



west virginia department of environmental protection

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

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

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 4MH
47-033-06046-00-00

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

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

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

A blue ink signature of James A. Martin, Chief, is written over the text. The signature is stylized and cursive.

James A. Martin
Chief

Operator's Well Number: Abbey South 4MH
Farm Name: Long Ridge West Virginia LLC
U.S. WELL NUMBER: 47-033-06046-00-00
Horizontal 6A New Drill
Date Issued: 12/20/2024

Promoting a healthy environment.

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

4703306046

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 - Q₁ Rosemont 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Abbey South 4MH 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 Oil _____ Underground Storage _____

Other _____

(b) If Gas Shallow Deep _____

Horizontal _____

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

RECEIVED
Office of Oil and Gas

10) Proposed Total Measured Depth: 27,024'

NOV 18 2024

11) Proposed Horizontal Leg Length: 19,255'

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

WV Department of
Environmental Protection

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

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

4703306046

18)

CASING AND TUBING PROGRAM

<u>TYPE</u>	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
Conductor	20"	New	A	52.78	100'	100'	151ft ³ /CTS
Fresh Water/Coal	13.375"	New	H40	48	750'	750'	521ft ³ /CTS
Intermediate	9.625"	New	J55	36	2,545'	2,545'	797ft ³ /CTS
Production	5.5"	New	HP P110	20	27,024'	27,024'	4,842ft ³ /5,887ft
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 Wellbore
10/24/24*

<u>TYPE</u>	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Anticipated Max. Internal Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
Conductor	20"	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	6,395	N/A	N/A
Liners	N/A	N/A	N/A	N/A	N/A	N/A	N/A

PACKERS

RECEIVED
Office of Oil and Gas

Kind:				NOV 18 2024
Sizes:				Department of Environmental Protection
Depths Set:				

4703306046

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 6,887' and continue to drill the curve and horizontal leg per the proposed plan in the Marcellus formation to an estimated horizontal length of 19,255' (27,024'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. 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.

*Note: Attach additional sheets as needed.

4703306046

Well Name: Abbey South 4MH		  				Notes: - 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: Abbey						
Rig KB (ft): 28						
Target: Marcellus						
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' 6,854' 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 6887' MD 6854' TVD Landing Point 7769' MD 7415' TVD Dip Angle = 89	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 @ ~5887'	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.
			19,255' Lateral			BHL 27024' MD 7751' TVD

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



DIVERSIFIED energy

703306046

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSept	Annotation
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
1350 00	0 00	0 00	1350 00	0 00	0 00	0 00	0 00	0 00	KOP: Begin 2.00' Build
1870 50	6 41	105 00	1569 93	-4 64	17 30	2 00	105 00	10 03	Hold 6.41' Tangent; 2.00' Turn
1816 78	6 41	78 57	1815 21	-5 13	33 19	2 00	-103 15	15 68	Hold 78.57' Az
6887 19	6 41	78 57	5853 95	107 07	587 56	0 00	0 00	90 70	Begin 10.00' Build/Turn
7768 78	89 00	160 95	7415 00	-405 03	829 72	10 00	82 55	653 66	Hold 89.00' Lateral
27024 52	89 00	160 95	7751 06	-18603 88	7112 41	0 00	0 00	19906 46	PBHL - 27024 52' MD

DESIGN TARGET DETAILS

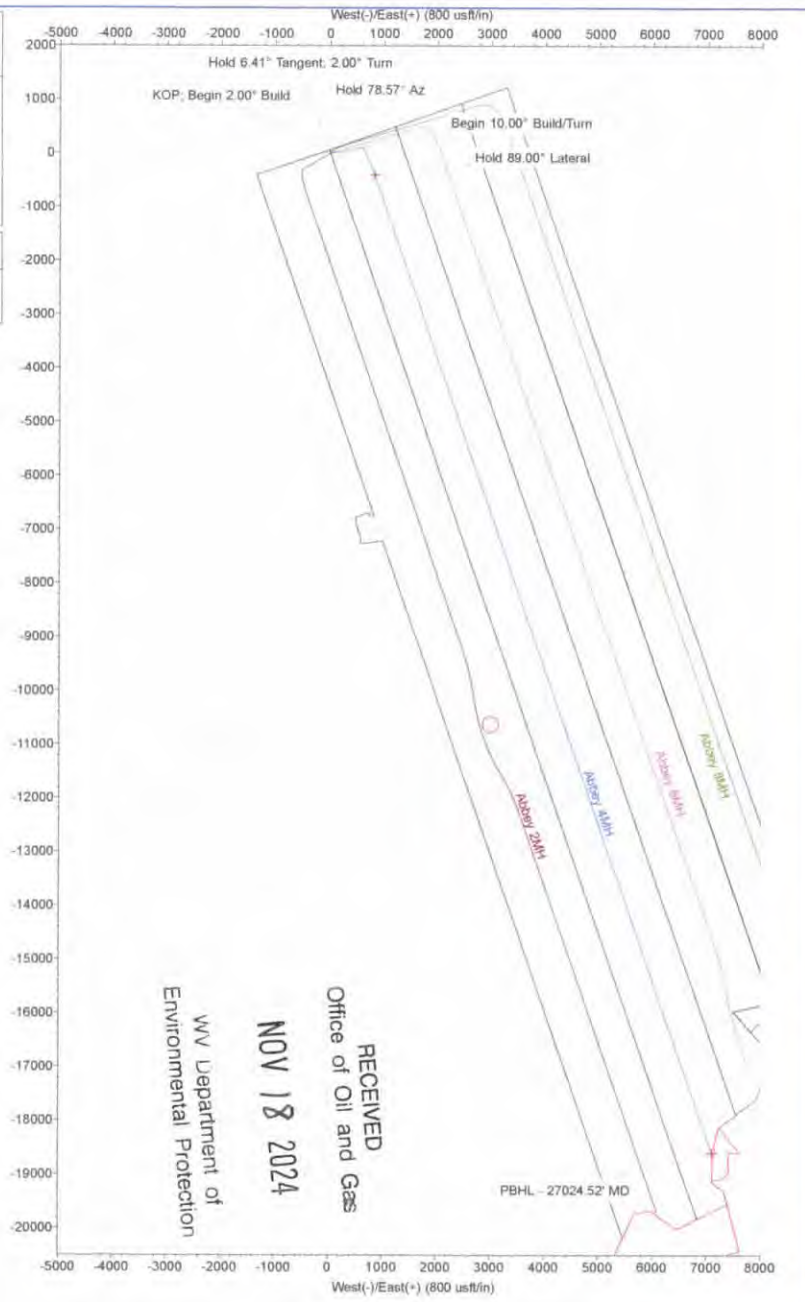
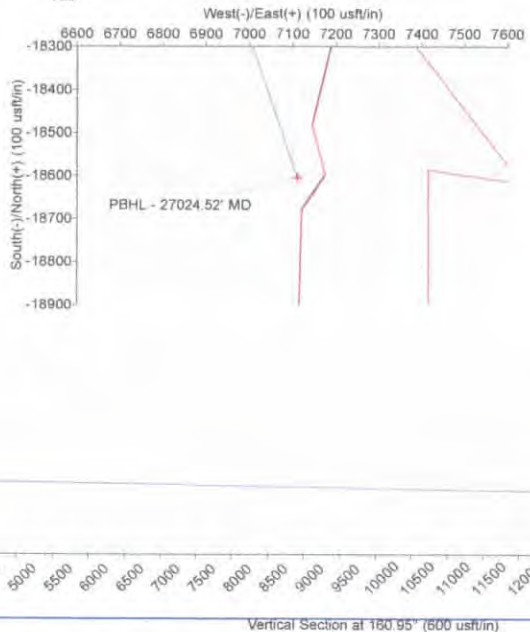
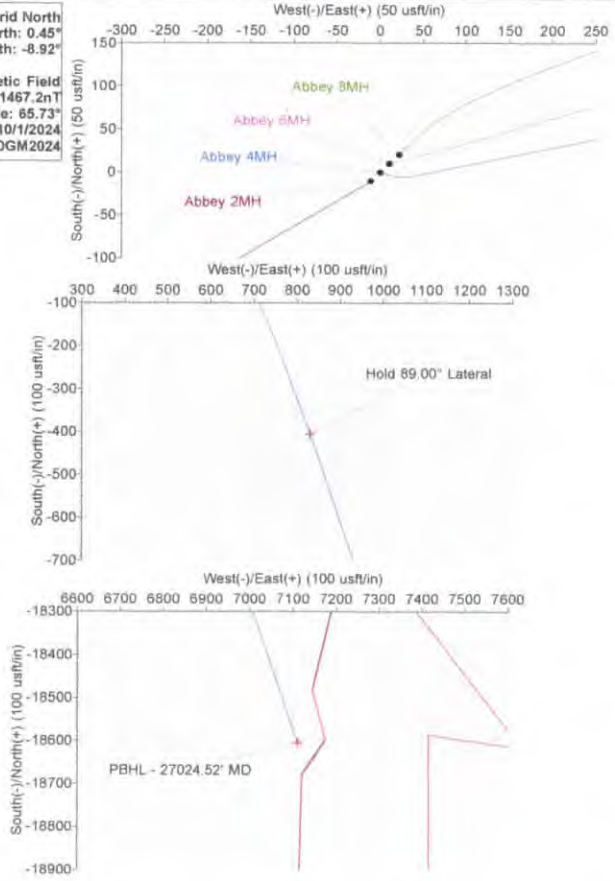
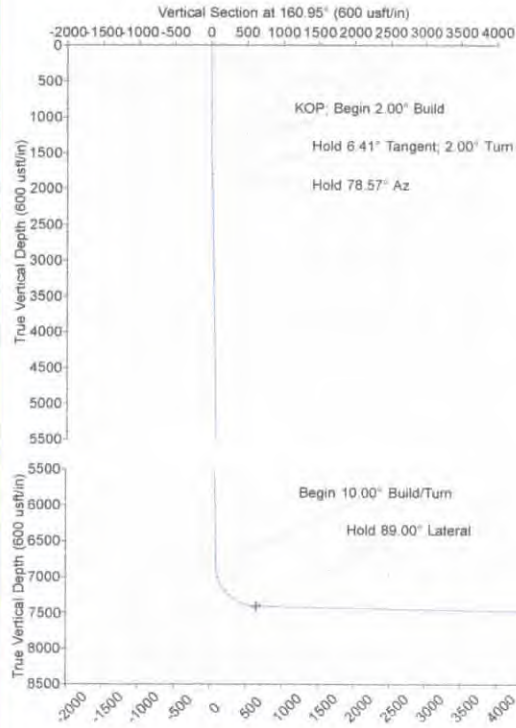
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP v4 - Abbey 4MH	7415 00	-405 03	829 72	318581.75	1771157 99	39 372573	-80.198076
PBHL v5 - Abbey 4MH	7751 06	-18603 88	7112 41	300382 89	1777440 68	39 322741	-80.175370

Project: Harrison County, WV (NAD83 - GRID)
 Site: Abbey Pad
 Well: Abbey 4MH
 Wellbore: Wellbore #1
 Design: Design #5

Abbey 4MH



Azimuths to Grid North
 True North: 0.45°
 Magnetic North: -8.92°
 Magnetic Field
 Strength: 51467.2nT
 Dip Angle: 65.73°
 Date: 10/1/2024
 Model: HDGM2024



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

Vertical Section at 180.95° (600 usf/in)

Document Path: R:\070170-11275 - DGOC - Abbey Well Pad\Drawing\Final Design\Exhibits\Site Safety\AbbeyWellPad-4MH-AreaofReview.mxd

4703306046

4709100456

4709100541

4709101006

4709100099

4709100240

4709100892

4709100891

4709100259

4709100874

4703300168

4709100062

4703300166

4709100902

4709100114

4709100400

4709100172

4709100402

4709100164

4709100401

4709100038

4709100161

4703305873

4703306027

4703306026

4709100477

4703306024

4703303278

4703300170

4703303276

4703300214

4703300216

4703300136

4709100833

4709100142

4703300267

4703300190

Booths Creek District

4709100793

4709100141

4709100093

4709100529

4709100556

4709100186

4709100564

4703300152

4709100069

4709100092

4709100545

4703303165

4709100047

4709100008

4709100016

4709100138

4709100482

4709100555

4703302147

4709100091

4709100094

4709100171

4703300151

4703300149

4709100005

4709100051

4709100421

4709100935

4703302034

4709100061

4709101056

4709100835

4709100144

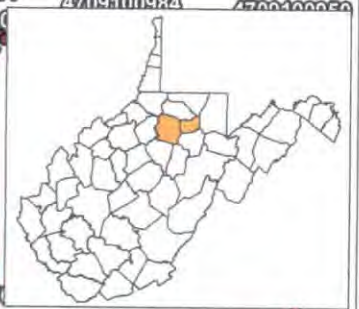
4709101007

4709100984

4709100050

- Abbey Well Pad 4MH Well Bore
- 500-FT Buffer
- TAX DISTRICTS
- FREE WAY OR MAJOR ROADS
- COUNTY BOUNDARY

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



Abbey Well Pad: 4MH
Clay/Booth's Creek/Districts
Harrison & Taylor Counties - West Virginia

THRASHER

12/20/2024

9/23/2024

1 inch = 2,200 feet

By: dphares

4703306046

Area of Review for Communication Purposes Report

Abbey South 4MH

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
47-091-00016	Eastern Gas Transmission and Storage, Inc.	1633'	Fifty-foot	unknown	yes	Active Vertical Well

