



---

west virginia department of environmental protection

---

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

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

Friday, December 20, 2024  
WELL WORK PERMIT  
Horizontal 6A / New Drill

DIVERSIFIED PRODUCTION LLC  
101 MCQUISTON DRIVE

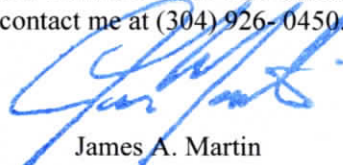
JACKSON CENTER, PA 16133

Re: Permit approval for Abbey South 8MH  
47-033-06048-00-00

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: Abbey South 8MH  
Farm Name: Long Ridge West Virginia LLC  
U.S. WELL NUMBER: 47-033-06048-00-00  
Horizontal 6A New Drill  
Date Issued: 12/20/2024

# PERMIT CONDITIONS

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

## CONDITIONS

---

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

12/20/2024

**4703306048**

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

1) Well Operator: Diversified Production, LLC 494524121 Harrison Clay - O<sub>1</sub> Rosemont 7.5'  
Operator ID County District Quadrangle

2) Operator's Well Number: Abbey South 8MH Well Pad Name: Abbey

3) Farm Name/Surface Owner: Long Ridge West Virginia LLC Public Road Access: 73/73 Middletown Road

4) Elevation, current ground: 996.78' Elevation, proposed post-construction: 996.75'

5) Well Type (a) Gas X Oil \_\_\_\_\_ Underground Storage \_\_\_\_\_  
Other \_\_\_\_\_  
(b) If Gas Shallow X Deep \_\_\_\_\_  
Horizontal X

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Formation = Marcellus Shale, Depth = 7,425', Thickness = 130', Pressure = 4,317 psi

8) Proposed Total Vertical Depth: 7,415'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 25,891'

11) Proposed Horizontal Leg Length: 17,248'

12) Approximate Fresh Water Strata Depths: 65', 160'

13) Method to Determine Fresh Water Depths: Offset well - 47-091-00062

14) Approximate Saltwater Depths: 768'

15) Approximate Coal Seam Depths: Sewickley Coal - 25', Freeport Coal - 623'

16) Approximate Depth to Possible Void (coal mine, karst, other): None anticipated

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

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

RECEIVED  
Office of Oil and Gas  
**NOV 18 2024**  
WV Department of  
Environmental Protection

**4703306048**

18) CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	A	52.78	100'	100'	151ft <sup>3</sup> /CTS
Fresh Water/Coal	13.375"	New	H40	48	750'	750'	521ft <sup>3</sup> /CTS
Intermediate	9.625"	New	J55	36	2,545'	2,545'	797ft <sup>3</sup> /CTS
Production	5.5"	New	HP P110	20	25,891'	25,891'	4,390ft <sup>3</sup> /6,729ft
Tubing	2.375"	New	L80	4.7	N/A	8,000'	N/A
Liners	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Ky Willett  
10/24/24*

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	26"	0.25"	450	90	Ready Mix	N/A
Fresh Water/Coal	13.375"	17.5"	0.33"	1,730	610	Class A	1.19
Intermediate	9.625"	12.25"	0.352"	3,520	2,070	Class A	1.19 - 1.88
Production	5.5"	8.5"	0.361"	14,360	12,924	Class A	1.19 - 1.55
Tubing	2.375"	N/A	0.19	11,200	6,365	N/A	N/A
Liners	N/A	N/A	N/A	N/A	N/A	N/A	N/A

PACKERS

Kind:				
Sizes:				
Depths Set:				

RECEIVED  
Office of Oil and Gas

NOV 18 2024

Wis. Department of  
Environmental Protection

4703306048

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

Drill the vertical portion of the well (setting casing and cementing per proposed plan) to an anticipated depth of 7,729' and continue to drill the curve and horizontal leg per the proposed plan in the Marcellus formation to an estimated horizontal length of 17,248' (25,891' TMD). Run and cement production casing. Perform CBL and stimulate per plan.

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

The stimulation will be completed with multiple stages divided over the lateral length of the well. Stage spacing and proppant used will be dependent on engineering design. Slickwater fracturing technique will be utilized on each stage consisting of water, sand and chemicals (outlined in the Site Safety Plan SDS sheets). Maximum pump rate not to exceed 120 bbl/min and maximum pressure not to exceed 90% of production casing burst rating.

*Ky Willett*  
*10/24/24*

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 5.98 acres

22) Area to be disturbed for well pad only, less access road (acres): 2.52 acres

23) Describe centralizer placement for each casing string:

Conductor: None  
Fresh Water: Every 3rd joint from shoe to surface  
Intermediate: Every 3rd joint from shoe to surface  
Production: Every other joint from shoe to Top of Cement

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection




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

Conductor: None - Typical construction Ready Mix Used  
Fresh Water: Class A with 1-3% Calcium Chloride and up to 1 lb/sk super flake LCM  
Intermediate: Class A with POZ or equivalent to reduce density in lead, 1-3% Calcium Chloride, Fluid Loss/Gas Migration additive, anti-foaming additive, Retarder and up to 1 lb/sk super flake or Mica LCM  
Production: Class A with POZ or equivalent to reduce density in lead, 1-3% Calcium Chloride, Fluid Loss/Gas Migration additive, anti-foaming additive, Retarder, and up to 1 lb/sk super flake or Mica LCM

25) Proposed borehole conditioning procedures:

Conductor: Hole is auger drilled: No conditioning required.  
Fresh Water: Condition hole with air or FW at TD until visibly clean; pumping FW sweeps if needed, run casing, circulate and clear 1.5x pipe volume with water before cementing.  
Intermediate: Condition hole with air or water based drilling fluid at TD until visibly clean; pumping sweeps if needed, run casing, circulate and clear 1.5x pipe volume with water before cementing.  
Production: Circulate hole with synthetic based drilling fluid at TD until hole is clean and free of excess gas above background. TOO H and circulate minimum of 1 bottoms up and until returns are minimal at the base of the curve. Run casing, circulate and ensure good returns and low gas before cementing.

\*Note: Attach additional sheets as needed.

Well Name: <b>Abbey South 8MH</b>		  				<b>Notes:</b> - Formation depths are estimates - Casing Depths subject to change based on as-drilled geologic depths - Casing weights/grades subject to change, but only if a higher weight/grade is used - Cement additives may include Antifoam, LCM, accelerator, Retarder, Fluid Loss, Gas Migration, etc to meet needed properties. - Detailed program will be distributed before drilling the well
Pad Name: <b>Abbey</b>						
Rig KB (ft): <b>28</b>						
Target: <b>Marcellus</b>						
TVD	Geology	Wellhead	Hole Size & MW	Casing (Size   Wt   Grade   Connection)	Cement	Centralizers & Wellbore Conditioning
128'	Conductor	13-5/8" 5k	26 "	20" 52.73# Grade A PE&B Conductor		No Centralizers Hole is auger drilled: No conditioning required.
Surface 160' 623' 583' 750'	DFGW Freeport Coal Pottsville Sand  Casing Point TVD	750' MD 750' TVD	17-1/2"  Air/FW Mist Fluid Drill with FW if air pack unavailable	13 3/8 48# H40 BTC	Tail (50% OH excess) 15.6 ppg Class A Cement to surface	Every 3rd joint from shoe to surface  Condition hole with air or FW at TD until visibly clean; pumping FW sweeps if needed, run casing, circulate and clear 1.5x pipe volume with fresh water before cementing.
Intermediate 1,146' 1,207' 1,291' 1,666' 1,766' 2,055' 2,225' 2,295' 2,545'	Little Lime Big Lime Big Injun Sandstone Berea Sandstone Fifty Foot Sandstone Gordon Sandstone Fourth Sand Sandstone Fifth Sand Sandstone Casing Point TVD	2545' MD 2545' TVD	12-1/4"  Air/FW Mist Fluid Drill with FW if air pack unavailable	9 5/8 36# J55 LTC	Lead (25% OH excess) 14.5 ppg class A Cement to surface Tail (25% OH excess) 15.6 ppg class A Top of Tail @ ~2036'	Every 3rd joint from shoe to surface  Condition hole with water based drilling fluid at TD until visibly clean; pumping sweeps if needed, run casing, circulate and clear 1.5x pipe volume with water before cementing.
Production 2,975' 4,300' 6,910' 7,040' 7,080' 7,140' 7,295' 7,415' 7,425'	Speechley Sandstone Benson Sandstone  KOP (TVD)  Burkett Shale Tully Limestone  Hamilton Shale Marcellus Shale  Landing Point (TVD) Onondaga	KOP 7729' MD 6910' TVD	8-3/4" Above Curve Air/ Mist  8-1/2" Curve & Lateral 11.5 - 12.5 ppg MW	5 1/2 20# HP P110 Semi-Premium	Tail (10% OH excess) 15.2 ppg Class A Top of Tail @ ~6729'	Every other joint from shoe to Top of Cement  Circulate hole with synthetic based drilling fluid at TD until hole is clean and free of excess gas above background. TOOH and circulate minimum of 1 bottoms up and until returns are minimal at the base of the curve. Run casing, circulate and ensure good returns and low gas before cementing.
		Landing Point 8643' MD 7415' TVD Dip Angle = 89	17,248' Lateral		BHL 25891' MD 7715' TVD	

WV Department of  
 Environmental Protection  
 RECEIVED  
 Office of Oil and Gas  
 NOV 18 2024

4703306048



**Area of Review for Communication Purposes Report**

**Abbey South 8MH**

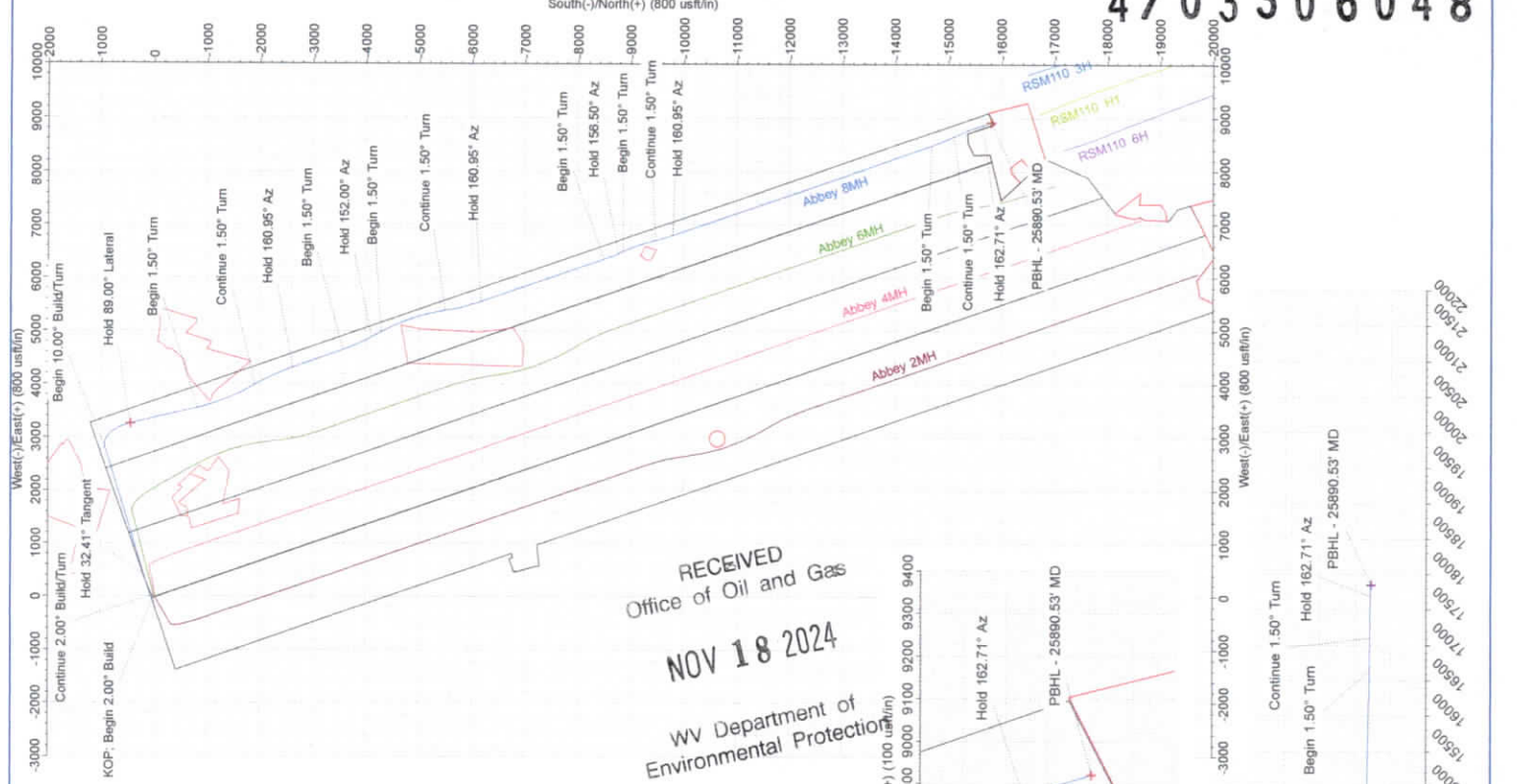
API Number	Operator Name	Total Depth	Perforated Formations	Producing zones not Perforated	Is this well "known or reasonably expected to penetrate a depth that could be within range of Fracture propagation"?	Comments
47-091-00456	Energy Corporation of America	N/A	N/A	N/A	no	Never Drilled
47-091-00099	Ross & Wharton Gas Company, Inc.	1462'	Big Injun	unknown	no	Abandoned Vertical Well
47-091-00482	Eastern Gas Transmission & Storage, Inc.	2940'	Speechley	unknown	yes	Vertical Well
47-091-00421	Berry Energy, Inc.	2824'	Speechley	unknown	yes	Abandoned Vertical Well
47-091-01056	Berry Energy, Inc.	2319'	Fifth	unknown	yes	Vertical Well
47-091-00984	WV Mineral Group, LLC	2973'	Speechley	unknown	yes	Vertical Well
47-091-00966	Bowie, Inc.	N/A	N/A	N/A	no	Never Drilled

This report was compiled using data from the WVDEP website, WVGES Interactive Mapping tool and Enverus drilling information.

