

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, November 15, 2024 WELL WORK PERMIT Horizontal 6A / New Drill

DIVERSIFIED PRODUCTION LLC 101 MCQUISTON DRIVE

JACKSON CENTER, PA 16133

Re: Permit approval for Abbey South 2MH

47-033-06043-00-00

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

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

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

James A. Martin

Chief

Operator's Well Number: Abbey South 2MH

Farm Name: Long Ridge West Virginia LLC

U.S. WELL NUMBER: 47-033-06043-00-00

Horizontal 6A New Drill

Date Issued: 11/15/2024

API Number:	

PERMIT CONDITIONS 4703306043

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.



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 dep.wv.gov

ORDER ISSUED UNDER WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 6A

TO: Diversified Production, LLC 101 McQuiston Drive Jackson Center, PA 16133 DATE: November 15, 2024 ORDER NO.: 2024-W-4

INTRODUCTION

This Order (hereinafter "Order") is issued by the Office of Oil and Gas (hereinafter "OOG"), by and through its Chief, pursuant to the authority of W. Va. Code §§ 22-1-1, 22-6-1 and 22-6A-1 *et seq.* to Diversified Production, LLC (hereinafter "Diversified" or "Operator"), collectively the "Parties."

FINDINGS OF THE CHIEF

In support of this Order, the Chief hereby finds the following:

- 1. OOG, an office within the West Virginia Department of Environmental Protection, is the agency with the duty and authority to execute and enforce W. Va. Code §22-6-1 and §22-6A-1 *et seq.*, and the rules and regulations promulgated thereunder.
- 2. Diversified is a "person" as defined by W. Va. Code §22-6-1(n), with a corporate address as 101 McQuiston Drive, Jackson Center, PA 16133.
- 3. On October 4, 2024, Diversified submitted a well work permit application identified as API# 47-033-06043. The well is located on the Abbey Pad in the Clay District of Harrison County, West Virginia.
- 4. On October 4, 2024, Diversified requested a waiver for perennial stream Booths Creek, as outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit application identified as API# 47-033-06043.

CONCLUSIONS OF LAW

- 1. West Virginia Code §22-1-6(d) requires, in part, that "in addition to other powers, duties and responsibilities granted and assigned to the secretary by this chapter, the secretary is authorized and empowered to...(3) Enter private lands to make surveys and inspections for environmental protection purposes; to investigate for violations of statutes or rules which the Office of Oil and Gas is charged with enforcing; to serve and execute warrants and processes; to make arrests; issue orders, which for the purposes of this chapter include consent agreements; and to otherwise enforce the statutes or rules which the Office of Oil and Gas is charged with enforcing."
- 2. West Virginia Code §22-6A-2(a)(6) requires, in part, that "Concomitant with the broad powers to condition the issuance of well work permits, the secretary should also have broad authority to waive certain minimum requirements of this article when, in his or her discretion, such waiver is appropriate: *Provided*, That the secretary shall submit a written report of the number of waivers granted to the Legislature commencing January 1, 2013, and each year thereafter."
- 3. West Virginia Code §22-6A-12(b) requires, in part, that "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 Office of Oil and Gas 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 Office of Oil and Gas 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."

ORDER

West Virginia Code §22-6A-12(b) requires, in part, that "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. The Office of Oil and Gas grants the request for a waiver for the perennial stream Booths Creek from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit application identified as API# 47-033-06043. The Office of Oil and Gas hereby **ORDERS** that Diversified shall meet the following site construction and operational requirements for the Abbey Well Pad:

- a. A berm shall be constructed around the perimeter of the pad to contain any potential spills and storm water runoff. Berm is to be at least twenty-four inches (24") in height;
- b. Erosion control blankets shall be installed on all slopes and down gradient locations of the pad as erosion and sediment controlling BMPs;
- c. The perennial stream Booths Creek shall be protected by the pad perimeter berm eighteen inch (18") Compost Filter Sock and forty-two inch (42") Smart Fence. This along with temporary and permanent vegetative cover will prevent sediment from reaching the wetlands
- d. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual;
- e. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill;
- f. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- g. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- h. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- i. Inspections of the storm water and spill prevention measures shall be conducted after any major storm event defined as a half inch (½") rain within any twenty-four (24) hour period;
- j. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies:
- k. All records from inspections shall be maintained on site for the life of the project and be available upon request.

Thus ORDERED, the 15th day of November 2024.

IN THE NAME OF THE STATE OF WEST VIRGINIA:

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

Bv:

JAMES A. MARTIN, CHIEF

4703306043

11/3/14 Wetland and Perennial Stream Waiver Request

API Number: 47-033-06043
Operator's Well Number: 2MH

	Diversified Braduation IIIC	
Well Operator:	Diversified Production, LLC	
Well Number:		Well Pad Name: Abbey Well Pad
County District	Quadrangle of Well Location. Harris	son County - Clay - Rosemont Quadrangle

Answer the questions below to request a waiver from West Virginia Department of Environmental Protection for any wetlands or perennial streams which lie within one hundred feet of proposed project Limit of Disturbance (LOD), which includes any erosion and sediment control devices to be used.

This waiver shall be requested pursuant to Chapter 22 Article 6A Section 12 of West Virginia Code, which states:

§22-6A-12(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.

§22-6A-12(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.

11/3/14 API Number: <u>47-033-06043</u>

Operator's Well Number: 2MH

Answer in the space provided, or use additional pages as necessary to fully answer the questions below:

1. Describe the proposed project location, including unique identifying names of all wetlands, and the names of perennial streams for which the waiver is sought.

The project site is located in Harrison County, West Virginia, with approximate central coordinates N 39.373545° W 80.200870°. The project will be accessed via an access road originating from Middletown Road (County Route 73/73), at approximate coordinates N 39.373609° W 80.201663°. The proposed project area is adjacent to one perennial stream. The following is the identified water body, including its identifying name and type, which has a 100' buffer within the Limit of Disturbance (LOD). TTG Stream Booths Creek (PER).

- 2. Justify the proposed activity by describing alternatives to this project that were considered.
 - a. Include a No-Action Alternative as to show "the future without the project"
 - b. Location Alternatives must be shown
 - c. Must demonstrate why a one hundred foot buffer cannot be maintained
 - d. Describe how the proposed project is the least environmentally damaging practicable alternative

The development of a natural gas well site presents a valuable economic opportunity for the community and the energy sector. Failure to implement the project would result in the loss of potential jobs, revenue, and energy production. The project has been designed with environmental conservation in mind while avoiding aquatic features. In evaluating potential location alternatives, various sites were considered. However, the chosen site was selected based on a number of factors, including proximity to resources, geologic suitability, access to infrastructure, and minimal environmental impact. Given the proximity to the nearby perennial stream, adhering to a 100-foot buffer around the stream would not allow for safe or effective operations to occur. The project design prioritizes the avoidance of all impacts to streams.

3. Identify sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. This description should include all additional erosion and sediment control measures and devices that will be used.

To ensure the safeguarding of aquatic resources, a comprehensive set of measures, facilities, and practices will be employed. While lower strength E&S controls such as 18-Inch compost filter sock could be used based upon the contributing drainage area, as an added best management practice Smart Fence 42 will be used as perimeter control to protect the perennial stream. Check dams will be placed strategically along the construction and access roads to slow the flow of storm water, allowing sediment to settle before reaching water bodies. Diversion channels will be constructed to divert clean storm water runoff away from sensitive areas, reducing the potential for erosion and sediment transport. Exposed soils within the construction area will be stabilized using erosion control blankets, native vegetation, tracking, smooth drum rolling or other suitable methods to prevent soil erosion. Erosion and sediment control measures will be inspected at minimum, once every 7 calendar days and within 24 hours after any storm event greater than .5" per 24-hour period. Any required repairs or maintenance will be made immediately. Perimeter berms and pad sumps with an automatic pump with shut off will be utilized on the Well Pad to prevent spills or contaminated runoff from leaving the site.

- 4. Provide mapping, plans, specifications and design analysis for the preferred alternative to the project.
 - a. Specify in writing what additional controls, measures, devices, monitoring, etc. will be used to protect these wetlands and/or perennial streams for which the waiver is sought.

As shown on the Erosion and Sediment control plans and mentioned in the above section, Smart Fence 42 will be in areas within the 100-foot restriction buffer as an added measure of protection for the aquatic resources. Lower strength E&S controls such as 18-Inch compost filter sock could be used for erosion and sediment control. However, as an added level of protection for being within the perennial stream buffer Smart Fence 42 will be installed. Additionally, Perimeter berms and sumps with an automatic pump with shut off shall be utilized on the Well Pad to prevent any spills or contaminated runoff from impacting the aquatic features. The Limit of Disturbance (LOD) will be clearly marked to prevent inadvertent encroachment.

4703306043

API NO. 47- 033 - OPERATOR WELL NO. Abbey South 2MH

Well Pad Name: Abbey

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

1) Well Operato	or: Diversi	fied Product	tion, LLC	494524121	Harrison	Clay - Ou	Rosemont 7.5'
				Operator ID	County	District	Quadrangle
2) Operator's W	ell Number	Abbey Sor	uth 2MH	Well Pa	d Name: Abb	еу	
3) Farm Name/S	Surface Own	ner: Long Ridg	e West Virgin	nia LLC Public Ro	ad Access: 73	/73 Middleto	own Road
4) Elevation, cu	rrent ground	d: <u>996.78'</u>	Ele	evation, proposed	post-construct	tion: 996.75	5'
5) Well Type	(a) Gas	Χ	Oil	Und	lerground Stora	ige	
	Other		,			,	
	(b)If Gas	Shallow	X	Deep	 .		
		Horizontal	<u>X</u>				
6) Existing Pad:	Yes or No	No	_		_		
				pated Thickness = 425', Thickness =			
8) Proposed Tot	tal Vertical	Depth: 7,41	5'				
9) Formation at			Marcellus		<u>.</u>	Office of	CEIVED Oil and Gry
10) Proposed To	otal Measure	ed Depth: 2	27,728'			NOV o	5 2024
11) Proposed He	orizontal Le	g Length:	19,944'				
12) Approximat	e Fresh Wa	ter Strata Dej	oths:	65', 160'	"	WV Depai Environmenta	tment of Protection
13) Method to Γ	Determine F	resh Water D	epths: C	Offset well - 47-0	91-00062		-31,
14) Approximat	e Saltwater	Depths: 76	8'				
15) Approximat	e Coal Sean	n Depths: S	ewickley	Coal - 25', Free	oort Coal - 623	3'	
16) Approximat	e Depth to 1	Possible Voic	l (coal mi	ne, karst, other):	None anticipa	ated	
17) Does Propos directly overlyir				ns Yes	No	o <u>x</u>	
(a) If Yes, pro	vide Mine I	nfo: Name:					
_		Depth:				•••	
		Seam:		· ·	<u> </u>		
		Owner	:		···		

API NO. 47 00 3 3 0 6 0 4 3

OPERATOR WELL NO. Abbey South 2MH
Well Pad Name: Abbey

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	Α	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	27,728'	27,728'	4,998ft^3/5,911ft
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

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	26"	0.25"	450	90	Ready Mix	N/A
Fresh Water/Coal	13.375"	17.5"	0.33"	1,730	610	Class A	1.19
Intermediate	9.625"	12.25"	0.352"	3,520	2,070	Class A	1.19 - 1.88
Production	5.5"	8.5"	0.361"	14,360	12,924	Class A	1.19 - 1.55
Tubing	2.375"	N/A	0.19	11,200	6,475	N/A	N/A
Liners	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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OCT 4 2024

Kind:		WV Department of Environmental Protecti
Sizes:		
Depths Set:		

Ky Wielets 9/24/24 WW-6B (10/14)

API NO. 47- 033 OPERATOR WELL NO. Abbey South 2MH Well Pad Name: Abbey

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 6,911' and continue to drill the curve and horizontal leg per the proposed plan in the Marcellus formation to an estimated horizontal length of 19,944' (27,728'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.

- 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:

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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 Office of Oil and Gas

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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.

Ky Wellets 9/24/24 Page 3 of 3 11/29/2024

Area of Review for Communication Purposes Report

Abbey South 2MH

					is this well "known or reasonably expected to	
•			Perforated	Producing zones not	penetrate a depth that could be within range	
API Number	Operator Name	Total Depth	Formations	Perforated	of Fracture propagation"?	Comments
47-091-00062		unknown	unknown	unknown	no	orphaned well

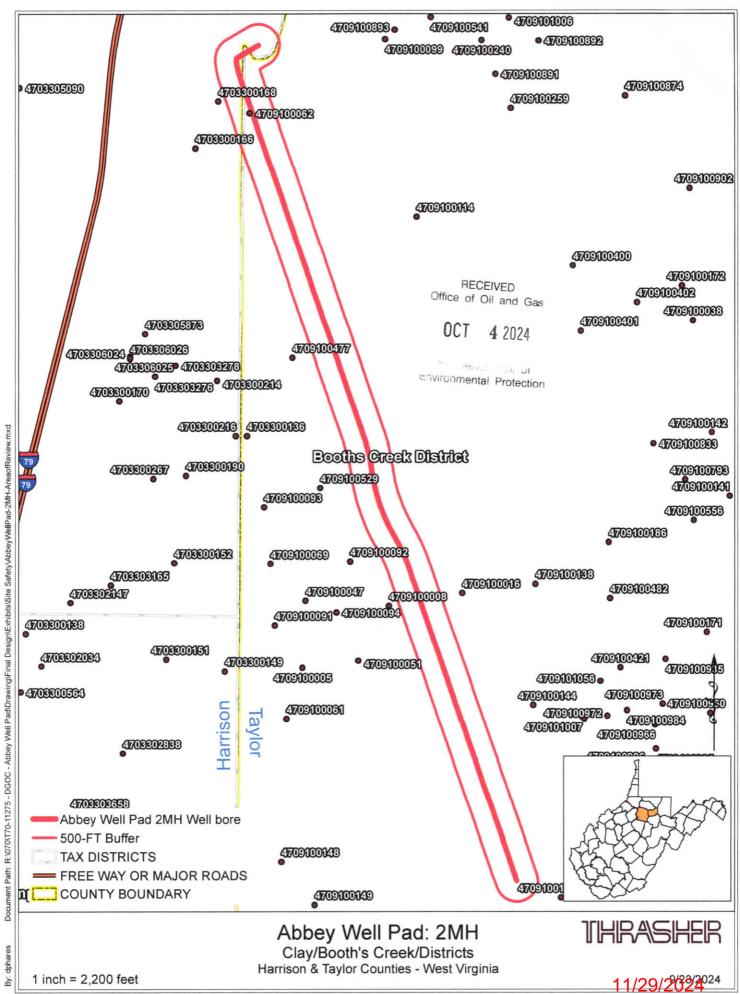
This report was compiled using data from the WVDEP website, WVGES Interactive Mapping tool and Enverus drilling information.