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

4703306046

Diversified Production, LLC

Harrison County, WV (NAD83 - GRID)

Abbey Pad

Abbey 4MH

Wellbore #1

Plan: Design #5



RECEIVED
Office of Oil and Gas

NOV 18 2024

WV Department of
Environmental Protection

Standard Plan Report

09 September, 2024

Total Report Version 1.70

COMPASS 5000.16 Build 97



Company:	Diversified Production, LLC	Local Co-ordinate Reference:	Well Abbey 4MH
Project:	Harrison County, WV (NAD83 - GRID)	TVD Reference:	WELL @ 1024.00usft (28' RKB)
Site:	Abbey Pad	MD Reference:	WELL @ 1024.00usft (28' RKB)
Well:	Abbey 4MH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #5	Database:	.Total Directional Production DB

RECEIVED

Project	Harrison County, WV (NAD83 - GRID)			Office of Oil and Gas
Map System:	US State Plane 1983	System Datum:	Mean Sea Level	NOV 18 2024
Geo Datum:	North American Datum 1983			
Map Zone:	West Virginia Northern Zone			

WV Department of Environmental Protection

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

Well	Abbey 4MH					
Well Position	+N/-S	0.00 usft	Northing:	318,986.77 usft	Latitude:	39.373667
	+E/-W	0.00 usft	Easting:	1,770,328.27 usft	Longitude:	-80.201024
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level:	996.00 usft
Grid Convergence:	-0.45 °					

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

Design	Design #5				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	160.95	

Survey Tool Program	Date	9/9/2024			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	27,024.52	Design #5 (Wellbore #1)	MWD+HRGM	OWSG MWD + HRGM	

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	
1,670.50	6.41	105.00	1,669.83	-4.64	17.30	2.00	2.00	0.00	105.00	
1,816.76	6.41	78.57	1,815.21	-5.13	33.19	2.00	0.00	-18.07	-103.15	
6,887.19	6.41	78.57	6,853.95	107.07	587.98	0.00	0.00	0.00	0.00	
7,768.78	89.00	160.95	7,415.00	-405.03	829.72	10.00	9.37	9.35	82.55	LP v4 - Abbey 4MH
27,024.52	89.00	160.95	7,751.06	-18,603.88	7,112.41	0.00	0.00	0.00	0.00	PBHL v5 - Abbey 4I



Company:	Diversified Production, LLC	Local Co-ordinate Reference:	Well Abbey 4MH Environmental Protection
Project:	Harrison County, WV (NAD83 - GRID)	TVD Reference:	WELL @ 1024.00usft (28' RKB)
Site:	Abbey Pad	MD Reference:	WELL @ 1024.00usft (28' RKB)
Well:	Abbey 4MH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #5	Database:	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)
0.00	0.00	0.00	0.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
1,350.00	0.00	0.00	1,350.00	0.00	0.00	318,986.77	1,770,328.27	39.373667	-80.201024	0.00	0.00	0.00	0.00
1,400.00	1.00	105.00	1,400.00	-0.11	0.42	318,986.66	1,770,328.69	39.373667	-80.201023	0.24	2.00	2.00	0.00
1,500.00	3.00	105.00	1,499.93	-1.02	3.79	318,985.76	1,770,332.06	39.373665	-80.201011	2.20	2.00	2.00	0.00
1,600.00	5.00	105.00	1,599.68	-2.82	10.53	318,983.95	1,770,338.80	39.373660	-80.200987	6.10	2.00	2.00	0.00
1,670.50	6.41	105.00	1,669.83	-4.64	17.30	318,982.14	1,770,345.57	39.373655	-80.200963	10.03	2.00	2.00	0.00
1,700.00	6.30	99.76	1,699.15	-5.34	20.49	318,981.44	1,770,348.76	39.373653	-80.200951	11.73	2.00	-0.37	-17.77
1,800.00	6.34	81.52	1,798.55	-5.45	31.36	318,981.32	1,770,359.63	39.373653	-80.200913	15.39	2.00	0.04	-18.24
1,816.76	6.41	78.57	1,815.21	-5.13	33.19	318,981.64	1,770,361.46	39.373654	-80.200907	15.68	2.00	-0.40	-17.64
1,900.00	6.41	78.57	1,897.93	-3.29	42.30	318,983.49	1,770,370.57	39.373659	-80.200874	16.91	0.00	0.00	0.00
2,000.00	6.41	78.57	1,997.30	-1.08	53.24	318,985.70	1,770,381.51	39.373666	-80.200836	18.39	0.00	0.00	0.00
2,100.00	6.41	78.57	2,096.68	1.14	64.18	318,987.91	1,770,392.45	39.373672	-80.200797	19.87	0.00	0.00	0.00
2,200.00	6.41	78.57	2,196.05	3.35	75.12	318,990.13	1,770,403.39	39.373678	-80.200758	21.35	0.00	0.00	0.00
2,300.00	6.41	78.57	2,295.43	5.56	86.06	318,992.34	1,770,414.34	39.373685	-80.200720	22.83	0.00	0.00	0.00
2,400.00	6.41	78.57	2,394.80	7.78	97.01	318,994.55	1,770,425.28	39.373691	-80.200681	24.31	0.00	0.00	0.00
2,500.00	6.41	78.57	2,494.18	9.99	107.95	318,996.76	1,770,436.22	39.373697	-80.200643	25.79	0.00	0.00	0.00
2,600.00	6.41	78.57	2,593.55	12.20	118.89	318,998.98	1,770,447.16	39.373703	-80.200604	27.27	0.00	0.00	0.00
2,700.00	6.41	78.57	2,692.93	14.42	129.83	319,001.19	1,770,458.10	39.373710	-80.200565	28.75	0.00	0.00	0.00
2,800.00	6.41	78.57	2,792.30	16.63	140.77	319,003.40	1,770,469.04	39.373716	-80.200527	30.23	0.00	0.00	0.00
2,900.00	6.41	78.57	2,891.68	18.84	151.71	319,005.62	1,770,479.98	39.373722	-80.200488	31.71	0.00	0.00	0.00
3,000.00	6.41	78.57	2,991.05	21.05	162.66	319,007.83	1,770,490.93	39.373729	-80.200449	33.19	0.00	0.00	0.00
3,100.00	6.41	78.57	3,090.43	23.27	173.60	319,010.04	1,770,501.87	39.373735	-80.200411	34.67	0.00	0.00	0.00
3,200.00	6.41	78.57	3,189.80	25.48	184.54	319,012.25	1,770,512.81	39.373741	-80.200372	36.15	0.00	0.00	0.00
3,300.00	6.41	78.57	3,289.18	27.69	195.48	319,014.47	1,770,523.75	39.373748	-80.200333	37.63	0.00	0.00	0.00



Planned Survey Report

NOV 18 2024



Company:	Diversified Production, LLC	Local Co-ordinate Reference:	Well Abbey 4MH	WV Department of Environmental Protection
Project:	Harrison County, WV (NAD83 - GRID)	TVD Reference:	WELL @ 1024.00usft (28' RKB)	
Site:	Abbey Pad	MD Reference:	WELL @ 1024.00usft (28' RKB)	
Well:	Abbey 4MH	North Reference:	Grid	
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature	
Design:	Design #5	Database:	.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 (°)				
3,400.00	6.41	78.57	3,388.55	29.91	206.42	319,016.68	1,770,534.69	39.373754	-80.200295	39.11	0.00	0.00	0.00
3,500.00	6.41	78.57	3,487.93	32.12	217.36	319,018.89	1,770,545.63	39.373760	-80.200256	40.59	0.00	0.00	0.00
3,600.00	6.41	78.57	3,587.30	34.33	228.31	319,021.11	1,770,556.58	39.373767	-80.200217	42.07	0.00	0.00	0.00
3,700.00	6.41	78.57	3,686.68	36.54	239.25	319,023.32	1,770,567.52	39.373773	-80.200179	43.55	0.00	0.00	0.00
3,800.00	6.41	78.57	3,786.05	38.76	250.19	319,025.53	1,770,578.46	39.373779	-80.200140	45.03	0.00	0.00	0.00
3,900.00	6.41	78.57	3,885.43	40.97	261.13	319,027.75	1,770,589.40	39.373785	-80.200102	46.50	0.00	0.00	0.00
4,000.00	6.41	78.57	3,984.80	43.18	272.07	319,029.96	1,770,600.34	39.373792	-80.200063	47.98	0.00	0.00	0.00
4,100.00	6.41	78.57	4,084.18	45.40	283.01	319,032.17	1,770,611.28	39.373798	-80.200024	49.46	0.00	0.00	0.00
4,200.00	6.41	78.57	4,183.55	47.61	293.96	319,034.38	1,770,622.23	39.373804	-80.199986	50.94	0.00	0.00	0.00
4,300.00	6.41	78.57	4,282.93	49.82	304.90	319,036.60	1,770,633.17	39.373811	-80.199947	52.42	0.00	0.00	0.00
4,400.00	6.41	78.57	4,382.30	52.04	315.84	319,038.81	1,770,644.11	39.373817	-80.199908	53.90	0.00	0.00	0.00
4,500.00	6.41	78.57	4,481.68	54.25	326.78	319,041.02	1,770,655.05	39.373823	-80.199870	55.38	0.00	0.00	0.00
4,600.00	6.41	78.57	4,581.05	56.46	337.72	319,043.24	1,770,665.99	39.373830	-80.199831	56.86	0.00	0.00	0.00
4,700.00	6.41	78.57	4,680.43	58.67	348.66	319,045.45	1,770,676.93	39.373836	-80.199792	58.34	0.00	0.00	0.00
4,800.00	6.41	78.57	4,779.80	60.89	359.61	319,047.66	1,770,687.88	39.373842	-80.199754	59.82	0.00	0.00	0.00
4,900.00	6.41	78.57	4,879.18	63.10	370.55	319,049.87	1,770,698.82	39.373849	-80.199715	61.30	0.00	0.00	0.00
5,000.00	6.41	78.57	4,978.55	65.31	381.49	319,052.09	1,770,709.76	39.373855	-80.199676	62.78	0.00	0.00	0.00
5,100.00	6.41	78.57	5,077.93	67.53	392.43	319,054.30	1,770,720.70	39.373861	-80.199638	64.26	0.00	0.00	0.00
5,200.00	6.41	78.57	5,177.30	69.74	403.37	319,056.51	1,770,731.64	39.373868	-80.199599	65.74	0.00	0.00	0.00
5,300.00	6.41	78.57	5,276.68	71.95	414.31	319,058.73	1,770,742.58	39.373874	-80.199561	67.22	0.00	0.00	0.00
5,400.00	6.41	78.57	5,376.05	74.16	425.26	319,060.94	1,770,753.53	39.373880	-80.199522	68.70	0.00	0.00	0.00
5,500.00	6.41	78.57	5,475.43	76.38	436.20	319,063.15	1,770,764.47	39.373886	-80.199483	70.18	0.00	0.00	0.00
5,600.00	6.41	78.57	5,574.80	78.59	447.14	319,065.37	1,770,775.41	39.373893	-80.199445	71.66	0.00	0.00	0.00
5,700.00	6.41	78.57	5,674.18	80.80	458.08	319,067.58	1,770,786.35	39.373899	-80.199406	73.14	0.00	0.00	0.00
5,800.00	6.41	78.57	5,773.55	83.02	469.02	319,069.79	1,770,797.29	39.373905	-80.199367	74.62	0.00	0.00	0.00
5,900.00	6.41	78.57	5,872.93	85.23	479.96	319,072.00	1,770,808.23	39.373912	-80.199329	76.10	0.00	0.00	0.00
6,000.00	6.41	78.57	5,972.30	87.44	490.90	319,074.22	1,770,819.18	39.373918	-80.199290	77.58	0.00	0.00	0.00
6,100.00	6.41	78.57	6,071.68	89.65	501.85	319,076.43	1,770,830.12	39.373924	-80.199251	79.05	0.00	0.00	0.00
6,200.00	6.41	78.57	6,171.05	91.87	512.79	319,078.64	1,770,841.06	39.373931	-80.199213	80.53	0.00	0.00	0.00
6,300.00	6.41	78.57	6,270.43	94.08	523.73	319,080.86	1,770,852.00	39.373937	-80.199174	82.01	0.00	0.00	0.00
6,400.00	6.41	78.57	6,369.80	96.29	534.67	319,083.07	1,770,862.94	39.373943	-80.199135	83.49	0.00	0.00	0.00
6,500.00	6.41	78.57	6,469.18	98.51	545.61	319,085.28	1,770,873.88	39.373950	-80.199097	84.97	0.00	0.00	0.00
6,600.00	6.41	78.57	6,568.55	100.72	556.55	319,087.49	1,770,884.83	39.373956	-80.199058	86.45	0.00	0.00	0.00
6,700.00	6.41	78.57	6,667.93	102.93	567.50	319,089.71	1,770,895.77	39.373962	-80.199020	87.93	0.00	0.00	0.00
6,800.00	6.41	78.57	6,767.30	105.15	578.44	319,091.92	1,770,906.71	39.373968	-80.198981	89.41	0.00	0.00	0.00
6,887.19	6.41	78.57	6,853.95	107.07	587.98	319,093.85	1,770,916.25	39.373974	-80.198947	90.70	0.00	0.00	0.00
6,900.00	6.70	89.52	6,866.67	107.22	589.43	319,094.00	1,770,917.70	39.373974	-80.198942	91.03	10.00	2.24	85.54
6,950.00	9.53	119.50	6,916.19	105.21	595.95	319,091.98	1,770,924.22	39.373969	-80.198919	95.07	10.00	5.67	59.96