RECEIVED  
 Office of Oil and Gas  
**NOV 18 2024**  
 WV Department of  
 Environmental Protection

4703306048





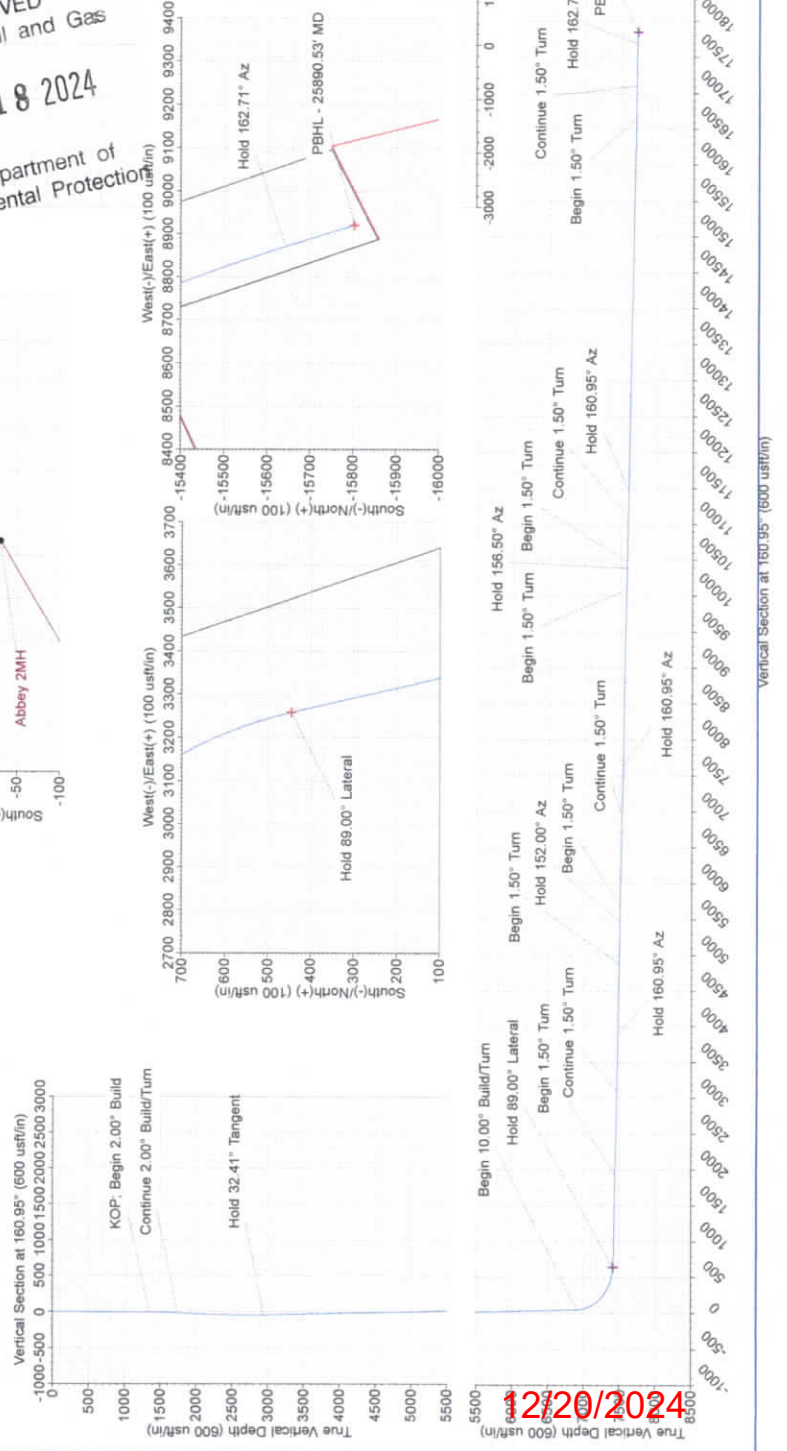
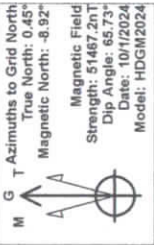
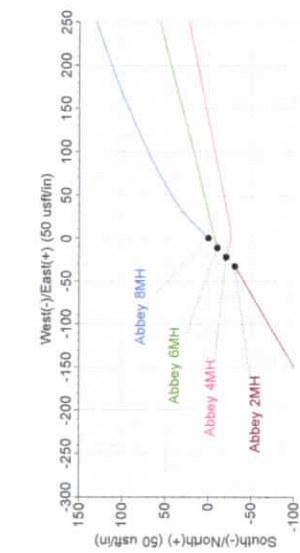
RECEIVED  
Office of Oil and Gas  
NOV 18 2024  
WV Department of  
Environmental Protection

SECTION DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSecl	Annotation
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP - Begin 2.00° Build
8	1950.00	0.00	1950.00	0.00	0.00	0.00	0.00	0.00	Continue 2.00° Build/Turn
9	3029.74	32.41	185.90	185.90	417.25	2.00	45.67	-12.20	Hold 89.00° Lateral
10	7729.35	72.96	2044.43	185.90	417.25	0.00	36.97	-3.20	Begin 1.50° Turn
11	8642.56	89.00	6906.80	924.36	2824.61	0.00	0.00	48.58	Hold 89.00° Lateral
12	9942.56	89.00	167.00	7415.00	445.27	10.00	93.95	642.56	Begin 1.50° Turn
13	11123.32	89.00	167.00	7415.00	445.27	10.00	93.95	642.56	Continue 1.50° Turn
14	12001.31	89.00	148.28	7458.12	-821.22	1.50	-60.05	3109.57	Hold 160.95° Az
15	13097.88	89.00	7471.53	-2616.86	4315.41	1.50	90.26	3882.06	Begin 1.50° Turn
16	14866.80	89.00	7409.44	-109.30	4873.60	1.50	90.06	4951.97	Continue 1.50° Turn
17	15976.07	89.00	7525.25	-501.30	5377.10	1.50	90.08	6955.06	Begin 1.50° Turn
18	18126.07	89.00	7537.15	-6170.40	5542.46	1.50	90.26	7641.49	Hold 160.95° Az
19	18252.69	89.00	7579.91	-8485.97	6342.00	0.00	10091.12	10091.12	Begin 1.50° Turn
20	18522.69	89.00	7585.00	-8762.16	6448.98	1.50	-90.04	10387.40	Hold 156.50° Az
21	19160.63	89.00	7592.32	-9457.32	6993.74	1.50	90.04	11122.08	Continue 1.50° Turn
22	19502.88	89.00	7603.90	-9785.37	6790.72	1.50	-90.13	11465.91	Hold 160.95° Az
23	24877.88	89.00	7604.22	-14676.21	8479.55	0.00	16840.12	16840.12	Begin 1.50° Turn
24	25141.15	89.00	7702.31	-15103.80	8656.88	1.50	-90.06	17102.18	Continue 1.50° Turn
25	25217.00	89.00	7715.46	-15942.82	8870.79	1.50	90.07	17681.49	Hold 162.71° Az
26	25890.53	89.00	7715.46	-15904.00	8820.96	0.00	0.00	17850.22	PBHL - 25890.53' MD

DESIGN TARGET DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSecl	Annotation
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP - Begin 2.00° Build
8	1950.00	0.00	1950.00	0.00	0.00	0.00	0.00	0.00	Continue 2.00° Build/Turn
9	3029.74	32.41	185.90	185.90	417.25	2.00	45.67	-12.20	Hold 89.00° Lateral
10	7729.35	72.96	2044.43	185.90	417.25	0.00	36.97	-3.20	Begin 1.50° Turn
11	8642.56	89.00	6906.80	924.36	2824.61	0.00	0.00	48.58	Hold 89.00° Lateral
12	9942.56	89.00	167.00	7415.00	445.27	10.00	93.95	642.56	Begin 1.50° Turn
13	11123.32	89.00	167.00	7415.00	445.27	10.00	93.95	642.56	Continue 1.50° Turn
14	12001.31	89.00	148.28	7458.12	-821.22	1.50	-60.05	3109.57	Hold 160.95° Az
15	13097.88	89.00	7471.53	-2616.86	4315.41	1.50	90.26	3882.06	Begin 1.50° Turn
16	14866.80	89.00	7409.44	-109.30	4873.60	1.50	90.06	4951.97	Continue 1.50° Turn
17	15976.07	89.00	7525.25	-501.30	5377.10	1.50	90.08	6955.06	Begin 1.50° Turn
18	18126.07	89.00	7537.15	-6170.40	5542.46	1.50	90.26	7641.49	Hold 160.95° Az
19	18252.69	89.00	7579.91	-8485.97	6342.00	0.00	10091.12	10091.12	Begin 1.50° Turn
20	18522.69	89.00	7585.00	-8762.16	6448.98	1.50	-90.04	10387.40	Hold 156.50° Az
21	19160.63	89.00	7592.32	-9457.32	6993.74	1.50	90.04	11122.08	Continue 1.50° Turn
22	19502.88	89.00	7603.90	-9785.37	6790.72	1.50	-90.13	11465.91	Hold 160.95° Az
23	24877.88	89.00	7604.22	-14676.21	8479.55	0.00	16840.12	16840.12	Begin 1.50° Turn
24	25141.15	89.00	7702.31	-15103.80	8656.88	1.50	-90.06	17102.18	Continue 1.50° Turn
25	25217.00	89.00	7715.46	-15942.82	8870.79	1.50	90.07	17681.49	Hold 162.71° Az
26	25890.53	89.00	7715.46	-15904.00	8820.96	0.00	0.00	17850.22	PBHL - 25890.53' MD



**DIVERSIFIED energy**

**Abbey 8MH**

Name: Abbey 8MH  
Silo: Abbey Pad  
Wellbore: Wellbore #1  
Design: Design #6

Project: Harrison County, WV (NAD83 - GRID)  
Date: 10/10/2024  
Model: HDGM2024

# Diversified Production, LLC

Harrison County, WV (NAD83 - GRID)

Abbey Pad

Abbey 8MH

Wellbore #1

Plan: Design #6



## Standard Plan Report

26 September, 2024

Total Report Version 1.70  
COMPASS 5000.16 Build 97

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection



<b>Company:</b>	Diversified Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Abbey 8MH
<b>Project:</b>	Harrison County, WV (NAD83 - GRID)	<b>TVD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Site:</b>	Abbey Pad	<b>MD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Well:</b>	Abbey 8MH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #6	<b>Database:</b>	.Total Directional Production DB

<b>Project</b>	Harrison County, WV (NAD83 - GRID)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	West Virginia Northern Zone		

<b>Site</b>	Abbey Pad				
<b>Site Position:</b>		<b>Northing:</b>	319,064.16 usft	<b>Latitude:</b>	39.373884
<b>From:</b>	Map	<b>Easting:</b>	1,770,510.16 usft	<b>Longitude:</b>	-80.200383
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "		

<b>Well</b>	Abbey 8MH					
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	319,007.37 usft	<b>Latitude:</b>	39.373724
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	1,770,350.08 usft	<b>Longitude:</b>	-80.200948
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	usft	<b>Ground Level:</b>	996.00 usft
<b>Grid Convergence:</b>	-0.45 °					

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM2024	10/1/2024	-9.37	65.73	51,467.20000000

<b>Design</b>	Design #6				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00	
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	160.95	

<b>Survey Tool Program</b>	<b>Date</b>	9/26/2024			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.00	25,890.45	Design #6 (Wellbore #1)	MWD+HRGM	OWSG MWD + HRGM	



<b>Company:</b>	Diversified Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Abbey 8MH
<b>Project:</b>	Harrison County, WV (NAD83 - GRID)	<b>TVD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Site:</b>	Abbey Pad	<b>MD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Well:</b>	Abbey 8MH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #6	<b>Database:</b>	.Total Directional Production DB

**Plan Summary**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,350.00	0.00	0.00	1,350.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,750.00	8.00	45.00	1,748.70	19.71	19.71	2.00	2.00	0.00	45.00	
3,029.74	32.41	72.96	2,942.43	185.99	417.25	2.00	1.91	2.18	35.57	
7,729.35	32.41	72.96	6,909.80	924.36	2,825.81	0.00	0.00	0.00	0.00	
8,642.56	89.00	167.00	7,415.00	445.27	3,258.18	10.00	6.20	10.30	93.95	LP v4 - Abbey 8MH
9,942.56	89.00	167.00	7,437.69	-821.22	3,550.57	0.00	0.00	0.00	0.00	
11,123.32	89.03	149.26	7,458.12	-1,912.48	3,988.55	1.50	0.00	-1.50	-90.05	
11,901.31	89.00	160.95	7,471.53	-2,616.86	4,315.41	1.50	0.00	1.50	90.26	
12,901.31	89.00	160.95	7,488.98	-3,561.95	4,641.75	0.00	0.00	0.00	0.00	
13,497.88	89.00	152.00	7,499.41	-4,108.30	4,879.60	1.50	0.00	-1.50	-90.08	
13,697.88	89.00	152.00	7,502.90	-4,284.86	4,973.48	0.00	0.00	0.00	0.00	
14,985.80	89.03	171.29	7,525.25	-5,501.30	5,377.10	1.50	0.00	1.50	90.08	
15,676.07	89.00	160.95	7,537.15	-6,170.40	5,542.46	1.50	0.00	-1.50	-90.26	
18,126.07	89.00	160.95	7,579.91	-8,485.87	6,342.00	0.00	0.00	0.00	0.00	
18,422.69	89.00	156.50	7,585.09	-8,762.16	6,449.58	1.50	0.00	-1.50	-90.04	
18,522.69	89.00	156.50	7,586.83	-8,853.86	6,489.45	0.00	0.00	0.00	0.00	
19,160.63	89.01	166.10	7,597.95	-9,457.32	6,693.71	1.50	0.00	1.50	90.04	
19,502.88	89.00	160.95	7,603.90	-9,785.37	6,790.72	1.50	0.00	-1.50	-90.13	
24,677.88	89.00	160.95	7,694.22	-14,676.21	8,479.55	0.00	0.00	0.00	0.00	
25,141.15	89.00	154.00	7,702.32	-15,103.80	8,656.88	1.50	0.00	-1.50	-90.06	
25,721.70	89.00	162.71	7,712.46	-15,642.82	8,870.79	1.50	0.00	1.50	90.07	
25,890.53	89.00	162.71	7,715.40	-15,804.00	8,920.96	0.00	0.00	0.00	0.00	PBHL v4 - Abbey 8

**Planned Survey**

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates (usft)		Map Coordinates (usft)		Geo Coordinates (°)		Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
				+N/-S	+E/-W	Northing	Easting	Latitude	Longitude				
0.00	0.00	0.00	0.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00



<b>Company:</b>	Diversified Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Abbey 8MH
<b>Project:</b>	Harrison County, WV (NAD83 - GRID)	<b>TVD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Site:</b>	Abbey Pad	<b>MD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Well:</b>	Abbey 8MH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #6	<b>Database:</b>	.Total Directional Production DB

**Planned Survey**

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Map Coordinates Northing (usft)	Easting (usft)	Geo Coordinates Latitude (°)	Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,350.00	0.00	0.00	1,350.00	0.00	0.00	319,007.38	1,770,350.08	39.373724	-80.200948	0.00	0.00	0.00	0.00
1,400.00	1.00	45.00	1,400.00	0.31	0.31	319,007.69	1,770,350.39	39.373725	-80.200946	-0.19	2.00	2.00	0.00
1,500.00	3.00	45.00	1,499.93	2.78	2.78	319,010.15	1,770,352.85	39.373732	-80.200938	-1.72	2.00	2.00	0.00
1,600.00	5.00	45.00	1,599.68	7.71	7.71	319,015.09	1,770,357.79	39.373746	-80.200920	-4.77	2.00	2.00	0.00
1,700.00	7.00	45.00	1,699.13	15.10	15.10	319,022.48	1,770,365.18	39.373766	-80.200895	-9.34	2.00	2.00	0.00
1,750.00	8.00	45.00	1,748.70	19.71	19.71	319,027.09	1,770,369.79	39.373779	-80.200878	-12.20	2.00	2.00	0.00
1,800.00	8.83	48.79	1,798.16	24.70	25.06	319,032.08	1,770,375.14	39.373793	-80.200860	-15.17	2.00	1.66	7.58
1,900.00	10.58	54.54	1,896.73	35.09	38.32	319,042.47	1,770,388.40	39.373822	-80.200813	-20.66	2.00	1.75	5.75
2,000.00	12.41	58.64	1,994.72	46.01	54.98	319,053.39	1,770,405.06	39.373852	-80.200754	-25.55	2.00	1.83	4.10
2,100.00	14.28	61.70	2,092.02	57.45	75.02	319,064.83	1,770,425.09	39.373884	-80.200684	-29.82	2.00	1.87	3.05
2,200.00	16.18	64.05	2,188.50	69.40	98.41	319,076.78	1,770,448.49	39.373917	-80.200601	-33.48	2.00	1.90	2.35
2,300.00	18.11	65.92	2,284.05	81.84	125.14	319,089.21	1,770,475.21	39.373952	-80.200507	-36.51	2.00	1.92	1.87
2,400.00	20.05	67.44	2,378.56	94.75	155.15	319,102.13	1,770,505.23	39.373988	-80.200401	-38.92	2.00	1.94	1.52
2,500.00	21.99	68.70	2,471.90	108.13	188.43	319,115.51	1,770,538.51	39.374025	-80.200284	-40.70	2.00	1.95	1.26
2,600.00	23.95	69.77	2,563.96	121.95	224.93	319,129.33	1,770,575.00	39.374064	-80.200155	-41.86	2.00	1.96	1.06
2,700.00	25.91	70.68	2,654.64	136.20	264.59	319,143.58	1,770,614.67	39.374104	-80.200015	-42.38	2.00	1.96	0.91
2,800.00	27.88	71.47	2,743.82	150.86	307.39	319,158.23	1,770,657.47	39.374145	-80.199864	-42.27	2.00	1.97	0.79
2,900.00	29.85	72.17	2,831.39	165.91	353.26	319,173.29	1,770,703.33	39.374187	-80.199703	-41.52	2.00	1.97	0.70
3,000.00	31.83	72.79	2,917.25	181.33	402.14	319,188.71	1,770,752.22	39.374231	-80.199530	-40.15	2.00	1.97	0.62
3,029.74	32.41	72.96	2,942.43	185.99	417.25	319,193.37	1,770,767.33	39.374244	-80.199477	-39.62	2.00	1.98	0.57
3,100.00	32.41	72.96	3,001.75	197.03	453.26	319,204.41	1,770,803.34	39.374275	-80.199350	-38.30	0.00	0.00	0.00
3,200.00	32.41	72.96	3,086.17	212.74	504.51	319,220.12	1,770,854.59	39.374319	-80.199169	-36.42	0.00	0.00	0.00
3,300.00	32.41	72.96	3,170.58	228.45	555.76	319,235.83	1,770,905.84	39.374364	-80.198988	-34.54	0.00	0.00	0.00
3,400.00	32.41	72.96	3,255.00	244.16	607.01	319,251.54	1,770,957.09	39.374408	-80.198807	-32.67	0.00	0.00	0.00
3,500.00	32.41	72.96	3,339.42	259.87	658.26	319,267.25	1,771,008.34	39.374452	-80.198626	-30.79	0.00	0.00	0.00
3,600.00	32.41	72.96	3,423.84	275.59	709.51	319,282.96	1,771,059.59	39.374496	-80.198445	-28.91	0.00	0.00	0.00
3,700.00	32.41	72.96	3,508.26	291.30	760.76	319,298.68	1,771,110.84	39.374540	-80.198264	-27.04	0.00	0.00	0.00
3,800.00	32.41	72.96	3,592.68	307.01	812.01	319,314.39	1,771,162.09	39.374585	-80.198084	-25.16	0.00	0.00	0.00
3,900.00	32.41	72.96	3,677.10	322.72	863.26	319,330.10	1,771,213.34	39.374629	-80.197903	-23.28	0.00	0.00	0.00
4,000.00	32.41	72.96	3,761.52	338.43	914.51	319,345.81	1,771,264.59	39.374673	-80.197722	-21.41	0.00	0.00	0.00
4,100.00	32.41	72.96	3,845.94	354.14	965.76	319,361.52	1,771,315.84	39.374717	-80.197541	-19.53	0.00	0.00	0.00
4,200.00	32.41	72.96	3,930.36	369.85	1,017.01	319,377.23	1,771,367.09	39.374762	-80.197360	-17.65	0.00	0.00	0.00
4,300.00	32.41	72.96	4,014.78	385.57	1,068.26	319,392.94	1,771,418.34	39.374806	-80.197179	-15.78	0.00	0.00	0.00
4,400.00	32.41	72.96	4,099.19	401.28	1,119.51	319,408.65	1,771,469.59	39.374850	-80.196998	-13.90	0.00	0.00	0.00
4,500.00	32.41	72.96	4,183.61	416.99	1,170.76	319,424.37	1,771,520.84	39.374894	-80.196818	-12.02	0.00	0.00	0.00
4,600.00	32.41	72.96	4,268.03	432.70	1,222.01	319,440.08	1,771,572.09	39.374938	-80.196637	-10.15	0.00	0.00	0.00
4,700.00	32.41	72.96	4,352.45	448.41	1,273.26	319,455.79	1,771,623.34	39.374983	-80.196456	-8.27	0.00	0.00	0.00