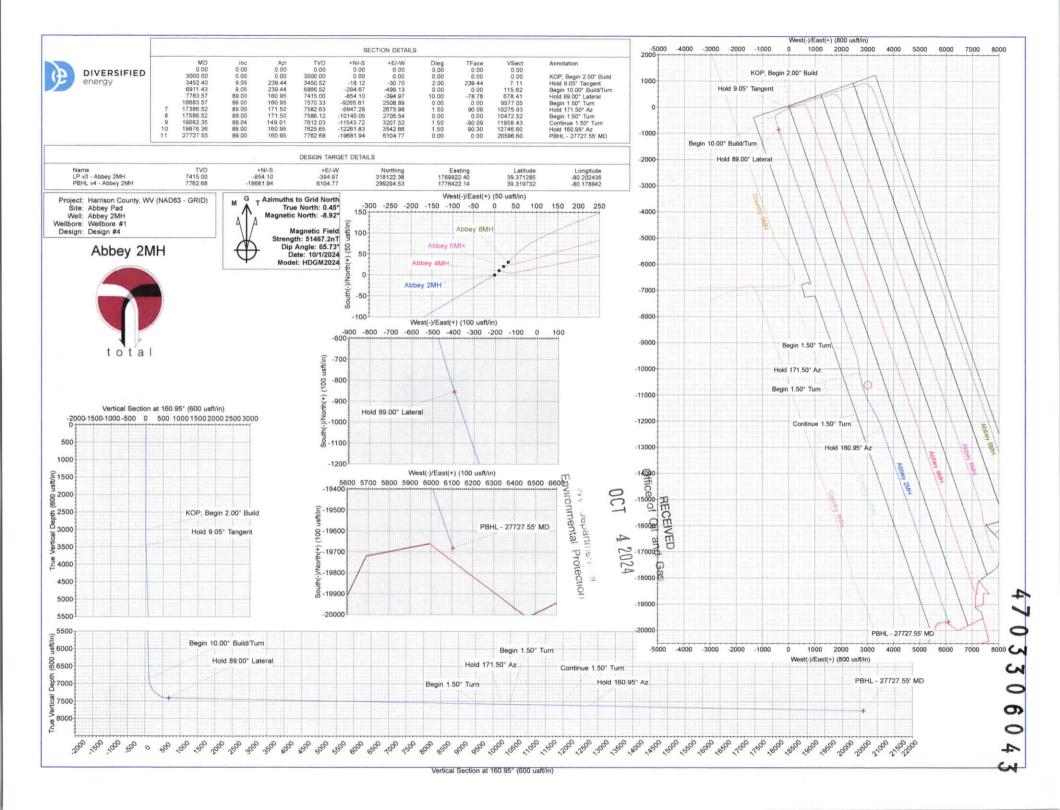
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WV Department of Environmental Protection





Diversified Production, LLC

Harrison County, WV (NAD83 - GRID) Abbey Pad Abbey 2MH

Wellbore #1

Plan: Design #4



Standard Plan Report

09 September, 2024

Total Report Version 1.70

COMPASS 5000.16 Build 97

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WV Department of Environmental Protection



4703306043

Planned Survey Report



Diversified Production, LLC Company:

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 2MH

Wellbore: Wellbore #1 Design: Design #4

Local Co-ordinate Reference:

Well Abbey 2MH WELL @ 1024.00usft (28' RKB) TVD Reference:

MD Reference: WELL @ 1024.00usft (28' RKB) North Reference: Grid

Survey Calculation Method:

Database:

Minimum Curvature

.Total Directional Production DB

Project Harrison County, WV (NAD83 - GRID)

Map System: Geo Datum: Map Zone:

US State Plane 1983 North American Datum 1983 West Virginia Northern Zone System Datum:

Mean Sea Level

Site Abbey Pad

Site Position: From:

Map

+N/-S

+E/-W

Northing: Easting:

319,064.16 usft 1,770,510.16 usft

Latitude: Longitude: 39.373884

Position Uncertainty:

0.00 usft

Slot Radius:

-80.200383

13-3/16 "

Well Abbey 2MH

Well Position

0.00 usft

0.00 usft

Northing: Easting:

318,976.47 usfl 1,770,317.37 usfl

Latitude:

39.373639 Longitude: -80.201062

Position Uncertainty

0.00 usft

Wellhead Elevation:

usfi

Ground Level:

996.00 usfl

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 #4

Audit Notes:

Version:

Phase:

Tie On Depth:

0.00

PLAN

0.00

Direction

Vertical Section:

Depth From (TVD) (usft)

+N/-S (usft) 0.00 +E/-W (usft)

(°)

160.95

Survey Tool Program

Date 9/9/2024

From (usft)

0.00

To (usft)

27,727.55

Survey (Wellbore) Design #4 (Wellbore #1)

0.00

Tool Name MWD+HRGM Description

OWSG MWD + HRGM

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4703306043 Planned Survey Report

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4 2024



Company: Diversified Production, LLC

Design #4

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 2MH Wellbore #1 Wellbore:

Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Well Abbey 2MH WV Department O WELL @ 1024_00HAB (288 RAB) Protection

WELL @ 1024.00usft (28' RKB)

Grid

Survey Calculation Method: Minimum Curvature

Database: .Total Directional Production DB

lan Summa	ry									
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	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,452.40	9.05	239.44	3,450.52	-18.12	-30.70	2.00	2.00	0.00	239.44	
6,911.43	9.05	239.44	6,866.52	-294.67	-499.13	0.00	0.00	0.00	0.00	
7,783.57	89.00	160.95	7,415.00	-854.10	-394.97	10.00	9.17	-9.00	-78.78	LP v3 - Abbey 2MH
16,683.57	89.00	160.95	7,570.33	-9,265.61	2,508.89	0.00	0.00	0.00	0.00	
17,386.52	89.00	171.50	7,582.63	-9,947.28	2,675.98	1.50	0.00	1.50	90.09	
17,586.52	89.00	171.50	7,586.12	-10,145.05	2,705.54	0.00	0.00	0.00	0.00	
19,082.35	89.04	149.01	7,612.03	-11,543.72	3,207.52	1.50	0.00	-1.50	-90.09	
19,876.36	89.00	160.95	7,625.65	-12,261.83	3,542.66	1.50	-0.01	1.50	90.30	
27,727.55	89.00	160.95	7,762.68	-19,681.94	6,104.77	0.00	0.00	0.00		PBHL v4 - Abbey 2I

Planned Su	rvey												
Measured Depth (usft)	INC	AZI (°)	Vertical Depth (usft)	Local Coo +N/-S (usft)	rdinates +E/-W (usft)	Map Coo Northing (usft)	rdinates Easting (usft)	Geo Coord Latitude	inates Longituge (°)	Vertical Section (usft)		Rate	Rate
0.00	0.00	0.00	0.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	318,976.47	1,770,317.37	39,373639	-80.201062	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80,201062	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80,201062	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00

RECEIVED Office of Oil and Gas



4703306043

Planned Survey Report

4: 2024

WV Department of tal Protection

Company: Diversified Production, LLC

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 2MH

Wellbore: Wellbore #1 Design: Design #4

Local Co-ordinate Reference:

Well Abbey 2MH TVD Reference:

WELL @ 1024.00usft (28' RKB) MD Reference: WELL @ 1024.00usft (28' RKB)

North Reference:

Survey Calculation Method: Minimum Curvature

Database: .Total Directional Production DB

Planned Su	irvey												
Measured Depth (usft)	INC	AZI (°)	Vertical Depth (usft)	Local Coo +N/-S (usft)	rdinates +E/-W (usft)	Map Coo Northing (usft)	erdinates Easting (usft)	Geo Coord Latitude	inates Longituge (°)	Vertical Section (usft)	Rate	Rate	Rate
2,300.00	0.00	0.00	2,300.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	318,976.47	1,770,317.37	39.373639	-80.201062	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	318,976.47	1,770,317.37	39,373639	-80.201062	0.00	0.00	0.00	0.0
3,100.00	2.00	239.44	3,099.98	-0.89	-1.50	318,975.59	1,770,315.86	39.373636	-80.201068	0.35	2.00	2.00	0.0
3,200.00	4.00	239.44	3,199.84	-3.55	-6.01	318,972.93	1,770,311.36	39.373629	-80.201084	1.39	2.00	2.00	0.0
3,300.00	6.00	239.44	3,299.45	-7.98	-13.51	318,968.49	1,770,303.85	39.373617	-80.201110	3.13	2.00	2.00	0.0
3,400.00	8.00	239.44	3,398.70	-14.17	-24.01	318,962.30	1,770,293.36	39.373599	-80.201147	5.56	2.00	2.00	0.0
3,452.40	9.05	239.44	3,450.52	-18.12	-30.70	318,958.35	1,770,286.67	39.373588	-80.201170	7.11	2.00	2.00	0.0
3,500.00	9.05	239.44	3,497.53	-21.93	-37.14	318,954.55	1,770,280.22	39.373578	-80.201193	8.60	0.00	0.00	0.0
3,600.00	9.05	239.44	3,596.29	-29.92	-50.68	318,946.55	1,770,266.68	39.373556	-80.201241	11.74	0.00	0.00	0.0
3,700.00	9.05	239.44	3,695.04	-37.92	-64.23	318,938.56	1,770,253.14	39,373533	-80.201289	14.88	0.00	0.00	0.0
3,800.00	9.05	239.44	3,793.80	-45.91	-77.77	318,930.56	1,770,239.60	39.373511	-80.201336	18.01	0.00	0.00	0.0
3,900.00	9.05	239.44	3,892.55	-53.91	-91.31	318,922.57	1,770,226.06	39.373489	-80.201384	21.15	0.00	0.00	0.0
4,000.00	9.05	239.44	3,991.31	-61.90	-104.85	318,914.57	1,770,212.51	39.373467	-80.201432	24.29	0.00	0.00	0.00
4,100.00	9.05	239.44	4,090.06	-69.90	-118.40	318,906.58	1,770,198.97	39.373444	-80.201479	27.43	0.00	0.00	0.00
4,200.00	9.05	239.44	4,188.82	-77.89	-131.94	318,898.58	1,770,185.43	39.373422	-80.201527	30.56	0.00	0.00	0.00
4,300.00	9.05	239.44	4,287.58	-85.89	-145.48	318,890.59	1,770,171.89	39.373400	-80.201575	33.70	0.00	0.00	0.00
4,400.00	9.05	239.44	4,386.33	-93.88	-159.02	318,882.59	1,770,158.35	39.373378	-80.201622	36.84	0.00	0.00	0.00
4,500.00	9.05	239.44	4,485.09	-101.88	-172.56	318,874.60	1,770,144.80	39.373355	-80.201670	39.97	0.00	0.00	0.00
4,600.00	9.05	239.44	4,583.84	-109.87	-186.11	318,866.60	1,770,131.26	39.373333	-80.201718	43.11	0.00	0.00	0.00
4,700.00	9.05	239.44	4,682.60	-117.87	-199.65	318,858.61	1,770,117.72	39.373311	-80.201765	46.25	0.00	0.00	0.00
4,800.00	9.05	239.44	4,781.35	-125.86	-213.19	318,850.61	1,770,104.18	39.373289	-80.201813	49.38	0.00	0.00	0.00
4,900.00	9.05	239.44	4,880.11	-133.86	-226.73	318,842.62	1,770,090.63	39.373267	-80.201861	52.52	0.00	0.00	0.00
5,000.00	9.05	239.44	4,978.87	-141.85	-240.28	318,834.62	1,770,077.09	39.373244	-80.201908	55.66	0.00	0.00	0.00
5,100.00	9.05	239.44	5,077.62	-149.85	-253.82	318,826.63	1,770,063.55	39.373222	-80.201956	58.80	0.00	0.00	0.00
5,200.00	9.05	239.44	5,176.38	-157.84	-267.36	318,818.63	1,770,050.01	39.373200	-80.202004	61.93	0.00	0.00	0.00
5,300.00	9.05	239.44	5,275.13	-165.84	-280.90	318,810.64	1,770,036.47	39.373178	-80.202051	65.07	0.00	0.00	0.00
5,400.00	9.05	239.44	5,373.89	-173.83	-294.44	318,802.64	1,770,022.92	39.373155	-80.202099	68.21	0.00	0.00	0.00
5,500.00	9.05	239.44	5,472.64	-181.83	-307.99	318,794.65	1,770,009.38	39.373133	-80.202147	71.34	0.00	0.00	0.00
5,600.00	9.05	239.44	5,571.40	-189.82	-321.53	318,786.65	1,769,995.84	39.373111	-80.202194	74.48	0.00	0.00	0.00
5,700.00	9.05	239.44	5,670.16	-197.82	-335.07	318,778.66	1,769,982.30	39.373089	-80.202242	77.62	0.00	0.00	0.00
5,800.00	9.05	239.44	5,768.91	-205.81	-348.61	318,770.66	1,769,968.75	39.373066	-80.202290	80.75	0.00	0.00	0.00

4703306043

DIVERSIFIED energy

Planned Survey Report

OCT 4 2024



wy Department of

Company: Diversified Production, LLC

Design #4

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 2MH Wellbore: Wellbore #1

Design:

d Production, LLC

County, WV (NAD83 - GRID)

Local Co-ordinate Reference:

TVD Reference:

MD Reference:
North Reference:

North Reference: Survey Calculation Method:

Database:

Well Abbey 2MAVIronmen

WELL @ 1024.00usft (28' RKB) WELL @ 1024.00usft (28' RKB)

Grid

Minimum Curvature

Design.		ngii #4				Database		.10	tal Directional	Toddottor	100		
Planned Su	irvey		Kikwasyner		M H / M L		No. 2 In Co. 184	MILE REFE		7 115 115 116			
Measured Depth (usft)	INC	AZI (°)	Vertical Depth (usft)	Local Coc +N/-S (usft)	rdinates +E/-W (usft)	Map Coo Northing (usft)	rdinates Easting (usft)	Geo Coord Latitude	inates Longituge (°)	Vertical Section (usft)		Rate	Rate
5,900.00	9.05	239.44	5,867.67	-213.81	-362.15	318,762.67	1,769,955.21	39.373044	-80.202338	83.89	0.00	0.00	0.00
6,000.00	9.05	239.44	5,966.42	-221.80	-375.70	318,754.67	1,769,941.67	39.373022	-80.202385	87.03	0.00	0.00	0.00
6,100.00	9.05	239.44	6,065.18	-229.80	-389.24	318,746.68	1,769,928.13	39.373000	-80.202433	90.17	0.00	0.00	0.00
6,200.00	9.05	239.44	6,163.93	-237.79	-402.78	318,738.68	1,769,914.59	39.372977	-80.202481	93.30	0.00	0.00	0.00
6,300.00	9.05	239.44	6,262.69	-245.79	-416.32	318,730.69	1,769,901.04	39.372955	-80.202528	96.44	0.00	0.00	0.00
6,400.00	9.05	239.44	6,361.45	-253.78	-429.87	318,722.69	1,769,887.50	39.372933	-80.202576	99.58	0.00	0.00	0.00
6,500.00	9.05	239.44	6,460.20	-261.78	-443.41	318,714.70	1,769,873.96	39.372911	-80.202624	102.71	0.00	0.00	0.00
6,600.00	9.05	239.44	6,558.96	-269.77	-456.95	318,706.70	1,769,860.42	39.372888	-80.202671	105.85	0.00	0.00	0.00
6,700.00	9.05	239.44	6,657.71	-277.77	-470.49	318,698.71	1,769,846.87	39.372866	-80.202719	108.99	0.00	0.00	0.00
6,800.00	9.05	239.44	6,756.47	-285.76	-484.03	318,690.71	1,769,833.33	39.372844	-80.202767	112.12	0.00	0.00	0.00
6,900.00	9.05	239.44	6,855.22	-293.76	-497.58	318,682.72	1,769,819.79	39.372822	-80.202814	115.26	0.00	0.00	0.00
6,911.43	9.05	239.44	6,866.52	-294.67	-499.13	318,681.80	1,769,818.24	39.372819	-80.202820	115.62	0.00	0.00	0.00
6,950.00	10.50	218.21	6,904.53	-298.97	-503.91	318,677.50	1,769,813.46	39.372807	-80.202837	118.13	10.00	3.76	-55.05
7,000.00	13.81	200.21	6,953.42	-308.16	-508.79	318,668.31	1,769,808.57	39.372782	-80.202854	125.22	10.00	6.63	-36.00
7,050.00	17.92	189.67	7,001.52	-321.35	-512.15	318,655.12	1,769,805.22	39.372746	-80.202865	136.59	10.00	8.21	-21.09
7,100.00	22.38	183.08	7,048.45	-338.45	-513.96	318,638.02	1,769,803.41	39.372699	-80.202871	152.16	10.00	8.92	-13.18
7,150.00	27.03	178.62	7,093.87	-359.33	-514.19	318,617.15	1,769,803.17	39.372641	-80.202871	171.82	10.00	9.29	-8.91
7,200.00	31.77	175.40	7,137.42	-383.82	-512.86	318,592.65	1,769,804.50	39.372574	-80,202866	195.40	10.00	9.49	-6.44
7,250.00	36.58	172.94	7,178.78	-411.74	-509.98	318,564.73	1,769,807.39	39.372498	-80.202855	222.74	10.00	9.61	-4.91
7,300.00	41.42	170.99	7,217.62	-442.88	-505.55	318,533.59	1,769,811.81	39.372412	-80.202838	253.62	10.00	9.69	-3.91
7,350.00	46.30	169.38	7,253.66	-477.00	-499.63	318,499.47	1,769,817.74	39.372319	-80.202817	287.81	10.00	9.75	-3.22
7,400.00	51.19	168.01	7,286.63	-513.85	-492.24	318,462.63	1,769,825.12	39.372218	-80.202789	325.04	10.00	9.79	-2.74
7,450.00	56.10	166.82	7,316.26	-553.13	-483.46	318,423.34	1,769,833.91	39.372110	-80.202757	365.04	10.00	9.81	-2.38
7,500.00	61.02	165.76	7,342.33	-594.56	-473.34	318,381.91	1,769,844.02	39.371996	-80.202720	407.50	10.00	9.83	-2.12
7,550.00	65.94	164.79	7,364.65	-637.81	-461.97	318,338.66	1,769,855.40	39.371878	-80.202679	452.10	10.00	9.85	-1.93
7,600.00	70.87	163.90	7,383.05	-682.56	-449.43	318,293.91	1,769,867.94	39.371755	-80.202633	498.49	10.00	9.86	-1.79
7,650.00	75.81	163.06	7,397.38	-728.47	-435.81	318,248.00	1,769,881.56	39.371630	-80.202584	546.33	10.00	9.87	-1.68
7,700.00	80.74	162.26	7,407.54	-775.19	-421.22	318,201.29	1,769,896.15	39.371502	-80.202531	595.25	10.00	9.88	-1.61
7,750.00	85.68	161.47	7,413.44	-822.35	-405.76	318,154.12	1,769,911.60	39.371372	-80.202475	644.88	10.00	9.88	-1.57
7,783.57	89.00	160.95	7,415.00	-854.10	-394.97	318,122.38	1,769,922.40	39.371286	-80.202436	678.41	10.00	9.88	-1.55
7,800.00	89.00	160.95	7,415.29	-869.63	-389.61	318,106.85	1,769,927.76	39.371243	-80.202416	694.84	0.00	0.00	0.00
7,900.00	89.00	160.95	7,417.03	-964.14	-356.98	318,012.34	1,769,960.39	39.370984	-80.202298	794.82	0.00	0.00	0.00
8,000.00	89.00	160.95	7,418.78	-1,058.65	-324.35	317,917.82	1,769,993.02	39.370725	-80.202180	894.80	0.00	0.00	0.00
8,100.00	89.00	160.95	7,420.52	-1,153.16	-291.72	317,823.31	1,770,025.64	39.370467	-80.202062	994.79	0.00	0.00	0.00
8,200.00	89.00	160.95	7,422.27	-1,247.67	-259.10	317,728.80	1,770,058.27	39.370208	-80.201944	1,094.77	0.00	0.00	0.00
8,300.00	89.00	160.95	7,424.01	-1,342.18	-226.47	317,634.29	1,770,090.90	39.369949	-80.201826	1,194.76	0.00	0.00	0.00
8,400.00	89.00	160.95	7,425.76	-1,436.69	-193.84	317,539.78	1,770,123.53	39.369690	-80.201708	1,294.74	0.00	0.00	0.00
8,500.00	89.00	160.95	7,427.50	-1,531.21	-161.21	317,445.27	1,770,156.15	39.369432	-80.201590	1,394.73	0.00	0.00	0.00