Company:	Diversified Production, LLC	Local Co-ordinate Reference:	Well Abbey 4MH	Department:	
Project:	Harrison County, WV (NAD83 - GRID)	TVD Reference:	WELL @ 1024.00usft (28' RKB)	Division:	
Site:	Abbey Pad	MD Reference:	WELL @ 1024.00usft (28' RKB)		
Well:	Abbey 4MH	North Reference:	Grid		
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature		
Design:	Design #5	Database:	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)
7,000.00	13.66	133.79	6,965.17	99.08	603.82	319,085.85	1,770,932.09	39.373952	-80.198891	103.43	10.00	8.26	28.57
7,050.00	18.22	141.29	7,013.24	88.89	612.97	319,075.66	1,770,941.24	39.373925	-80.198858	116.05	10.00	9.13	15.01
7,100.00	22.97	145.83	7,060.03	74.71	623.35	319,061.48	1,770,951.62	39.373886	-80.198821	132.84	10.00	9.48	9.07
7,150.00	27.80	148.87	7,105.19	56.64	634.86	319,043.42	1,770,963.13	39.373837	-80.198790	153.67	10.00	9.66	6.08
7,200.00	32.67	151.06	7,148.38	34.84	647.43	319,021.62	1,770,975.70	39.373777	-80.198735	178.38	10.00	9.75	4.39
7,250.00	37.58	152.74	7,189.27	9.46	660.95	318,996.23	1,770,989.22	39.373708	-80.198686	206.79	10.00	9.81	3.36
7,300.00	42.50	154.09	7,227.53	-19.30	675.32	318,967.47	1,771,003.59	39.373629	-80.198635	238.67	10.00	9.85	2.68
7,350.00	47.44	155.20	7,262.89	-51.23	690.44	318,935.54	1,771,018.71	39.373542	-80.198580	273.78	10.00	9.88	2.22
7,400.00	52.39	156.14	7,295.08	-86.08	706.18	318,900.69	1,771,034.45	39.373446	-80.198524	311.86	10.00	9.89	1.89
7,450.00	57.34	156.97	7,323.85	-123.59	722.44	318,863.18	1,771,050.71	39.373344	-80.198465	352.62	10.00	9.91	1.66
7,500.00	62.30	157.71	7,348.97	-163.47	739.08	318,823.31	1,771,067.35	39.373234	-80.198405	395.74	10.00	9.92	1.48
7,550.00	67.26	158.39	7,370.27	-205.41	755.97	318,781.36	1,771,084.24	39.373120	-80.198344	440.91	10.00	9.92	1.35
7,600.00	72.23	159.02	7,387.57	-249.11	773.00	318,737.67	1,771,101.27	39.373000	-80.198283	487.77	10.00	9.93	1.26
7,650.00	77.20	159.61	7,400.75	-294.22	790.03	318,692.56	1,771,118.30	39.372877	-80.198221	535.96	10.00	9.93	1.19
7,700.00	82.16	160.19	7,409.71	-340.40	806.92	318,646.38	1,771,135.19	39.372750	-80.198160	585.13	10.00	9.94	1.14
7,750.00	87.13	160.75	7,414.37	-387.30	823.56	318,599.48	1,771,151.83	39.372622	-80.198100	634.89	10.00	9.94	1.12
7,768.78	89.00	160.95	7,415.00	-405.03	829.72	318,581.75	1,771,157.99	39.372573	-80.198078	653.66	10.00	9.94	1.11
7,800.00	89.00	160.95	7,415.55	-434.54	839.90	318,552.24	1,771,168.18	39.372492	-80.198041	684.88	0.00	0.00	0.00
7,900.00	89.00	160.95	7,417.29	-529.05	872.53	318,457.73	1,771,200.80	39.372234	-80.197923	784.86	0.00	0.00	0.00
8,000.00	89.00	160.95	7,419.04	-623.56	905.16	318,363.22	1,771,233.43	39.371975	-80.197805	884.85	0.00	0.00	0.00
8,100.00	89.00	160.95	7,420.78	-718.07	937.79	318,268.71	1,771,266.06	39.371716	-80.197687	984.83	0.00	0.00	0.00
8,200.00	89.00	160.95	7,422.53	-812.58	970.42	318,174.19	1,771,298.69	39.371457	-80.197569	1,084.82	0.00	0.00	0.00
8,300.00	89.00	160.95	7,424.27	-907.09	1,003.04	318,079.68	1,771,331.32	39.371198	-80.197451	1,184.80	0.00	0.00	0.00
8,400.00	89.00	160.95	7,426.02	-1,001.60	1,035.67	317,985.17	1,771,363.94	39.370940	-80.197333	1,284.79	0.00	0.00	0.00
8,500.00	89.00	160.95	7,427.76	-1,096.11	1,068.30	317,890.66	1,771,396.57	39.370681	-80.197215	1,384.77	0.00	0.00	0.00
8,600.00	89.00	160.95	7,429.51	-1,190.62	1,100.93	317,796.15	1,771,429.20	39.370422	-80.197097	1,484.75	0.00	0.00	0.00
8,700.00	89.00	160.95	7,431.25	-1,285.14	1,133.56	317,701.64	1,771,461.83	39.370163	-80.196979	1,584.74	0.00	0.00	0.00
8,800.00	89.00	160.95	7,433.00	-1,379.65	1,166.19	317,607.13	1,771,494.46	39.369905	-80.196861	1,684.72	0.00	0.00	0.00
8,900.00	89.00	160.95	7,434.74	-1,474.16	1,198.81	317,512.62	1,771,527.08	39.369646	-80.196743	1,784.71	0.00	0.00	0.00
9,000.00	89.00	160.95	7,436.49	-1,568.67	1,231.44	317,418.11	1,771,559.71	39.369387	-80.196625	1,884.69	0.00	0.00	0.00
9,100.00	89.00	160.95	7,438.23	-1,663.18	1,264.07	317,323.59	1,771,592.34	39.369128	-80.196507	1,984.68	0.00	0.00	0.00
9,200.00	89.00	160.95	7,439.98	-1,757.69	1,296.70	317,229.08	1,771,624.97	39.368869	-80.196389	2,084.66	0.00	0.00	0.00
9,300.00	89.00	160.95	7,441.72	-1,852.20	1,329.33	317,134.57	1,771,657.60	39.368611	-80.196271	2,184.65	0.00	0.00	0.00
9,400.00	89.00	160.95	7,443.47	-1,946.71	1,361.95	317,040.06	1,771,690.22	39.368352	-80.196153	2,284.63	0.00	0.00	0.00
9,500.00	89.00	160.95	7,445.21	-2,041.23	1,394.58	316,945.55	1,771,722.85	39.368093	-80.196035	2,384.62	0.00	0.00	0.00
9,600.00	89.00	160.95	7,446.96	-2,135.74	1,427.21	316,851.04	1,771,755.48	39.367834	-80.195917	2,484.60	0.00	0.00	0.00
9,700.00	89.00	160.95	7,448.70	-2,230.25	1,459.84	316,756.53	1,771,788.11	39.367575	-80.195799	2,584.59	0.00	0.00	0.00



NOV 18 2024

Company:	Diversified Production, LLC	Local Co-ordinate Reference:	Well Abbey 4MH
Project:	Harrison County, WV (NAD83 - GRID)	TVD Reference:	WELL @ 1024.00usft (28' RKB)
Site:	Abbey Pad	MD Reference:	WELL @ 1024.00usft (28' RKB)
Well:	Abbey 4MH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #5	Database:	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 (°)				
9,800.00	89.00	160.95	7,450.45	-2,324.76	1,492.47	316,662.02	1,771,820.74	39.367317	-80.195681	2,684.57	0.00	0.00	0.00
9,900.00	89.00	160.95	7,452.20	-2,419.27	1,525.09	316,567.50	1,771,853.36	39.367058	-80.195563	2,784.56	0.00	0.00	0.00
10,000.00	89.00	160.95	7,453.94	-2,513.78	1,557.72	316,472.99	1,771,885.99	39.366799	-80.195445	2,884.54	0.00	0.00	0.00
10,100.00	89.00	160.95	7,455.69	-2,608.29	1,590.35	316,378.48	1,771,918.62	39.366540	-80.195327	2,984.53	0.00	0.00	0.00
10,200.00	89.00	160.95	7,457.43	-2,702.80	1,622.98	316,283.97	1,771,951.25	39.366282	-80.195209	3,084.51	0.00	0.00	0.00
10,300.00	89.00	160.95	7,459.18	-2,797.31	1,655.61	316,189.46	1,771,983.88	39.366023	-80.195091	3,184.50	0.00	0.00	0.00
10,400.00	89.00	160.95	7,460.92	-2,891.83	1,688.23	316,094.95	1,772,016.50	39.365764	-80.194973	3,284.48	0.00	0.00	0.00
10,500.00	89.00	160.95	7,462.67	-2,986.34	1,720.86	316,000.44	1,772,049.13	39.365505	-80.194855	3,384.47	0.00	0.00	0.00
10,600.00	89.00	160.95	7,464.41	-3,080.85	1,753.49	315,905.93	1,772,081.76	39.365247	-80.194737	3,484.45	0.00	0.00	0.00
10,700.00	89.00	160.95	7,466.16	-3,175.36	1,786.12	315,811.42	1,772,114.39	39.364988	-80.194619	3,584.44	0.00	0.00	0.00
10,800.00	89.00	160.95	7,467.90	-3,269.87	1,818.75	315,716.90	1,772,147.02	39.364729	-80.194501	3,684.42	0.00	0.00	0.00
10,900.00	89.00	160.95	7,469.65	-3,364.38	1,851.37	315,622.39	1,772,179.64	39.364470	-80.194383	3,784.40	0.00	0.00	0.00
11,000.00	89.00	160.95	7,471.39	-3,458.89	1,884.00	315,527.88	1,772,212.27	39.364211	-80.194265	3,884.39	0.00	0.00	0.00
11,100.00	89.00	160.95	7,473.14	-3,553.40	1,916.63	315,433.37	1,772,244.90	39.363953	-80.194147	3,984.37	0.00	0.00	0.00
11,200.00	89.00	160.95	7,474.88	-3,647.92	1,949.26	315,338.86	1,772,277.53	39.363694	-80.194029	4,084.36	0.00	0.00	0.00
11,300.00	89.00	160.95	7,476.63	-3,742.43	1,981.89	315,244.35	1,772,310.16	39.363435	-80.193911	4,184.34	0.00	0.00	0.00
11,400.00	89.00	160.95	7,478.37	-3,836.94	2,014.51	315,149.84	1,772,342.78	39.363176	-80.193793	4,284.33	0.00	0.00	0.00
11,500.00	89.00	160.95	7,480.12	-3,931.45	2,047.14	315,055.33	1,772,375.41	39.362917	-80.193675	4,384.31	0.00	0.00	0.00
11,600.00	89.00	160.95	7,481.86	-4,025.96	2,079.77	314,960.81	1,772,408.04	39.362659	-80.193557	4,484.30	0.00	0.00	0.00
11,700.00	89.00	160.95	7,483.61	-4,120.47	2,112.40	314,866.30	1,772,440.67	39.362400	-80.193439	4,584.28	0.00	0.00	0.00
11,800.00	89.00	160.95	7,485.36	-4,214.98	2,145.03	314,771.79	1,772,473.30	39.362141	-80.193321	4,684.27	0.00	0.00	0.00
11,900.00	89.00	160.95	7,487.10	-4,309.49	2,177.65	314,677.28	1,772,505.92	39.361882	-80.193203	4,784.25	0.00	0.00	0.00
12,000.00	89.00	160.95	7,488.85	-4,404.01	2,210.28	314,582.77	1,772,538.55	39.361624	-80.193085	4,884.24	0.00	0.00	0.00
12,100.00	89.00	160.95	7,490.59	-4,498.52	2,242.91	314,488.26	1,772,571.18	39.361365	-80.192967	4,984.22	0.00	0.00	0.00
12,200.00	89.00	160.95	7,492.34	-4,593.03	2,275.54	314,393.75	1,772,603.81	39.361106	-80.192850	5,084.21	0.00	0.00	0.00
12,300.00	89.00	160.95	7,494.08	-4,687.54	2,308.17	314,299.24	1,772,636.44	39.360847	-80.192732	5,184.19	0.00	0.00	0.00
12,400.00	89.00	160.95	7,495.83	-4,782.05	2,340.79	314,204.73	1,772,669.07	39.360588	-80.192614	5,284.18	0.00	0.00	0.00
12,500.00	89.00	160.95	7,497.57	-4,876.56	2,373.42	314,110.21	1,772,701.69	39.360330	-80.192496	5,384.16	0.00	0.00	0.00
12,600.00	89.00	160.95	7,499.32	-4,971.07	2,406.05	314,015.70	1,772,734.32	39.360071	-80.192378	5,484.15	0.00	0.00	0.00
12,700.00	89.00	160.95	7,501.06	-5,065.58	2,438.68	313,921.19	1,772,766.95	39.359812	-80.192260	5,584.13	0.00	0.00	0.00
12,800.00	89.00	160.95	7,502.81	-5,160.09	2,471.31	313,826.68	1,772,799.58	39.359553	-80.192142	5,684.12	0.00	0.00	0.00
12,900.00	89.00	160.95	7,504.55	-5,254.61	2,503.94	313,732.17	1,772,832.21	39.359294	-80.192024	5,784.10	0.00	0.00	0.00
13,000.00	89.00	160.95	7,506.30	-5,349.12	2,536.56	313,637.66	1,772,864.83	39.359036	-80.191906	5,884.08	0.00	0.00	0.00
13,100.00	89.00	160.95	7,508.04	-5,443.63	2,569.19	313,543.15	1,772,897.46	39.358777	-80.191788	5,984.07	0.00	0.00	0.00
13,200.00	89.00	160.95	7,509.79	-5,538.14	2,601.82	313,448.64	1,772,930.09	39.358518	-80.191670	6,084.05	0.00	0.00	0.00
13,300.00	89.00	160.95	7,511.53	-5,632.65	2,634.45	313,354.12	1,772,962.72	39.358259	-80.191552	6,184.04	0.00	0.00	0.00
13,400.00	89.00	160.95	7,513.28	-5,727.16	2,667.08	313,259.61	1,772,995.35	39.358001	-80.191434	6,284.02	0.00	0.00	0.00
13,500.00	89.00	160.95	7,515.02	-5,821.67	2,699.70	313,165.10	1,773,027.97	39.357742	-80.191316	6,384.01	0.00	0.00	0.00