<b>Company:</b>	Diversified Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Abbey 8MH
<b>Project:</b>	Harrison County, WV (NAD83 - GRID)	<b>TVD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Site:</b>	Abbey Pad	<b>MD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Well:</b>	Abbey 8MH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #6	<b>Database:</b>	.Total Directional Production DB

**Planned Survey**

Measured Depth (usft)	INC (")	AZI (")	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Map Coordinates Northing (usft)	Easting (usft)	Geo Coordinates Latitude (")	Longitude (")	Vertical Section (usft)	Dogleg Rate (/100usft)	Build Rate (/100usft)	Turn Rate (/100usft)
4,800.00	32.41	72.96	4,436.87	464.12	1,324.51	319,471.50	1,771,674.59	39.375027	-80.196275	-6.39	0.00	0.00	0.00
4,900.00	32.41	72.96	4,521.29	479.83	1,375.76	319,487.21	1,771,725.84	39.375071	-80.196094	-4.52	0.00	0.00	0.00
5,000.00	32.41	72.96	4,605.71	495.55	1,427.01	319,502.92	1,771,777.09	39.375115	-80.195913	-2.64	0.00	0.00	0.00
5,100.00	32.41	72.96	4,690.13	511.26	1,478.26	319,518.63	1,771,828.34	39.375160	-80.195732	-0.76	0.00	0.00	0.00
5,200.00	32.41	72.96	4,774.55	526.97	1,529.51	319,534.35	1,771,879.59	39.375204	-80.195552	1.11	0.00	0.00	0.00
5,300.00	32.41	72.96	4,858.97	542.68	1,580.76	319,550.06	1,771,930.84	39.375248	-80.195371	2.99	0.00	0.00	0.00
5,400.00	32.41	72.96	4,943.38	558.39	1,632.01	319,565.77	1,771,982.09	39.375292	-80.195190	4.87	0.00	0.00	0.00
5,500.00	32.41	72.96	5,027.80	574.10	1,683.26	319,581.48	1,772,033.34	39.375337	-80.195009	6.74	0.00	0.00	0.00
5,600.00	32.41	72.96	5,112.22	589.81	1,734.51	319,597.19	1,772,084.59	39.375381	-80.194828	8.62	0.00	0.00	0.00
5,700.00	32.41	72.96	5,196.64	605.52	1,785.76	319,612.90	1,772,135.84	39.375425	-80.194647	10.50	0.00	0.00	0.00
5,800.00	32.41	72.96	5,281.06	621.24	1,837.01	319,628.61	1,772,187.09	39.375469	-80.194466	12.38	0.00	0.00	0.00
5,900.00	32.41	72.96	5,365.48	636.95	1,888.26	319,644.33	1,772,238.34	39.375513	-80.194286	14.25	0.00	0.00	0.00
6,000.00	32.41	72.96	5,449.90	652.66	1,939.51	319,660.04	1,772,289.59	39.375558	-80.194105	16.13	0.00	0.00	0.00
6,100.00	32.41	72.96	5,534.32	668.37	1,990.77	319,675.75	1,772,340.84	39.375602	-80.193924	18.01	0.00	0.00	0.00
6,200.00	32.41	72.96	5,618.74	684.08	2,042.02	319,691.46	1,772,392.09	39.375646	-80.193743	19.88	0.00	0.00	0.00
6,300.00	32.41	72.96	5,703.16	699.79	2,093.27	319,707.17	1,772,443.34	39.375690	-80.193562	21.76	0.00	0.00	0.00
6,400.00	32.41	72.96	5,787.57	715.50	2,144.52	319,722.88	1,772,494.59	39.375735	-80.193381	23.64	0.00	0.00	0.00
6,500.00	32.41	72.96	5,871.99	731.22	2,195.77	319,738.59	1,772,545.84	39.375779	-80.193200	25.51	0.00	0.00	0.00
6,600.00	32.41	72.96	5,956.41	746.93	2,247.02	319,754.31	1,772,597.09	39.375823	-80.193020	27.39	0.00	0.00	0.00
6,700.00	32.41	72.96	6,040.83	762.64	2,298.27	319,770.02	1,772,648.34	39.375867	-80.192839	29.27	0.00	0.00	0.00
6,800.00	32.41	72.96	6,125.25	778.35	2,349.52	319,785.73	1,772,699.59	39.375911	-80.192658	31.14	0.00	0.00	0.00
6,900.00	32.41	72.96	6,209.67	794.06	2,400.77	319,801.44	1,772,750.84	39.375956	-80.192477	33.02	0.00	0.00	0.00
7,000.00	32.41	72.96	6,294.09	809.77	2,452.02	319,817.15	1,772,802.09	39.376000	-80.192296	34.90	0.00	0.00	0.00
7,100.00	32.41	72.96	6,378.51	825.48	2,503.27	319,832.86	1,772,853.34	39.376044	-80.192115	36.77	0.00	0.00	0.00
7,200.00	32.41	72.96	6,462.93	841.20	2,554.52	319,848.57	1,772,904.59	39.376088	-80.191934	38.65	0.00	0.00	0.00
7,300.00	32.41	72.96	6,547.35	856.91	2,605.77	319,864.28	1,772,955.84	39.376132	-80.191753	40.53	0.00	0.00	0.00
7,400.00	32.41	72.96	6,631.76	872.62	2,657.02	319,880.00	1,773,007.09	39.376177	-80.191573	42.40	0.00	0.00	0.00
7,500.00	32.41	72.96	6,716.18	888.33	2,708.27	319,895.71	1,773,058.34	39.376221	-80.191392	44.28	0.00	0.00	0.00
7,600.00	32.41	72.96	6,800.60	904.04	2,759.52	319,911.42	1,773,109.59	39.376265	-80.191211	46.16	0.00	0.00	0.00
7,700.00	32.41	72.96	6,885.02	919.75	2,810.77	319,927.13	1,773,160.84	39.376309	-80.191030	48.03	0.00	0.00	0.00
7,729.35	32.41	72.96	6,909.80	924.36	2,825.81	319,931.74	1,773,175.89	39.376322	-80.190977	48.58	0.00	0.00	0.00
7,750.00	32.33	76.81	6,927.24	927.25	2,836.48	319,934.62	1,773,186.56	39.376330	-80.190939	49.34	10.00	-0.41	18.66
7,800.00	32.61	86.12	6,969.45	931.21	2,862.96	319,938.59	1,773,213.03	39.376342	-80.190846	54.24	10.00	0.57	18.61
7,850.00	33.56	95.11	7,011.37	930.89	2,890.18	319,938.27	1,773,240.26	39.376342	-80.190749	63.43	10.00	1.90	18.00
7,900.00	35.13	103.54	7,052.67	926.29	2,917.95	319,933.67	1,773,268.03	39.376330	-80.190651	76.84	10.00	3.13	16.85
7,950.00	37.23	111.23	7,093.05	917.44	2,946.06	319,924.82	1,773,296.13	39.376306	-80.190551	94.38	10.00	4.20	15.39
8,000.00	39.78	118.15	7,132.19	904.41	2,974.28	319,911.78	1,773,324.35	39.376271	-80.190451	115.91	10.00	5.10	13.83
8,050.00	42.69	124.32	7,169.81	887.29	3,002.40	319,894.67	1,773,352.47	39.376224	-80.190351	141.26	10.00	5.83	12.34



<b>Company:</b>	Diversified Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Abbey 8MH
<b>Project:</b>	Harrison County, WV (NAD83 - GRID)	<b>TVD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Site:</b>	Abbey Pad	<b>MD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Well:</b>	Abbey 8MH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #6	<b>Database:</b>	.Total Directional Production DB

**Planned Survey**

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Map Coordinates Northing (usft)	Easting (usft)	Geo Coordinates Latitude (°)	Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,100.00	45.90	129.81	7,205.60	866.23	3,030.21	319,873.61	1,773,380.28	39.376167	-80.190252	170.25	10.00	6.42	10.98
8,150.00	49.35	134.72	7,239.31	841.37	3,057.49	319,848.75	1,773,407.57	39.376099	-80.190155	202.65	10.00	6.89	9.81
8,200.00	52.98	139.13	7,270.66	812.91	3,084.05	319,820.29	1,773,434.13	39.376022	-80.190060	238.22	10.00	7.27	8.83
8,250.00	56.76	143.13	7,299.44	781.07	3,109.67	319,788.45	1,773,459.75	39.375935	-80.189969	276.68	10.00	7.56	8.00
8,300.00	60.66	146.80	7,325.40	746.09	3,134.17	319,753.46	1,773,484.25	39.375839	-80.189881	317.75	10.00	7.80	7.33
8,350.00	64.65	150.19	7,348.37	708.22	3,157.35	319,715.60	1,773,507.43	39.375736	-80.189798	361.10	10.00	7.98	6.78
8,400.00	68.72	153.36	7,368.16	667.77	3,179.04	319,675.15	1,773,529.12	39.375625	-80.189720	406.42	10.00	8.13	6.35
8,450.00	72.84	156.36	7,384.62	625.04	3,199.08	319,632.42	1,773,549.16	39.375508	-80.189648	453.35	10.00	8.24	6.00
8,500.00	77.00	159.23	7,397.63	580.35	3,217.31	319,587.73	1,773,567.38	39.375386	-80.189583	501.54	10.00	8.33	5.74
8,550.00	81.19	162.01	7,407.09	534.05	3,233.59	319,541.43	1,773,583.66	39.375259	-80.189524	550.62	10.00	8.39	5.55
8,600.00	85.41	164.72	7,412.92	486.48	3,247.79	319,493.86	1,773,597.87	39.375129	-80.189472	600.22	10.00	8.43	5.42
8,642.56	89.00	167.00	7,415.00	445.27	3,258.18	319,452.65	1,773,608.25	39.375016	-80.189434	642.56	10.00	8.45	5.36
8,700.00	89.00	167.00	7,416.00	389.31	3,271.10	319,396.69	1,773,621.17	39.374863	-80.189387	699.67	0.00	0.00	0.00
8,800.00	89.00	167.00	7,417.75	291.89	3,293.59	319,299.27	1,773,643.66	39.374596	-80.189305	799.10	0.00	0.00	0.00
8,900.00	89.00	167.00	7,419.49	194.47	3,316.08	319,201.85	1,773,666.16	39.374329	-80.189223	898.53	0.00	0.00	0.00
9,000.00	89.00	167.00	7,421.24	97.05	3,338.57	319,104.42	1,773,688.65	39.374062	-80.189141	997.95	0.00	0.00	0.00
9,100.00	89.00	167.00	7,422.98	-0.38	3,361.06	319,007.00	1,773,711.14	39.373795	-80.189058	1,097.38	0.00	0.00	0.00
9,200.00	89.00	167.00	7,424.73	-97.80	3,383.55	318,909.58	1,773,733.63	39.373528	-80.188976	1,196.81	0.00	0.00	0.00
9,300.00	89.00	167.00	7,426.47	-195.22	3,406.05	318,812.16	1,773,756.12	39.373261	-80.188894	1,296.24	0.00	0.00	0.00
9,400.00	89.00	167.00	7,428.22	-292.64	3,428.54	318,714.74	1,773,778.61	39.372994	-80.188812	1,395.67	0.00	0.00	0.00
9,500.00	89.00	167.00	7,429.96	-390.06	3,451.03	318,617.31	1,773,801.11	39.372727	-80.188730	1,495.09	0.00	0.00	0.00
9,600.00	89.00	167.00	7,431.71	-487.49	3,473.52	318,519.89	1,773,823.60	39.372460	-80.188647	1,594.52	0.00	0.00	0.00
9,700.00	89.00	167.00	7,433.45	-584.91	3,496.01	318,422.47	1,773,846.09	39.372193	-80.188565	1,693.95	0.00	0.00	0.00
9,800.00	89.00	167.00	7,435.20	-682.33	3,518.50	318,325.05	1,773,868.58	39.371926	-80.188483	1,793.38	0.00	0.00	0.00
9,900.00	89.00	167.00	7,436.94	-779.75	3,541.00	318,227.62	1,773,891.07	39.371659	-80.188401	1,892.81	0.00	0.00	0.00
9,942.56	89.00	167.00	7,437.69	-821.22	3,550.57	318,186.16	1,773,900.65	39.371545	-80.188366	1,935.12	0.00	0.00	0.00
10,000.00	89.00	166.14	7,438.69	-877.08	3,563.91	318,130.30	1,773,913.99	39.371392	-80.188317	1,992.28	1.50	0.00	-1.50
10,100.00	89.00	164.64	7,440.44	-973.82	3,589.13	318,033.55	1,773,939.21	39.371127	-80.188225	2,091.96	1.50	0.00	-1.50
10,200.00	89.00	163.13	7,442.18	-1,069.88	3,616.89	317,937.50	1,773,966.96	39.370864	-80.188124	2,191.81	1.50	0.00	-1.50
10,300.00	89.00	161.63	7,443.93	-1,165.17	3,647.15	317,842.21	1,773,997.23	39.370603	-80.188015	2,291.76	1.50	0.00	-1.50
10,400.00	89.00	160.13	7,445.67	-1,259.63	3,679.90	317,747.74	1,774,029.97	39.370344	-80.187896	2,391.74	1.50	0.00	-1.50
10,500.00	89.00	158.63	7,447.42	-1,353.21	3,715.11	317,654.17	1,774,065.19	39.370088	-80.187769	2,491.69	1.50	0.00	-1.50
10,600.00	89.01	157.12	7,449.15	-1,445.83	3,752.77	317,561.55	1,774,102.84	39.369835	-80.187634	2,591.53	1.50	0.00	-1.50
10,700.00	89.01	155.62	7,450.88	-1,537.43	3,792.84	317,469.95	1,774,142.91	39.369584	-80.187489	2,691.19	1.50	0.00	-1.50
10,800.00	89.01	154.12	7,452.61	-1,627.95	3,835.30	317,379.43	1,774,185.37	39.369336	-80.187337	2,790.61	1.50	0.00	-1.50
10,900.00	89.02	152.62	7,454.32	-1,717.33	3,880.11	317,290.05	1,774,230.19	39.369092	-80.187176	2,889.72	1.50	0.00	-1.50
11,000.00	89.02	151.12	7,456.03	-1,805.50	3,927.25	317,201.88	1,774,277.33	39.368851	-80.187007	2,988.45	1.50	0.01	-1.50