4 7 0 3 3 0 6 0 4 3 Planned Survey Report

4 2024 OCT

WV Department of Environmental Protection



Company: Diversified Production, LLC

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Abbey 2MH Well: Wellbore: Wellbore #1

Design:

Design #4

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well Abbey 2MH

WELL @ 1024.00usft (28' RKB)

WELL @ 1024.00usft (28' RKB)

Minimum Curvature

		TO 10 10 10 10 10 10 10 10 10 10 10 10 10		No de la composición dela composición de la composición dela composición de la compo	C. Markinson		Carlo State Sa						S+21
Planned Su	irvey												
Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Co +N/-S (usft)	+E/-W (usft)	Map Coo Northing (usft)	ordinates Easting (usft)	Geo Coord Latitude	inates Longituge (°)	Vertical Section (usft)		Build Rate (°/100usft)	Rate
8,600.00	89.00	160.95	7,429.25	-1,625.72	-128.58	317,350.76	1,770,188.78	39.369173	-80.201472	1,494.71	0.00	0.00	0.0
8,700.00	89.00	160.95	7,430.99	-1,720.23	-95.96	317,256.25	1,770,221.41	39.368914	-80.201354	1,594.70		0.00	0.00
8,800.00	89.00	160.95	7,432.74	-1,814.74	-63.33	317,161.73	1,770,254.04	39.368655	-80.201236	1,694.68	0.00	0.00	0.00
8,900.00	89.00	160.95	7,434.48	-1,909.25	-30.70	317,067.22	1,770,286.67	39.368396	-80.201118	1,794.67		0.00	0.00
9,000.00	89.00	160.95		-2,003.76	1.93		1,770,319.29	39.368138	-80.201000	1,894.65		0.00	0.00
9,100.00	89.00	160.95		-2,098.27	34.55		1,770,351.92	39.367879	-80.200882	1,994.64		0.00	0.00
9,200.00	89.00	160.95		-2,192.78	67.18		1,770,384.55	39.367620	-80.200764	2,094.62		0.00	0.00
9,300.00	89.00	160.95	7 441 47	-2,287.30	99.81	316 689 18	1,770,417.18	39.367361	-80.200646	2,194.61	0.00	0.00	0.00
9,400.00	89.00	160.95		-2,381.81	132.44		1,770,449.80	39.367103	-80.200528	2,194.51		0.00	
9,500.00	89.00	160.95		-2,476.32	165.06		1,770,449.60	39.366844	-80.200410			-	0.00
9,600.00	89.00	160.95		-2,570.83	197.69			39.366585	-80.200292	2,394.58		0.00	0.00
9,700.00	89.00	160.95	See Assess Control	-2,665.34	230.32	52701201201201010101	1,770,515.06 1,770,547.69	39.366326	-80.200174	2,494.56 2,594.55		0.00	0.00
9.800.00	90.00	160.05	7.450.40	2.750.05	202.05			20.266067	80 200056				
	89.00	160.95		-2,759.85	262.95		1,770,580.31	39.366067	-80.200056	2,694.53		0.00	0.00
9,900.00	89.00	160.95		-2,854.36	295.57		1,770,612.94	39.365809	-80.199938	2,794.52		0.00	0.00
10,000.00	89.00	160.95		-2,948.88	328.20		1,770,645.57	39.365550	-80.199820	2,894.50	0.00	0.00	0.00
10,100.00	89.00	160.95		-3,043.39	360.83	315,933.09	1,770,678.20	39.365291	-80.199702	2,994.49	0.00	0.00	0.00
10,200.00	89.00	160.95	7,457.17	-3,137.90	393.46	315,838.58	1,770,710.82	39.365032	-80.199584	3,094.47	0.00	0.00	0.00
10,300.00	89.00	160.95	7,458.92	-3,232.41	426.08	315,744.06	1,770,743.45	39.364774	-80.199466	3,194.45	0.00	0.00	0.00
10,400.00	89.00	160.95	7,460.66	-3,326.92	458.71	315,649.55	1,770,776.08	39.364515	-80.199348	3,294.44	0.00	0.00	0.00
10,500.00	89.00	160.95	7,462.41	-3,421.43	491.34	315,555.04	1,770,808.71	39.364256	-80.199230	3,394.42	0.00	0.00	0.00
10,600.00	89.00	160.95	7,464.15	-3,515.94	523.97	315,460.53	1,770,841.33	39.363997	-80.199112	3,494.41	0.00	0.00	0.00
10,700.00	89.00	160.95	7,465.90	-3,610.45	556.59	315,366.02	1,770,873.96	39.363738	-80.198994	3,594.39	0.00	0.00	0.00
10,800.00	89.00	160.95	7,467.64	-3,704.97	589.22	315,271.51	1,770,906.59	39.363480	-80.198876	3,694.38	0.00	0.00	0.00
10,900.00	89.00	160.95	7,469.39	-3,799.48	621.85	315,177.00	1,770,939.22	39.363221	-80.198758	3,794.36	0.00	0.00	0.00
11,000.00	89.00	160.95	7,471.13	-3,893.99	654.48	315,082.48	1,770,971.84	39,362962	-80.198640	3,894.35	0.00	0.00	0.00
11,100.00	89.00	160.95	7,472.88	-3,988.50	687.11	314,987.97	1,771,004.47	39.362703	-80.198522	3,994.33	0.00	0.00	0.00
11,200.00	89.00	160.95	7,474.63	-4,083.01	719.73	314,893.46	1,771,037.10	39.362445	-80.198404	4,094.32	0.00	0.00	0.00
11,300.00	89.00	160.95	7,476.37	-4,177.52	752.36	314,798.95	1,771,069.73	39.362186	-80.198286	4,194.30	0.00	0.00	0.00
11,400.00	89.00	160.95	7,478.12	-4,272.03	784.99	314,704.44	1,771,102.36	39.361927	-80.198168	4,294.29	0.00	0.00	0.00
11,500.00	89.00	160.95		-4,366.55	817.62		1,771,134.98	39.361668	-80.198050	4,394.27		0.00	0.00
11,600.00	89.00	160.95	7,481.61	-4,461.06	850.24		1,771,167.61	39.361409	-80.197932	4,494.26		0.00	0.00
11,700.00	89.00	160.95	7,483.35		882.87		1,771,200.24	39.361151	-80.197814	4,594.24		0.00	0.00
11,800.00	89.00	160.95	7,485.10	-4.650.08	915.50	314.326.39	1,771,232.87	39.360892	-80.197696	4,694.23	0.00	0.00	0.00
11,900.00	89.00	160.95	7,486.84	DOMESTIC DESIGNATION	948.13		1,771,265.49	39.360633	-80.197578	4,794.21		0.00	0.00
12,000.00	89.00	160.95	7,488.59		980.75	1210 0 8120 030	1,771,298.12	39.360374	-80.197460	4,894.20		0.00	
12,100.00	89.00	160.95		4,933.61	1,013.38		1,771,330.75	39.360116	-80.197342	4,994.18			0.00
12,200.00	89.00	160.95		-5.028.12			1,771,363.38	39.359857	-80.197224	With the second second		0.00	0.00
12,200.00	00.00	100.50	1,432.00	-0,020.12	1,040.01	313,840.33	1,771,303.36	55.505007	00, 101224	5,094.17	0.00	0.00	0.00

RECEIVED Office of Oil and Gas

4703306043





Planned Survey Report

North Reference:

WV Department of

Company: Project:

Diversified Production, LLC

Harrison County, WV (NAD83 - GRID) Abbey Pad

Site: Well: Abbey 2MH

Wellbore: Wellbore #1 Design: Design #4

Local Co-ordinate Reference:

TVD Reference: MD Reference:

WELL @ 1024.00usft (28' RKB) WELL @ 1024.00usft (28' RKB)

Well Abbey 2MH

Survey Calculation Method: Minimum Curvature

Database:

Planned Su	rvey										Name of Street	NAME OF TAXABLE	
Measured Depth (usft)	INC	AZI (°)	Vertical Depth (usft)	Local Coc +N/-S (usft)	rdinates +E/-W (usft)	Map Coo Northing (usft)	erdinates Easting (usft)	Geo Coord Latitude	inates Longituge (°)	Vertical Section (usft)		Rate	Rate
12,300.00	89.00	160.95	7,493.82	-5,122.64	1,078.64	313,853.84	1,771,396.00	39.359598	-80.197106	5,194.15	0.00	0.00	0.00
12,400.00	89.00	160.95	7,495.57	-5,217.15	1,111.26	313,759.33	1,771,428.63	39.359339	-80.196988	5,294.13	0.00	0.00	0.00
12,500.00	89.00	160.95	7,497.31	-5,311.66	1,143.89	313,664.81	1,771,461.26	39.359080	-80.196870	5,394.12	0.00	0.00	0.00
12,600.00	89.00	160.95	7,499.06	-5,406.17	1,176.52	313,570.30	1,771,493.89	39.358822	-80.196752	5,494.10	0.00	0.00	0.00
12,700.00	89.00	160.95	7,500.80	-5,500.68	1,209.15	313,475.79	1,771,526.51	39.358563	-80.196634	5,594.09	0.00	0.00	0.00
12,800.00	89.00	160.95	7,502.55	-5,595.19	1,241.77	313,381.28	1,771,559.14	39.358304	-80,196516	5,694.07	0.00	0.00	0.00
12,900.00	89.00	160.95	7,504.29	-5,689.70	1,274.40	313,286.77	1,771,591.77	39.358045	-80.196398	5,794.06	0.00	0.00	0.00
13,000.00	89.00	160.95	7,506.04	-5,784.22	1,307.03	313,192.26	1,771,624.40	39.357787	-80.196280	5,894.04	0.00	0.00	0.00
13,100.00	89.00	160.95	7,507.79	-5,878.73	1,339.66	313,097.75	1,771,657.02	39.357528	-80.196162	5,994.03	0.00	0.00	0.00
13,200.00	89.00	160.95	7,509.53	-5,973.24	1,372.29	313,003.24	1,771,689.65	39.357269	-80.196044	6,094.01	0.00	0.00	0.00
13,300.00	89.00	160.95	7,511.28	-6,067.75	1,404.91	312,908.72	1,771,722.28	39.357010	-80.195927	6,194.00	0.00	0.00	0.00
13,400.00	89.00	160.95	7,513.02	-6,162.26	1,437.54	312,814.21	1,771,754.91	39.356751	-80.195809	6,293.98	0.00	0.00	0.00
13,500.00	89.00	160.95	7,514.77	-6,256.77	1,470.17	312,719.70	1,771,787.53	39.356493	-80.195691	6,393.97	0.00	0.00	0.00
13,600.00	89.00	160.95	7,516.51	-6,351.28	1,502.80	312,625.19	1,771,820.16	39.356234	-80.195573	6,493.95	0.00	0.00	0.00
13,700.00	89.00	160.95	7,518.26	-6,445.80	1,535.42	312,530.68	1,771,852.79	39.355975	-80.195455	6,593.94	0.00	0.00	0.00
13,800.00	89.00	160.95	7,520.00	-6,540.31	1,568.05	312,436.17	1,771,885.42	39.355716	-80.195337	6,693.92	0.00	0.00	0.00
13,900.00	89.00	160.95	7,521.75	-6,634.82	1,600.68	312,341.66	1,771,918.05	39.355458	-80.195219	6,793.91	0.00	0.00	0.00
14,000.00	89.00	160.95	7,523.49	-6,729.33	1,633.31	312,247.14	1,771,950.67	39.355199	-80.195101	6,893.89	0.00	0.00	0.00
14,100.00	89.00	160.95	7,525.24	-6,823.84	1,665.93	312,152.63	1,771,983.30	39.354940	-80.194983	6,993.88	0.00	0.00	0.00
14,200.00	89.00	160.95	7,526.98	-6,918.35	1,698.56	312,058.12	1,772,015.93	39.354681	-80.194865	7,093.86	0.00	0.00	0.00
14,300.00	89.00	160.95	7,528.73	-7,012.86	1,731.19	311,963.61	1,772,048.56	39.354422	-80.194747	7,193.85	0.00	0.00	0.00
14,400.00	89.00	160.95	7,530.47	-7,107.37	1,763.82	311,869.10	1,772,081.18	39.354164	-80.194629	7,293.83	0.00	0.00	0.00
14,500.00	89.00	160.95	7,532.22	-7,201.89	1,796.44	311,774.59	1,772,113.81	39.353905	-80.194511	7,393.82	0.00	0.00	0.00
14,600.00	89.00	160.95	7,533.96	-7,296.40	1,829.07	311,680.08	1,772,146.44	39.353646	-80.194393	7,493.80	0.00	0.00	0.00
14,700.00	89.00	160.95	7,535.71	-7,390.91	1,861.70	311,585.57	1,772,179.07	39.353387	-80.194275	7,593.78	0.00	0.00	0.00
14,800.00	89.00	160.95	7,537.45	-7,485.42	1,894.33	311,491.05	1,772,211.69	39.353128	-80.194157	7,693.77	0.00	0.00	0.00
14,900.00	89.00	160.95	7,539.20	-7,579.93	1,926.95	311,396.54	1,772,244.32	39.352870	-80.194039	7,793.75	0.00	0.00	0.00
15,000.00	89.00	160.95	7,540.95	-7,674.44	1,959.58	311,302.03	1,772,276.95	39.352611	-80.193921	7,893.74	0.00	0.00	0.00
15,100.00	89.00	160.95	7,542.69	-7,768.95	1,992.21	311,207.52	1,772,309.58	39.352352	-80.193803	7,993.72	0.00	0.00	0.00
15,200.00	89.00	160.95	7,544.44	-7,863.47	2,024.84	311,113.01	1,772,342.20	39.352093	-80.193685	8,093.71	0.00	0.00	0.00
15,300.00	89.00	160.95	7,546.18	-7,957.98	2,057.46	311,018.50	1,772,374.83	39.351835	-80 193567	8,193.69	0.00	0.00	0.00
15,400.00	89.00	160.95	7,547.93	-8,052.49	2,090.09	310,923.99	1,772,407.46	39.351576	-80.193449	8,293.68	0.00	0.00	0.00
15,500.00	89.00	160.95	7,549.67	-8,147.00	2,122.72	310,829.47	1,772,440.09	39.351317	-80.193331	8,393.66	0.00	0.00	0.00
15,600.00	89.00	160.95	7,551.42	-8,241.51	2,155.35	310,734.96	1,772,472.71	39.351058	-80.193213	8,493.65	0.00	0.00	0.00
15,700.00	89.00	160.95	7,553.16	-8,336.02	2,187.98	310,640.45	1,772,505.34	39.350799	-80.193095	8,593.63	0.00	0.00	0.00
15,800.00	89.00	160.95	7,554.91	-8,430.53	2,220.60	310,545.94	1,772,537.97	39.350541	-80.192977	8,693.62	0.00	0.00	0.00
15,900.00	89.00	160.95	7,556.65	-8,525.04	2,253.23	310,451.43	1,772,570.60	39.350282	-80.192859	8,793.60	0.00	0.00	0.00
16,000.00	89.00	160.95	7,558.40	-8,619.56	2,285.86	310,356.92	1,772,603.23	39.350023	-80.192741	8,893.59	0.00	0.00	0.00