Company: Diversified Production, LLC	Local Co-ordinate Reference: Well Abbey 4MH	NOV 18 2024
Project: Harrison County, WV (NAD83 - GRID)	TVD Reference: WELL @ 1024.00usft (28' RKB)	
Site: Abbey Pad	MD Reference: WELL @ 1024.00usft (28' RKB)	WV Department of Environmental Protection
Well: Abbey 4MH	North Reference: Grid	
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature	
Design: Design #5	Database: 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)
13,600.00	89.00	160.95	7,516.77	-5,916.18	2,732.33	313,070.59	1,773,060.60	39.357483	-80.191198	6,483.99	0.00	0.00	0.00
13,700.00	89.00	160.95	7,518.52	-6,010.70	2,764.96	312,976.08	1,773,093.23	39.357224	-80.191080	6,583.98	0.00	0.00	0.00
13,800.00	89.00	160.95	7,520.26	-6,105.21	2,797.59	312,881.57	1,773,125.86	39.356965	-80.190962	6,683.96	0.00	0.00	0.00
13,900.00	89.00	160.95	7,522.01	-6,199.72	2,830.22	312,787.06	1,773,158.49	39.356707	-80.190844	6,783.95	0.00	0.00	0.00
14,000.00	89.00	160.95	7,523.75	-6,294.23	2,862.84	312,692.55	1,773,191.11	39.356448	-80.190726	6,883.93	0.00	0.00	0.00
14,100.00	89.00	160.95	7,525.50	-6,388.74	2,895.47	312,598.03	1,773,223.74	39.356189	-80.190608	6,983.92	0.00	0.00	0.00
14,200.00	89.00	160.95	7,527.24	-6,483.25	2,928.10	312,503.52	1,773,256.37	39.355930	-80.190490	7,083.90	0.00	0.00	0.00
14,300.00	89.00	160.95	7,528.99	-6,577.76	2,960.73	312,409.01	1,773,289.00	39.355671	-80.190372	7,183.89	0.00	0.00	0.00
14,400.00	89.00	160.95	7,530.73	-6,672.27	2,993.36	312,314.50	1,773,321.63	39.355413	-80.190254	7,283.87	0.00	0.00	0.00
14,500.00	89.00	160.95	7,532.48	-6,766.78	3,025.98	312,219.99	1,773,354.25	39.355154	-80.190136	7,383.86	0.00	0.00	0.00
14,600.00	89.00	160.95	7,534.22	-6,861.30	3,058.61	312,125.48	1,773,386.88	39.354895	-80.190018	7,483.84	0.00	0.00	0.00
14,700.00	89.00	160.95	7,535.97	-6,955.81	3,091.24	312,030.97	1,773,419.51	39.354636	-80.189900	7,583.83	0.00	0.00	0.00
14,800.00	89.00	160.95	7,537.71	-7,050.32	3,123.87	311,936.46	1,773,452.14	39.354378	-80.189783	7,683.81	0.00	0.00	0.00
14,900.00	89.00	160.95	7,539.46	-7,144.83	3,156.50	311,841.95	1,773,484.77	39.354119	-80.189665	7,783.80	0.00	0.00	0.00
15,000.00	89.00	160.95	7,541.20	-7,239.34	3,189.12	311,747.43	1,773,517.39	39.353860	-80.189547	7,883.78	0.00	0.00	0.00
15,100.00	89.00	160.95	7,542.95	-7,333.85	3,221.75	311,652.92	1,773,550.02	39.353601	-80.189429	7,983.76	0.00	0.00	0.00
15,200.00	89.00	160.95	7,544.69	-7,428.36	3,254.38	311,558.41	1,773,582.65	39.353342	-80.189311	8,083.75	0.00	0.00	0.00
15,300.00	89.00	160.95	7,546.44	-7,522.87	3,287.01	311,463.90	1,773,615.28	39.353084	-80.189193	8,183.73	0.00	0.00	0.00
15,400.00	89.00	160.95	7,548.18	-7,617.39	3,319.64	311,369.39	1,773,647.91	39.352825	-80.189075	8,283.72	0.00	0.00	0.00
15,500.00	89.00	160.95	7,549.93	-7,711.90	3,352.26	311,274.88	1,773,680.53	39.352566	-80.188957	8,383.70	0.00	0.00	0.00
15,600.00	89.00	160.95	7,551.67	-7,806.41	3,384.89	311,180.37	1,773,713.16	39.352307	-80.188839	8,483.69	0.00	0.00	0.00
15,700.00	89.00	160.95	7,553.42	-7,900.92	3,417.52	311,085.86	1,773,745.79	39.352048	-80.188721	8,583.67	0.00	0.00	0.00
15,800.00	89.00	160.95	7,555.17	-7,995.43	3,450.15	310,991.34	1,773,778.42	39.351790	-80.188603	8,683.66	0.00	0.00	0.00
15,900.00	89.00	160.95	7,556.91	-8,089.94	3,482.78	310,896.83	1,773,811.05	39.351531	-80.188485	8,783.64	0.00	0.00	0.00
16,000.00	89.00	160.95	7,558.66	-8,184.45	3,515.40	310,802.32	1,773,843.67	39.351272	-80.188367	8,883.63	0.00	0.00	0.00
16,100.00	89.00	160.95	7,560.40	-8,278.96	3,548.03	310,707.81	1,773,876.30	39.351013	-80.188249	8,983.61	0.00	0.00	0.00
16,200.00	89.00	160.95	7,562.15	-8,373.48	3,580.66	310,613.30	1,773,908.93	39.350754	-80.188131	9,083.60	0.00	0.00	0.00
16,300.00	89.00	160.95	7,563.89	-8,467.99	3,613.29	310,518.79	1,773,941.56	39.350496	-80.188013	9,183.58	0.00	0.00	0.00
16,400.00	89.00	160.95	7,565.64	-8,562.50	3,645.92	310,424.28	1,773,974.19	39.350237	-80.187895	9,283.57	0.00	0.00	0.00
16,500.00	89.00	160.95	7,567.38	-8,657.01	3,678.54	310,329.77	1,774,006.82	39.349978	-80.187777	9,383.55	0.00	0.00	0.00
16,600.00	89.00	160.95	7,569.13	-8,751.52	3,711.17	310,235.26	1,774,039.44	39.349719	-80.187660	9,483.54	0.00	0.00	0.00
16,700.00	89.00	160.95	7,570.87	-8,846.03	3,743.80	310,140.74	1,774,072.07	39.349461	-80.187542	9,583.52	0.00	0.00	0.00
16,800.00	89.00	160.95	7,572.62	-8,940.54	3,776.43	310,046.23	1,774,104.70	39.349202	-80.187424	9,683.51	0.00	0.00	0.00
16,900.00	89.00	160.95	7,574.36	-9,035.05	3,809.06	309,951.72	1,774,137.33	39.348943	-80.187306	9,783.49	0.00	0.00	0.00
17,000.00	89.00	160.95	7,576.11	-9,129.56	3,841.69	309,857.21	1,774,169.96	39.348684	-80.187188	9,883.48	0.00	0.00	0.00
17,100.00	89.00	160.95	7,577.85	-9,224.08	3,874.31	309,762.70	1,774,202.58	39.348425	-80.187070	9,983.46	0.00	0.00	0.00
17,200.00	89.00	160.95	7,579.60	-9,318.59	3,906.94	309,668.19	1,774,235.21	39.348167	-80.186952	10,083.45	0.00	0.00	0.00



Company:	Diversified Production, LLC	Local Co-ordinate Reference:	Well Abbey 4MH
Project:	Harrison County, WV (NAD83 - GRID)	TVD Reference:	WELL @ 1024.00usft (28' RKB)
Site:	Abbey Pad	MD Reference:	WELL @ 1024.00usft (28' RKB)
Well:	Abbey 4MH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #5	Database:	Total Directional Production DB

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					
17,300.00	89.00	160.95	7,581.34	-9,413.10	3,939.57	309,573.68	1,774,267.84	39.347908	-80.186834	10,183.43	0.00	0.00	0.00	
17,400.00	89.00	160.95	7,583.09	-9,507.61	3,972.20	309,479.17	1,774,300.47	39.347649	-80.186716	10,283.41	0.00	0.00	0.00	
17,500.00	89.00	160.95	7,584.83	-9,602.12	4,004.83	309,384.65	1,774,333.10	39.347390	-80.186598	10,383.40	0.00	0.00	0.00	
17,600.00	89.00	160.95	7,586.58	-9,696.63	4,037.45	309,290.14	1,774,365.72	39.347131	-80.186480	10,483.38	0.00	0.00	0.00	
17,700.00	89.00	160.95	7,588.33	-9,791.14	4,070.08	309,195.63	1,774,398.35	39.346873	-80.186362	10,583.37	0.00	0.00	0.00	
17,800.00	89.00	160.95	7,590.07	-9,885.65	4,102.71	309,101.12	1,774,430.98	39.346614	-80.186244	10,683.35	0.00	0.00	0.00	
17,900.00	89.00	160.95	7,591.82	-9,980.17	4,135.34	309,006.61	1,774,463.61	39.346355	-80.186126	10,783.34	0.00	0.00	0.00	
18,000.00	89.00	160.95	7,593.56	-10,074.68	4,167.97	308,912.10	1,774,496.24	39.346096	-80.186009	10,883.32	0.00	0.00	0.00	
18,100.00	89.00	160.95	7,595.31	-10,169.19	4,200.59	308,817.59	1,774,528.86	39.345837	-80.185891	10,983.31	0.00	0.00	0.00	
18,200.00	89.00	160.95	7,597.05	-10,263.70	4,233.22	308,723.08	1,774,561.49	39.345579	-80.185773	11,083.29	0.00	0.00	0.00	
18,300.00	89.00	160.95	7,598.80	-10,358.21	4,265.85	308,628.56	1,774,594.12	39.345320	-80.185655	11,183.28	0.00	0.00	0.00	
18,400.00	89.00	160.95	7,600.54	-10,452.72	4,298.48	308,534.05	1,774,626.75	39.345061	-80.185537	11,283.26	0.00	0.00	0.00	
18,500.00	89.00	160.95	7,602.29	-10,547.23	4,331.11	308,439.54	1,774,659.38	39.344802	-80.185419	11,383.25	0.00	0.00	0.00	
18,600.00	89.00	160.95	7,604.03	-10,641.74	4,363.73	308,345.03	1,774,692.00	39.344543	-80.185301	11,483.23	0.00	0.00	0.00	
18,700.00	89.00	160.95	7,605.78	-10,736.25	4,396.36	308,250.52	1,774,724.63	39.344285	-80.185183	11,583.22	0.00	0.00	0.00	
18,800.00	89.00	160.95	7,607.52	-10,830.77	4,428.99	308,156.01	1,774,757.26	39.344026	-80.185065	11,683.20	0.00	0.00	0.00	
18,900.00	89.00	160.95	7,609.27	-10,925.28	4,461.62	308,061.50	1,774,789.89	39.343767	-80.184947	11,783.19	0.00	0.00	0.00	
19,000.00	89.00	160.95	7,611.01	-11,019.79	4,494.25	307,966.99	1,774,822.52	39.343508	-80.184829	11,883.17	0.00	0.00	0.00	
19,100.00	89.00	160.95	7,612.76	-11,114.30	4,526.87	307,872.48	1,774,855.14	39.343250	-80.184711	11,983.16	0.00	0.00	0.00	
19,200.00	89.00	160.95	7,614.50	-11,208.81	4,559.50	307,777.96	1,774,887.77	39.342991	-80.184594	12,083.14	0.00	0.00	0.00	
19,300.00	89.00	160.95	7,616.25	-11,303.32	4,592.13	307,683.45	1,774,920.40	39.342732	-80.184476	12,183.13	0.00	0.00	0.00	
19,400.00	89.00	160.95	7,617.99	-11,397.83	4,624.76	307,588.94	1,774,953.03	39.342473	-80.184358	12,283.11	0.00	0.00	0.00	
19,500.00	89.00	160.95	7,619.74	-11,492.34	4,657.39	307,494.43	1,774,985.66	39.342214	-80.184240	12,383.09	0.00	0.00	0.00	
19,600.00	89.00	160.95	7,621.49	-11,586.86	4,690.01	307,399.92	1,775,018.28	39.341956	-80.184122	12,483.08	0.00	0.00	0.00	
19,700.00	89.00	160.95	7,623.23	-11,681.37	4,722.64	307,305.41	1,775,050.91	39.341697	-80.184004	12,583.06	0.00	0.00	0.00	
19,800.00	89.00	160.95	7,624.98	-11,775.88	4,755.27	307,210.90	1,775,083.54	39.341438	-80.183886	12,683.05	0.00	0.00	0.00	
19,900.00	89.00	160.95	7,626.72	-11,870.39	4,787.90	307,116.39	1,775,116.17	39.341179	-80.183768	12,783.03	0.00	0.00	0.00	
20,000.00	89.00	160.95	7,628.47	-11,964.90	4,820.53	307,021.87	1,775,148.80	39.340920	-80.183650	12,883.02	0.00	0.00	0.00	
20,100.00	89.00	160.95	7,630.21	-12,059.41	4,853.15	306,927.36	1,775,181.42	39.340662	-80.183532	12,983.00	0.00	0.00	0.00	
20,200.00	89.00	160.95	7,631.96	-12,153.92	4,885.78	306,832.85	1,775,214.05	39.340403	-80.183414	13,082.99	0.00	0.00	0.00	
20,300.00	89.00	160.95	7,633.70	-12,248.43	4,918.41	306,738.34	1,775,246.68	39.340144	-80.183297	13,182.97	0.00	0.00	0.00	
20,400.00	89.00	160.95	7,635.45	-12,342.95	4,951.04	306,643.83	1,775,279.31	39.339885	-80.183179	13,282.96	0.00	0.00	0.00	
20,500.00	89.00	160.95	7,637.19	-12,437.46	4,983.67	306,549.32	1,775,311.94	39.339626	-80.183061	13,382.94	0.00	0.00	0.00	
20,600.00	89.00	160.95	7,638.94	-12,531.97	5,016.29	306,454.81	1,775,344.57	39.339368	-80.182943	13,482.93	0.00	0.00	0.00	
20,700.00	89.00	160.95	7,640.68	-12,626.48	5,048.92	306,360.30	1,775,377.19	39.339109	-80.182825	13,582.91	0.00	0.00	0.00	
20,800.00	89.00	160.95	7,642.43	-12,720.99	5,081.55	306,265.79	1,775,409.82	39.338850	-80.182707	13,682.90	0.00	0.00	0.00	
20,900.00	89.00	160.95	7,644.17	-12,815.50	5,114.18	306,171.27	1,775,442.45	39.338591	-80.182589	13,782.88	0.00	0.00	0.00	
21,000.00	89.00	160.95	7,645.92	-12,910.01	5,146.81	306,076.76	1,775,475.08	39.338332	-80.182471	13,882.87	0.00	0.00	0.00	