<b>Company:</b>	Diversified Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Abbey 8MH
<b>Project:</b>	Harrison County, WV (NAD83 - GRID)	<b>TVD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Site:</b>	Abbey Pad	<b>MD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Well:</b>	Abbey 8MH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #6	<b>Database:</b>	.Total Directional Production DB

**Planned Survey**

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Map Coordinates Northing (usft)	Easting (usft)	Geo Coordinates Latitude (°)	Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,100.00	89.03	149.61	7,457.73	-1,892.40	3,976.69	317,114.98	1,774,326.77	39.368613	-80.186830	3,086.73	1.50	0.01	-1.50
11,123.32	89.03	149.26	7,458.12	-1,912.48	3,988.55	317,094.90	1,774,338.62	39.368558	-80.186787	3,109.57	1.50	0.01	-1.50
11,200.00	89.03	150.42	7,459.42	-1,978.77	4,027.07	317,028.61	1,774,377.14	39.368377	-80.186649	3,184.81	1.50	-0.01	1.50
11,300.00	89.02	151.92	7,461.12	-2,066.36	4,075.29	316,941.02	1,774,425.36	39.368138	-80.186476	3,283.33	1.50	-0.01	1.50
11,400.00	89.02	153.42	7,462.84	-2,155.18	4,121.19	316,852.20	1,774,471.27	39.367895	-80.186311	3,382.27	1.50	-0.01	1.50
11,500.00	89.01	154.92	7,464.56	-2,245.17	4,164.75	316,762.21	1,774,514.83	39.367649	-80.186155	3,481.56	1.50	0.00	1.50
11,600.00	89.01	156.42	7,466.29	-2,336.28	4,205.94	316,671.10	1,774,556.02	39.367399	-80.186007	3,581.12	1.50	0.00	1.50
11,700.00	89.00	157.93	7,468.02	-2,428.43	4,244.72	316,578.95	1,774,594.80	39.367147	-80.185867	3,680.88	1.50	0.00	1.50
11,800.00	89.00	159.43	7,469.76	-2,521.57	4,281.08	316,485.81	1,774,631.16	39.366892	-80.185736	3,780.79	1.50	0.00	1.50
11,901.31	89.00	160.95	7,471.53	-2,616.86	4,315.41	316,390.52	1,774,665.48	39.366631	-80.185612	3,882.06	1.50	0.00	1.50
12,000.00	89.00	160.95	7,473.25	-2,710.13	4,347.62	316,297.24	1,774,697.69	39.366376	-80.185495	3,980.74	0.00	0.00	0.00
12,100.00	89.00	160.95	7,475.00	-2,804.64	4,380.25	316,202.74	1,774,730.33	39.366117	-80.185378	4,080.73	0.00	0.00	0.00
12,200.00	89.00	160.95	7,476.74	-2,899.15	4,412.88	316,108.23	1,774,762.96	39.365858	-80.185260	4,180.71	0.00	0.00	0.00
12,300.00	89.00	160.95	7,478.49	-2,993.66	4,445.52	316,013.72	1,774,795.60	39.365600	-80.185142	4,280.70	0.00	0.00	0.00
12,400.00	89.00	160.95	7,480.23	-3,088.17	4,478.15	315,919.21	1,774,828.23	39.365341	-80.185024	4,380.68	0.00	0.00	0.00
12,500.00	89.00	160.95	7,481.98	-3,182.68	4,510.79	315,824.70	1,774,860.86	39.365082	-80.184906	4,480.67	0.00	0.00	0.00
12,600.00	89.00	160.95	7,483.72	-3,277.19	4,543.42	315,730.19	1,774,893.50	39.364823	-80.184788	4,580.65	0.00	0.00	0.00
12,700.00	89.00	160.95	7,485.47	-3,371.70	4,576.06	315,635.68	1,774,926.13	39.364565	-80.184670	4,680.64	0.00	0.00	0.00
12,800.00	89.00	160.95	7,487.21	-3,466.21	4,608.69	315,541.17	1,774,958.77	39.364306	-80.184552	4,780.62	0.00	0.00	0.00
12,901.31	89.00	160.95	7,488.98	-3,561.95	4,641.75	315,445.43	1,774,991.83	39.364044	-80.184432	4,881.91	0.00	0.00	0.00
13,000.00	89.00	159.47	7,490.70	-3,654.80	4,675.16	315,352.58	1,775,025.24	39.363789	-80.184312	4,980.58	1.50	0.00	-1.50
13,100.00	89.00	157.97	7,492.45	-3,747.96	4,711.45	315,259.42	1,775,061.52	39.363534	-80.184181	5,080.49	1.50	0.00	-1.50
13,200.00	89.00	156.47	7,494.20	-3,840.14	4,750.16	315,167.23	1,775,100.24	39.363282	-80.184041	5,180.26	1.50	0.00	-1.50
13,300.00	89.00	154.97	7,495.95	-3,931.28	4,791.28	315,076.10	1,775,141.35	39.363033	-80.183893	5,279.82	1.50	0.00	-1.50
13,400.00	89.00	153.47	7,497.70	-4,021.31	4,834.76	314,986.07	1,775,184.84	39.362786	-80.183737	5,379.11	1.50	0.00	-1.50
13,497.88	89.00	152.00	7,499.41	-4,108.30	4,879.60	314,899.08	1,775,229.67	39.362549	-80.183576	5,475.97	1.50	0.00	-1.50
13,500.00	89.00	152.00	7,499.45	-4,110.17	4,880.59	314,897.21	1,775,230.67	39.362543	-80.183573	5,478.07	0.00	0.00	0.00
13,600.00	89.00	152.00	7,501.19	-4,198.45	4,927.53	314,808.92	1,775,277.61	39.362302	-80.183404	5,576.83	0.00	0.00	0.00
13,697.88	89.00	152.00	7,502.90	-4,284.86	4,973.48	314,722.51	1,775,323.55	39.362066	-80.183239	5,673.51	0.00	0.00	0.00
13,700.00	89.00	152.03	7,502.94	-4,286.73	4,974.47	314,720.64	1,775,324.55	39.362061	-80.183236	5,675.60	1.50	0.00	1.50
13,800.00	89.00	153.53	7,504.69	-4,375.64	5,020.20	314,631.73	1,775,370.28	39.361818	-80.183072	5,774.57	1.50	0.00	1.50
13,900.00	89.00	155.03	7,506.44	-4,465.72	5,063.59	314,541.66	1,775,413.67	39.361571	-80.182916	5,873.87	1.50	0.00	1.50
14,000.00	89.00	156.52	7,508.19	-4,556.90	5,104.62	314,450.48	1,775,454.69	39.361322	-80.182768	5,973.45	1.50	0.00	1.50
14,100.00	89.00	158.02	7,509.94	-4,649.12	5,143.24	314,358.26	1,775,493.32	39.361069	-80.182629	6,073.22	1.50	0.00	1.50
14,200.00	89.00	159.52	7,511.69	-4,742.31	5,179.45	314,265.06	1,775,529.52	39.360814	-80.182499	6,173.13	1.50	0.00	1.50
14,300.00	89.00	161.02	7,513.43	-4,836.42	5,213.20	314,170.95	1,775,563.28	39.360556	-80.182377	6,273.11	1.50	0.00	1.50
14,400.00	89.00	162.51	7,515.18	-4,931.39	5,244.49	314,075.99	1,775,594.56	39.360296	-80.182264	6,373.08	1.50	0.00	1.50
14,500.00	89.01	164.01	7,516.91	-5,027.13	5,273.28	313,980.25	1,775,623.36	39.360034	-80.182159	6,472.98	1.50	0.00	1.50





<b>Company:</b>	Diversified Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Abbey 8MH
<b>Project:</b>	Harrison County, WV (NAD83 - GRID)	<b>TVD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Site:</b>	Abbey Pad	<b>MD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Well:</b>	Abbey 8MH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #6	<b>Database:</b>	.Total Directional Production DB

**Planned Survey**

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,600.00	89.01	165.51	7,518.65	-5,123.60	5,299.56	313,883.78	1,775,649.64	39.359770	-80.182064	6,572.74	1.50	0.00	1.50
14,700.00	89.01	167.01	7,520.37	-5,220.72	5,323.31	313,786.66	1,775,673.39	39.359504	-80.181977	6,672.29	1.50	0.00	1.50
14,800.00	89.02	168.50	7,522.09	-5,318.43	5,344.51	313,688.95	1,775,694.59	39.359236	-80.181899	6,771.57	1.50	0.01	1.50
14,900.00	89.02	170.00	7,523.80	-5,416.66	5,363.16	313,590.72	1,775,713.23	39.358967	-80.181831	6,870.51	1.50	0.01	1.50
14,985.80	89.03	171.29	7,525.25	-5,501.30	5,377.10	313,506.08	1,775,727.18	39.358735	-80.181779	6,955.06	1.50	0.01	1.50
15,000.00	89.03	171.07	7,525.49	-5,515.33	5,379.28	313,492.05	1,775,729.36	39.358696	-80.181771	6,969.04	1.50	-0.01	-1.50
15,100.00	89.02	169.58	7,527.19	-5,613.89	5,396.08	313,393.49	1,775,746.16	39.358426	-80.181709	7,067.69	1.50	-0.01	-1.50
15,200.00	89.02	168.08	7,528.90	-5,711.98	5,415.45	313,295.40	1,775,765.53	39.358157	-80.181638	7,166.73	1.50	-0.01	-1.50
15,300.00	89.01	166.58	7,530.62	-5,809.53	5,437.38	313,197.85	1,775,787.46	39.357890	-80.181558	7,266.09	1.50	0.00	-1.50
15,400.00	89.01	165.08	7,532.35	-5,906.47	5,461.85	313,100.91	1,775,811.93	39.357624	-80.181469	7,365.71	1.50	0.00	-1.50
15,500.00	89.00	163.59	7,534.08	-6,002.74	5,488.85	313,004.64	1,775,838.93	39.357360	-80.181371	7,465.52	1.50	0.00	-1.50
15,600.00	89.00	162.09	7,535.82	-6,098.27	5,518.35	312,909.11	1,775,868.43	39.357099	-80.181264	7,565.44	1.50	0.00	-1.50
15,676.07	89.00	160.95	7,537.15	-6,170.40	5,542.46	312,836.98	1,775,892.54	39.356901	-80.181177	7,641.49	1.50	0.00	-1.50
15,700.00	89.00	160.95	7,537.57	-6,193.02	5,550.27	312,814.36	1,775,900.35	39.356839	-80.181148	7,665.42	0.00	0.00	0.00
15,800.00	89.00	160.95	7,539.31	-6,287.53	5,582.90	312,719.85	1,775,932.98	39.356580	-80.181030	7,765.41	0.00	0.00	0.00
15,900.00	89.00	160.95	7,541.06	-6,382.04	5,615.54	312,625.34	1,775,965.62	39.356321	-80.180912	7,865.39	0.00	0.00	0.00
16,000.00	89.00	160.95	7,542.80	-6,476.55	5,648.17	312,530.83	1,775,998.25	39.356063	-80.180795	7,965.38	0.00	0.00	0.00
16,100.00	89.00	160.95	7,544.55	-6,571.06	5,680.81	312,436.32	1,776,030.88	39.355804	-80.180677	8,065.36	0.00	0.00	0.00
16,200.00	89.00	160.95	7,546.29	-6,665.56	5,713.44	312,341.81	1,776,063.52	39.355545	-80.180559	8,165.35	0.00	0.00	0.00
16,300.00	89.00	160.95	7,548.04	-6,760.07	5,746.08	312,247.30	1,776,096.15	39.355286	-80.180441	8,265.33	0.00	0.00	0.00
16,400.00	89.00	160.95	7,549.78	-6,854.58	5,778.71	312,152.80	1,776,128.79	39.355027	-80.180323	8,365.32	0.00	0.00	0.00
16,500.00	89.00	160.95	7,551.53	-6,949.09	5,811.34	312,058.29	1,776,161.42	39.354769	-80.180205	8,465.30	0.00	0.00	0.00
16,600.00	89.00	160.95	7,553.27	-7,043.60	5,843.98	311,963.78	1,776,194.06	39.354510	-80.180087	8,565.29	0.00	0.00	0.00
16,700.00	89.00	160.95	7,555.02	-7,138.11	5,876.61	311,869.27	1,776,226.69	39.354251	-80.179969	8,665.27	0.00	0.00	0.00
16,800.00	89.00	160.95	7,556.76	-7,232.62	5,909.25	311,774.76	1,776,259.32	39.353992	-80.179851	8,765.26	0.00	0.00	0.00
16,900.00	89.00	160.95	7,558.51	-7,327.13	5,941.88	311,680.25	1,776,291.96	39.353734	-80.179733	8,865.24	0.00	0.00	0.00
17,000.00	89.00	160.95	7,560.25	-7,421.64	5,974.52	311,585.74	1,776,324.59	39.353475	-80.179615	8,965.23	0.00	0.00	0.00
17,100.00	89.00	160.95	7,562.00	-7,516.15	6,007.15	311,491.23	1,776,357.23	39.353216	-80.179497	9,065.21	0.00	0.00	0.00
17,200.00	89.00	160.95	7,563.74	-7,610.65	6,039.79	311,396.72	1,776,389.86	39.352957	-80.179379	9,165.19	0.00	0.00	0.00
17,300.00	89.00	160.95	7,565.49	-7,705.16	6,072.42	311,302.21	1,776,422.50	39.352698	-80.179261	9,265.18	0.00	0.00	0.00
17,400.00	89.00	160.95	7,567.24	-7,799.67	6,105.05	311,207.71	1,776,455.13	39.352440	-80.179143	9,365.16	0.00	0.00	0.00
17,500.00	89.00	160.95	7,568.98	-7,894.18	6,137.69	311,113.20	1,776,487.76	39.352181	-80.179025	9,465.15	0.00	0.00	0.00
17,600.00	89.00	160.95	7,570.73	-7,988.69	6,170.32	311,018.69	1,776,520.40	39.351922	-80.178908	9,565.13	0.00	0.00	0.00
17,700.00	89.00	160.95	7,572.47	-8,083.20	6,202.96	310,924.18	1,776,553.03	39.351663	-80.178790	9,665.12	0.00	0.00	0.00
17,800.00	89.00	160.95	7,574.22	-8,177.71	6,235.59	310,829.67	1,776,585.67	39.351404	-80.178672	9,765.10	0.00	0.00	0.00
17,900.00	89.00	160.95	7,575.96	-8,272.22	6,268.23	310,735.16	1,776,618.30	39.351146	-80.178554	9,865.09	0.00	0.00	0.00
18,000.00	89.00	160.95	7,577.71	-8,366.73	6,300.86	310,640.65	1,776,650.94	39.350887	-80.178436	9,965.07	0.00	0.00	0.00

<b>Company:</b>	Diversified Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Abbey 8MH
<b>Project:</b>	Harrison County, WV (NAD83 - GRID)	<b>TVD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Site:</b>	Abbey Pad	<b>MD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Well:</b>	Abbey 8MH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #6	<b>Database:</b>	.Total Directional Production DB