HEUCIVLU Office of Oil and Gas

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4 2024 OCT



Planned Survey Report

WV Department of Environmental Protection

Company: Project:

Site:

Well:

Wellbore:

Diversified Production, LLC

Harrison County, WV (NAD83 - GRID)

Abbey Pad Abbey 2MH Wellbore #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Well Abbey 2MH

WELL @ 1024.00usft (28' RKB) WELL @ 1024.00usft (28' RKB)

Minimum Curvature

Design:		sign #4				Survey C Database	alculation Met :		nimum Curvatu tal Directional		n DB		
Planned Su	urvey	15 2 30 14		WEST MATE		And Section 1989	Calendary					SP(A)	
Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coc +N/-S (usft)	ordinates +E/-W (usft)	Map Coo Northing (usft)	erdinates Easting (usft)	Geo Coord Latitude	inates Longituge (°)	Vertical Section (usft)	Rate	Build Rate (*/100usft)	Rate
16,100.00	89.00	160.95	7,560.14	-8,714.07	2,318.49	310,262.41	1,772,635.85	39.349764	-80.192624	8,993.57	0.00	0.00	0.00
16,200.00	89.00	160.95	7,561.89	-8,808.58	2,351.11	310,167.89	1,772,668.48	39.349505	-80.192506			0.00	0.00
16,300.00	89.00	160.95	7,563.63	-8,903.09	2,383.74	310,073.38	1,772,701.11	39.349247	-80.192388	9,193.54	0.00	0.00	0.00
16,400.00	89.00	160.95	7,565.38	-8,997.60	2,416.37	309,978.87	1,772,733.74	39.348988	-80.192270	9,293.53	0.00	0.00	0.00
16,500.00	89.00	160.95	7,567.12	-9,092.11	2,449.00	309,884.36	1,772,766.36	39.348729	-80.192152	9,393.51	0.00	0.00	0.00
16,600.00	89.00	160.95	7,568.87	-9,186.62	2,481.62	309,789.85	1,772,798.99	39.348470	-80.192034	9,493.50	0.00	0.00	0.00
16,683.57	89.00	160.95	7,570.33	-9,265.61	2,508.89	309,710.87	1,772,826.26	39.348254	-80.191935	9,577.05		0.00	0.00
16,700.00	89.00	161.20	7,570.61	-9,281.15	2,514.22	309,695.33	1,772,831.58	39.348211	-80.191916	9,593.48	1.50	0.00	1.50
16,800.00	89.00	162.70	7,572.36	-9,376.21	2,545.20	309,600.26	1,772,862.56	39.347951	-80.191804	9,693.45	1.50	0.00	1.50
16,900.00	89.00	164.20	7,574.11	-9,472.05	2,573.67	309,504.42	1,772,891.04	39.347689	-80.191701	9,793.33	1.50	0.00	1.50
17,000.00	89.00	165.70	7,575.86	-9,568.60	2,599.63	309,407.87	1,772,917.00	39.347424	-80.191606	9,893.07	1.50	0.00	1.50
17,100.00	89.00	167.20	7,577.62	-9,665.80	2,623.06	309,310.67	1,772,940.42	39.347158	-80.191521	9,992.59	1.50	0.00	1.50
17,200.00	89.00	168.70	7,579.37	-9,763.58	2,643.93	309,212.89	1,772,961.29	39.346890	-80.191444	10,091.83	1.50	0.00	1.50
17,300.00	89.00	170.20	7,581.12	-9,861.87	2,662.23		1,772,979.60	39.346620		10,190.71		0.00	1.50
17,386.52	89.00	171.50	7,582.63	-9,947.28	2,675.98		1,772,993.35	39.346386		10,275.93		0.00	1.50
17,400.00	89.00	171.50	7,582.87	-9,960.61	2,677.98		1,772,995.34	39.346350		10,289.18		0.00	0.00
17,500.00	89.00	171.50	7,584.61	10,059.49	2,692.75	308,916.98	1,773,010.12	39.346078		10,387.47		0.00	0.00
17,586.52	89.00	171.50	7,586.12-	10,145.05	2,705.54	308,831.42	1,773,022.91	39.345844	-80.191216	10,472.52	0.00	0.00	0.00
17,600.00	89.00	171.30	7,586.36-	10,158.38	2,707.56	308,818.10	1,773,024.92	39.345807	-80.191208	10,485.77	1.50	0.00	-1.50
17,700.00	89.00	169.79	7,588.10-	10,257.00	2,723.98	308,719.47	1,773,041.35	39.345537	-80.191148	10,584.36	1.50	0.00	-1.50
17,800.00	89.00	168.29	7,589.85-	10,355.16	2,742.98	308,621.31	1,773,060.35	39.345268	-80.191078	10,683.34	1.50	0.00	-1.50
17,900.00	89.00	166.79	7,591.61-	10,452.79	2,764.56	308,523.69	1,773,081.93	39.345000	-80.190999	10,782.66	1.50	0.00	-1.50
18,000.00	89.00	165.28	7,593.36-	10,549.81	2,788.68	308,426.66	1,773,106.05	39.344734	-80,190911	10,882.25	1.50	0.00	-1.50
18,100.00	89.00	163.78	7,595.11-	10,646.17	2,815.35	308,330.30	1,773,132.72	39.344470		10,982.04		0.00	-1.50
18,200.00	89.00	162.28	7,596.86-	10,741.80	2,844.53	308,234.67	1,773,161.90	39.344208	-80.190708	11,081.95	1.50	0.00	-1.50
18,300.00	89.00	160.77	7,598.61-	10,836.63	2,876.21	308,139.84	1,773,193.58	39.343949	-80.190594	11,181.93	1.50	0.00	-1.50
18,400.00	89.00	159.27	7,600.35-	10,930.60	2,910.37	308,045.88	1,773,227.74	39.343691	-80.190470	11,281.90	1.50	0.00	-1.50
18,500.00	89.01	157.77	7,602.09-	11,023.64	2,946.98	307,952.84	1,773,264.35	39.343437	-80.190338	11,381.79	1.50	0.00	-1.50
18,600.00	89.01	156.26	7,603.82	11,115.68	2,986.02	307,860.79	1,773,303.39	39.343185	-80.190198	11,481.54	1.50	0.00	-1.50
18,700.00	89.02	154.76	7,605.54-	11,206.67	3,027.46	307,769.80	1,773,344.83	39.342936	-80.190049	11,581.07	1.50	0.00	-1.50
18,800.00	89.02	153.26	7,607.25-	11,296.54	3,071.28	307,679.93	1,773,388.64	39.342690	-80.189891			0.01	-1.50
18,900.00	89.03	151.76	7,608.95-	11,385.23	3,117.43	307,591.24	1,773,434.80	39.342448	-80.189726	11,779.22	1.50	0.01	-1.50
19,000.00	89.03	150.25	7,610.65-	11,472.68	3,165.90	307,503.79	1,773,483.27	39.342208	-80.189552	11,877.70	1.50	0.01	-1.50
19,082.35	89.04	149.01	7,612.03-	11,543.72	3,207.52	307,432.75	1,773,524.89	39.342014	-80.189403	11,958.43	1.50	0.01	-1.50
19,100.00	89.04	149.28	7,612.32-	11,558.87	3,216.58	307,417.60	1,773,533.94	39.341973	-80.189371	11,975.71	1.50	-0.01	1.50
19,200.00	89.03	150.78	7,614.01-	11,645.49	3,266.52	307,330.99	1,773,583.89	39.341736	-80.189192 1	12,073.88	1.50	-0.01	1.50
19,300.00	89.03	152.29	7,615.70-	11,733.38	3,314.18	307,243.09	1,773,631.54	39.341496	-80.189021 1	12,172.52	1.50	-0.01	1.50





Planned Survey Report

WV Department of Environmental Protection



Company: Diversified Production, LLC

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 2MH

Wellbore: Wellbore #1
Design: Design #4

Local Co-ordinate Reference: Well Abbey 2MH

 TVD Reference:
 WELL @ 1024.00usft (28' RKB)

 MD Reference:
 WELL @ 1024.00usft (28' RKB)

North Reference: Grid

Survey Calculation Method: Minimum Curvature

Database: .Total Directional Production DB

Planned Su	rvey												
Measured Depth (usft)	INC	AZI (°)	Vertical Depth (usft)	Local Coc +N/-S (usft)	rdinates +E/-W (usft)	Map Coo Northing (usft)	ordinates Easting (usft)	Geo Coord Latitude	inates Longituge (°)	Vertical Section (usft)		Rate	Turn Rate
19,400.00	89.02	153.79	7,617.41	-11,822.50	3,359.51	307,153.98	1,773,676.88	39.341252	-80.188858	12,271.55	1.50	-0.01	1.5
19,500.00	89.01	155.29	7,619.13	-11,912.77	3,402.49	307,063.70	1,773,719.86	39.341005		12,370.91		-0.01	1.5
19,600.00	89.01	156.80	7,620.85	12,004.14	3,443.08	306,972.33	1,773,760.45	39.340755		12,470.52		0.00	1.5
19,700.00	89.01	158.30	7,622.58	12,096.54	3,481.27	306,879.93	1,773,798.64	39.340502		12,570.33		0.00	1.5
19,800.00	89.00	159.80	7,624.32	12,189.92	3,517.02	306,786.56	1,773,834.39	39.340247		12,670.25		0.00	1.5
19,876.36	89.00	160.95	7,625.65	12,261.83	3,542.66	306,714.64	1,773,860.03	39.340050	-80.188199	12,746.60	1.50	0.00	1.5
19,900.00	89.00	160.95	7,626.07	12,284.17	3,550.37	306,692.30	1,773,867.74	39.339989		12,770.23		0.00	0.0
20,000.00	89.00	160.95	7,627.81-	12,378.68	3,583.01		1,773,900.38	39.339730		12,870.22		0.00	0.0
20,100.00	89.00	160.95	7,629.56	12,473.19	3,615.64		1,773,933.01	39.339471		12,970.20		0.00	0.0
20,200.00	89.00	160.95	7,631.30-	12,567.70	3,648.28		1,773,965.64	39.339212		13,070.19		0.00	0.0
20,300.00	89.00	160.95	7,633.05-	12,662.21	3,680.91	306,314.27	1,773,998.28	39.338954	-80.187699	13,170.17	0.00	0.00	0.0
20,400.00	89.00	160.95	7,634.79	12,756.72	3,713.55		1,774,030.91	39.338695		13,270.16		0.00	0.
20,500.00	89.00	160.95	7,636.54	12,851.22	3,746.18		1,774,063.55	39.338436		13,370.14		0.00	0.
20,600.00	89.00	160.95	7,638.28-	12,945.73	3,778.81		1,774,096.18	39.338177		13,470.13		0.00	0.
20,700.00	89.00	160.95	7,640.03-	13,040.24	3,811.45	305,936.23	1,774,128.82	39.337918		13,570.11		0.00	0.
20,800.00	89.00	160.95	7,641.77-	13,134.75	3,844.08	305.841.72	1,774,161.45	39.337660	-80.187109	13,670.10	0.00	0.00	0.
20,900.00	89.00	160.95	7,643.52-	13,229.26	3,876.72	305,747.21	1,774,194.08	39.337401		13,770.08		0.00	0.
21,000.00	89.00	160.95	7,645.26-	13,323.77	3,909.35	305,652.70	1,774,226.72	39.337142		13,870.07		0.00	0.
21,100.00	89.00	160.95	7,647.01-	13,418.28	3,941.99	305,558.20	1,774,259.35	39.336883		13,970.05		0.00	0.
21,200.00	89.00	160.95	7,648.75-	13,512.79	3,974.62	305,463.69	1,774,291.99	39.336624		14,070.04		0.00	0.
21,300.00	89.00	160.95	7,650.50-	13,607.30	4,007.25	305,369.18	1,774,324.62	39.336366	-80.186520	14,170.02	0.00	0.00	0.
21,400.00	89.00	160.95	7,652.24-	13,701.81	4,039.89	305,274.67	1,774,357.26	39.336107		14,270.01		0.00	0.
21,500.00	89.00	160.95	7,653.99-	13,796.31	4,072.52	305,180.16	1,774,389.89	39.335848		14,369.99		0.00	0.
21,600.00	89.00	160.95	7,655.74-	13,890.82	4,105.16	305,085.65	1,774,422.53	39.335589	-80.186166	14,469.98	0.00	0.00	0.
1,700.00	89.00	160.95	7,657.48-	13,985.33	4,137.79	304,991.14	1,774,455.16	39.335331	-80.186048	14,569.96	0.00	0.00	0.
1,800.00	89.00	160.95	7,659.23-	14,079.84	4,170.43	304,896.63	1,774,487.79	39.335072	-80.185930	14,669.95	0.00	0.00	0.
1,900.00	89.00	160.95	7,660.97-	14,174.35	4,203.06	304,802.12	1,774,520.43	39.334813	-80.185812			0.00	0.
2,000.00	89.00	160.95	7,662.72-	14,268.86	4,235.70	304,707.61	1,774,553.06	39.334554		14,869.91		0.00	0.
2,100.00	89.00	160.95	7,664.46-	14,363.37	4,268.33	304,613.11	1,774,585.70	39.334295		14,969.90		0.00	0.
2,200.00	89.00	160.95	7,666.21-	14,457.88	4,300.96	304,518.60	1,774,618.33	39,334037	-80.185458	15,069.88	0.00	0.00	0.
2,300.00	89.00	160.95	7,667.95-	14,552.39	4,333.60	304,424.09	1,774,650.97	39.333778	-80.185340	15,169.87	0.00	0.00	0.
2,400.00	89.00	160.95	7,669.70-	14,646.90	4,366.23	304,329.58	1,774,683.60	39.333519		15,269.85		0.00	0.
2,500.00	89.00	160.95	7,671.44-	14,741.40	4,398.87	304,235.07	1,774,716.23	39.333260	-80.185105			0.00	0.
2,600.00	89.00	160.95	7,673.19-	14,835.91	4,431.50	304,140.56	1,774,748.87	39.333001	-80.184987			0.00	0.
2,700.00	89.00	160.95	7,674.93-	14,930.42	4,464.14		1,774,781.50	39.332743	-80.184869			0.00	0.
2,800.00	89.00	160.95	7,676.68-	15,024.93	4,496.77	303,951.54	1,774,814.14	39.332484	-80.184751	15,669.79	0.00	0.00	0.
2,900.00	89.00	160.95		15,119.44		222 222707	1,774,846.77	39.332225	-80.184633 ·			0.00	0.0
3,000.00		160.95		15,213.95			1,774,879.41	39.331966	-80.184515 ·			0.00	0.0