Company:	Diversified Production, LLC	Local Co-ordinate Reference:	Well Abbey 4MH Department of
Project:	Harrison County, WV (NAD83 - GRID)	TVD Reference:	WELL @ Environmental Protection
Site:	Abbey Pad	MD Reference:	WELL @ 1024.00usft (28' RKB)
Well:	Abbey 4MH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #5	Database:	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)
21,100.00	89.00	160.95	7,647.66	-13,004.52	5,179.43	305,982.25	1,775,507.71	39.338074	-80.182353	13,982.85	0.00	0.00	0.00
21,200.00	89.00	160.95	7,649.41	-13,099.03	5,212.06	305,887.74	1,775,540.33	39.337815	-80.182235	14,082.84	0.00	0.00	0.00
21,300.00	89.00	160.95	7,651.15	-13,193.55	5,244.69	305,793.23	1,775,572.96	39.337556	-80.182118	14,182.82	0.00	0.00	0.00
21,400.00	89.00	160.95	7,652.90	-13,288.06	5,277.32	305,698.72	1,775,605.59	39.337297	-80.182000	14,282.81	0.00	0.00	0.00
21,500.00	89.00	160.95	7,654.64	-13,382.57	5,309.95	305,604.21	1,775,638.22	39.337038	-80.181882	14,382.79	0.00	0.00	0.00
21,600.00	89.00	160.95	7,656.39	-13,477.08	5,342.58	305,509.70	1,775,670.85	39.336780	-80.181764	14,482.78	0.00	0.00	0.00
21,700.00	89.00	160.95	7,658.14	-13,571.59	5,375.20	305,415.18	1,775,703.47	39.336521	-80.181646	14,582.76	0.00	0.00	0.00
21,800.00	89.00	160.95	7,659.88	-13,666.10	5,407.83	305,320.67	1,775,736.10	39.336262	-80.181528	14,682.74	0.00	0.00	0.00
21,900.00	89.00	160.95	7,661.63	-13,760.61	5,440.46	305,226.16	1,775,768.73	39.336003	-80.181410	14,782.73	0.00	0.00	0.00
22,000.00	89.00	160.95	7,663.37	-13,855.12	5,473.09	305,131.65	1,775,801.36	39.335744	-80.181292	14,882.71	0.00	0.00	0.00
22,100.00	89.00	160.95	7,665.12	-13,949.64	5,505.72	305,037.14	1,775,833.99	39.335486	-80.181174	14,982.70	0.00	0.00	0.00
22,200.00	89.00	160.95	7,666.86	-14,044.15	5,538.34	304,942.63	1,775,866.61	39.335227	-80.181057	15,082.68	0.00	0.00	0.00
22,300.00	89.00	160.95	7,668.61	-14,138.66	5,570.97	304,848.12	1,775,899.24	39.334968	-80.180939	15,182.67	0.00	0.00	0.00
22,400.00	89.00	160.95	7,670.35	-14,233.17	5,603.60	304,753.61	1,775,931.87	39.334709	-80.180821	15,282.65	0.00	0.00	0.00
22,500.00	89.00	160.95	7,672.10	-14,327.68	5,636.23	304,659.10	1,775,964.50	39.334450	-80.180703	15,382.64	0.00	0.00	0.00
22,600.00	89.00	160.95	7,673.84	-14,422.19	5,668.86	304,564.58	1,775,997.13	39.334192	-80.180585	15,482.62	0.00	0.00	0.00
22,700.00	89.00	160.95	7,675.59	-14,516.70	5,701.48	304,470.07	1,776,029.75	39.333933	-80.180467	15,582.61	0.00	0.00	0.00
22,800.00	89.00	160.95	7,677.33	-14,611.21	5,734.11	304,375.56	1,776,062.38	39.333674	-80.180349	15,682.59	0.00	0.00	0.00
22,900.00	89.00	160.95	7,679.08	-14,705.72	5,766.74	304,281.05	1,776,095.01	39.333415	-80.180231	15,782.58	0.00	0.00	0.00
23,000.00	89.00	160.95	7,680.82	-14,800.24	5,799.37	304,186.54	1,776,127.64	39.333156	-80.180114	15,882.56	0.00	0.00	0.00
23,100.00	89.00	160.95	7,682.57	-14,894.75	5,832.00	304,092.03	1,776,160.27	39.332898	-80.179996	15,982.55	0.00	0.00	0.00
23,200.00	89.00	160.95	7,684.31	-14,989.26	5,864.62	303,997.52	1,776,192.89	39.332639	-80.179878	16,082.53	0.00	0.00	0.00
23,300.00	89.00	160.95	7,686.06	-15,083.77	5,897.25	303,903.01	1,776,225.52	39.332380	-80.179760	16,182.52	0.00	0.00	0.00
23,400.00	89.00	160.95	7,687.80	-15,178.28	5,929.88	303,808.49	1,776,258.15	39.332121	-80.179642	16,282.50	0.00	0.00	0.00
23,500.00	89.00	160.95	7,689.55	-15,272.79	5,962.51	303,713.98	1,776,290.78	39.331862	-80.179524	16,382.49	0.00	0.00	0.00
23,600.00	89.00	160.95	7,691.30	-15,367.30	5,995.14	303,619.47	1,776,323.41	39.331604	-80.179406	16,482.47	0.00	0.00	0.00
23,700.00	89.00	160.95	7,693.04	-15,461.81	6,027.76	303,524.96	1,776,356.03	39.331345	-80.179288	16,582.46	0.00	0.00	0.00
23,800.00	89.00	160.95	7,694.79	-15,556.33	6,060.39	303,430.45	1,776,388.66	39.331086	-80.179171	16,682.44	0.00	0.00	0.00
23,900.00	89.00	160.95	7,696.53	-15,650.84	6,093.02	303,335.94	1,776,421.29	39.330827	-80.179053	16,782.42	0.00	0.00	0.00
24,000.00	89.00	160.95	7,698.28	-15,745.35	6,125.65	303,241.43	1,776,453.92	39.330568	-80.178935	16,882.41	0.00	0.00	0.00
24,100.00	89.00	160.95	7,700.02	-15,839.86	6,158.28	303,146.92	1,776,486.55	39.330310	-80.178817	16,982.39	0.00	0.00	0.00
24,200.00	89.00	160.95	7,701.77	-15,934.37	6,190.90	303,052.40	1,776,519.17	39.330051	-80.178699	17,082.38	0.00	0.00	0.00
24,300.00	89.00	160.95	7,703.51	-16,028.88	6,223.53	302,957.89	1,776,551.80	39.329792	-80.178581	17,182.36	0.00	0.00	0.00
24,400.00	89.00	160.95	7,705.26	-16,123.39	6,256.16	302,863.38	1,776,584.43	39.329533	-80.178463	17,282.35	0.00	0.00	0.00
24,500.00	89.00	160.95	7,707.00	-16,217.90	6,288.79	302,768.87	1,776,617.06	39.329274	-80.178345	17,382.33	0.00	0.00	0.00
24,600.00	89.00	160.95	7,708.75	-16,312.42	6,321.42	302,674.36	1,776,649.69	39.329016	-80.178228	17,482.32	0.00	0.00	0.00
24,700.00	89.00	160.95	7,710.49	-16,406.93	6,354.04	302,579.85	1,776,682.31	39.328757	-80.178110	17,582.30	0.00	0.00	0.00



Company:	Diversified Production, LLC	Local Co-ordinate Reference:	Well Abbey 4MH
Project:	Harrison County, WV (NAD83 - GRID)	TVD Reference:	WELL @ 1024.00usft (28' RKB)
Site:	Abbey Pad	MD Reference:	WELL @ 1024.00usft (28' RKB)
Well:	Abbey 4MH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #5	Database:	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)
24,800.00	89.00	160.95	7,712.24	-16,501.44	6,386.67	302,485.34	1,776,714.94	39.328498	-80.177992	17,682.29	0.00	0.00	0.00
24,900.00	89.00	160.95	7,713.98	-16,595.95	6,419.30	302,390.83	1,776,747.57	39.328239	-80.177874	17,782.27	0.00	0.00	0.00
25,000.00	89.00	160.95	7,715.73	-16,690.46	6,451.93	302,296.32	1,776,780.20	39.327980	-80.177756	17,882.26	0.00	0.00	0.00
25,100.00	89.00	160.95	7,717.47	-16,784.97	6,484.56	302,201.80	1,776,812.83	39.327722	-80.177638	17,982.24	0.00	0.00	0.00
25,200.00	89.00	160.95	7,719.22	-16,879.48	6,517.18	302,107.29	1,776,845.46	39.327463	-80.177520	18,082.23	0.00	0.00	0.00
25,300.00	89.00	160.95	7,720.96	-16,973.99	6,549.81	302,012.78	1,776,878.08	39.327204	-80.177403	18,182.21	0.00	0.00	0.00
25,400.00	89.00	160.95	7,722.71	-17,068.50	6,582.44	301,918.27	1,776,910.71	39.326945	-80.177285	18,282.20	0.00	0.00	0.00
25,500.00	89.00	160.95	7,724.46	-17,163.02	6,615.07	301,823.76	1,776,943.34	39.326686	-80.177167	18,382.18	0.00	0.00	0.00
25,600.00	89.00	160.95	7,726.20	-17,257.53	6,647.70	301,729.25	1,776,975.97	39.326428	-80.177049	18,482.17	0.00	0.00	0.00
25,700.00	89.00	160.95	7,727.95	-17,352.04	6,680.33	301,634.74	1,777,008.60	39.326169	-80.176931	18,582.15	0.00	0.00	0.00
25,800.00	89.00	160.95	7,729.69	-17,446.55	6,712.95	301,540.23	1,777,041.22	39.325910	-80.176813	18,682.14	0.00	0.00	0.00
25,900.00	89.00	160.95	7,731.44	-17,541.06	6,745.58	301,445.71	1,777,073.85	39.325651	-80.176695	18,782.12	0.00	0.00	0.00
26,000.00	89.00	160.95	7,733.18	-17,635.57	6,778.21	301,351.20	1,777,106.48	39.325392	-80.176578	18,882.11	0.00	0.00	0.00
26,100.00	89.00	160.95	7,734.93	-17,730.08	6,810.84	301,256.69	1,777,139.11	39.325134	-80.176460	18,982.09	0.00	0.00	0.00
26,200.00	89.00	160.95	7,736.67	-17,824.59	6,843.47	301,162.18	1,777,171.74	39.324875	-80.176342	19,082.07	0.00	0.00	0.00
26,300.00	89.00	160.95	7,738.42	-17,919.11	6,876.09	301,067.67	1,777,204.36	39.324616	-80.176224	19,182.06	0.00	0.00	0.00
26,400.00	89.00	160.95	7,740.16	-18,013.62	6,908.72	300,973.16	1,777,236.99	39.324357	-80.176106	19,282.04	0.00	0.00	0.00
26,500.00	89.00	160.95	7,741.91	-18,108.13	6,941.35	300,878.65	1,777,269.62	39.324098	-80.175988	19,382.03	0.00	0.00	0.00
26,600.00	89.00	160.95	7,743.65	-18,202.64	6,973.98	300,784.14	1,777,302.25	39.323840	-80.175870	19,482.01	0.00	0.00	0.00
26,700.00	89.00	160.95	7,745.40	-18,297.15	7,006.61	300,689.63	1,777,334.88	39.323581	-80.175753	19,582.00	0.00	0.00	0.00
26,800.00	89.00	160.95	7,747.14	-18,391.66	7,039.23	300,595.11	1,777,367.50	39.323322	-80.175635	19,681.98	0.00	0.00	0.00
26,900.00	89.00	160.95	7,748.89	-18,486.17	7,071.86	300,500.60	1,777,400.13	39.323063	-80.175517	19,781.97	0.00	0.00	0.00
27,000.00	89.00	160.95	7,750.63	-18,580.68	7,104.49	300,406.09	1,777,432.76	39.322804	-80.175399	19,881.95	0.00	0.00	0.00
27,024.52	89.00	160.95	7,751.06	-18,603.88	7,112.41	300,382.89	1,777,440.68	39.322741	-80.175370	19,906.46	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LP v4 - Abbey 4MH - hit/miss target - Shape - plan hits target center - Point	0.00	360.00	7,415.00	-405.03	829.72	318,581.74	1,771,157.99	39.372573	-80.198078
PBHL v5 - Abbey 4MH - plan hits target center - Point	0.00	360.00	7,751.06	-18,603.88	7,112.41	300,382.89	1,777,440.68	39.322741	-80.175370