**Planned Survey**

Measured Depth (usft)	INC (")	AZI (")	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (")	Geo Coordinates Longitude (")	Vertical Section (usft)	Dogleg Rate ("/100usft)	Build Rate ("/100usft)	Turn Rate ("/100usft)
18,100.00	89.00	160.95	7,579.45	-8,461.24	6,333.49	310,546.14	1,776,683.57	39.350628	-80.178318	10,065.06	0.00	0.00	0.00
18,126.07	89.00	160.95	7,579.91	-8,485.87	6,342.00	310,521.51	1,776,692.08	39.350561	-80.178287	10,091.12	0.00	0.00	0.00
18,200.00	89.00	159.84	7,581.20	-8,555.51	6,366.80	310,451.87	1,776,716.88	39.350370	-80.178198	10,165.04	1.50	0.00	-1.50
18,300.00	89.00	158.34	7,582.94	-8,648.90	6,402.49	310,358.47	1,776,752.56	39.350114	-80.178069	10,264.97	1.50	0.00	-1.50
18,400.00	89.00	156.84	7,584.69	-8,741.34	6,440.60	310,266.04	1,776,790.68	39.349861	-80.177932	10,364.78	1.50	0.00	-1.50
18,422.69	89.00	156.50	7,585.09	-8,762.16	6,449.58	310,245.21	1,776,799.66	39.349804	-80.177899	10,387.40	1.50	0.00	-1.50
18,500.00	89.00	156.50	7,586.44	-8,833.05	6,480.41	310,174.32	1,776,830.49	39.349610	-80.177789	10,464.47	0.00	0.00	0.00
18,522.69	89.00	156.50	7,586.83	-8,853.86	6,489.45	310,153.52	1,776,839.53	39.349553	-80.177756	10,487.08	0.00	0.00	0.00
18,600.00	89.00	157.66	7,588.18	-8,925.05	6,519.56	310,082.32	1,776,869.63	39.349358	-80.177648	10,564.20	1.50	0.00	1.50
18,700.00	89.00	159.17	7,589.93	-9,018.03	6,556.34	309,989.35	1,776,906.41	39.349104	-80.177515	10,664.09	1.50	0.00	1.50
18,800.00	89.00	160.67	7,591.67	-9,111.93	6,590.66	309,895.45	1,776,940.74	39.348847	-80.177391	10,764.05	1.50	0.00	1.50
18,900.00	89.00	162.18	7,593.42	-9,206.71	6,622.51	309,800.67	1,776,972.58	39.348587	-80.177276	10,864.03	1.50	0.00	1.50
19,000.00	89.00	163.68	7,595.16	-9,302.28	6,651.85	309,705.09	1,777,001.93	39.348326	-80.177170	10,963.95	1.50	0.00	1.50
19,100.00	89.01	165.19	7,596.90	-9,398.60	6,678.68	309,608.78	1,777,028.76	39.348062	-80.177072	11,063.75	1.50	0.00	1.50
19,160.63	89.01	166.10	7,597.95	-9,457.32	6,693.71	309,550.06	1,777,043.79	39.347901	-80.177018	11,124.16	1.50	0.00	1.50
19,200.00	89.01	165.51	7,598.63	-9,495.49	6,703.36	309,511.89	1,777,053.44	39.347796	-80.176982	11,163.39	1.50	0.00	-1.50
19,300.00	89.00	164.00	7,600.37	-9,591.95	6,729.65	309,415.43	1,777,079.73	39.347532	-80.176887	11,263.15	1.50	0.00	-1.50
19,400.00	89.00	162.50	7,602.11	-9,687.69	6,758.47	309,319.69	1,777,108.54	39.347270	-80.176782	11,363.05	1.50	0.00	-1.50
19,502.88	89.00	160.95	7,603.90	-9,785.37	6,790.72	309,222.01	1,777,140.80	39.347002	-80.176666	11,465.91	1.50	0.00	-1.50
19,600.00	89.00	160.95	7,605.60	-9,877.15	6,822.42	309,130.23	1,777,172.49	39.346751	-80.176551	11,563.01	0.00	0.00	0.00
19,700.00	89.00	160.95	7,607.34	-9,971.66	6,855.05	309,035.72	1,777,205.13	39.346492	-80.176433	11,663.00	0.00	0.00	0.00
19,800.00	89.00	160.95	7,609.09	-10,066.17	6,887.68	308,941.21	1,777,237.76	39.346233	-80.176316	11,762.98	0.00	0.00	0.00
19,900.00	89.00	160.95	7,610.83	-10,160.68	6,920.32	308,846.70	1,777,270.40	39.345974	-80.176198	11,862.97	0.00	0.00	0.00
20,000.00	89.00	160.95	7,612.58	-10,255.19	6,952.95	308,752.19	1,777,303.03	39.345716	-80.176080	11,962.95	0.00	0.00	0.00
20,100.00	89.00	160.95	7,614.33	-10,349.70	6,985.59	308,657.68	1,777,335.66	39.345457	-80.175962	12,062.94	0.00	0.00	0.00
20,200.00	89.00	160.95	7,616.07	-10,444.21	7,018.22	308,563.17	1,777,368.30	39.345198	-80.175844	12,162.92	0.00	0.00	0.00
20,300.00	89.00	160.95	7,617.82	-10,538.72	7,050.86	308,468.66	1,777,400.93	39.344939	-80.175726	12,262.90	0.00	0.00	0.00
20,400.00	89.00	160.95	7,619.56	-10,633.22	7,083.49	308,374.15	1,777,433.57	39.344680	-80.175608	12,362.89	0.00	0.00	0.00
20,500.00	89.00	160.95	7,621.31	-10,727.73	7,116.13	308,279.64	1,777,466.20	39.344422	-80.175490	12,462.87	0.00	0.00	0.00
20,600.00	89.00	160.95	7,623.05	-10,822.24	7,148.76	308,185.14	1,777,498.84	39.344163	-80.175372	12,562.86	0.00	0.00	0.00
20,700.00	89.00	160.95	7,624.80	-10,916.75	7,181.39	308,090.63	1,777,531.47	39.343904	-80.175254	12,662.84	0.00	0.00	0.00
20,800.00	89.00	160.95	7,626.54	-11,011.26	7,214.03	307,996.12	1,777,564.11	39.343645	-80.175136	12,762.83	0.00	0.00	0.00
20,900.00	89.00	160.95	7,628.29	-11,105.77	7,246.66	307,901.61	1,777,596.74	39.343386	-80.175019	12,862.81	0.00	0.00	0.00
21,000.00	89.00	160.95	7,630.03	-11,200.28	7,279.30	307,807.10	1,777,629.37	39.343128	-80.174901	12,962.80	0.00	0.00	0.00
21,100.00	89.00	160.95	7,631.78	-11,294.79	7,311.93	307,712.59	1,777,662.01	39.342869	-80.174783	13,062.78	0.00	0.00	0.00
21,200.00	89.00	160.95	7,633.52	-11,389.30	7,344.57	307,618.08	1,777,694.64	39.342610	-80.174665	13,162.77	0.00	0.00	0.00
21,300.00	89.00	160.95	7,635.27	-11,483.81	7,377.20	307,523.57	1,777,727.28	39.342351	-80.174547	13,262.75	0.00	0.00	0.00
21,400.00	89.00	160.95	7,637.01	-11,578.32	7,409.83	307,429.06	1,777,759.91	39.342092	-80.174429	13,362.74	0.00	0.00	0.00



<b>Company:</b>	Diversified Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Abbey 8MH
<b>Project:</b>	Harrison County, WV (NAD83 - GRID)	<b>TVD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Site:</b>	Abbey Pad	<b>MD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Well:</b>	Abbey 8MH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #6	<b>Database:</b>	.Total Directional Production DB

**Planned Survey**

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
21,500.00	89.00	160.95	7,638.76	-11,672.82	7,442.47	307,334.55	1,777,792.55	39.341834	-80.174311	13,462.72	0.00	0.00	0.00
21,600.00	89.00	160.95	7,640.50	-11,767.33	7,475.10	307,240.05	1,777,825.18	39.341575	-80.174193	13,562.71	0.00	0.00	0.00
21,700.00	89.00	160.95	7,642.25	-11,861.84	7,507.74	307,145.54	1,777,857.81	39.341316	-80.174075	13,662.69	0.00	0.00	0.00
21,800.00	89.00	160.95	7,643.99	-11,956.35	7,540.37	307,051.03	1,777,890.45	39.341057	-80.173958	13,762.68	0.00	0.00	0.00
21,900.00	89.00	160.95	7,645.74	-12,050.86	7,573.01	306,956.52	1,777,923.08	39.340798	-80.173840	13,862.66	0.00	0.00	0.00
22,000.00	89.00	160.95	7,647.48	-12,145.37	7,605.64	306,862.01	1,777,955.72	39.340540	-80.173722	13,962.65	0.00	0.00	0.00
22,100.00	89.00	160.95	7,649.23	-12,239.88	7,638.27	306,767.50	1,777,988.35	39.340281	-80.173604	14,062.63	0.00	0.00	0.00
22,200.00	89.00	160.95	7,650.98	-12,334.39	7,670.91	306,672.99	1,778,020.99	39.340022	-80.173486	14,162.62	0.00	0.00	0.00
22,300.00	89.00	160.95	7,652.72	-12,428.90	7,703.54	306,578.48	1,778,053.62	39.339763	-80.173368	14,262.60	0.00	0.00	0.00
22,400.00	89.00	160.95	7,654.47	-12,523.41	7,736.18	306,483.97	1,778,086.25	39.339504	-80.173250	14,362.59	0.00	0.00	0.00
22,500.00	89.00	160.95	7,656.21	-12,617.91	7,768.81	306,389.46	1,778,118.89	39.339246	-80.173132	14,462.57	0.00	0.00	0.00
22,600.00	89.00	160.95	7,657.96	-12,712.42	7,801.45	306,294.95	1,778,151.52	39.338987	-80.173014	14,562.55	0.00	0.00	0.00
22,700.00	89.00	160.95	7,659.70	-12,806.93	7,834.08	306,200.45	1,778,184.16	39.338728	-80.172897	14,662.54	0.00	0.00	0.00
22,800.00	89.00	160.95	7,661.45	-12,901.44	7,866.72	306,105.94	1,778,216.79	39.338469	-80.172779	14,762.52	0.00	0.00	0.00
22,900.00	89.00	160.95	7,663.19	-12,995.95	7,899.35	306,011.43	1,778,249.43	39.338210	-80.172661	14,862.51	0.00	0.00	0.00
23,000.00	89.00	160.95	7,664.94	-13,090.46	7,931.98	305,916.92	1,778,282.06	39.337952	-80.172543	14,962.49	0.00	0.00	0.00
23,100.00	89.00	160.95	7,666.68	-13,184.97	7,964.62	305,822.41	1,778,314.69	39.337693	-80.172425	15,062.48	0.00	0.00	0.00
23,200.00	89.00	160.95	7,668.43	-13,279.48	7,997.25	305,727.90	1,778,347.33	39.337434	-80.172307	15,162.46	0.00	0.00	0.00
23,300.00	89.00	160.95	7,670.17	-13,373.99	8,029.89	305,633.39	1,778,379.96	39.337175	-80.172189	15,262.45	0.00	0.00	0.00
23,400.00	89.00	160.95	7,671.92	-13,468.50	8,062.52	305,538.88	1,778,412.60	39.336916	-80.172071	15,362.43	0.00	0.00	0.00
23,500.00	89.00	160.95	7,673.66	-13,563.00	8,095.16	305,444.37	1,778,445.23	39.336658	-80.171953	15,462.42	0.00	0.00	0.00
23,600.00	89.00	160.95	7,675.41	-13,657.51	8,127.79	305,349.86	1,778,477.87	39.336399	-80.171836	15,562.40	0.00	0.00	0.00
23,700.00	89.00	160.95	7,677.15	-13,752.02	8,160.42	305,255.36	1,778,510.50	39.336140	-80.171718	15,662.39	0.00	0.00	0.00
23,800.00	89.00	160.95	7,678.90	-13,846.53	8,193.06	305,160.85	1,778,543.14	39.335881	-80.171600	15,762.37	0.00	0.00	0.00
23,900.00	89.00	160.95	7,680.64	-13,941.04	8,225.69	305,066.34	1,778,575.77	39.335622	-80.171482	15,862.36	0.00	0.00	0.00
24,000.00	89.00	160.95	7,682.39	-14,035.55	8,258.33	304,971.83	1,778,608.40	39.335364	-80.171364	15,962.34	0.00	0.00	0.00
24,100.00	89.00	160.95	7,684.13	-14,130.06	8,290.96	304,877.32	1,778,641.04	39.335105	-80.171246	16,062.33	0.00	0.00	0.00
24,200.00	89.00	160.95	7,685.88	-14,224.57	8,323.60	304,782.81	1,778,673.67	39.334846	-80.171128	16,162.31	0.00	0.00	0.00
24,300.00	89.00	160.95	7,687.63	-14,319.08	8,356.23	304,688.30	1,778,706.31	39.334587	-80.171011	16,262.30	0.00	0.00	0.00
24,400.00	89.00	160.95	7,689.37	-14,413.59	8,388.86	304,593.79	1,778,738.94	39.334328	-80.170893	16,362.28	0.00	0.00	0.00
24,500.00	89.00	160.95	7,691.12	-14,508.09	8,421.50	304,499.28	1,778,771.58	39.334070	-80.170775	16,462.27	0.00	0.00	0.00
24,600.00	89.00	160.95	7,692.86	-14,602.60	8,454.13	304,404.77	1,778,804.21	39.333811	-80.170657	16,562.25	0.00	0.00	0.00
24,677.88	89.00	160.95	7,694.22	-14,676.21	8,479.55	304,331.17	1,778,829.63	39.333609	-80.170565	16,640.12	0.00	0.00	0.00
24,700.00	89.00	160.62	7,694.61	-14,697.09	8,486.83	304,310.29	1,778,836.90	39.333552	-80.170539	16,662.23	1.50	0.00	-1.50
24,800.00	89.00	159.12	7,696.35	-14,790.96	8,521.24	304,216.41	1,778,871.32	39.333295	-80.170415	16,762.20	1.50	0.00	-1.50
24,900.00	89.00	157.62	7,698.10	-14,883.90	8,558.10	304,123.47	1,778,908.17	39.333041	-80.170282	16,862.08	1.50	0.00	-1.50
25,000.00	89.00	156.12	7,699.85	-14,975.85	8,597.38	304,031.53	1,778,947.45	39.332789	-80.170141	16,961.81	1.50	0.00	-1.50



<b>Company:</b>	Diversified Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Abbey 8MH
<b>Project:</b>	Harrison County, WV (NAD83 - GRID)	<b>TVD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Site:</b>	Abbey Pad	<b>MD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Well:</b>	Abbey 8MH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #6	<b>Database:</b>	.Total Directional Production DB

**Planned Survey**

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Geo Coordinates		Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
				+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude (°)	Longitude (°)				
25,100.00	89.00	154.62	7,701.60	-15,066.73	8,639.05	303,940.65	1,778,989.13	39.332540	-80.169991	17,061.32	1.50	0.00	-1.50
25,141.15	89.00	154.00	7,702.32	-15,103.80	8,656.88	303,903.57	1,779,006.96	39.332439	-80.169927	17,102.18	1.50	0.00	-1.50
25,200.00	89.00	154.88	7,703.34	-15,156.89	8,682.27	303,850.49	1,779,032.35	39.332294	-80.169836	17,160.64	1.50	0.00	1.50
25,300.00	89.00	156.38	7,705.09	-15,247.97	8,723.52	303,759.41	1,779,073.60	39.332045	-80.169688	17,260.20	1.50	0.00	1.50
25,400.00	89.00	157.88	7,706.84	-15,340.09	8,762.37	303,667.29	1,779,112.45	39.331792	-80.169548	17,359.96	1.50	0.00	1.50
25,500.00	89.00	159.38	7,708.59	-15,433.20	8,798.80	303,574.18	1,779,148.88	39.331538	-80.169417	17,459.86	1.50	0.00	1.50
25,600.00	89.00	160.88	7,710.34	-15,527.23	8,832.78	303,480.15	1,779,182.85	39.331280	-80.169294	17,559.83	1.50	0.00	1.50
25,700.00	89.00	162.38	7,712.08	-15,622.12	8,864.28	303,385.26	1,779,214.36	39.331020	-80.169180	17,659.80	1.50	0.00	1.50
25,721.70	89.00	162.71	7,712.46	-15,642.82	8,870.79	303,364.56	1,779,220.86	39.330964	-80.169157	17,681.49	1.50	0.00	1.50
25,800.00	89.00	162.71	7,713.82	-15,717.57	8,894.06	303,289.81	1,779,244.13	39.330759	-80.169072	17,759.74	0.00	0.00	0.00
25,890.53	89.00	162.71	7,715.40	-15,804.00	8,920.96	303,203.38	1,779,271.04	39.330522	-80.168975	17,850.22	0.00	0.00	0.00