4703306043

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Office of Oil and Gas

OCT 4 2024



Company:

Design:

Diversified Production, LLC

Harrison County, WV (NAD83 - GRID)

Project: Harrison Co Site: Abbey Pad Well: Abbey 2MH Wellbore: Wellbore #1

energy

Wellbore #1 Design #4

DIVERSIFIED

Local Co-ordinate Reference:

TVD Reference: MD Reference:

Planned Survey Report

North Reference: Survey Calculation Method:

Database:

Well Abbey 2MH Environmental Protection WELL @ 1024.00usft (28' RKB)

WELL @ 1024.00usft (28' RKB)

Grid Minimum Curvature

Planned Survey													
Measured Depth (usft)	INC	AZI (°)	Vertical Depth (usft)	Local Coc +N/-S (usft)	rdinates +E/-W (usft)	Map Coo Northing (usft)	rdinates Easting (usft)	Geo Coord Latitude	inates Longituge	Vertical Section (usft)		Rate	Rate
23,100.00	89.00	160.95	7,681.91	-15,308.46	4,594.67	303,668.02	1,774,912.04	39.331708	-80.184397	15,969.75	0.00	0.00	0.00
23,200.00	89.00	160.95		-15,402.97	4,627.31		1,774,944.67	39.331449		16,069.73		0.00	0.00
23,300.00	89.00	160.95	7,685.40	-15,497.48	4,659.94	303,479.00	1,774,977.31	39.331190	-80.184161	16,169.72	0.00	0.00	0.00
23,400.00	89.00	160.95	7,687.15	-15,591.99	4,692.58	303,384.49	1,775,009.94	39.330931	-80.184043	16,269.70	0.00	0.00	0.00
23,500.00	89.00	160.95	7,688.89	-15,686.49	4,725.21	303,289.98	1,775,042.58	39.330672	-80.183925	16,369.69	0.00	0.00	0.00
23,600.00	89.00	160.95	7,690.64	-15,781.00	4,757.84	303,195.47	1,775,075.21	39.330414	-80.183807	16,469.67	0.00	0.00	0.00
23,700.00	89.00	160.95	7,692.39	-15,875.51	4,790.48	303,100.96	1,775,107.85	39.330155	-80.183690	16,569.66	0.00	0.00	0.00
23,800.00	89.00	160.95	7,694.13	-15,970.02	4,823.11	303,006.45	1,775,140.48	39.329896	-80.183572	16,669.64	0.00	0.00	0.00
23,900.00	89.00	160.95	7,695.88	-16,064.53	4,855.75	302,911.94	1,775,173.11	39,329637	-80.183454	16,769.63	0.00	0.00	0.00
24,000.00	89.00	160.95	7,697.62	-16,159.04	4,888.38	302,817.43	1,775,205.75	39.329378	-80.183336	16,869.61	0.00	0.00	0.00
24,100.00	89.00	160.95	7,699.37	-16,253.55	4,921.02	302,722.92	1,775,238.38	39.329120	-80.183218	16,969.59	0.00	0.00	0.00
24,200.00	89.00	160.95	7,701.11	-16,348.06	4,953.65	302,628.42	1,775,271.02	39.328861	-80.183100	17,069.58	0.00	0.00	0.00
24,300.00	89.00	160.95	7,702.86	-16,442.57	4,986.29	302,533.91	1,775,303.65	39.328602	-80.182982	17,169.56	0.00	0.00	0.00
24,400.00	89.00	160.95	7,704.60	-16,537.08	5,018.92	302,439.40	1,775,336.29	39.328343		17,269.55		0.00	0.00
24,500.00	89.00	160.95	7,706.35	-16,631.58	5,051.55	302,344.89	1,775,368.92	39.328084	-80.182746	17,369.53	0.00	0.00	0.00
24,600.00	89.00	160.95	7,708.09	-16,726.09	5,084.19	302,250.38	1,775,401.56	39.327826	-80.182628			0.00	0.00
24,700.00	89.00	160.95	7,709.84	-16,820.60	5,116.82	302,155.87	1,775,434.19	39.327567	-80.182511	17,569.50	0.00	0.00	0.00
24,800.00	89.00	160.95	7,711.58	-16,915.11	5,149.46	302,061.36	1,775,466.82	39.327308	-80.182393	17,669.49	0.00	0.00	0.00
24,900.00	89.00	160.95	7,713.33	-17,009.62	5,182.09	301,966.85	1,775,499.46	39.327049	-80.182275	17,769.47	0.00	0.00	0.00
25,000.00	89.00	160.95	7,715.07	17,104.13	5,214.73	301,872.34	1,775,532.09	39.326791	-80.182157	17,869.46	0.00	0.00	0.00
25,100.00	89.00	160.95	7,716.82	17,198.64	5,247.36	301,777.83	1,775,564.73	39.326532	-80.182039	17,969.44	0.00	0.00	0.00
25,200.00	89.00	160.95	7,718.56	17,293.15	5,279.99	301,683.33	1,775,597.36	39.326273	-80.181921	18,069.43	0.00	0.00	0.00
25,300.00	89.00	160.95	7,720.31	17,387.66	5,312.63	301,588.82	1,775,630.00	39.326014	-80.181803	18,169.41	0.00	0.00	0.00
25,400.00	89.00	160.95	7,722.05	17,482.17	5,345.26	301,494.31	1,775,662.63	39.325755	-80.181685	18,269.40	0.00	0.00	0.00
25,500.00	89.00	160.95	7,723.80-	17,576.68	5,377.90	301,399.80	1,775,695.26	39.325497	-80.181567	18,369.38	0.00	0.00	0.00
25,600.00	89.00	160.95	7,725.54	17,671.18	5,410.53	301,305.29	1,775,727.90	39.325238	-80.181449	18,469.37	0.00	0.00	0.00
25,700.00	89.00	160.95	7,727.29	17,765.69	5,443.17	301,210.78	1,775,760.53	39.324979	-80.181332	18,569.35	0.00	0.00	0.00
25,800.00	89.00	160.95	7,729.04	17,860.20	5,475.80	301,116.27	1,775,793.17	39.324720	-80.181214	18,669.34	0.00	0.00	0.00
25,900.00	89.00	160.95	7,730.78	17,954.71	5,508.43	301,021.76	1,775,825.80	39.324461	-80.181096	18,769.32	0.00	0.00	0.00
26,000.00	89.00	160.95	7,732.53-	18,049.22	5,541.07	300,927.25	1,775,858.44	39.324203		18,869.31		0.00	0.00
26,100.00	89.00	160.95	7,734.27	18,143.73	5,573.70	300,832.74	1,775,891.07	39.323944	-80.180860	18,969.29	0.00	0.00	0.00
26,200.00	89.00	160.95	7,736.02-	18,238.24	5,606.34	300,738.24	1,775,923.70	39.323685	-80.180742	19,069.28	0.00	0.00	0.00
26,300.00	89.00	160.95	7,737.76-	18,332.75	5,638.97	300,643.73	1,775,956.34	39.323426	-80.180624	19,169.26	0.00	0.00	0.00
26,400.00	89.00	160.95	7,739.51-	18,427.26	5,671.61	300,549.22	1,775,988.97	39.323167	-80.180506	19,269.24	0.00	0.00	0.00
26,500.00	89.00	160.95	7,741.25	18,521.77	5,704.24	300,454.71	1,776,021.61	39.322909		19,369.23		0.00	0.00
26,600.00	89.00	160.95	7,743.00-	18,616.27	5,736.88	300,360.20	1,776,054.24	39.322650	-80.180271	19,469.21	0.00	0.00	0.00
26,700.00	89.00	160.95	7,744.74-	18,710.78	5,769.51	300,265.69	1,776,086.88	39.322391	-80.180153			0.00	0.00



Planned Survey Report

4703306043



Company:

Diversified Production, LLC

Project:

Harrison County, WV (NAD83 - GRID)

Site: Well: Abbey Pad Abbey 2MH

Wellbore: Design:

Wellbore #1 Design #4

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well Abbey 2MH

WELL @ 1024.00usft (28' RKB) WELL @ 1024.00usft (28' RKB)

Minimum Curvature

.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC	AZI	Vertical Depth	Local Coo +N/-S	+E/-W	Map Coo Northing	Easting	Geo Coordi Latitude	Longituge	Vertical Section	Rate	Rate	Turn Rate
(usit)	(°)	(°)	(usit)	(usft)	(usft)	(usft)	(usft)	(°)	(°)	(usft)	(°/100usft)	(°/100usft)("/100usft)
26,800.00	89.00	160.95	7,746.49-	18,805.29	5,802.14	300,171.18	1,776,119.51	39.322132	-80.180035	19,669.18	0.00	0.00	0.00
26,900.00	89.00	160.95	7,748.23-	18,899.80	5,834.78	300,076.67	1,776,152.15	39.321873	-80.179917	19,769.17	0.00	0.00	0.00
27,000.00	89.00	160.95	7,749.98-	18,994.31	5,867.41	299,982.16	1,776,184.78	39.321615	-80.179799	19,869.15	0.00	0.00	0.00
27,100.00	89.00	160.95	7,751.72-	19,088.82	5,900.05	299,887.65	1,776,217.41	39.321356	-80.179681	19,969.14	0.00	0.00	0.00
27,200.00	89.00	160.95	7,753.47-	19,183.33	5,932.68	299,793.15	1,776,250.05	39.321097	-80.179563	20,069.12	0.00	0.00	0.00
27,300.00	89.00	160.95	7,755.21-	19,277.84	5,965.32	299,698.64	1,776,282.68	39.320838	-80.179445	20,169.11	0.00	0.00	0.00
27,400.00	89.00	160.95	7,756.96-	19,372.35	5,997.95	299,604.13	1,776,315.32	39.320580	-80.179328	20,269.09	0.00	0.00	0.00
27,500.00	89.00	160.95	7,758.70-	19,466.86	6,030.58	299,509.62	1,776,347.95	39.320321	-80.179210	20,369.08	0.00	0.00	0.00
27,600.00	89.00	160.95	7,760.45-	19,561.36	6,063.22	299,415.11	1,776,380.59	39.320062	-80.179092	20,469.06	0.00	0.00	0.00
27,700.00	89.00	160.95	7,762.19-	19,655.87	6,095.85	299,320.60	1,776,413.22	39.319803	-80.178974	20,569.05	0.00	0.00	0.00
27,727.55	89.00	160.95	7,762.68-	19,681.94	6,104.77	299,294.53	1,776,422.14	39.319732	-80.178942	20,596.60	0.00	0.00	0.00

Design Targets

-					
Ta	ra	ΩŤ	N.	3 r	na
ıα	ıч	O.	134	a ı	116

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LP v3 - Abbey 2MH - plan hits target co - Point	0.00 enter	0.00	7,415.00	-854.10	-394.97	318,122.37	1,769,922.40	39.371286	-80.202436
PBHL v4 - Abbey 2MF	0.00	360.00	7,762.68	-19,681.94	6,104.77	299,294.53	1,776,422.14	39.319732	-80.178942

⁻ plan hits target center

⁻ Point

Plan		

Measured	Vertical	Local Cool	rdinates	
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
3000	3000	0	0	KOP; Begin 2.00° Build
3452	3451	-18	-31	Hold 9.05° Tangent
6911	6867	-295	-499	Begin 10.00° Build/Turn
7784	7415	-854	-395	Hold 89.00° Lateral
16,684	7570	-9266	2509	Begin 1.50° Turn
17,387	7583	-9947	2676	Hold 171.50° Az
17,587	7586	-10,145	2706	Begin 1.50° Turn
19,082	7612	-11,544	3208	Continue 1.50° Turn
19,876	7626	-12,262	3543	Hold 160.95° Az
27,728	7763	-19,682	6105	PBHL - 27727.55' MD

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Office	of	Oil	and	Gas					

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Checked	By:
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-	'ell Name: 'ad Name:	Abbey South 2MH Abbey	45	DIVERSIFIED LO	ONG RIDGE	~~~	Notes: - Formation depths are estimates - Casing Depths subject to change based on as-drilled geologic depths
F	tig KB (ft):	28	е	energy	VERGY & POWER	AUXENERGY	 - 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.
	Target:	Marcellus					- Detailed program will be distributed before drilling the well
	TVD	Geology		Hole Size & MW	<u>Casing</u> (Size Wt Grade Connection)	Cement	Centralizers & Wellbore Conditioning
			Wellhead	26 "	20" 52.73# Grade A PE&B		No Centralizers
	128'	Conductor	13-5/8" 5k		Conductor		Hole is auger drilled: No conditioning required.
Surface	160' 623' 583'	DFGW Freeport Coal Pottsville Sand Casing Point TVD	750' MD	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'	Little Lime Big Lime Big Injun Sandstone Berea Sandstone Fifty Foot Sandstone	750' TVD	12-1/4" Air/FW Mist Fluid Drill with FW if air pack unavailable	0.5/0.2/#.I55.LTG	Lead (60% OH & Cased excess) 14.5 ppg class A Cement to surface Tail (0% excess)	Every 3rd joint from shoe to surface
Inter	2,055' 2,225' 2,295' 2,545'	Gordon Sandstone Fourth Sand Sandstone Fifth Sand Sandstone Casing Point TVD	2545' MD		9 5/8 36# J55 LTC	15.6 ppg class A Top of Tail @ ~1,579'	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.
	2,975' 4,300'	Speechley Sandstone Benson Sandstone	2545' TVD	8-3/4" Above Curve Air/ Mist	5 1/2 20# HP P110 Semi-	Tail (10% OH excess)	Every other joint from shoe to Top of Cement
Production	6,866' 7,040' 7,080'	KOP (TVD) Burkett Shale Tully Limestone	<u>KOP</u> 6911' MD 6866' TVD	8-1/2" Curve & Lateral 11.5 - 12.5 ppg MW	Premium	15.2 ppg Class A Top of Tail @ ~5911'	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.
_	7,140' 7,295'	Hamilton Shale Marcellus Shale	Landing Point				BHL
	7,415 ' 7,425'	Landing Point (TVD) Onondaga	7784' MD 7415' TVD Dip Angle =		19,944' Lateral -		27728' MD 7763' TVD
				WV Department of Environmental Protection	RECEIVE e of Oil a		

WW-9 (4/16)

API Number	47 -	033	-	
Oper	rator's	Well No.	Abbey South 2MH	

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

FLUIDS/ CUTTINGS DISPOSAL & RECL	AMATION PLAN		
Operator Name Diversified Production, LLC	OP Code 494524121		
Watershed (HUC 10) West Fork Quadrangl			
Do you anticipate using more than 5,000 bbls of water to complete the propose		_	
Will a pit be used? Yes No V			
If so, please describe anticipated pit waste: Will a synthetic liner be used in the pit? Yes No No	The second secon		
Will a synthetic liner be used in the pit? Yes No 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)	
Other (Explain			
		_	
Will closed loop system be used? If so, describe: Closed loop comissing of multiple half-round tanks to accomp	commodate all drift culturgs that will be solidified on site and transported via truck to a disposa.	s' alto	
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshw	vater, oil based, etc. See attached		
-If oil based, what type? Synthetic, petroleum, etc. *See attached Additives to be used in drilling medium? *See attached		RECE	IVED
Additives to be used in drilling medium? *See attached		O	il and Gas
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. landfill, removed offsite, e	ndfill	OCT	4 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	Env	ironmental	lment of Protection
Permittee shall provide written notice to the Office of Oil and Gas of any load of West Virginia solid waste facility. The notice shall be provided within 24 hours where it was properly disposed.	of drill cuttings or associated waste rejected at s of rejection and the permittee shall also discl	any lose	
l certify that I understand and agree to the terms and conditions of the on August 1, 2005, by the Office of Oil and Gas of the West Virginia Departme provisions of the permit are enforceable by law. Violations of any term or co law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and application form and all attachments thereto and that, based on my inquir obtaining the information, I believe that the information is true, accurate, at penalties for submitting false information, including the possibility of fine or in Company Official Signature Company Official Title Director - EHS Regulatory	ent of Environmental Protection. I understand ondition of the general permit and/or other ap am familiar with the information submitted by of those individuals immediately response and complete. I am aware that there are significant	I that the oplicable I on this sible for	
Subscribed and sworn before me this 23 rd day of Septer Could be a couper of the subscribed and sworn before me this 23 rd day of Septer My commission expires 10/10/2027	NOTAR STATE OF W ANDREAS	IAL SEAL Y PUBLIC YEST VIRGINIA STIHL HAYS ENGRY WY 20	

Title: O&G Inspector

Field Reviewed?