RECEIVED
Office of Oil and Gas

NOV 18 2024



Company:	Diversified Production, LLC	Local Co-ordinate Reference:	Well Abbey 4MH
Project:	Harrison County, WV (NAD83 - GRID)	TVD Reference:	WELL @ 1024.00usft (28' RKB)
Site:	Abbey Pad	MD Reference:	WELL @ 1024.00usft (28' RKB)
Well:	Abbey 4MH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #5	Database:	.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
1671	1670	-5	17	Hold 6.41° Tangent; 2.00° Turn
1817	1815	-5	33	Hold 78.57° Az
6887	6854	107	588	Begin 10.00° Build/Turn
7769	7415	-405	830	Hold 89.00° Lateral
27,025	7751	-18,604	7112	PBHL - 27024.52' MD

Checked By: _____ Approved By: _____ Date: _____

RECEIVED
Office of Oil and Gas

NOV 18 2024

WV Department of
Environmental Protection

4703306046

WW-9
(4/16)

API Number 47 - 033 -
Operator's Well No. Abbey South 4MH

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 surface 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

RECEIVED
Office of Oil and Gas

Additives to be used in drilling medium? *See attached

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

NOV 18 2024

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

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

WV Department of
Environmental Protection

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

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

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

Company Official Signature [Signature]
Company Official (Typed Name) Daniel Frick
Company Official Title Director - EHS Regulatory

Subscribed and sworn before me this 29th day of October, 2024

Andrea S. Hays 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 Wright

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

Additional Information for WW-9**Drilling Medium anticipated for this well (vertical and horizontal)?** Air, freshwater, oil based, etc.Vertical Surface: Air/FW MistVertical Intermediates: Air Brine MistHorizontal: Synthetic Oil Based Mud**Additives to be used in drilling medium?**Vertical Surface: FW shale stabilizersVertical Intermediates: Shale inhibitors, mist soap & gear oil; Water Based Mud w/NaCl2 & bentonite gelHorizontal: 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

4703306046



Diversified
Production LLC

WELL SITE SAFETY PLAN

Well Name: Abbey South 4MH

Pad Name: Abbey

911 Address:

39 Cathrine Drive
Shinnston, WV 26431

County: Harrison

District: Clay - Outside

UTM (meters), NAD83, Zone 17

Northing: 4,358,548.589

Easting: 568,819.810

Ky Willett
10/24/24

October 2024

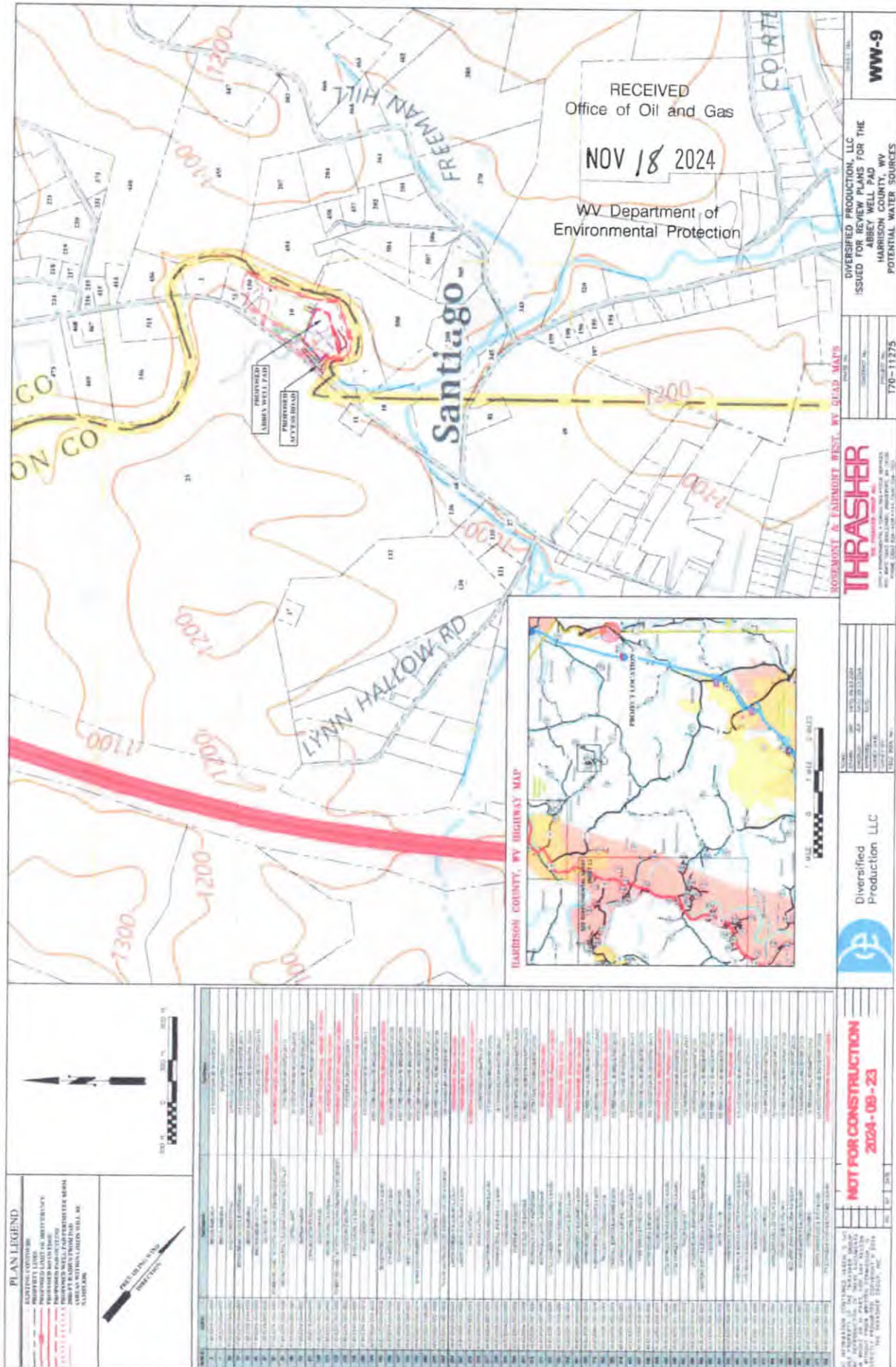
RECEIVED
Office of Oil and Gas

NOV 18 2024

West Virginia Department
Environmental Protection

12/20/2024

703306046



PLAN LEGEND

EXISTING CONDUITS
PROPOSED 12" WATER MAIN
PROPOSED 18" WATER MAIN
PROPOSED 24" WATER MAIN
PROPOSED 30" WATER MAIN
PROPOSED 36" WATER MAIN
PROPOSED 42" WATER MAIN
PROPOSED 48" WATER MAIN
PROPOSED 54" WATER MAIN
PROPOSED 60" WATER MAIN
PROPOSED 66" WATER MAIN
PROPOSED 72" WATER MAIN
PROPOSED 78" WATER MAIN
PROPOSED 84" WATER MAIN
PROPOSED 90" WATER MAIN
PROPOSED 96" WATER MAIN
PROPOSED 102" WATER MAIN
PROPOSED 108" WATER MAIN
PROPOSED 114" WATER MAIN
PROPOSED 120" WATER MAIN
PROPOSED 126" WATER MAIN
PROPOSED 132" WATER MAIN
PROPOSED 138" WATER MAIN
PROPOSED 144" WATER MAIN
PROPOSED 150" WATER MAIN
PROPOSED 156" WATER MAIN
PROPOSED 162" WATER MAIN
PROPOSED 168" WATER MAIN
PROPOSED 174" WATER MAIN
PROPOSED 180" WATER MAIN
PROPOSED 186" WATER MAIN
PROPOSED 192" WATER MAIN
PROPOSED 198" WATER MAIN
PROPOSED 204" WATER MAIN
PROPOSED 210" WATER MAIN
PROPOSED 216" WATER MAIN
PROPOSED 222" WATER MAIN
PROPOSED 228" WATER MAIN
PROPOSED 234" WATER MAIN
PROPOSED 240" WATER MAIN
PROPOSED 246" WATER MAIN
PROPOSED 252" WATER MAIN
PROPOSED 258" WATER MAIN
PROPOSED 264" WATER MAIN
PROPOSED 270" WATER MAIN
PROPOSED 276" WATER MAIN
PROPOSED 282" WATER MAIN
PROPOSED 288" WATER MAIN
PROPOSED 294" WATER MAIN
PROPOSED 300" WATER MAIN