**Design Targets**
**Target Name**

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LP v4 - Abbey 8MH - plan hits target center - Point	0.00	360.00	7,415.00	445.27	3,258.18	319,452.65	1,773,608.25	39.375016	-80.189434
PBHL v4 - Abbey 8MH - plan hits target center - Point	0.00	0.00	7,715.40	-15,804.00	8,920.96	303,203.38	1,779,271.04	39.330522	-80.168975

 RECEIVED  
 Office of Oil and Gas

NOV 18 2024

 WV Department of  
 Environmental Protection



<b>Company:</b>	Diversified Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Abbey 8MH
<b>Project:</b>	Harrison County, WV (NAD83 - GRID)	<b>TVD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Site:</b>	Abbey Pad	<b>MD Reference:</b>	WELL @ 1024.00usft (28' RKB)
<b>Well:</b>	Abbey 8MH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #6	<b>Database:</b>	.Total Directional Production DB

**Plan Annotations**

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1350	1350	0	0	KOP; Begin 2.00° Build
1750	1749	20	20	Continue 2.00° Build/Turn
3030	2942	186	417	Hold 32.41° Tangent
7729	6910	924	2826	Begin 10.00° Build/Turn
8643	7415	445	3258	Hold 89.00° Lateral
9943	7438	-821	3551	Begin 1.50° Turn
11,123	7458	-1912	3989	Continue 1.50° Turn
11,901	7472	-2617	4315	Hold 160.95° Az
12,901	7489	-3562	4642	Begin 1.50° Turn
13,498	7499	-4108	4880	Hold 152.00° Az
13,698	7503	-4285	4973	Begin 1.50° Turn
14,986	7525	-5501	5377	Continue 1.50° Turn
15,676	7537	-6170	5542	Hold 160.95° Az
18,126	7580	-8486	6342	Begin 1.50° Turn
18,423	7585	-8762	6450	Hold 156.50° Az
18,523	7587	-8854	6489	Begin 1.50° Turn
19,161	7598	-9457	6694	Continue 1.50° Turn
19,503	7604	-9785	6791	Hold 160.95° Az
24,678	7694	-14,676	8480	Begin 1.50° Turn
25,141	7702	-15,104	8657	Continue 1.50° Turn
25,722	7712	-15,643	8871	Hold 162.71° Az
25,891	7715	-15,804	8921	PBHL - 25890.53' MD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection

4703306048

WW-9  
(4/16)

API Number 47 - 033 - \_\_\_\_\_  
Operator's Well No. Abbey South 8MH

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Diversified Production, LLC OP Code 494524121

Watershed (HUC 10) West Fork Quadrangle Rosemont 7 5'

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

Will a pit be used? Yes  No

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

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

Proposed Disposal Method For Treated Pit Wastes:

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

Will closed loop system be used? If so, describe: Closed loop consisting of multiple half-round tanks to accommodate all drill cuttings that will be solidified on site and transported via truck to a disposal site

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

-If oil based, what type? Synthetic, petroleum, etc. \*See attached

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) \_\_\_\_\_

-Landfill or offsite name/permit number? \*See attached

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) Daniel Flick

Company Official Title Director - EHS Regulatory

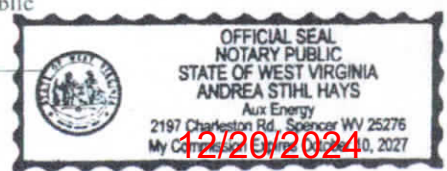
NOV 18 2024

WV Department of Environmental Protection

Subscribed and sworn before me this 29<sup>th</sup> day of October, 2024

Andrea S. Hays Notary Public

My commission expires 10/10/2027



Diversified Production, LLC

Proposed Revegetation Treatment: Acres Disturbed 5.98 acres Prevegetation pH \_\_\_\_\_

Lime 2 Tons/acre or to correct to pH approx. 7

Fertilizer type 10-20-20 or equivalent

Fertilizer amount 500 lbs/acre

Mulch 100 bales Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

Seed Type	lbs/acre
30% Annual Ryegrass, 20% Pennate Orchard	
10% Alsike Clover, 10% Trefoil Norcen Empire	
15% Climax Timothy N.C., 15% Perennial Ryegrass	

Seed Type	lbs/acre
30% Annual Ryegrass, 20% Pennate Orchard	
10% Alsike Clover, 10% Trefoil Norcen Empire	
15% Climax Timothy N.C., 15% Perennial Ryegrass	

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: Ky Weibel

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

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection

Title: O&G Inspector

Date: 10/24/24

Field Reviewed? (  ) Yes (  ) No

4703306048

### Additional Information for WW-9

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

Vertical Surface: Air/FW Mist

Vertical Intermediates: Air Brine Mist

Horizontal: Synthetic Oil Based Mud

**Additives to be used in drilling medium?**

Vertical Surface: FW shale stabilizers

Vertical Intermediates: Shale inhibitors, mist soap & gear oil; Water Based Mud w/NaCl<sub>2</sub> & bentonite gel

Horizontal: Barite, bentonite gel, emulsifiers, wetting agents & lime

Landfill Info:

Landfill	Permit #	Address
Waste Management	SWF 1032	1488 Dawson Drive Bridgeport, WV 26330 304-343-6987
Wetzel County Landfill	SWF 1021	Rt. 1 Box 156A New Martinsville, WV 26035 304-455-3800
Apex Environmental	06-08438	11 County Road 78 Amstardam, OH 43903 740-543-4389
Chestnut Valley	100419	1184 McClellandtown Road McClellandtown, PA 15458 724-437-7336

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection

12/20/2024



4703306048



Diversified  
Production LLC

## WELL SITE SAFETY PLAN

Well Name: Abbey South 8MH

Pad Name: Abbey

911 Address:

39 Cathrine Drive  
Shinnston, WV 26431

County: Harrison

District: Clay - Outside

UTM (meters), NAD83, Zone 17

Northing: 4,358,554.976

Easting: 568,826.350

October 2024

*Ky Willis*  
*10/24/24*

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection

12/20/2024



ABBEY SOUTH WELL BMH		
ID	SURFACE OWNER	DIST-TM-PAR
1	LONG RIDGE WEST VIRGINIA LLC	5-210-44.2
2	SANDRA LOU TAYLOR	P/O 3-6-16.1
3	DOREEN M. & LEONARD L. LARSON	3-6-13
4	CHARLES THOMAS & MILDRED C. LITTLE	3-6-12
5	TERRY D. & PATRICIA WYER	3-6-26.1
6	TERRY D. & PATRICIA WYER	3-6-26
7	BEVERLY SUE & SCOTT A. MARKS	3-6-26.2
8	DAVID & BARBARA PYBUS	3-6-37.2
9	ELTON O. JR & CONSTANCE C. FITZPATRICK	3-6-37.3
10	ELTON O. JR & CONSTANCE C. FITZPATRICK	3-6-37
11	ROBERT C. & DIANA L. BOYLE	3-6-36.1
12	THOMAS I. MCDANIEL, JR & KATHY L. MCDANIEL	3-6-38
13	JOHN DALE MAULLER	3-6-51.1
14	TIMOTHY B. MCDANIEL & KATHLEEN M. WITHAM	3-6-51.2
15	ROSE MARIE WOLFE REVOCABLE LIVING TRUST	3-6-49.3
16	MIA RAE GRESAK & CAMERON AUSTIN MORRIS	3-6-49.1
17	ERIK & STEPHANIE A. HURST	3-6-50
18	MARK V. SCHUMACHER	3-6-60
19	MARK V. SCHUMACHER	3-13-26
20	MARK V. SCHUMACHER	3-13-27
21	JAMES MARK & BARBARA KAY FERGUSON	3-13-34.1
22	JOSEPH BLAINE FERGUSON	3-13-34
23	DEBORAH C. TENDA & TIMOTHY M. BOES	3-13-32.2
24	CARL LEE WARNER	3-13-36.2
25	SELBY R. & ROSEMARY B. WOODS	3-13-36.3
26	DAWN L. HECK	3-13-37.2
27	KEITH J. & JANE L. HADDIX	3-13-37.5

ABBEY SOUTH WELL BMH		
ID	SURFACE OWNER	DIST-TM-PAR
28	BRETT A. SCHROCK	P/O 3-13-39
29	EVAN & WHITNEY HELMS KLIETHERMES	3-13-41
30	EVAN M. & WHITNEY M. KLIETHERMES	3-13-44
31	EVAN M. KLIETHERMES	3-13-42
32	DIEDRE FAE SNOW	3-13-43
33	RUSSELL HALL	3-14-38
34	HARMONY GROVE BAPTIST CHURCH TRS OF	3-14-19
35	CHARLES E. PRYOR	3-15-5
36	MARTHA JANE FINDLEY	3-15-8.1

SEE PAGE 2 FOR LESSOR INFO  
SEE PAGE 3 FOR PLAT DUE TO LENGTH OF LATERAL

# THRASHER

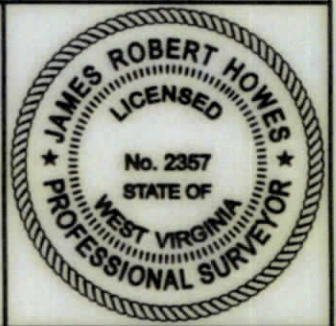
THE THRASHER GROUP, INC.  
600 WHITE OAKS BLVD.  
BRIDGEPORT, WV 26330  
PHONE 304-624-4108



Diversified  
Production LLC

FILE #: T70-11275 ABBEY WELL PAD  
DRAWING #: ABBEY SOUTH 8MH  
SCALE: 1" = 2,000'  
DATE: NOVEMBER 14, 2024

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.



MINIMUM DEGREE OF ACCURACY: 1/2500  
PROVEN SOURCE SURVEY GRADE GPS OF ELEVATION: (NAVD 88, US FT)

SIGNED: *James R Howes*  
R.P.E.: \_\_\_\_\_ L.L.S.: P.S. No. 2357



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

OPERATOR'S WELL #: ABBEY SOUTH 8MH  
API WELL #: 47 33 06048  
STATE COUNTY PERMIT

WELL TYPE: OIL  WASTE DISPOSAL  PRODUCTION  DEEP  GAS  LIQUID INJECTION  STORAGE  SHALLOW   
WATERSHED: WEST FORK ELEVATION: 996.00'±  
COUNTY/DISTRICT: HARRISON / CLAY-OUTSIDE QUADRANGLE: ROSEMONT, WV 7.5'  
SURFACE OWNER: LONG RIDGE WEST VIRGINIA LLC ACREAGE: 6.77±  
OIL & GAS ROYALTY OWNER: WILLOW CREEK MHV, LLC ACREAGE: 6.77± 12/20/2024  
DRILL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION   
CONVERT  PLUG & ABANDON  CLEAN OUT & REPLUG  PERFORATE NEW FORMATION   
OTHER CHANGE  (SPECIFY): \_\_\_\_\_  
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: (LATERAL) TMD: 7,415'± TMD: 25,891'±

WELL OPERATOR: DIVERSIFIED PRODUCTION, LLC DESIGNATED AGENT: CHRIS VEASEY  
ADDRESS: 101 MCQUISTON DRIVE ADDRESS: 400 SUMMER STREET  
CITY: JACKSON CENTER STATE: PA ZIP CODE: 16133 CITY: CHARLESTON STATE: WV ZIP CODE: 25301

**ABBAY SOUTH WELL 8MH**

ID	LEASE NUMBER	LESSOR	LEASE ACREAGE
A	101263000	WILLOW CREEK MHV	6.77
B	101282000, 101283000, 101272000, 101094000, 101069000, 101284000, 101271000, 101285000	SANDRA FAYE STACKHOUSE ET AL	4.39
C	101286000	LARRY B. & LAURA L. WEAVER	4.00
D	101250000	CHARLES THOMAS LITTLE	19.45
E	101182000	TERRY D. & PATRICIA WYER	5.98
F	101249000	TERRY D. & PATRICIA WYER	26.42
G	101182000	BEVERLY SUE & SCOTT A. MARKS	4.91
H	101281000	AUGUSTA RESOURCES, LLC	47.52
H	101281000	AUGUSTA RESOURCES, LLC	47.52
H	101281000	AUGUSTA RESOURCES, LLC	47.52
I	101290000	ROBERT C. & DIANA L. BOYLE	5.58
J	101300000	THOMAS I. MCDANIEL, JR & KATHY L. MCDANIEL	14.59
K	101301000	JOHN DALE MAULLER	4.86
L	101302000	TIMOTHY B. MCDANIEL & KATHLEEN M. WITHAM	14.92
M	101303000	THE ERNEST AND ROBERTA SCHUMACHER IRREVOCABLE TRUST	20.61
M	101303000	THE ERNEST AND ROBERTA SCHUMACHER IRREVOCABLE TRUST	20.61
N	100945000	ERIK & STEPHANIE A. HURST	11.56
O	BP070829	S.M. ROBINSON	46.00
P	BP059059	A.C. MORRIS	46.00
Q	BP066857	M.B. TOLLEY	85.00
R	BP067020	NANCY HUNSACKER	15.00
S	101304000, 101105000, 101103000	SENECA-UPSHUR PETROLEUM, LLC ET AL	11.90
T	BP059113	ROY ELDER	50.00
U	BP064885	A.G. CALIFF	18.00
V	BP057189	RUFUS HOLDEN ET UX	43.00
W	BP067174	L.R. DAVIS	51.00
X	BP049762	CHARLES H PAYNE	100.25
Y	BP067021	L.R. DAVIS	12.00
Z	BP066889	DORSEY CROPP	16.00
AA	BP067189	H.D. SMALLWOOD	30.00
BB	101269000	CHARLES E. FINDLEY AND CLARICE GAIL FINDLEY	63.75

SEE PAGE 1 FOR SURFACE OWNER INFO  
SEE PAGE 3 FOR PLAT DUE TO LENGTH OF LATERAL

# THRASHER

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



Diversified  
Production LLC

FILE #: T70-11275 ABBEY WELL PAD  
DRAWING #: ABBAY SOUTH 8MH  
SCALE: 1" = 2,000'  
DATE: NOVEMBER 14, 2024

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.