_____ Date: 9/24/24 (_____) No

Additional Information for WW-9

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

Vertical Surface: Air/FW Mist

<u>Vertical Intermediates</u>: Air Brine Mist <u>Horizontal</u>: Synthetic Oil Based Mud

Additives to be used in drilling medium?

Vertical Surface: FW shale stabilizers

<u>Vertical Intermediates</u>: Shale inhibiters, mist soap & gear oil; Water Based Mud w/NaCl2 &

bentonite gel

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

Landfill Info:

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

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WV Department of Environmental Protection



WELL SITE SAFETY PLAN

Well Name: Abbey South 2MH Pad Name: Abbey

> 911 Address: 39 Cathrine Drive Shinnston, WV 26431

County: Harrison
District: Clay - Outside
UTM (meters), NAD83, Zone 17
Northing: 4,358,545.395
Easting: 568,816.540

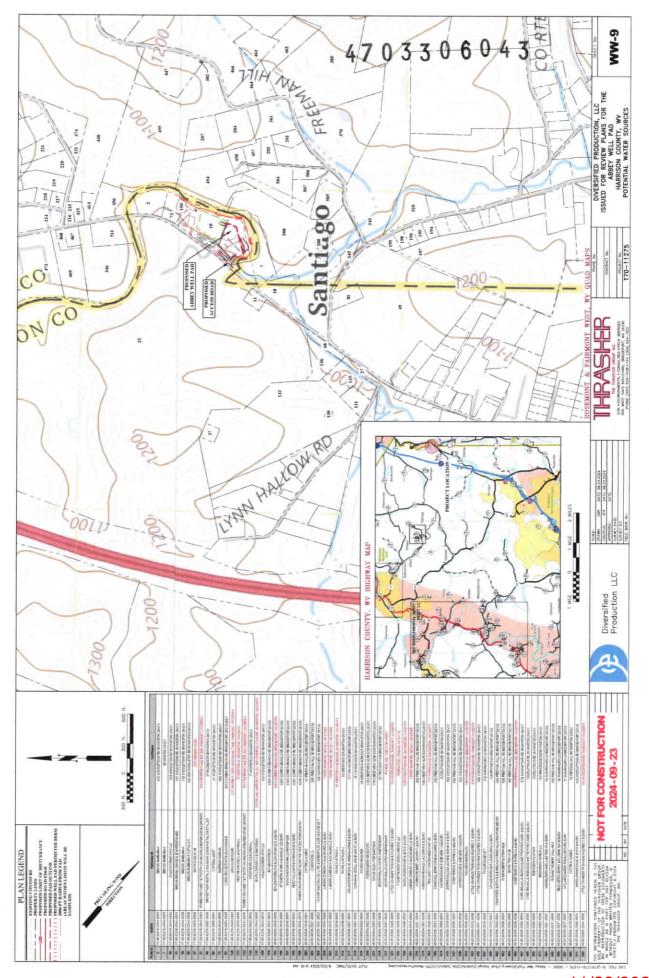
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Office of Oil and Gas

OCT 4 2024

WV Department of Environmental Protection

September 2024

Ky Willets 9/24/24



	ABBEY SOUTH WELL 2MH	
ID	SURFACE OWNER	DIST-TM-PAR
1	LONG RIDGE WEST VIRGINIA LLC	5-210-44.2
2	BARBARA A. BROWN	5-210-44.3
3	BARBARA A. BROWN	5-210-44.8
4	BRYAN BROWN	5-210-44A
5	BRYAN WAYNE BROWN & JENNIFER PINARD	5-210-44.1
6	ADAM LINDSAY ET AL	5-210-55
7	MARK CHRISTOPHER SCHUMACHER	3-6-45.5
8	MARK CHRISTOPHER SCHUMACHER	3-6-45.16
9	MARK CHRISTOPHER SCHUMACHER	3-6-45.17
10	CAROL D. MERRILL	3-6-45.7
11	MARK CHRISTOPHER SCHUMACHER	3-6-45.21
12	VICTOR W & PATTY CLINE	3-6-45.11
13	ANGELA ELLIOT	3-6-45.4
14	STANLEY H. & FRANCES L. VANCE	3-6-45.3
15	TIMOTHY F. HOGAN	3-6-45.2
16	RANDALL J. & AMY L. CHENEVERT	3-6-45.1
17	THE COUNTY COMMISSION OF TAYLOR COUNTY	3-68-47.50
18	RONALD E & JENNIFER L. WRIGHT	3-68-47.22
19	4-T ARENA INC.	3-68-47.5
20	4-T ARENA INC.	3-13-2
21	4-T ARENA INC.	3-13-3
22	4-T ARENA INC.	3-13-4.3
23	4-T ARENA INC.	3-13-6
24	GARRETT M. MOATS & CAYLIN HULL	3-13-8
25	JOYCE A. NUZUM	3-13-8.1
26	EDWARD HELMICK	3-13-9.2
27	DONALD PAUL WILSON	3-13-9.1

	ABBEY SOUTH WELL 2MH	
ID	SURFACE OWNER	DIST-TM-PAR
28	CYNTHIA KNOTTS	3-13-9.17
29	CYNTHIA L KNOTTS	3-13-9.14
30	CARMEN R. ROMANO & MARY F. WILLIAMS-ROMANO	3-13-9.13
31	SEAN G. SISLER	3-13-21.6
32	JESSICA KERNS & CODY JUDY	3-13-21.11
33	MICHAEL & FRANCESCA MCCUTCHAN	3-13-21.34
34	DENISE R. & DENNIS E. BOWLES	3-13-21.36
35	SUSIE L. LEHMANN & FARRAH R. AUSTIN	P/O 3-13-21.37
36	COREY A. & STACIE L. HIMES	P/O 3-13-21.38
37	COREY A. & STACIE L. HIMES	P/O 3-13-21.38
38	THOMAS LAWSON & JESSIE LOU ELLIOTT	P/O 3-13-21.25
39	GARY W & MICHON M. MILES	P/O 3-13-21.24
40	TIMOTHY J. FEEMAN	P/O 3-13-21.27
41	PATRICIA M. ASHCRAFT	3-13-13.1
42	MARY SUSAN MASON	3-13-16.6
43	EVAN M. KLIETHERMES	3-13-16
44	EVAN M. KLIETHERMES	3-14-17
45	LINDA O. MORGAN	3-14-16
46	MICHAEL A. MESSINGER	P/O 3-14-15
47	MICHAEL A. MESSINGER	P/O 3-14-15
48	MARK W. & PAMELA CARDER	3-14-14
49	MARK W. & PAMELA CARDER	3-14-13
50	CHAD D. & JENNIFER L. GOFF	3-14-10.6
51	MICHAEL T. ALONSO	P/O 3-14-24.3
52	TODD ALONSO	3-14-25
53	ALEXANDRIA D. & SPENCER W. CAPLAN	3-14-25.2
54	JOEL B. SMITH & JOSHUA B. SYKES	3-14-27.5
55	DENNIS L. & JANET L. WITHERS	3-14-27.4

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

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

Diversified

FILE #: T70-11275 ABBEY WELL PAD		UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT
DRAWING #: ABBEY SOUTH 2MH		TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THE INFORMATION REQUIRED BY LAW AND THE
SCALE:1" = 2,000'	REGULATIONS	ISSUED AND PRESCRIBED BY THE DEPARTMENT
DATE: OCTOBER 7, 2024	OF ENVIRON	MENTAL PROTECTION.
MINIMUM DEGREE OF ACCURACY: 1/2500	SIGNED:	paras K Hower
PROVEN SOURCE SURVEY GRADE GPS OF ELEVATION: (NAVD 88, US FT)	R.P.E.:	L.L.S.: P.S. No. 2357

OBERT HOUSE ROBERT HO PANTA SONAL SO

PAGE 1 OF



WELL PLAN VERSION #4

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

OPERATOR'S	WELL#:_	ABBEY SO	OUTH 2MH
API WELL #:	47	33	06043
	STATE	COUNTY	PERMIT

CHARLESTON, WV 25304	STATE	COUNTY PERMIT
	ELEVATION:	996.09'±
COUNTY/DISTRICT: HARRISON / CLAY-OUTSIDE Q	UADRANGLE: ROSEMONT,	. WV 7.5'
SURFACE OWNER: LONG RIDGE WEST VIRGINIA LLC	ACREAGE:	6.77± 11/29/2024
OIL & GAS ROYALTY OWNER: WILLOW CREEK MHV, LLC	ACREAGE:	
DRILL DRILL DEEPER REDRILL FRACTURE OR STIM CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY):		
TARGET FORMATION: MARCELLUS ESTI	MATED DEPTH: (LATERAL) TVD: 7,76	3'± TMD: 27,727,'±
ADDRESS: 101 MCQUISTON DRIVE ADDR	GNATED AGENT: CHRIS VEASEY RESS: 400 SUMMER STREET 7: CHARLESTON STATE:	W ZIP CODE: 25301

	ABBEY SOUTH WELL 2MH					
ID	LEASE NUMBER	LESSOR	LEASE ACREAGE			
Α	101263000	WILLOW CREEK MHV	6.77			
В	100969000, 101265000, 101270000, 101261000, 101262000	BARBARA A. BROWN, ET AL	2.15			
С	10971000, 101265000, 101270000, 101261000, 101262000	BARBARA A. BROWN L/E, ET AL	2.36			
D	101254000	BRYAN BROWN	29.04			
E	100972000	BRYAN WAYNE BROWN	0.56			
F	100879000, 100880000, 100881000, 100882000, 100883000, 100892000, 100928000, 100916000, 100917000, 100918000, 100919000, 100920000, 100921000, 100922000, 100923000, 100924000, 100925000, 100926000	WV MINERALS, INC., ET AL	34.20			
G	BP066839	GEORGIA C. NIXON, WIDOW, ET AL	48.00			
н	BP070955	WALTER F. WHITE, ET AL	148.00			
1	BP055201, BP058765, BP060623, BP067019, BP067268	H.I. RIFFEE, ET AL	144.00			
J	BP044943	O.E. CORDER, ET AL	208.00			
K	BP049546	O.E. CORDER, ET AL	10.00			
L	BP037526	MARTHA O. GOFF, ET AL	36.00			
М	BP024534	A.Y. MCELROY, ET AL	252.00			
N	BP066982, BP066983	LLOYD SAYRES, ET AL	88.00			
0	BP024394	M.O. GOFF	620.00			
P	BP066981	LLOYD SAYRES, ET AL	17.00			
Q	BP069917	LLOYD SAYRES, ET AL	5.00			
R	BP062676	EMMA L. TETRICK, ET AL	10.00			
S	BP066927	ELSIE MAY CURRY, ET AL	46.00			
Т	BP002907	BELLE S. PAYNE, ET AL	800.00			
U	BP024535	HELEN M. 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



FILE #:	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 DF ACCURACY: 1/2500	SIGNED: James Hower
PROVEN SOURCE SURVEY GRADE GPS OF ELEVATION: (NAVD 88, US FT)	R.P.E.: L.L.S.: P.S. No. 2357

No. 2357 * No. 2357 * STATE OF VIRGINIA

DAGE 2 OF

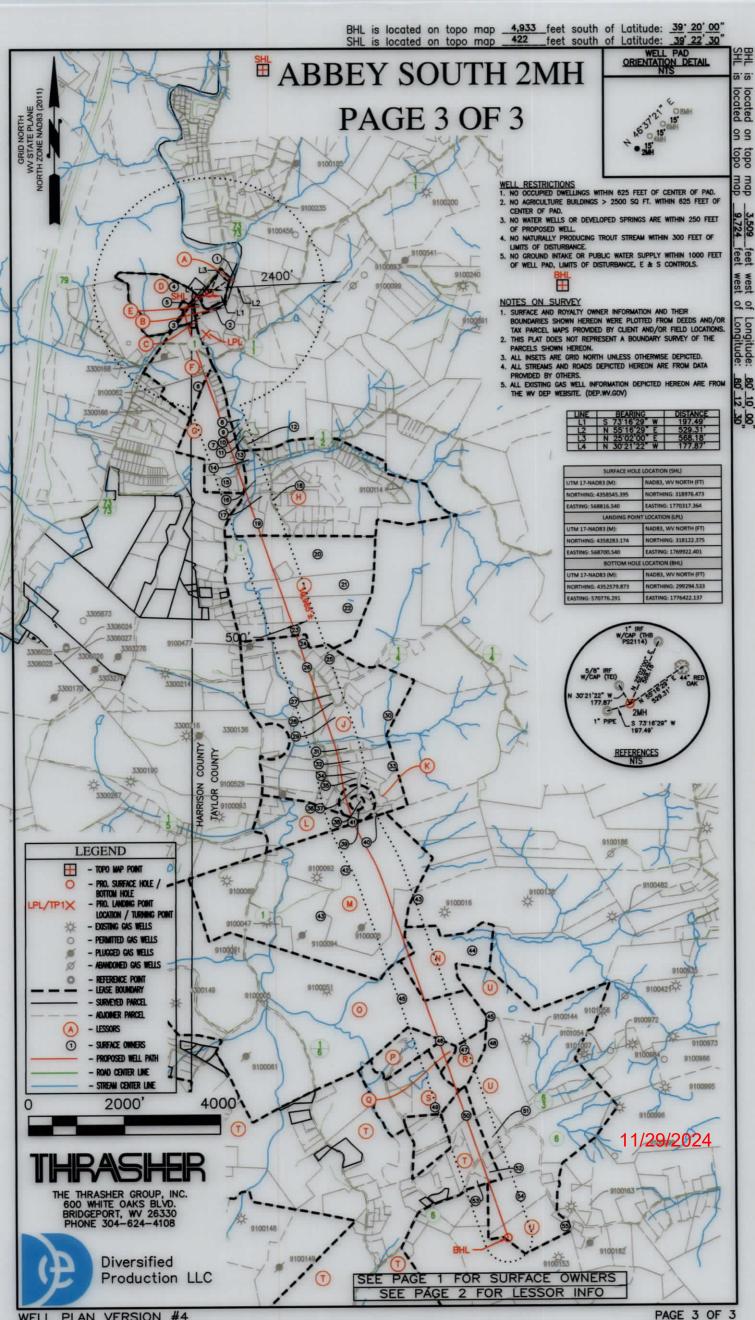
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WELL DIAN VERSION #4

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

OPERATOR'S WELL #:_		ABBEY SOUTH 2MH		
47	33	06043		
TATE	COUNTY	PERMIT		

CHARLESTON, WV 25304	STATE COUNTY PERMIT
WELL TYPE: OIL WASTE DISPOSAL PRODUCTION WATERSHED: WEST FORK	DEEP ☐ GAS ☐ LIQUID INJECTION ☐ STORAGE ☐ SHALLOW ☐ ELEVATION: 996.09'±
COUNTY/DISTRICT: HARRISON / CLAY-OUTSIDE	QUADRANGLE: ROSEMONT, WV 7.5'
SURFACE OWNER: LONG RIDGE WEST VIRGINIA LLC	ACREAGE: 6.77± 11/29/2024
OIL & GAS ROYALTY OWNER: WILLOW CREEK MHV, LLC	
DRILL DEEPER REDRILL FRACTUR CONVERT PLUG & ABANDON CLEAN OUT & RE OTHER CHANGE (SPECIFY): TARGET FORMATION: MARCELLUS	
WELL OPERATOR: DIVERSIFIED PRODUCTION, LLC ADDRESS: 101 MCQUISTON DRIVE CITY: JACKSON CENTER STATE: PA ZIP CODE: 1613	DESIGNATED AGENT: CHRIS VEASEY ADDRESS: 400 SUMMER STREET CITY: CHARLESTON STATE: WV ZIP CODE: 25301



WW-6A1 (5/13)

Operator's	Well	No	Abbey	South	2MH
Operator 5	VV CII	INU.			