NO.	DESCRIPTION	DATE	BY	CHECKED
1	ISSUED FOR PERMIT	08/20/24	J. W. HARRIS	J. W. HARRIS
2	ISSUED FOR REVIEW	09/10/24	J. W. HARRIS	J. W. HARRIS
3	ISSUED FOR CONSTRUCTION	09/23/24	J. W. HARRIS	J. W. HARRIS
4	ISSUED FOR REVIEW	10/10/24	J. W. HARRIS	J. W. HARRIS
5	ISSUED FOR CONSTRUCTION	10/20/24	J. W. HARRIS	J. W. HARRIS
6	ISSUED FOR REVIEW	11/05/24	J. W. HARRIS	J. W. HARRIS
7	ISSUED FOR CONSTRUCTION	11/15/24	J. W. HARRIS	J. W. HARRIS
8	ISSUED FOR REVIEW	11/25/24	J. W. HARRIS	J. W. HARRIS
9	ISSUED FOR CONSTRUCTION	12/05/24	J. W. HARRIS	J. W. HARRIS
10	ISSUED FOR REVIEW	12/15/24	J. W. HARRIS	J. W. HARRIS
11	ISSUED FOR CONSTRUCTION	12/20/24	J. W. HARRIS	J. W. HARRIS
12	ISSUED FOR REVIEW	01/05/25	J. W. HARRIS	J. W. HARRIS
13	ISSUED FOR CONSTRUCTION	01/15/25	J. W. HARRIS	J. W. HARRIS
14	ISSUED FOR REVIEW	01/25/25	J. W. HARRIS	J. W. HARRIS
15	ISSUED FOR CONSTRUCTION	02/05/25	J. W. HARRIS	J. W. HARRIS
16	ISSUED FOR REVIEW	02/15/25	J. W. HARRIS	J. W. HARRIS
17	ISSUED FOR CONSTRUCTION	02/20/25	J. W. HARRIS	J. W. HARRIS
18	ISSUED FOR REVIEW	03/05/25	J. W. HARRIS	J. W. HARRIS
19	ISSUED FOR CONSTRUCTION	03/15/25	J. W. HARRIS	J. W. HARRIS
20	ISSUED FOR REVIEW	03/25/25	J. W. HARRIS	J. W. HARRIS
21	ISSUED FOR CONSTRUCTION	04/05/25	J. W. HARRIS	J. W. HARRIS
22	ISSUED FOR REVIEW	04/15/25	J. W. HARRIS	J. W. HARRIS
23	ISSUED FOR CONSTRUCTION	04/20/25	J. W. HARRIS	J. W. HARRIS
24	ISSUED FOR REVIEW	05/05/25	J. W. HARRIS	J. W. HARRIS
25	ISSUED FOR CONSTRUCTION	05/15/25	J. W. HARRIS	J. W. HARRIS
26	ISSUED FOR REVIEW	05/25/25	J. W. HARRIS	J. W. HARRIS
27	ISSUED FOR CONSTRUCTION	06/05/25	J. W. HARRIS	J. W. HARRIS
28	ISSUED FOR REVIEW	06/15/25	J. W. HARRIS	J. W. HARRIS
29	ISSUED FOR CONSTRUCTION	06/20/25	J. W. HARRIS	J. W. HARRIS
30	ISSUED FOR REVIEW	07/05/25	J. W. HARRIS	J. W. HARRIS
31	ISSUED FOR CONSTRUCTION	07/15/25	J. W. HARRIS	J. W. HARRIS
32	ISSUED FOR REVIEW	07/25/25	J. W. HARRIS	J. W. HARRIS
33	ISSUED FOR CONSTRUCTION	08/05/25	J. W. HARRIS	J. W. HARRIS
34	ISSUED FOR REVIEW	08/15/25	J. W. HARRIS	J. W. HARRIS
35	ISSUED FOR CONSTRUCTION	08/20/25	J. W. HARRIS	J. W. HARRIS
36	ISSUED FOR REVIEW	09/05/25	J. W. HARRIS	J. W. HARRIS
37	ISSUED FOR CONSTRUCTION	09/15/25	J. W. HARRIS	J. W. HARRIS
38	ISSUED FOR REVIEW	09/25/25	J. W. HARRIS	J. W. HARRIS
39	ISSUED FOR CONSTRUCTION	10/05/25	J. W. HARRIS	J. W. HARRIS
40	ISSUED FOR REVIEW	10/15/25	J. W. HARRIS	J. W. HARRIS
41	ISSUED FOR CONSTRUCTION	10/20/25	J. W. HARRIS	J. W. HARRIS
42	ISSUED FOR REVIEW	11/05/25	J. W. HARRIS	J. W. HARRIS
43	ISSUED FOR CONSTRUCTION	11/15/25	J. W. HARRIS	J. W. HARRIS
44	ISSUED FOR REVIEW	11/25/25	J. W. HARRIS	J. W. HARRIS
45	ISSUED FOR CONSTRUCTION	12/05/25	J. W. HARRIS	J. W. HARRIS
46	ISSUED FOR REVIEW	12/15/25	J. W. HARRIS	J. W. HARRIS
47	ISSUED FOR CONSTRUCTION	12/20/25	J. W. HARRIS	J. W. HARRIS
48	ISSUED FOR REVIEW	01/05/26	J. W. HARRIS	J. W. HARRIS
49	ISSUED FOR CONSTRUCTION	01/15/26	J. W. HARRIS	J. W. HARRIS
50	ISSUED FOR REVIEW	01/25/26	J. W. HARRIS	J. W. HARRIS
51	ISSUED FOR CONSTRUCTION	02/05/26	J. W. HARRIS	J. W. HARRIS
52	ISSUED FOR REVIEW	02/15/26	J. W. HARRIS	J. W. HARRIS
53	ISSUED FOR CONSTRUCTION	02/20/26	J. W. HARRIS	J. W. HARRIS
54	ISSUED FOR REVIEW	03/05/26	J. W. HARRIS	J. W. HARRIS
55	ISSUED FOR CONSTRUCTION	03/15/26	J. W. HARRIS	J. W. HARRIS
56	ISSUED FOR REVIEW	03/25/26	J. W. HARRIS	J. W. HARRIS
57	ISSUED FOR CONSTRUCTION	04/05/26	J. W. HARRIS	J. W. HARRIS
58	ISSUED FOR REVIEW	04/15/26	J. W. HARRIS	J. W. HARRIS
59	ISSUED FOR CONSTRUCTION	04/20/26	J. W. HARRIS	J. W. HARRIS
60	ISSUED FOR REVIEW	05/05/26	J. W. HARRIS	J. W. HARRIS
61	ISSUED FOR CONSTRUCTION	05/15/26	J. W. HARRIS	J. W. HARRIS
62	ISSUED FOR REVIEW	05/25/26	J. W. HARRIS	J. W. HARRIS
63	ISSUED FOR CONSTRUCTION	06/05/26	J. W. HARRIS	J. W. HARRIS
64	ISSUED FOR REVIEW	06/15/26	J. W. HARRIS	J. W. HARRIS
65	ISSUED FOR CONSTRUCTION	06/20/26	J. W. HARRIS	J. W. HARRIS
66	ISSUED FOR REVIEW	07/05/26	J. W. HARRIS	J. W. HARRIS
67	ISSUED FOR CONSTRUCTION	07/15/26	J. W. HARRIS	J. W. HARRIS
68	ISSUED FOR REVIEW	07/25/26	J. W. HARRIS	J. W. HARRIS
69	ISSUED FOR CONSTRUCTION	08/05/26	J. W. HARRIS	J. W. HARRIS
70	ISSUED FOR REVIEW	08/15/26	J. W. HARRIS	J. W. HARRIS
71	ISSUED FOR CONSTRUCTION	08/20/26	J. W. HARRIS	J. W. HARRIS
72	ISSUED FOR REVIEW	09/05/26	J. W. HARRIS	J. W. HARRIS
73	ISSUED FOR CONSTRUCTION	09/15/26	J. W. HARRIS	J. W. HARRIS
74	ISSUED FOR REVIEW	09/25/26	J. W. HARRIS	J. W. HARRIS
75	ISSUED FOR CONSTRUCTION	10/05/26	J. W. HARRIS	J. W. HARRIS
76	ISSUED FOR REVIEW	10/15/26	J. W. HARRIS	J. W. HARRIS
77	ISSUED FOR CONSTRUCTION	10/20/26	J. W. HARRIS	J. W. HARRIS
78	ISSUED FOR REVIEW	11/05/26	J. W. HARRIS	J. W. HARRIS
79	ISSUED FOR CONSTRUCTION	11/15/26	J. W. HARRIS	J. W. HARRIS
80	ISSUED FOR REVIEW	11/25/26	J. W. HARRIS	J. W. HARRIS
81	ISSUED FOR CONSTRUCTION	12/05/26	J. W. HARRIS	J. W. HARRIS
82	ISSUED FOR REVIEW	12/15/26	J. W. HARRIS	J. W. HARRIS
83	ISSUED FOR CONSTRUCTION	12/20/26	J. W. HARRIS	J. W. HARRIS
84	ISSUED FOR REVIEW	01/05/27	J. W. HARRIS	J. W. HARRIS
85	ISSUED FOR CONSTRUCTION	01/15/27	J. W. HARRIS	J. W. HARRIS
86	ISSUED FOR REVIEW	01/25/27	J. W. HARRIS	J. W. HARRIS
87	ISSUED FOR CONSTRUCTION	02/05/27	J. W. HARRIS	J. W. HARRIS
88	ISSUED FOR REVIEW	02/15/27	J. W. HARRIS	J. W. HARRIS
89	ISSUED FOR CONSTRUCTION	02/20/27	J. W. HARRIS	J. W. HARRIS
90	ISSUED FOR REVIEW	03/05/27	J. W. HARRIS	J. W. HARRIS
91	ISSUED FOR CONSTRUCTION	03/15/27	J. W. HARRIS	J. W. HARRIS
92	ISSUED FOR REVIEW	03/25/27	J. W. HARRIS	J. W. HARRIS
93	ISSUED FOR CONSTRUCTION	04/05/27	J. W. HARRIS	J. W. HARRIS
94	ISSUED FOR REVIEW	04/15/27	J. W. HARRIS	J. W. HARRIS
95	ISSUED FOR CONSTRUCTION	04/20/27	J. W. HARRIS	J. W. HARRIS
96	ISSUED FOR REVIEW	05/05/27	J. W. HARRIS	J. W. HARRIS
97	ISSUED FOR CONSTRUCTION	05/15/27	J. W. HARRIS	J. W. HARRIS
98	ISSUED FOR REVIEW	05/25/27	J. W. HARRIS	J. W. HARRIS
99	ISSUED FOR CONSTRUCTION	06/05/27	J. W. HARRIS	J. W. HARRIS
100	ISSUED FOR REVIEW	06/15/27	J. W. HARRIS	J. W. HARRIS

RECEIVED
Office of Oil and Gas

NOV 18 2024

WV Department of
Environmental Protection

THRASHER
ENGINEERS & SURVEYORS, INC.
1000 WEST MAIN STREET, SUITE 200
HARRISON, WV 25925
PHONE: 304.762.1111 FAX: 304.762.1112
WWW.THRASHERINC.COM

SOVEREIGNTY & ENDURANCE FIRST, BY OUR MATHS

170-11275

DIVERSIFIED PRODUCTION, LLC
ISSUED FOR REVIEW PLANS FOR THE
SANTIAGO WATER MAIN
HARRISON COUNTY, WV
POTENTIAL WATER SOURCES

WW-9

Diversified
Production, LLC

NOT FOR CONSTRUCTION
2024-09-23

12/20/2024

ABBEY SOUTH WELL 4MH		
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	SANDRA LOU TAYLOR	P/O 3-6-16.1
4	DAVID L. & ETHELYN VANGILDER	3-6-21.1
5	SANDRA LOU TAYLOR ET AL (LIFE)	3-6-21.2
6	ROBERT L. & KATHY L. MORRIS	3-6-21.4
7	CHARLES THOMAS & MILDRED C. LITTLE	3-6-20
8	JOHN R. LINN HRS	3-6-41
9	ROGER L. & BESSIE JO PETERSON LIVING TRUST	3-6B-47.7
10	ADAM T. & NAOMI WEST	3-6B-47.4
11	SYS LLC	3-6B-47.65
12	ENERGY GLASS INC	3-6B-47
13	RUSTIN & TIFFANY AULT	3-6B-47.88
14	RUSTIN & TIFFANY AULT	3-6B-47.84
15	RUSTIN & TIFFANY AULT	3-6B-47.83
16	RUSTIN & TIFFANY AULT	3-6B-47.82
17	GERALD L. & HELEN R. GOODWIN	3-6B-47.87
18	GERALD L. & HELEN R. GOODWIN	3-6B-47.103
19	DAVID A. TENNANT & BEVERLY HUFFMAN	3-6B-47.19
20	LARRY D. HARBISON & CYNTHIA L. BYRD	3-6B-47.78
21	SANDRA L. HAYSLETTE	3-6B-47.74
22	LISA E. DIERKES & CHARLES S. CARPENTER	3-6B-47.72
23	RANDY G. BRINKMAN	3-6B-47.66
24	4-T ARENA INC.	3-13-2
25	4-T ARENA INC.	3-13-3
26	4-T ARENA INC.	3-13-4.3
27	4-T ARENA INC.	3-13-6

ABBEY SOUTH WELL 4MH		
ID	SURFACE OWNER	DIST-TM-PAR
28	MARK V. SCHUMACHER	3-13-24
29	VICKI ANGOTTI	3-13-9.7
30	CARMEN R. ROMANO & MARY F. WILLIAMS-ROMANO	3-13-9.13
31	KEVIN L. & DEBRA MANNING	3-13-22
32	SCOTT E. & KASIE ANNE MCINTYRE	3-13-20
33	ADAM GROGG	3-13-19
34	WAYNE EDWARD & RALPH JAMES JR. WESTBROOK	3-13-18
35	EVAN & WHITNEY HELMS KLIETHERMES	3-13-17
36	EVAN M. KLIETHERMES	3-13-42
37	EVAN M. KLIETHERMES	3-14-17
38	JAMES K. ALFRED	3-14-21
39	JAMES E. & JENEANE B. MATTINGLY	3-14-22.2
40	BARBARA C. COMPTON	3-14-22
41	DAVID L. BOOTH	3-14-23.6
42	DEAN A. & KIMBERLY S. PARSONS	3-14-23.3
43	ROBIN O. FARIS	P/O 3-14-24
44	GARY M. & MELINDA M. SIMON	3-14-27.3
45	JOSEPH & STEPHANIE STARKEY	3-14-27.1

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

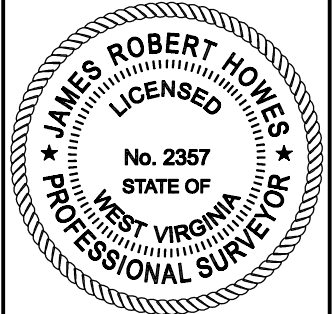
Diversified
Production LLC

FILE #: T70-11275 ABBEY WELL PAD
DRAWING #: ABBEY SOUTH 4MH
SCALE: 1" = 2,000'
DATE: DECEMBER 20, 2024

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

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

SIGNED: *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 4MH
API WELL #: 47 33
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) TVD: 7,415'± TMD: 27,024'±

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

ABBEY SOUTH WELL 4MH			
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	101296000, 101297000, 101278000, 101277000, 101279000, 101298000	SONIA SUE WILT ET AL	30.17
C	101296000, 101297000, 101278000, 101277000, 101279000, 101298000	SONIA SUE WILT ET AL	30.17
C	101296000, 101297000, 101278000, 101277000, 101279000, 101298000	SONIA SUE WILT ET AL	30.17
C	101296000, 101297000, 101278000, 101277000, 101279000, 101298000	SONIA SUE WILT ET AL	30.17
D	BP071106	K.H. LITTE	28.00
E	BP071105	M.F. LINN	25.00
F	BP070955	W.F. WHITE	148.00
G	BP055201, BP058765, BP060623, BP067019, BP067268	H.I. RIFFEE ET AL	144.00
H	BP070384	J.C. NUZUM	109.00
I	BP044943	O E CORDER ET AL	208.00
J	BP048028	VIONIA HERTZOG	108.00
K	BP066958	H.W. DENT	18.00
L	BP067344	DRAYTON E. MARSH ET AL	20.00
M	BP067466	CORA ALICE WESTBROOK ET AL	13.00
N	BP067174	L.R. DAVIS	51.00
O	BP049762	CHARLES H. PAYNE	100.25
P	BP066982, BP066983	LLOYD SAYRES	88.00
Q	BP024535	HELEN COCHRAN ET AL	270.00