MINIMUM DEGREE OF ACCURACY: 1/2500  
PROVEN SOURCE SURVEY GRADE GPS OF ELEVATION: (NAVD 88, US FT)

SIGNED: *James R Howes*  
R.P.E.: \_\_\_\_\_ L.L.S.: P.S. No. 2357



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

OPERATOR'S WELL #: ABBAY SOUTH 8MH  
API WELL #: 47 33 06048  
STATE COUNTY PERMIT

WELL TYPE: OIL  WASTE DISPOSAL  PRODUCTION  DEEP  GAS  LIQUID INJECTION  STORAGE  SHALLOW   
WATERSHED: WEST FORK ELEVATION: 996.00'±  
COUNTY/DISTRICT: HARRISON / CLAY-OUTSIDE QUADRANGLE: ROSEMONT, WV 7.5'  
SURFACE OWNER: LONG RIDGE WEST VIRGINIA LLC ACREAGE: 6.77±  
OIL & GAS ROYALTY OWNER: WILLOW CREEK MHV, LLC ACREAGE: 6.77± 12/20/2024  
DRILL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION   
CONVERT  PLUG & ABANDON  CLEAN OUT & REPLUG  PERFORATE NEW FORMATION   
OTHER CHANGE  (SPECIFY): \_\_\_\_\_  
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: (LATERAL) TMD: 7,415'± TMD: 25,891'±

WELL OPERATOR: DIVERSIFIED PRODUCTION, LLC DESIGNATED AGENT: CHRIS VEASEY  
ADDRESS: 101 MCQUISTON DRIVE ADDRESS: 400 SUMMER STREET  
CITY: JACKSON CENTER STATE: PA ZIP CODE: 16133 CITY: CHARLESTON STATE: WV ZIP CODE: 25301

BHL is located on topo map 1,025 feet south of Latitude: 39° 20' 00"  
 SHL is located on topo map 14,738 feet south of Latitude: 39° 22' 30"

# ABBHEY SOUTH 8MH

## PAGE 3 OF 3

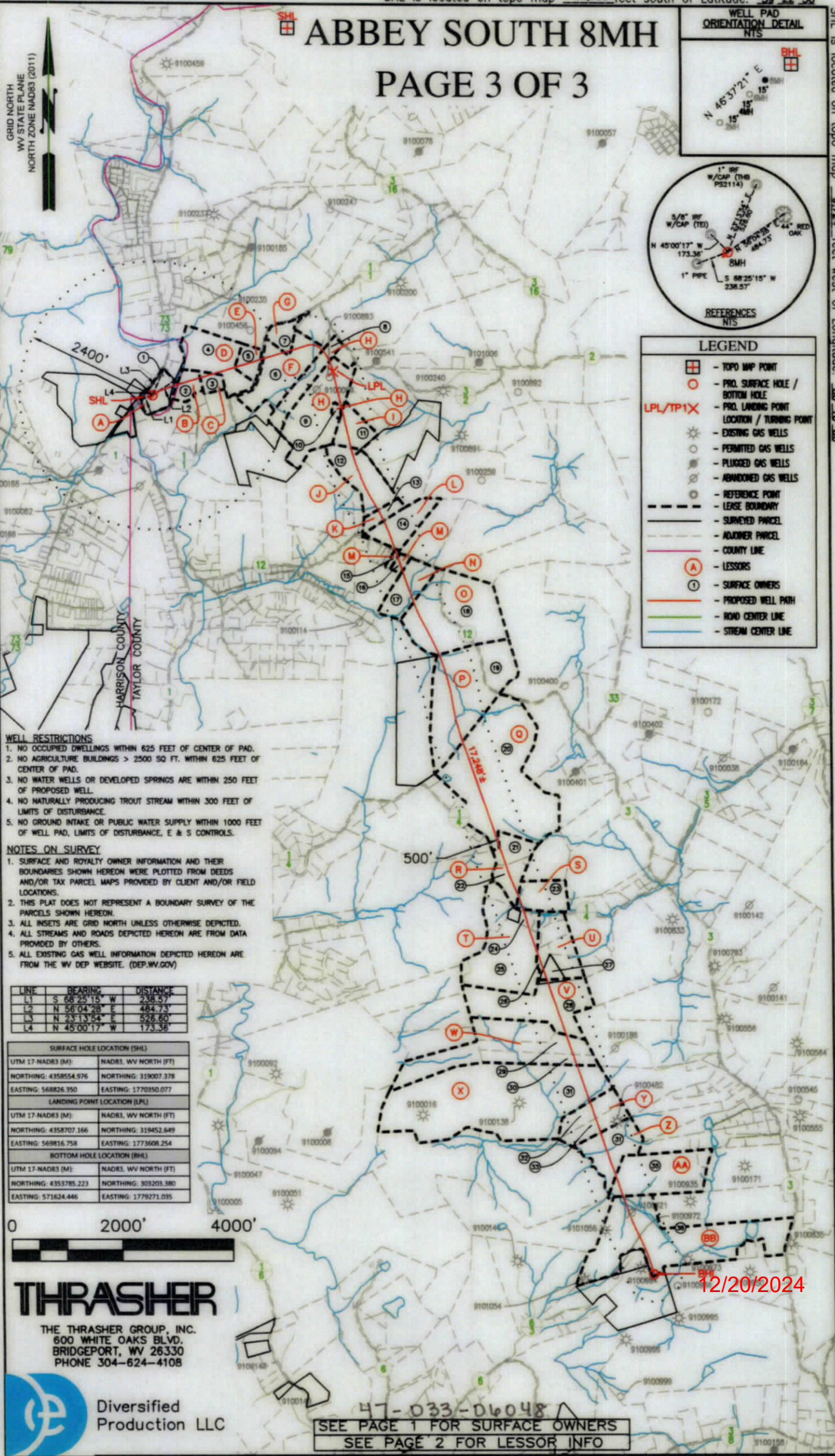
WELL PAD  
ORIENTATION  
DETAIL  
NTS



### LEGEND

- TOPO MAP POINT
- PRO. SURFACE HOLE / BOTTOM HOLE
- PRO. LANDING POINT LOCATION / TURNING POINT
- EXISTING GAS WELLS
- PERMITTED GAS WELLS
- PLUGGED GAS WELLS
- ABANDONED GAS WELLS
- REFERENCE POINT
- LEASE BOUNDARY
- SURVEYED PARCEL
- ADJACENT PARCEL
- COUNTY LINE
- LESSORS
- SURFACE OWNERS
- PROPOSED WELL PATH
- ROAD CENTER LINE
- STREAM CENTER LINE

GRID NORTH  
WV STATE PLANE  
NORTH ZONE NAD83 (2011)



### WELL RESTRICTIONS

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

### NOTES ON SURVEY

1. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
3. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.
4. ALL STREAMS AND ROADS DEPICTED HEREON ARE FROM DATA PROVIDED BY OTHERS.
5. ALL EXISTING GAS WELL INFORMATION DEPICTED HEREON ARE FROM THE WV DEP WEBSITE. (DEP.WV.GOV)

LINE	BEARING	DISTANCE
L1	S 68°25'15" W	238.57
L2	N 56°04'28" E	484.73
L3	N 23°13'54" E	526.60
L4	N 45°00'17" W	173.36

### SURFACE HOLE LOCATION (SHL)

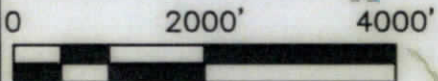
UTM 17-NAD83 (M)	NAD83, WV NORTH (FT)
NORTHING: 4358554.976	NORTHING: 319007.378
EASTING: 568826.350	EASTING: 1770350.077

### LANDING POINT LOCATION (LPL)

UTM 17-NAD83 (M)	NAD83, WV NORTH (FT)
NORTHING: 4358707.166	NORTHING: 319452.649
EASTING: 569816.758	EASTING: 1773608.254

### BOTTOM HOLE LOCATION (BHL)

UTM 17-NAD83 (M)	NAD83, WV NORTH (FT)
NORTHING: 4353785.223	NORTHING: 303203.380
EASTING: 571624.446	EASTING: 1779271.035



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



Diversified  
Production LLC

47-033-06048  
 SEE PAGE 1 FOR SURFACE OWNERS  
 SEE PAGE 2 FOR LESSOR INFO

12/20/2024

BHL is located on topo map 660 feet west of Longitude: 80° 10' 00"  
 SHL is located on topo map 9,724 feet west of Longitude: 80° 10' 00"

WW-6A1  
(5/13)

Operator's Well No. Abbey South 8MH

**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				

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection


\*Co-tenancy utilization - At least 7 mineral owners in tract. At least 75% of the royalty owners have executed a lease on the tract. The interests of the remaining co-tenants were acquired pursuant to the Co-tenancy Modernization and Majority Protection Act.

**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: Diversified Production, LLC  
 By: Amy L. Morris   
 Its: Director of Regulatory Affairs - Aux Energy, LLC (consultant)

Abbey South	LEASE NUMBER	TAX MAP	CURRENT LEASE NUMBER	GRANTOR/LESSOR	GRANTEE/LESSEE	ROYALTY	DEED BOOK	PAGE
A	112961.11395	5-210-44.2	101263000	WILLOW CREEK MHV LLC	LONG RIDGE WEST VIRGINIA, LLC	16%	1776	938
B	112961.10687	P/O 3-6-16.1	101282000	ROGER LEE STACKHOUSE	LONG RIDGE WEST VIRGINIA, LLC	15%	75	79
			101283000	LINDA LOU SMITH	LONG RIDGE WEST VIRGINIA, LLC	15%	75	121
			101272000	SANDRA FAYE STACKHOUSE	LONG RIDGE WEST VIRGINIA, LLC	15%	74	550
			101094000	SANDRA L. TAYLOR	LONG RIDGE WEST VIRGINIA, LLC	15%	72	663
			101069000	STEPHANIE A. BOWERS	LONG RIDGE WEST VIRGINIA, LLC	15%	72	500
			101284000	LARRY SUMMERS	LONG RIDGE WEST VIRGINIA, LLC	15%	74	313
			101271000	RANDY SUMMERS	LONG RIDGE WEST VIRGINIA, LLC	15%	74	542
			101285000	DALTON R. SUMMERS	LONG RIDGE WEST VIRGINIA, LLC	15%		co-tenancy
C	112961.10684	3-6-13	101286000	LARRY B. WEAVER AND LAURA L. WEAVER	LONG RIDGE WEST VIRGINIA, LLC	15%	75	110
D	112961.10683	3-6-12	101250000	CHARLES THOMAS LITTLE	LONG RIDGE WEST VIRGINIA, LLC	16%	74	297
E	112961.10677	3-6-26.1	101182000	TERRY D. WYER AND PATRICIA WYER	LONG RIDGE WEST VIRGINIA, LLC	16%	73	478
F	112961.10676	3-6-26	101182000	TERRY D. WYER AND PATRICIA WYER	LONG RIDGE WEST VIRGINIA, LLC	16%	73	478
G	112961.11402	3-6-26.2	101249000	BEVERLY SUE MARKS AND SCOTT A. MARKS	LONG RIDGE WEST VIRGINIA, LLC	16%	74	290
H	112961.10371	3-6-37.2	101281000	AUGUSTA RESOURCES, LLC	LONG RIDGE WEST VIRGINIA, LLC	16%	75	65
	112961.10372	3-6-37.3						
	112961.11428	3-6-37						
I	112961.10838	3-6-36.1	10129000	ROBERT C. BOYLE AND DIANA L. BOYLE	LONG RIDGE WEST VIRGINIA, LLC	15%	74	323
J	112961.10839	3-6-38	10130000	THOMAS I. MCDANIEL, JR. AND KATHY L. MCDANIEL	LONG RIDGE WEST VIRGINIA, LLC	15%	75	128
				THOMAS I. MCDANIEL, SR., L/E	LONG RIDGE WEST VIRGINIA, LLC	15%	75	128
K	112961.108480	3-6-51.1	101301000	J. DALE MAULLER	LONG RIDGE WEST VIRGINIA, LLC	15%	75	108
L	112961.108470	3-6-51.2	101302000	TIMOTHY B. MCDANIEL AND KATHLEEN W. WITHAM	LONG RIDGE WEST VIRGINIA, LLC	15%	75	103
M	112961.11431	3-6-49.3	101303000	THE ERNEST AND ROBERTA SCHUMACHER SECOND IRREVOCABLE TRUST, DATED JANUARY 29, 2019	LONG RIDGE WEST VIRGINIA, LLC	15%	74	315
	112961.11430	3-6-49.1						
N	112961.10420	3-6-50	100945000	Erik Hurst and Stephanie A. Hurst	LONG RIDGE WEST VIRGINIA, LLC	16%	71	578
O	BP070829	3-6-60	100810000	SAMUEL M. ROBINSON AND MADILINE ROBINSON, EACH IN HIS OWN RIGHT AND AS HUSBAND AND WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	25	287
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
P	BP059059	3-13-26	100734000	A.C. MORRIS, SINGLE;ALBERT W. POST AND MARY O. POST IN THEIR OWN RIGHT AND AS HUSBAND AND WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	22	19
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148

Q	BP066857	3-13-27	100753000	M.B. TOLLEY AND BLANCHE TOLLEY, HUSBAND AND WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	258
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148				
R	BP067020	3-13-34.1 3-13-34	100782000	HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
S	112961.10509	3-13-32.2	101304000 101105000 101103000	Seneca-Upshur Petroleum LLC	LONG RIDGE WEST VIRGINIA, LLC	15%	75	85
				Collingwood Appalachian Minerals II, LLC	LONG RIDGE WEST VIRGINIA, LLC	15%	73	128
				Collingwood Appalachian Minerals III, LLC	LONG RIDGE WEST VIRGINIA, LLC	15%	73	126
T	BP059113	3-13-36.2 3-13-36.3	100735000	RORY ELDER AND LENA ELDER, EACH IN THEIR OWN RIGHT AND AS HUSBAND AND WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	22	71
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148				
U	BP064885	3-13-37.2 3-13-37.5	100746000	RUFUS HOLDEN AND AGNES T. HOLDEN, HIS WIFE; A. GAY CALIFF, WIDOW; ELIZABETH BARTLETT, WIDOW	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	22	391
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148				
V	BP057189	P/O 3-13-39	100726000	RUFUS HOLDEN AND AGNES T. HOLDEN, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	21	195
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148				



4703306048

W	BP067174	3-13-41 3-13-44	100791000	LOUISE R. DAVIS, WIDOW; MINNIE REED, SINGLE; MIRIAM R. HARR & R. LEE HARR, HER HUSBAND; ETHEL REED DAVIS & GEORGE R. DAVIS, HER HUSBAND; J. ROBERT REED & AGNES VIRGINIA REED, HIS WIFE, CHARLES EARL REED & BERYL REED, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	389
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
				X	BP049762	3-13-42	100700000	CHAS. H. PAYNE AND JEAN M. PAYNE, HIS WIFE; F.C. PAYNE, SINGLE; MODENA TIGHE AND T.H. TIGHE, HER HUSBAND
HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138					270
CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5					555
CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51					795
CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58					362
DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33					377
TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39					69
M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39					148
Y	BP067021	3-13-43 3-14-18	100783000					ERNEST L. FLETCHER AND DOROTHY V. FLETCHER, HIS WIFE, BENJAMIN F. KIBBE AND MILDRED I. KIBBE, HIS WIFE; JAMES D. KIBBE AND REVA B. KIBBE, JASON H. KIBBE, SINGLE AND EDNA K. BRADLEY, SINGLE
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
				Z	BP066889	3-14-19	100758000	DORSEY CROPP AND MARY CROPP, HIS WIFE, AND DORSEY L. BROWN AND MINNIE M. BROWN, HIS WIFE
HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138					270
CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5					555
CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51					795
CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58					362
DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33					377
TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39					69
M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39					148
AA	BP067189	3-15-5	100792000					HERMAN E. SMALLWOOD AND AGNES C. SMALLWOOD; FRANK A. SMALLWOOD; MARGARET C. CONNER AND CHARLES EDWARD CONNER; HARRY D. SMALLWOOD AND SYLVIA MAE SMALLWOOD; FRED L. SMALLWOOD AND PAULINE E. SMALLWOOD; RALPH M. SMALLWOOD AND ANNIE L. SMALLWOOD; AND W.H. SMALLWOOD AND HAZEL SMALLWOOD
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
				Eva Jo Crites	LONG RIDGE WEST VIRGINIA, LLC	14%	72	642

4703306048

BB	112961.10854	P/O 3-15-8.1	101269000	CHARLES E. FINDLEY AND CLARICE GAIL FINDLEY, HIS WIFE	JAMES F. SCOTT	NOT LESS THAN 1/8	37	379
				JAMES F. SCOTT	NANCY CATHERINE GIBSON	ASSIGNMENT - WI	9	144
				JAMES F. SCOTT	SCOTT OIL & GAS COMPANY	NAME CHANGE/ASSIGNMENT	Unrecorded	Unrecorded
				SCOTT OIL & GAS COMPANY	SCOTT OIL COMPANY	NAME CHANGE/ASSIGNMENT	Unrecorded	Unrecorded
				SCOTT OIL COMPANY	EMAX OIL COMPANY	NAME CHANGE	53	408
				EMAX OIL COMPANY	CABOT OIL AND GAS CORPORATION	ASSIGNMENT	17	247
				CABOT OIL AND GAS CORPORATION	BOWIE, INC.	ASSIGNMENT	22	154
				SUZANNE MARIE GIBSON SLOAN	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT	39	470
				GINA CAROLYN GIBSON	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT	39	462
				BOWIE INC.	BOWIE FAMILY LLC			
				BOWIE FAMILY LLC	SYCAMORE INVESTMENTS, LLC	ASSIGNMENT	39	360
				SYCAMORE INVESTMENTS, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT	39	371



4703306048

November 14, 2024

Mr. Charles T. Brewer  
Assistant Chief  
WVDEP – Office of Oil and Gas  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

RE: Road Crossings

Dear Taylor:

On behalf of Diversified Production Company, LLC and Long Ridge West Virginia LLC, Aux Energy is submitting this road crossing letter for the Abbey South 8MH.

Diversified Production LLC has obtained the right to drill, extract and produce the minerals under the following country roads in the area reflected on the Abbey South 8MH well plat.