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

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

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

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

*See attached

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Office of Oil and Gas

DCT 4: 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:

By:

Its:

Diversified Production, LLC

Amy L. Morris

Operator:

Operator:

Amy L. Morris

Operator:

Operato

Page 1 of

2								
4	Parcel ID#	TAX MAP	LEASE NUMBER	GRANTOR/LESSOR	GRANTEE/LESSEE	ROYALTY	DEED BOOK	PAGE
> -	Α	5-210-44.2	101263000	Willow Creek MHV LLC	LONG RIDGE WEST VIRGINIA, LLC	16%	1776	938
0				Barbara A. Brown	LONG RIDGE WEST VIRGINIA, LLC	17%	1756	1321
			100969000, 101265000,	James Gordon Coughlin, II	LONG RIDGE WEST VIRGINIA, LLC	17%	1774	1128
0		5 242 442		Katherine Jean Coughlin Oldham	LONG RIDGE WEST VIRGINIA, LLC	17%	1774	1128
2	В	5-210-44.3	101270000, 101261000,	Linda Federspiel	LONG RIDGE WEST VIRGINIA, LLC	17%	1774	1137
2			101262000	Daleen Brown	LONG RIDGE WEST VIRGINIA, LLC	17%	1774	1134
				Brenda Nixon	LONG RIDGE WEST VIRGINIA, LLC	17%	1774	1131
\rightarrow				Barbara A. Brown L/E	LONG RIDGE WEST VIRGINIA, LLC	17%	1756	1319
				Tonya Isenhart	LONG RIDGE WEST VIRGINIA, LLC	17%	1756	1319
4			100971000, 101265000,	James Gordon Coughlin, II	LONG RIDGE WEST VIRGINIA, LLC RECEIVE	nd G85 17%	1774	1128
٦	С	5-210-44.8	101270000, 101261000,	Katherine Jean Coughlin Oldham	LONG RIDGE WEST VIRGINIA, LLC Office of Oil	17%	1774	1128
- 1	***		101262000	Linda Federspiel	LONG RIDGE WEST VIRGINIA, LLC	2024 17%	1774	1137
- 1				Daleen Brown	LONG RIDGE WEST VIRGINIA, LLC	17%	1774	1134
				Brenda Nixon	LONG RIDGE WEST VIRGINIA, LLC	17%	1774	1131
r	D	5-210-44A	101254000	Bryan Brown	LONG RIDGE WEST VIRGINIA, LLC	tment of 16%	1775	655
r	E	5-210-44.1	100972000	Bryan Wayne Brown	LONG RIDGE WEST VIRGINIA, LLC W DEP	al Protection 16%	1775	657
-			100879000, 100880000, 100881000, 100882000,	WV Minerals, Inc.	LONG RIDGE WEST VIRGINIA, LLC Environmen	18%	1755	1147
- 1				Stephen Snyder	LONG RIDGE WEST VIRGINIA, LLC	15%	1748	731
- 1				Barbara Ann Snyder Twigg	LONG RIDGE WEST VIRGINIA, LLC	14%	1747	1122
- 1				Patricia Snyder Hollman	LONG RIDGE WEST VIRGINIA, LLC	14%	1755	64
- 1				Jesse R. Leaf	LONG RIDGE WEST VIRGINIA, LLC	18%	N/A	N/A
				Dallas D. Leaf	LONG RIDGE WEST VIRGINIA, LLC	18%	N/A	N/A
- 1				Marlane Colvin Leaf	LONG RIDGE WEST VIRGINIA, LLC	15%	1781	778
- 1				Jason Post	LONG RIDGE WEST VIRGINIA, LLC	14%	1747	1120
- 1			100883000, 100892000,	John David Snyder, II	LONG RIDGE WEST VIRGINIA, LLC	15%	1747	1118
- 1			100928000, 100916000,	Jaclyn L. Snyder	LONG RIDGE WEST VIRGINIA, LLC	15%	1747	1116
- 1	F	5-210-55	100917000,	Thomas A. Grogg	LONG RIDGE WEST VIRGINIA, LLC	18%	1753	468
- 1			100918000,100919000,	Daniel P. Grogg	LONG RIDGE WEST VIRGINIA, LLC	18%	1753	474
- 1			100920000, 100921000,	Harold Larry Grogg	LONG RIDGE WEST VIRGINIA, LLC	18%	1753	478
- 1			100922000, 100923000,	Kathy R. Lee	LONG RIDGE WEST VIRGINIA, LLC	18%	1753	476
- 1			100924000, 100925000, 100926000	Terry A. Grogg	LONG RIDGE WEST VIRGINIA, LLC	18%	1753	472
- 1			100926000	Kevin S. Grogg	LONG RIDGE WEST VIRGINIA, LLC	18%	1753	470
- 1				Adam Matthew Lindsay	LONG RIDGE WEST VIRGINIA, LLC	18%	1752	461
- 1				Mark Lindsay AKA Mark Andrew Lindsay	LONG RIDGE WEST VIRGINIA, LLC	18%	1752	457
- 1				Alexander Scott Swiger	LONG RIDGE WEST VIRGINIA, LLC	18%	1752	459
- 1				Racquel Ann Buffey	LONG RIDGE WEST VIRGINIA, LLC	18%	1752	455
			1	Charles Rodney Lindsay, Jr.	LONG RIDGE WEST VIRGINIA, LLC	18%	1752	453

^{*}Co-tenancy utilization -Parcels aquired using co-tenancy are highlighted in yellow.

WW-6A1 Supplement Operator's Well No. Abbey South 2MH

M		3- 6- 45.5		GEORGIA C. NIXON, WIDOW; KEITH WOODRUFF AND VELMA WOODRUFF, HIS WIFE; AND ERNESTINE STANLEY, A MARRIED WOMAN	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	255
4		3-6-45.16		HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
2		3-6-45.17 3-6-45.7		CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
9	G	3-6-45.21 3-6-45.11	100751000	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
2		3-6-45.4		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
5		3-6-45.3 3-6-45.2		DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	ASSIGNMENT	33	377
<u>آ</u> ح		3-6-45.1		TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
、				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
4				WALTER F. WHITE AND VIRGINIA E. WHITE, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	25	323
			100815000	HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
		3-6B-47.50 3-6B-47.22 3-6B-47.5		CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
1	н			CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
ŀ	н			CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	3 <u>62</u>
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
1				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
ſ			100723000 100730000 100712000	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
:	ı	3-13-2 3-13-3		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. LINDIMORE AND A.O. LINDIMORE, HER HUSBAND; GOLDIE ICE AND				
1		3-13-4.3	100711000	ORIS I. ICE, SR., HER HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	403
1		3-13-6	100710000	HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
ł			1	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
			WED.	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	
- 1		RECE Office of O	and Gas	DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
J		Office of O	H and -	TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
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WV Department of Environmental Protection

^{*}Co-tenancy utilization -Parcels aquired using co-tenancy are highlighted in yellow.

						· - · · · · · · · · · · · · · · · · · ·	 	
2		3-13-8 3-13-8.1		O.E. CORDER AND MARTHA CORDER, HUSBAND AND WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	14	225
5		3-13-9.2 3-13-9.16		HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
5		3-13-9.1 3-13-9.17		CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	.5	555
5	,	3-13-9.14 3-13-9.13	100052000	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
اد	,	3-13-21.6 3-13-21.8	100652000	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	_58	362
2		3-13-21.11 3-13-21.7		DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
2	:	3-13-21.34 3-13-21.36		TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
f		p/o 3-13-21.37 p/o 3-13-21.38		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	19	15
ı	ļ	p/o 3-13-21.38 p/o 3-13-21.25 p/o 3-13-21.24	3-21.25 3-21.24 100653000	HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
1				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	55!
	1			CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
	К				DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36;
		p/o 3-13-21.27		CNG TRANSMISSION CORPORATION			33	37
		·		DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT		
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	65
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
		3-13-13.1	100676000	MARTHA O. GOFF	PHILADELPHIA COMPANY OF WEST VIRGINIA	NOT LESS THAN 1/8	8	4(
				PITTSBURGH AND WEST VIRGINIA GAS COMPANY; AND PHILADELPHIA OIL COMPANY OF WEST VIRGINIA	HOPE NATURAL GAS COMPANY	ASSIGNMENT	23	37:
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	55!
	L			CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	79
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36:
1				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	37
1				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	6
			Ì	M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	14
				A. Y. MCELROY AND SALLIE MCELROY	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	7	13
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	27
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	_5	55
		3-13-16.6		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	79
1	м	3-13-16	100672000	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	
1			ŀ	DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	
1				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	
				M4 ENERGY, LLC BECEIVED	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	14

Office of Oil and Gas

OCT 4 2024

^{*}Co-tenancy utilization -Parcels aquired using co-tenancy are highlighted in yellow.

		T	LLOVE CAVES & SUZABETH COMPANY				
			LLOYD SAYRES & ELIZABETH SAYRES, HIS WIFE; NELLIE FITZBUGH &			T	
			EARL D. FITZBUGHT, HER HUSBAND; ORVAL SAYRES, SINGLE; ELSIE		ľ	1 1	
			SWIGER, WIDOW	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	1 22	
			HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	
N	3-14-17	100777000	CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	130	
]		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	
			CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	51	
	1		DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT		
	Í	İ	TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	33	
	-	<u> </u>	M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39 39	
			M.O. GOFF	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8		
		1	HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	35	
		Į	CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	138	
0	3-14-16	100670000	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION		5	
•	1	1007000	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	51	
	İ	1	DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	MERGER/NAME CHANGE	58	
		1	TRIANA ENERGY, LLC	M4 ENERGY, LLC	PARTIAL ASSIGNMENT	33	3
		<u> </u>	M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT	39	
			LLOYD SAYRES & ELIZABETH SAYRES, HIS WIFE; NELLIE FITZBUGH &	Thomas, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	1
			EARL D. FITZBUGHT, HER HUSBAND; ORVAL SAYRES, SINGLE; ELSIE	i	···		
	p/o 3-14-15	100776000	SWIGER, WIDOW	HODE MATURAL CAS COMPANY			
			HOPE NATURAL GAS COMPANY	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	3
ъ.			CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	2
Р			CONSOLIDATED GAS TRANSMISSION CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	5
			CNG TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	7
			DOMINION TRANSMISSION, INC.	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	3
			TRIANA ENERGY, LLC	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	3
			M4 ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	· —
	·		LLOYD SAYRES & ELIZABETH SAYRES, HIS WIFE; NELLIE FITZBUGH &	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	1
			EARL D. STERRICHE LIED LINGS AND COMMITTEE STEELE FITZBUGH &				
			EARL D. FITZBUGHT, HER HUSBAND; ORVAL SAYRES, SINGLE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	24	30
			HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	
0	p/o 3-14-15	100000000	CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT		5:
u.	p/0 3-14-13	100806000	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	5: 79
		İ	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	
			DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	3
	i	i	TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT		3
			M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	
			EMMA L. TETRICK, WIDOW AND VIRGINIA D. COLE AND RICHARD L.			39	14
			COLE, HER HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8		
			HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	30	
_	 	!	CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	138	2
R	3-14-14	100743000	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION		5	5.
			CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	51	7
			DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	MERGER/NAME CHANGE	58	3
	į l		TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	33	3
			M4 ENERGY, LLC RECEIVED	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT	39	
			Office of Oil and Gas	1 mode ires, rindigin, etc	ASSIGNMENT FARMOUT AGREEMENT	39	14

OCT 4 2024

^{*}Co-tenancy utilization -Parcels aquired using co-tenancy are highlighted in yellow.

Operator's Well No. Abbey South 2MH WW-6A1 Supplement

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		1	1	ELSIE MAY CURRY AND DENZEL CURREY, HER HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	315
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
		ł		CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
		ļ.		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
1	\$	3-14-13	100768000	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
1				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	ASSIGNMENT	33	377
1				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
\vdash				BELLE S. PAYNE, COMMITTEE OF WALDO W. PAYNE, AN INSANE				
ı				PERSON AND SPECIAL COMMISSIONER	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	4]_	587
1		l		SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	42	342
		3-14-10.6	100657000	HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
1		p/o 3-14-24.3 3-14-25 3-14-25.2		PITTSBURGH & WEST VIRGINIA GAS COMPANY	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
	T			EQUITABLE GAS COMPANY	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				EQUITRANS, INC	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				EQT CAPITAL CORPORATION	TRIANA ENERGY, LLC	ASSIGNMENT	33	377
				EQUITABLE GAS COMPANY, LLC	M4 ENERGY, LLC	ASSIGNMENT	1727	722
				EQUITRANS, LP	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	1736	142
				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	NOT LESS THAN 1/8	7	133
ŀ			1	HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
ļ	ti.	3-14-27.5	100673000	CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
1	ŭ	3-14-27.4		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
1				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

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OCT 4 2024

^{*}Co-tenancy utilization -Parcels aquired using co-tenancy are highlighted in yellow.



September 26, 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 2MH.

Diversified Production LLC has obtained the right to drill, extract and produce the minerals under the following routes in the area reflected on the Country South 2MH well plat.

CR 1

CR 6

CR 1/4

A full title search in the relevant Court House confirms the ownership under said County Route 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

Iny Shours

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Office of Oil and Gas

OCT 4 2024

Date of Notice Certification: 10/01/2024

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

API No. 47- 033

		O	perator's	Well No. Abbe	ey South 2MH
		W	ell Pad l	Name: Abbey	
Notice has I	been given: te provisions in West Virginia Code tract of land as follows:	§ 22-6A, the Operator has provid	ed the rec	quired parties v	with the Notice Forms listed
State:	West Virginia	E	actino	568,816.540	
County:	Harrison	I I NA NA I NA I	asting: orthing:	4,358,545.395	
District:	Clay- Outside	Public Road Access		Middletown Rod	Rt 73/73
Quadrangle:	Rosemont 7.5'	Generally used farm		Long Ridge Wes	
Watershed:	West Fork		i name.		t viiginia 220
prescribed by it has provide information re of giving the requirements Virginia Code of this article	West Virginia Code § 22-6A-7(b), the secretary, shall be verified and seed the owners of the surface described equired by subsections (b) and (c), see surface owner notice of entry to surface owner notice of entry to surface of subsection (b), section sixteen of \$22-6A-11(b), the applicant shall thave been completed by the applicant	hall contain the following inform bed in subdivisions (1), (2) and ection sixteen of this article; (ii) to ervey pursuant to subsection (a), if this article were waived in we ender proof of and certify to the ett.	nation: (14), substant the representation of the section of the secretary	 A certificati section (b), sec quirement was ten of this arti the surface ov that the notice 	on from the operator that (interior ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice wher; and Pursuant to Wes
Pursuant to that the Oper	West Virginia Code § 22-6A, the Oprator has properly served the require	erator has attached proof to this d parties with the following:	Notice C	ertification	
*PLEASE CHE	CK ALL THAT APPLY				OOG OFFICE USE ONLY
☐ 1. NOT	CICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED SEISMIC ACTIVITY WAS C			☐ RECEIVED/ NOT REQUIRED
■ 2. NOT	TICE OF ENTRY FOR PLAT SURV	EY or □ NO PLAT SURVEY	WAS CO	ONDUCTED	RECEIVED
☐ 3. NOT	FICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED NOTICE OF ENTRY FOR PLANAS CONDUCTED or			☐ RECEIVED/ NOT REQUIRED
		WRITTEN WAIVER BY (PLEASE ATTACH)			
■ 4. NOT	TICE OF PLANNED OPERATION	Ottice H	of Oil all	_	RECEIVED
■ 5. PUB	LIC NOTICE	00	ct 4	2024	RECEIVED
■ 6. NOT	CICE OF APPLICATION	W	V Departr Onmental	nent of Protection	RECEIVED

Required Attachments:

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

WW-6AC (1/12)

Certification of Notice is hereby given:

THEREFORE, I 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

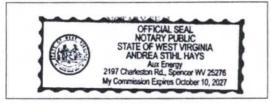
Jackson Center, PA 16133 Facsimile:

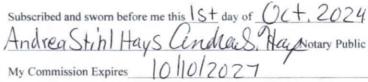
101 McQuiston Drive

Email:

Address:

l: amy@aux-energy.com





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.