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

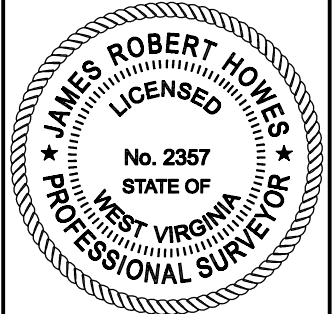
THRASHER

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 #: ABBEY SOUTH 4MH
SCALE: 1" = 2,000'
DATE: DECEMBER 20, 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 4MH
API WELL #: 47 33
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) TVD: 7,415'± TMD: 27,024'±

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

ABBHEY SOUTH 4MH

PAGE 3 OF 3



- WELL RESTRICTIONS:**
- NO UNIMPROVED BUILDINGS WITHIN 400 FEET OF CENTER OF PAD
 - NO AGRICULTURE BUILDINGS - 2000 FEET WITHIN 400 FEET OF CENTER OF PAD
 - NO WATER WELLS OR DEVELOPED BERMS ARE WITHIN 100 FEET OF PROPOSED WELL
 - NO NATURALLY PRODUCING FRESH WATER WITHIN 300 FEET OF LIMITS OF DISTURBANCE
 - NO GROUND INTAKE OR FRESH WATER SUPPLY WITHIN 1000 FEET OF WELL PAD LIMITS OF DISTURBANCE (L & S CONTROLS)

- WELL PLAN ASSUMPTIONS:**
- SURFACE AND COUNTY OWNED INFORMATION AND E-OP BUILDINGS SHOWN HEREON WERE OBTAINED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY SURFACE AND/OR FIELD OWNERS
 - THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PROPERTY SHOWN HEREON.
 - ALL WELLS ARE 3000 FEET DEEPER THAN 3 HORIZES DEPTH
 - ALL STREAMS AND ROADS LOCATED HEREON ARE FROM MAPS PROVIDED BY OTHERS
 - ALL SURVING AND WELL INFORMATION DEPICTED HEREON ARE FROM THE 2014 L&S RECORD (DERIVATION)

LINE	BEARING	DISTANCE
L1	N 71° 08' 30" W	27' 10.00"
L2	N 25° 31' 30" E	31' 4.30"
L3	N 24° 07' 47" E	354.36"
L4	N 30° 08' 30" W	175' 10"

SURFACE HOLE SECTION DATA	
WELL HOLE NUMBER	30000-00000-00
WELL DEPTH	3000 FEET
WELL TYPE	WATER
WELL STATUS	ACTIVE
WELL LOCATION	ABBHEY SOUTH 4MH
WELL OWNER	ABBHEY SOUTH 4MH
WELL OPERATOR	ABBHEY SOUTH 4MH
WELL PERMIT	ABBHEY SOUTH 4MH
WELL REGISTRATION	ABBHEY SOUTH 4MH



- LEGEND**
- TOP MAP POINT
 - WELL SURFACE HOLE / BOTTOM HOLE
 - WELL 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



THRASHER
 THE THRASHER GROUP, INC.
 800 WHITE OAKS BLVD.
 BRIDGEPORT, WV 26330
 PHONE 304-824-4108



SEE PAGE 1 FOR SURFACE OWNERS
 SEE PAGE 2 FOR LESSOR INFO

12/20/2024

BHL is located on topc map 3.845 feet west of Longitude: 80° 10' 00"
 917 feet west of Longitude: 80° 02' 30"

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

Abbey South	LEGACY 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	112961.10687 112961.10679 112961.10680 112961.10366	P/O 3-6-16.1 3-6-21.1 3-6-21.2 3-6-21.4	101296000	SONIA SUE WILT	LONG RIDGE WEST VIRGINIA, LLC	16.5%	74	309
			101297000	BONNIE LOU MOONEY	LONG RIDGE WEST VIRGINIA, LLC	15%	75	77
			101278000	JANET LOUISE WITHERS	LONG RIDGE WEST VIRGINIA, LLC	15%	74	540
			101277000	MICHAEL SCOTT WHITE	LONG RIDGE WEST VIRGINIA, LLC	16%	74	548
			101279000	STEPHANIE WHITE	LONG RIDGE WEST VIRGINIA, LLC	15%	74	546
			101298000	CHAD W. JOHNSON	LONG RIDGE WEST VIRGINIA, LLC	15%	Co-tenancy	
D	BP071106	3-6-20	100818000	KENNETH LITTLE AND PAULINE LITTLE, HIS WIFE; BEATRICE LITTLE, SINGLE AND CHAS. LITTLE AND JOSEPHONE LITTLE, HI WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	25	350
				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
E	BP071105	3-6-41	100817000	MARY F. LINN, WIDOW; VELMA E. VINCENT, WIDOW; OPAL A. LINN, SINGLE; DESSIE S. STEMPEL AND JAMES A. STEMPEL, HER HUSBAND; SARAH A. SINSEL AND GRANT SINSEL, HER HUSBAND; AND RAYMOND C. LINN AND ARTA I. LINN, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	25	356
				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	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
F	BP070955	3-6B-47.7 3-6B-47.4 3-6B-47.65 3-6B-47 3-6B-47.88 3-6B-47.84 3-6B-47.83 3-6B-47.82 3-6B-47.87 3-6B-47.103 3-6B-47.19 3-6B-47.78 3-6B-47.74 3-6B-47.72 3-6B-47.66	100815000	WALTER F. WHITE AND VIRGINIA E. WHITE, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	25	323
				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

G	BP055201 BP058765 BP060623 BP067019 BP067268	3-13-2 3-13-3 3-13-4.3 3-13-6	100723000 100730000 100712000 100711000 100710000	H.J RIFFEE, WIDOWER	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	20	310
				LENORA PHILLIPS MAXWELL AND LEEMAN M. MAXWELL, WIFE AND HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	22	173
				BRAXIE O. GRAGG AND GEORGE GRAGG, WIFE AND HUSBAND; AND VIRGIL SEESE AND GOLDIE SEESE, HUSBAND AND WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	346
				ISABELLA RIFFEE; ELEN RUTH PHILLIPS AND CHARLES M. PHILLIPS, HER HUSBAND; BERTHENA RIFFEE, SINGLE; ALLIE M. KINNEY, WIDOW; SYLVIA R. SMITH AND THOMAS A. SMITH, HER HUSBAND; EVA J.	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	403
				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
H	BP070384	3-13-24	100807000	JESSE C. NUZUM AND LOIS A. NUZUM, HIS WIFE; NARCISSUS WHITESCARVER AND L.W. WHITESCARVER, HER HUSBAND; NOLA MATTHEW, SINGLE; BESSIE FLEMING AND W. FRED FLEMING, HER HUSBAND; C.B. STARK AND ORA B. STARK, HIS WIFE; LILLIAN CHRISLIP, SINGLE; CHARLES CHRISLIP AND EVA M. CHRISLIP, HIS WIFE; CLARENCE E. STARK AND MARY M. STARK, HIS WIFE; JOHN H. CHRISLIP AND STELLA CHRISLIP, HIS WIFE; M.B. TOLLEY AND BLANCHE TOLLEY, HIS WIFE; AND MARY H. CHRISLIP, WIFE OF ALLEN R. CHRISLIP	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	25	179
				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
				O.E. CORDER AND MARTHA CORDER, HUSBAND AND WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	14	225
				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				
I	BP044943	3-13-9.7 3-13-9.13	100652000	O.E. CORDER AND MARTHA CORDER, HUSBAND AND WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	14	225
				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
				VIONIA HERTZOG	GRAFTON DRILLING COMPANY	NOT LESS THAN 1/8	7	304
				GRAFTON DRILLING COMPANY	COMET OIL AND GAS COMPANY	ASSIGNMENT	8	85
				COMET OIL AND GAS COMPANY	PITTSBURGH AND WEST VIRGINIA GAS COMPANY	ASSIGNMENT	77	293
PITTSBURGH AND WEST VIRGINIA GAS COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	19	214				
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				
J	BP048028	3-13-22	100690000					
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148

K	BP066958	3-13-20	100772000	MARY W. DENT, WIDOW, G. NEWELL COCHRAN AND EDNA COCHRAN, HUSBAND AND WIFE, AND MARY V. GRINNAN AND WILLIAM H. GRINNAN, WIFE AND HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	326
				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
L	BP067344	3-13-19	100798000	DRAYTON E. MARSH AND GEORGIA E. MARSH, HIS WIFE; DRAYTON E. MARSH, ATTORNEY IN FACT FOR VICTOR H. MARSH AND HELEN A. MARSH, HUSBAND AND WIFE; DRUSILLA M. REYNOLDS AND LOWELL A. REYNOLDS, HER HUSBAND; MALCOLM K. MARSH AND RUTH E. MARSH, HIS WIFE; MILDRED L. STERNBERG AND IRWIN STERNBERG, HER HUSBAND; AND LUCILE MIKKELSON WISEMAN AND EARL WISEMAN, HER HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	415
				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
M	BP067466	3-13-18	100799000	CORA ALICE WESTBROOK AND MACK WESTBROOK, HER HUSBAND; ELIZABETH M. ALEY AND WAYNE H. ALEY, HER HUSBAND; LILA AREHART, SINGLE; DOROTHY AREHART PARKS AND EDWARD D. PARKS, HER HUSBAND; AND WILLIAM J. AREHART, SINGLE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	438
				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

N	BP067174	3-13-17	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
				O	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
P	BP066982	3-14-17	100777000					LLOYD SAYRES & ELIZABETH SAYRES, HIS WIFE; NELLIE FITZBUGH & EARL D. FITZBUGH, HER HUSBAND; ORVAL SAYRES, SINGLE; ELSIE SWIGER, WIDOW
				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	BP024535	3-14-21 3-14-22 3-14-22.2 3-14-23.6 3-14-23.3 P/O 3-14-24 3-14-27.3 3-14-27.1	100673000	HELEN M. COCHRAN, WIDOW; RACHEL COCHRAN, SINGLE; Z.B. COCHRAN & INGABE COCHRAN, HIS WIFE; HELEN LORETTA SAYERS & W.H. SAYERS, HER HUSBAND; MINERVA A. STARK & ATWELL STARK, 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	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

4703306046



November 14, 2024

Mr. Charles T. Brewer
Assistant Chief
WVDEP – Office of Oil and Gas
601 57th 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 4MH.

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 4MH well plat.

CR 1/4
CR 6/3
CR 6

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.

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 4MH

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>568,819.810</u>
County:	<u>Harrison</u>		Northing:	<u>4,358,548.589</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.

<p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input 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</p> <p><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p>OOG OFFICE USE ONLY</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED</p>
---	---

RECEIVED
Office of Oil and Gas
NOV 18 2024
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.

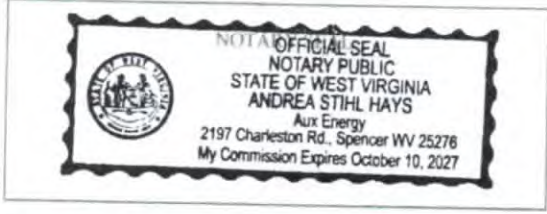
4703306046

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 12th 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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

RECEIVED
Office of Oil and Gas

NOV 18 2024

WV Department of
Environmental Protection

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: 11/14/2024 **Date Permit Application Filed:** 11/14/2024

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

RECEIVED
Office of Oil and Gas
NOV 18 2024

4703306046

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.

RECEIVED
Office of Oil and Gas
NOV 18 2024

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.

Department of
Environmental Protection

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

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

Well Location Restrictions

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

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

RECEIVED
Office of Oil and Gas

NOV 18 2024

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

12/20/2024

4703306046

WW-6A
(8-13)

API NO. 47- 033
OPERATOR WELL NO. Abbey South 4MH
Well Pad Name: Abbey

Notice is hereby given by:

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

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 deprivacyofficer@wv.gov.



Subscribed and sworn before me this 12th 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

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 13 2024

Official Production



COMPLEX PROJECTS
REQUIRE RESOLVE
THRASHER'S GOT IT

4703306046

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

4703306046

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 57th Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

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: _____

NOV 18 2024

WV Department of Environmental Protection

Oil and Gas Privacy Notice:

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

12/20/2024

4703306046

**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)

Name: _____

Address: 501 Corporate Drive, Suite 210

Address: _____

Canonsburg, PA 15317

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>568,819.810</u>
County:	<u>Harrison</u>		Northing:	<u>4,358,548.589</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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

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

Address: 101 McQuiston Drive
Jackson Center, PA 16133
Facsimile: _____

RECEIVED
Office of Oil and Gas

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.

WV Department of
Environmental Protection

12/20/2024



4703306046

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 57th Street, SE
Charleston, WV 25304

Subject: DOH Permit for the Abbey Well Pad, Harrison County
Abbey South 4MH 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

**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

OPERATOR: Diversified Production, LLC WELL NO: Abbey South 2MH

PAD NAME: Abbey

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

Department of
Environmental Protection