CR 12  
CR 1/4

A full title search in the relevant Court House confirms the ownership under said County Routes and we are not currently aware of any recorded document that would suggest ownership other than Diversified.

If your office has any questions or concerns regarding the contents of this letter, please do not hesitate to contact me directly at 304-376-0111 or by email at [amy@aux-energy.com](mailto:amy@aux-energy.com).

Sincerely,

Amy L. Morris  
Director of Regulatory Affairs

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection

12/20/2024

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

Date of Notice Certification: 11/12/2024

API No. 47- 033  
Operator's Well No. Abbey South 8MH  
Well Pad Name: Abbey

**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>568,826.350</u>
County:	<u>Harrison</u>		Northing:	<u>4,358,554.976</u>
District:	<u>Clay- Outside</u>	Public Road Access:	<u>Middletown Rod Rt. 73/73</u>	
Quadrangle:	<u>Rosemont 7.5'</u>	Generally used farm name:	<u>Long Ridge West Virginia LLC</u>	
Watershed:	<u>West Fork</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 checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED  <input type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input checked="" 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 checked="" type="checkbox"/> RECEIVED  <input type="checkbox"/> RECEIVED/ NOT REQUIRED  <input checked="" type="checkbox"/> RECEIVED  <input checked="" type="checkbox"/> RECEIVED  <input checked="" type="checkbox"/> RECEIVED
RECEIVED Office of Oil and Gas  <b>NOV 18 2024</b>  WV Department of Environmental Protection		

**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.

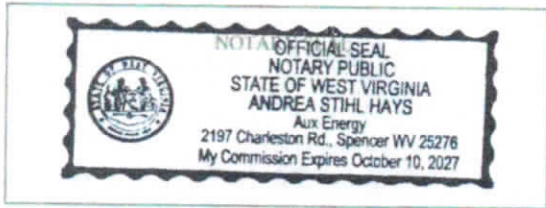
4703306048

**Certification of Notice is hereby given:**

THEREFORE, I Amy L. Morris *Amy L. Morris* 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: Diversified Production, LLC  
By: Amy L. Morris (Authorized Permitting Agent)  
Its: Director of Regulatory Affairs, Aux Energy, LLC  
Telephone: 304-376-0111

Address: 101 McQuiston Drive  
Jackson Center, PA 16133  
Facsimile: \_\_\_\_\_  
Email: amy@aux-energy.com



Subscribed and sworn before me this 12<sup>th</sup> day of November.  
Andrea S. Hays *Andrea S. Hays* Notary Public  
My Commission Expires 10/10/2027

**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).

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection

12/20/2024

WW-6A  
(9-13)

API NO. 47- 033 -  
OPERATOR WELL NO. Abbey South 8MH  
Well Pad Name: Abbey

**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:** 11/12/2024 **Date Permit Application Filed:** 11/13/2024

**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: Long Ridge West Virginia, LLC  
 Address: 501 Corporate Drive, Suite 210  
Canonsburg, PA 15317  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_

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

Name: Long Ridge West Virginia, LLC  
 Address: 501 Corporate Drive, Suite 210  
Canonsburg, PA 15317  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_

SURFACE OWNER(s) (Impoundments or Pits)

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

COAL OWNER OR LESSEE

Name: Long Ridge West Virginia, LLC  
 Address: 501 Corporate Drive, Suite 210  
Canonsburg, PA 15317  
 COAL OPERATOR  
 Name: N/A  
 Address: \_\_\_\_\_

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

Name: \*See attached  
 Address: \_\_\_\_\_

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: N/A  
 Address: \_\_\_\_\_

\*Please attach additional forms if necessary

**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).

RECEIVED  
Office of Oil and Gas

NOV 18 2024

**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

12/20/2024

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

**Water Well Testing:**

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

**Water Testing Laboratories:**

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

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

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

**Written Comment:**

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

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

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection

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

12/20/2024



**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.

RECEIVED  
Office of Oil and Gas  
**NOV 18 2024**  
WV Department of  
Environmental Protection

WW-6A  
(8-13)

4703306048

API NO. 47-033  
OPERATOR WELL NO. Abbey South BMH  
Well Pad Name: Abbey

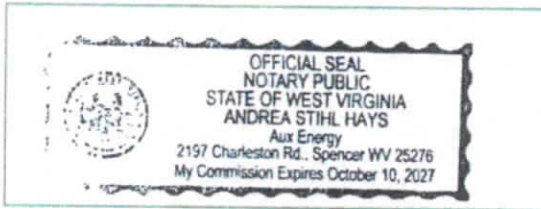
**Notice is hereby given by:**

Well Operator: Diversified Production, LLC  
Telephone: 304-376-0111  
Email: amy@aux-energy.com *amy stohl*

Address: 101 McQuiston Drive  
Jackson Center, PA 16133  
Facsimile: \_\_\_\_\_

**Oil and Gas Privacy Notice:**

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



Subscribed and sworn before me this 12<sup>th</sup> day of November, 2024  
Andrea S. Hays *Andrea S. Hays* Notary Public  
My Commission Expires 10/10/2027



RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection

12/20/2024



COMPLEX PROJECTS  
 REQUIRE RESOLVE  
 THRASHER'S GOT IT

4703306048

PLAN ID	PARCEL ID	OWNER NAME	OWNER ADDRESS (PHYSICAL NOT LISTED)
2	17-05-0210-0044-0004	ISENHART TONYA (BROWN BARBARA A TRUST) ✓	412 MIDDLETOWN RD SHINNSTON 26431
7	17-05-0210-0044-0003	BROWN BARBARA A ✓	SHINNSTON 26431
10	17-05-0210-0044-0002	LONG RIDGE WEST VIRGINIA LLC ✓	39 CATHERINE DRIVE, SHINNSTON 26431
11	17-05-0210-0044-0001	BROWN BRYAN WAYNE & JENNIFER PINARD ✓	157 MIDDLETOWN RD SHINNSTON 26431
18	17-05-0210-0044-0008	BROWN BARBARA A ✓	138 MIDDLETOWN RD SHINNSTON 26431
25	17-05-0210-0044-0000	BROWN BARBARA 1/3 ETAL 2/3 ✓	138 MIDDLETON RD SHINNSTON 26431
49	17-05-0210-0055-0000	GROGG THOMAS ETAL 3/8 & ADAM LINDSAY ETAL 3/8 ETAL 2/8 ✓	31 KILDEER DR SHINNSTON 26431
68	17-05-0210-0055-0001	COTTRILL JANET ✓	21 MIDDLETOWN RD SHINNSTON 26431
73	17-05-0210-0044-0005	SASTRAM MARIA R ✓	388 MIDDLETOWN RD SHINNSTON 26431
81	17-05-0210-0054-0000	CONNOR COLTON R & OLIVIA DIANE ✓	4815 CORBIN BRANCH RD BRIDGEPORT 26330 9827
132	17-05-0210-0043-0000	FORREN RICHARD T & TIMOTHY J MANCHIN (DBA FBM DEVELOPMENT) ✓	1543 FAIRMONT AVE STE 203, FAIRMONT, WV 26554
136	17-05-0210-0044-0006	JEWELL DENSEL C & ZANDERAV ✓	C/O DELANI WATSON ETAL 24, 105 LEVERTON COVE RD, SHINNSTON, WV 26431
150	17-05-0210-0044-0010	LONG RIDGE WEST VIRGINIA LLC ✓	412 MIDDLETOWN RD SHINNSTON 26431
199	46-03-0006-0045-0014	BAKER CRAIG HERBERT & WHITNEY NICOLE FORD & SURV ✓	4639 CORBIN BRANCH RD BRIDGEPORT 26330
200	46-03-0006-0018-0001	COTTRILL MARK E ✓	41 FREEMAN HILL RD BRIDGEPORT 26330
201	46-03-0006-0021-0000	CUMMINGS J L ✓	255 FREEMAN HILL RD BRIDGEPORT 26330
202	46-03-0006-0021-0002	TAYLOR SANDRA LOU (LIFE) & ROBERT LEE (LIFE) & EUGENE T ✓	146 HAWKHAVEN LN BRIDGEPORT 26330
204	46-03-0006-0014-0000	LARSON DOREEN M & LEONARD L & SURV ✓	16800 SHARP RD, SIDNEY, OH 45365
207	46-03-0006-0013-0000	LARSON DOREEN M & LEONARD L & SURV ✓	16800 SHARP RD, SIDNEY, OH 45365
343	46-03-0006-0020-0000	LITTLE CHARLES THOMAS & MILDRED C & SURV ✓	514 MIDDLETOWN RD, FAIRMONT, WV 26554
345	46-03-0006-0019-0000	TYGART RIVER HYDROCARBONS LLC ✓	PO BOX 520, ATHENS, WV 24712
346	46-03-0006-0006-0000	SHEDLOWSKI DAVID & JOYCE & SURV ✓	529 MIDDLETOWN RD, SHINNSTON, WV 26431
361	46-03-0006-0015-0000	LARSON DOREEN M & LEONARD L & SURV ✓	16800 SHARP RD, SIDNEY, OH 45365
370	46-03-0006-0021-0004	EDWIN FUNK ✓	282 FREEMAN HILL RD BRIDGEPORT 26330
385	46-03-0006-0023-0000	CRANDALL JERRY OR JEAN MARIE & SURV ✓	332 FREEMAN HILL RD BRIDGEPORT 26330
414	46-03-0006-0009-0001	WATKINS DAVID E & BEVERLY A & SURV ✓	MIDDLETOWN RD SHINNSTON 26431
448	46-03-0006-0010-0000	WATKINS DAVID E & BEVERLY A & SURV ✓	554 MIDDLETOWN RD SHINNSTON 26431
454	46-03-0006-0016-0001	TAYLOR SANDRA LOU ✓	146 HAWKHAVEN LN, BRIDGEPORT, WV 26330
455	46-03-0006-0012-0000	LITTLE CHARLES THOMAS & MILDRED C & SURV ✓	514 MIDDLETOWN RD, FAIRMONT, WV 26554
456	46-03-0006-0011-0000	LITTLE CHARLES THOMAS & MILDRED C & SURV ✓	492 MIDDLETOWN RD SHINNSTON 26431

RECEIVED  
 Office of Oil and Gas  
 NOV 19 2024

Department of  
 Environmental Protection



COMPLEX PROJECTS  
REQUIRE RESOLVE  
THRASHER'S GOT IT

4703306048

457	46-03-0006-0016-0002	TAYLOR EUGENE T ✓	172 HAWKHAVEN LN SHINNSTON 26431
458	46-03-0006-0016-0003	CHILDERS ROGER L & SANDRA L & SURV ✓	2031 MORGANTOWN PIKE, BELINGTON, WV 26250
464	46-03-0006-0024-0000	SMITH TONY W JR ✓	380 FREEMAN HILL RD BRIDGEPORT 26330
466	46-03-0006-0026-0000	WYER TERRY D & PATRICIA & SURV ✓	605 FREEMAN HILL RD, BRIDGEPORT, WV 26330
504	46-03-0006-0021-0001	VANGILDER DAVID L & ETHELYN & SURV ✓	52 HAWKHAVEN LN BRIDGEPORT 26330
505	46-03-0006-0017-0000	TENNANT ROBERT WILLIAM II ✓	159 FREEMAN HILL RD BRIDGEPORT 26330
506	46-03-0006-0017-0002	BELCASTRO JOHN II & D'LORAH KAY & SURV ✓	49 HAWKHAVEN LN BRIDGEPORT 26330
507	46-03-0006-0017-0003	WILLIAMS AARON R & ALLISON B & SURV ✓	37 HAWKHAVEN LN BRIDGEPORT 26330
508	46-03-0006-0018-0000	COTTRILL MARK E ✓	35 FREEMAN HILL RD GRAFTON 26354
511	46-03-0006-0006-0001	SHEDLOWSKI DAVID & JOYCE & SURV ✓	529 MIDDLETOWN RD BRIDGEPORT 26330

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection



4703306048

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

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

**Date of Notice:** 8/23/2024      **Date of Planned Entry:** 8/30/2024

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

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

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

**Notice is hereby provided to:**

SURFACE OWNER(s)

Name: Long Ridge WV LLC (Well Pad and Access Road)  
Address: 501 Corporate Drive, Suite 210  
Canonsburg, PA 15317

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

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

COAL OWNER OR LESSEE

Name: Long Ridge WV LLC  
Address: 501 Corporate Drive, Suite 210  
Canonsburg, PA 15317

MINERAL OWNER(s)

Name: Willow Creek MHV LLC  
Address: 485 Long Run Road  
Flemington, WV 26347

\*please attach additional forms if necessary

**Notice is hereby given:**

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

State: West Virginia  
County: Harrison  
District: Clay - Outside  
Quadrangle: Rosemont 7.5'

Approx. Latitude & Longitude: 39.373545; -80.200870  
Public Road Access: 73/73 Middletown Road  
Watershed: West Fork River  
Generally used farm name: Long Ridge WV LLC

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

RECEIVED  
Office of Oil and Gas

**Notice is hereby given by:**

Well Operator: Diversified Production, LLC  
Telephone: 304-376-0111  
Email: amy@aux-energy.com

Address: 101 McQuiston Drive  
Jackson Center, PA 16133

Facsimile: \_\_\_\_\_  
WV Department of Environmental Protection

NOV 18 2024

**Oil and Gas Privacy Notice:**

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

12/20/2024

**4703306048**

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

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

**Date of Notice:** 11/15/2024      **Date Permit Application Filed:** 11/15/2024

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

- CERTIFIED MAIL                                       HAND  
RETURN RECEIPT REQUESTED                                      DELIVERY

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

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

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

Name: Long Ridge WV LLC (Well Pad and Access Road)  
Address: 501 Corporate Drive, Suite 210  
Canonsburg, PA 15317

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

**Notice is hereby given:**

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

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>568,826.350</u>
County:	<u>Harrison</u>		Northing:	<u>4,358,554.976</u>
District:	<u>Clay - Outside</u>	Public Road Access:	<u>73/73 Middletown Road</u>	
Quadrangle:	<u>Rosemont 7.5'</u>	Generally used farm name:	<u>Long Ridge West Virginia LLC</u>	
Watershed:	<u>West Fork</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).

RECEIVED  
Office of Oil and Gas

Well Operator: Diversified Production, LLC  
Telephone: 304-376-0111  
Email: amy@aux-energy.com

Address: 101 McQuiston Drive  
Jackson Center, PA 16133  
Facsimile: \_\_\_\_\_

**NOV 18 2024**

**Oil and Gas Privacy Notice:**

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

WV Department of  
Environmental Protection

**12/20/2024**



4703306048

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

October 11, 2024

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

**Subject: DOH Permit for the Abbey Well Pad, Harrison County  
Abbey South 8MH Well Site**

Dear Mr. Martin,

This well site will be accessed from a DOH permit #04-2024-2642 which has been issued to Diversified Production, LLC for access to the State Road for a well site located off Harrison County Route 73/73 SLS MP 2.613.

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

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection

Cc: Amy Morris  
Diversified Production, LLC  
OM, D-4  
File



4703306048

**Frac Additives List of Chemical Names & CAS #'s  
Abbey Pad**

Chemical	CAS
Water	7732-18-5
Silica Substrate	14808-60-7
Hydrochloric Acid (Hydrogen Chloride)	7647-01-0
Water	7732-18-5
Proprietary Blend	Proprietary
Ethylene Glycol	7732-18-5
Hydrotreated light distillate	64742-47-8
Ethoxylated Tridecanol	Proprietary
Non-ionic surfactant	Proprietary
Glutaral	111-30-8
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1
Methyl alcohol	67-56-1

RECEIVED  
Office of Oil and Gas

**NOV 18 2024**

WV Department of  
Environmental Protection

12/20/2024

OPERATOR: Diversified Production, LLC WELL NO: Abbey South 8MH

PAD NAME: Abbey

REVIEWED BY: Amy L. Morris (Aux Energy - Consultant) SIGNATURE: *Amy L. Morris*

### WELL RESTRICTIONS CHECKLIST

#### HORIZONTAL 6A WELL

#### 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

RECEIVED  
Office of Oil and Gas

NOV 18 2024

WV Department of  
Environmental Protection

\*House within 625' is abandoned and does not have a physical address. Barn is empty and never houses animals.

12/20/2024