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Office of Oil and Gas

OCT 4 2024

WW-6A (9-13) API NO. 47-033 3 3 0 6 0 4 3 OPERATOR WELL NO. Abbey South 2MH

Well Pad Name: Abbey

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 10/2/2024 Date Permit Application Filed: 10/3/2024 Notice of: PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) ☐ PERSONAL ☐ REGISTERED ☑ METHOD OF DELIVERY THAT REQUIRES A **SERVICE** MAIL. RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a 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) COAL OWNER OR LESSEE RECEIVED Name: Long Ridge West Virginia LLC Name: Long Ridge West Virginia LLC Office of Oil and Gas Address: 501 Corporate Drive, Suite 210 Address: 501 Corporate Drive, Suite 210 Canonsburg, PA 15317 Canonsburg, PA 15317

☐ COAL OPERATOR OCT 4 2024 Name: Address: Name: N/A Address: ______Environmental Protection WV Department of ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) Name: Long Ridge West Virginia LLC ☑ SURFACE OWNER OF WATER WELL Address: 501 Corporate Drive, Suite 210 AND/OR WATER PURVEYOR(s) Canonsburg, PA 15317 Name: *See attached list Name: Address: Address: OPERATOR OF ANY NATURAL GAS STORAGE FIELD ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: N/A Name: N/A Address: Address: *Please attach additional forms if necessary

WW-6A (8-13)

RECEIVED Office of Oil and Gas

4 2024

APA 7 40 3 3 0 6 0 OPERATOR WELL NO. Abbey South 2MH Well Pad Name: Abbey

WV Department of

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

API NO. 47-033

OPERATOR WELL NO. Abbey South 2MH

Well Pad Name: Abbey

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: Office of Oil and Gas

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

4 2024

WV Department of

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 test water. NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

APAN 7. 40 3 3 0 6 0 4 3

OPERATOR WELL NO. Abbey South 2MH

Well Pad Name: Abbey

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

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Office of Oil and Gas

OCT 4 2024

WW-6A (8-13)

API NO. 47- 033 OPERATOR WELL NO. Abbey South 2MH
Well Pad Name: Abbey

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:

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.



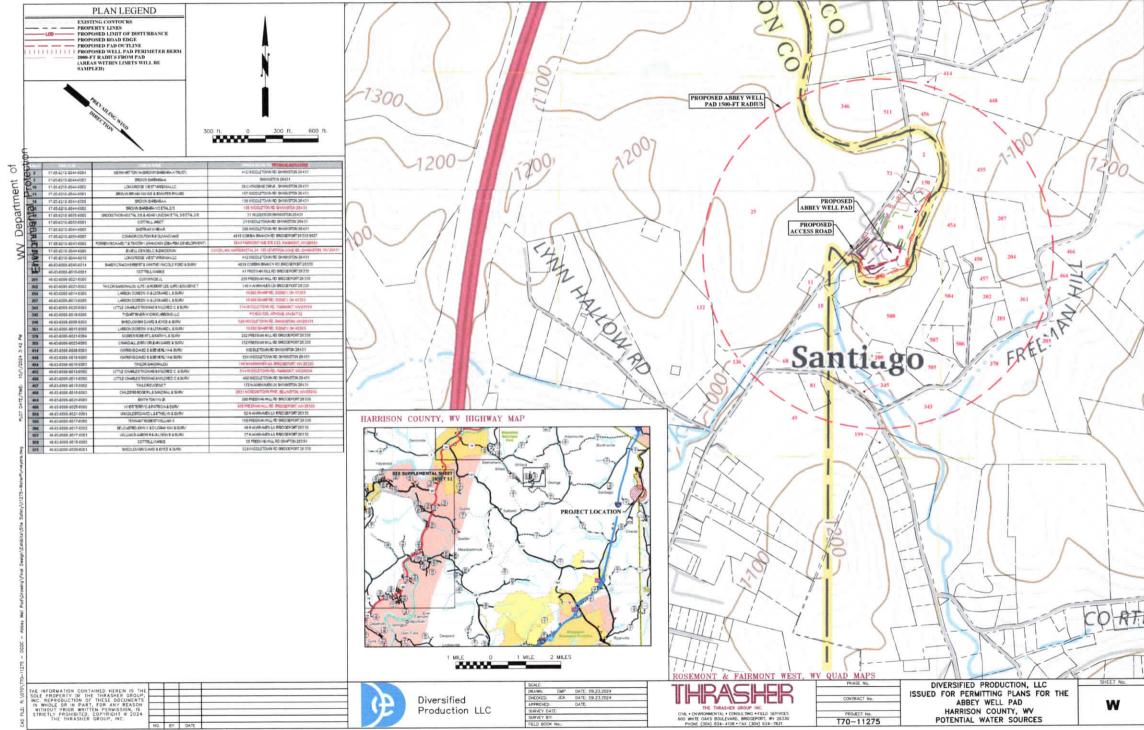
Subscribed and sworn before me this 1St day of Oct. 2024.

Andrea Stihl Hays and a S. Hay Notary Public My Commission Expires 10/10/2027

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Office of Oil and Gas

OCT 4 2024







COMPLEX PROJECTS REQUIRE RESOLVE

THRASHER'S GOT IT

ID	PARCELID	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	MORRIS ROBERT L & KATHY L & SURV	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



COMPLEX PROJECTS REQUIRE RESOLVE

THRASHER'S GOT IT

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 MARKE /	35 FREEMAN HILL RD GRAFTON 26354
511	46-03-0006-0006-0001	SHEDLOWSKI DAVID & JOYCE & SURV •	529 MIDDLETOWN RD BRIDGEPORT 26330

PECEIVED
Office of Oil and Gas
OCT 4 2024
wv Department of
wv Department of
Environmental Protection

4703306043

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

Date of Notice: PERSONAL REGISTERED METHOD OF DELIVERY THAT REQUIRES A SERVICE MAIL RECEIPT OR SIGNATURE CONFIRMATION	Notice Time R	lequirement:	Notice shall be provide	led at least	SEVEN (7) d	lays but no more tha	an FORTY-FIVE (45) days prior to	
PERSONAL REGISTERED MAIL RECIPT 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 entry to: (1) the surface owner of such entry to: (1) the surface owner of such entry to: (1) the surface owner of such entry to: (1) the surface owner of such entry (1) the surface owner of such entry (2) to any owner of resees 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 country 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, Sulte 210 Canonabus, PA 15317 Name: Address: 501 Corporate Drive, Sulte 210 Canonabus, PA 15317 OCT 4/ 2024 Address: 501 Corporate Drive, Sulte 210 Canonabus, PA 15317 Name: Address: 405 Long Rink Road Environmental Protection Address: 405 Long Rink Road Environmental Protection Address: 405 Long Rink Road Environmental Protection Address: 405 Long Rink Road Environmental Protection Address: 405 Long Rink Road Environmental Protection Address: 405 Long Rink Road Environmental Protection Address: 405 Long Rink Road Environmental Protection Address: 405 Long Rink Road Environmental Protection Approx. Latitude & Longitud	entry								
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SURFACE OWNER(s) Name: Long Ridge WV LLC (Well Pad and Access Road) Address: 501 Corporate Drive, Suite 210 Canonsburg, PA 15317 Name: Address: 501 Corporate Drive, Suite 210 Canonsburg, PA 15317 Name: MINERAL OWNER(s) Name: Willow Creek MHV LLC WV Department of Address: 485 Long Run Road Environmental Protection Bear Run Run 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 Run Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 Long Run Received Address: 495 L	but no more that beneath such tra owner of minera and Sediment C Secretary, which enable the surfa	tract to cond in forty-five d act that has fil als underlying Control Manua h statement slace owner to o	ays prior to such entry ed a declaration pursu g such tract in the cour all and the statutes and hall include contact in btain copies from the	to: (1) The ant to section ty tax recording relate formation, i	suant to this a surface own on thirty-six, rds. The notion	article. Such notice er of such tract; (2) article six, chapter to ce shall include a st as exploration and r	shall be provided at le to any owner or lesses twenty-two of this cod- atement that copies of	east seven days e of coal seams le; and (3) any the state Erosion	
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Name: Long Rogo W LLC Office of Oil and Gas Address: 501 Corporate Drive, Suite 210 Canonsburg, PA 15317 OCT 4' 2024 Address: 501 Corporate Drive, Suite 210 Canonsburg, PA 15317 OCT 4' 2024 Address: 501 Corporate Drive, Suite 210 Canonsburg, PA 15317 OCT 4' 2024 Address: 501 Corporate Drive, Suite 210 Canonsburg, PA 15317 OCT 4' 2024 MINERAL OWNER(s) Name: Willow Creek MHV LLC WV Department of Address: 485 Long Run Road Environmental Protection Plenington, 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 Approx. Latitude & Longitude: 39.373545; -80.200870 County: Harrison Public Road Access: 73/73 Middletown Road District: Clay - Outside Watershed: West Fork River Quadrangle: Rosemont 7.5' Generally used farm name: Long Ridge WV LLC Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57' 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. Notice is hereby given by: Well Operator: Diversified Production, LLC Address: 101 McQuiston Drive Jackson Center, PA 16133					■ COA	L OWNER OR LE	ESSEE	DECEMEN	
Address: Soli Corporate Dive, Suite 210 Address: MINERAL OWNER(s) Name: Address: West Met V LLC Address: West Form gan 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 Approx. Latitude & Longitude: 39.373545;-80.200870 County: Harrison District: Clay-Outside Quadrangle: Rosemont 7.5' 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. Notice is hereby given by: Well Operator: Diversified Production, LLC Address: 101 McQuiston Drive Jackson Center, PA 16133	the Market of the Control of the Con				Name: Long Ridge WV LLC				
Name:			210		Address: 501 Corporate Drive, Suite 210				
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Name:	Address:							C1 4 2024	
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Telephone: 304-376-0111 Jackson Center, PA 16133	Charleston, WV obtained from th	from the Sec 25304 (304- ne Secretary by by given by:	retary, at the WV Dep 926-0450). Copies of y visiting <u>www.dep.w</u>	artment of such docur	Environmenta ments or addit nd-gas/pages/	al Protection headquional information red default.aspx.	uarters, located at 601	57th Street SF	
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any@aux-energy.com			com		Faccimile	Jackson Center, PA 16	133		
		arriy@aux-energy	COIII		racsimile:				

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.

WW-6A5 (1/12)

Operator Well No. Abbey South 2MH

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

Date of Notice	ee: 10/02/2024 Date Permit Applica			application.
Delivery met	hod pursuant to West Virginia Code § 22-6A	A-16(c)		
	FIED MAIL HAY RN RECEIPT REQUESTED DEI	ND LIVERY		
return receipt the planned of required to be drilling of a l damages to the	V. Va. Code § 22-6A-16(c), no later than the requested or hand delivery, give the surface or peration. The notice required by this subsect provided by subsection (b), section ten of this norizontal well; and (3) A proposed surface use surface affected by oil and gas operations to the serious provided by this section shall be given to the	wner whose lan tion shall inclu- article to a sur- se and compen- the extent the d	d will be used for de: (1) A copy face owner whos sation agreement amages are comp	or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter.
(at the address	eby provided to the SURFACE OWNER(s) is listed in the records of the sheriff at the time of ge WV LLC (Well Pad and Access Road)	of notice): Name:		
Address: 501 0	Corporate Drive, Suite 210	Addres	s:	
Canonsburg, PA	15317			
	Vest Virginia Code § 22-6A-16(c), notice is here the surface owner's land for the purpose of dril West Virginia Harrison Clay - Outside Rosemont 7.5'	UTM NAD Public Road	Easting: Northing:	
Watershed:	West Fork	delicially us	ed farm name.	Long Nage West Vilginia LLO
to be provide horizontal we surface affect information re	Vest Virginia Code § 22-6A-16(c), this notice stand by W. Va. Code § 22-6A-10(b) to a surface ll; and (3) A proposed surface use and compensed by oil and gas operations to the extent the elated to horizontal drilling may be obtained to located at 601 57 th Street, SE, Charleston.	e owner whose sation agreemed damages are confrom the Secre	e land will be unt containing an ompensable und tary, at the WV	ased in conjunction with the drilling of a offer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection
Well Operator	" Diversified Production LLC	Address:	101 McOuleton Deliver	
Telephone:	Diversified Production, LLC 304-376-0111	Addiess.	101 McQuiston Drive Jackson Center, PA	
Email:	amy@aux-energy.com	Facsimile:	Jackson Center, PA	10100
	атушаал-епетуу.сотт	i destinite.		
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. RECEIVED

Office of Oil and Gas

4.2024 OCT

IN THE THE I Environmental Protection



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 3, 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 2MH 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

Sacy D. Pratt

RECEIVED
Office of Oil and Gas

DCT 4 2024

WV Department of Environmental Protection

Ce: Amy Morris Diversified Production, LLC

OM, D-4 File

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

CAS
7732-18-5
14808-60-7
7647-01-0
7732-18-5
Proprietary
7732-18-5
64742-47-8
Proprietary
Proprietary
111-30-8
68424-85-1
67-56-1

RECEIVED
Office of Oil and Gas

OCT 4 2024

WW-6A7 (6-12)

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

PAD NAME: Abbey

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

WELL RESTRICTIONS CHECKLIST

HORIZONTAL 64 WELL

RECEIVED
Office of Oil and Gas

		HOMZOWIAL VA WELL	OCT	4 2024
Well 1	Restri	ctions		
VV CII I		Cuons	Environment	artment of tal Protection
		At Least 100 Feet from Pad and LOD (including any E&S Control Featu Perennial Stream, Lake, Pond, Reservoir or Wetland; OR	re) to any	
		DEP Waiver and Permit Conditions		
	\checkmark	At Least 300 Feet from Pad and LOD (including any E&S Control Feature Naturally Producing Trout Stream; OR	re) to any	
,		DEP Waiver and Permit Conditions		
	\checkmark	At Least 1000 Feet from Pad and LOD (including any E&S Control Feat Groundwater Intake or Public Water Supply; OR	ure) to any	
		DEP Waiver and Permit Conditions		
ļ	✓	At Least 250 Feet from an Existing Water Well or Developed Spring to V Drilled; OR	Vell Being	
		Surface Owner Waiver and Recorded with County Clerk, OR		
,		DEP Variance and Permit Conditions		
Į	\checkmark	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		
Ĺ	√	At Least 625 Feet from Agricultural Buildings Larger than 2500 Square F of the Pad; OR	eet to the C	enter
		Surface Owner Waiver and Recorded with County Clerk, OR		
		DEP Variance and Permit Conditions		

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

11/29/2024