

west virginia department of environmental protection

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

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

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

DIVERSIFIED PRODUCTION LLC 101 MCQUISTON DRIVE

JACKSON CENTER, PA 16133

Re:

Permit approval for Abbey South 6MH

47-033-06047-00-00

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.

Operator's Well Number: Abbey South 6MH

Farm Name: Long Ridge West Virginia LLC

U.S. WELL NUMBER: 47-033-06047-00-00

Horizontal 6A New Drill

Date Issued: 12/20/2024

Promoting a healthy environment.

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API Number:				
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PERMIT CONDITIONS

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

CONDITIONS

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

API NO. 47- ⁰³³		
OPERATOR WELL	NO.	Abbey South 6MH
Well Pad Name	Abbev	

4703306047

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

1) Well Operat	or: Divers	ified Produc	tion, LL	4945	24121	Harrison	Clay - Q	Rosemont 7.5'
		- · · · · · · · · · · · · · · · · · · ·		Oper	ator ID	County	District	Quadrangle
2) Operator's V	Weil Numbe	r: Abbey So	uth 6MH		_ Well Pa	d Name: Abb	ey	
3) Farm Name/	Surface Ow	vner: Long Ridg	ge West Virg	inia LLC	Public Ro	ad Access: 73	/73 Middleto	own Road
4) Elevation, cu	urrent grour	nd: <u>996.78</u>	' E	levation	, proposed	post-construc	tion: 996.75	5'
5) Well Type	(a) Gas Other	X	_ Oil		Und	lerground Stora	age	
	(b)If Gas	Shallow Horizontal	X		Deep			
6) Existing Pad	l: Yes or No			····	-			
7) Proposed Ta	rget Forma	tion(s), Depth		_		and Expected leads 130', Pressure		
8) Proposed To	tal Vertical	Depth: 7,4	15'					
9) Formation at			Marcellus	s				
10) Proposed T	otal Measu	red Depth:	26,044'					
11) Proposed H	Iorizontal L	eg Length:	18,025'					
12) Approxima	ite Fresh Wa	ater Strata De	epths:	<u>65', 1</u>	60'			
13) Method to 1 14) Approxima			opins.	Offset v	vell - 47-0	91-00062		
15) Approxima	ite Coal Sea	m Depths: S	Sewickley	Coal -	25', Free	port Coal - 62	3'	
16) Approxima		_						
17) Does Propo directly overlyi					es	N	o <u>x</u>	
(a) If Yes, pro	ovide Mine	Info: Name	:					RECEIVED Office of Oil and Gas
		Depth	l:					NOV 18 2024
		Seam	•					
		Owne						Environmental Protection

APINO. 4-7330 3 3 0 6 0 4 7

OPERATOR WELL NO. Abbey South 6MH
Well Pad Name: Abbey

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	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	26,044'	26,044'	4,552ft^3/6,176ft
Tubing	2.375"	New	L80	4.7	N/A	8,000'	N/A
Liners	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Ky Willets 10/24/24

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	26"	0.25"	450	90	Ready Mix	N/A
Fresh Water/Coal	13.375"	17.5"	0.33"	1,730	610	Class A	1.19
Intermediate	9.625"	12.25"	0.352"	3,520	2,070	Class A	1.19 - 1.88
Production	5.5"	8.5"	0.361"	12,924	12,924	Class A	1.19 - 1.55
Tubing	2.375"	N/A	0.19	11,200	6,376	N/A	N/A
Liners	N/A	N/A	N/A	N/A	N/A	N/A	N/A

PACKERS

Kind:	
C'	RECEIVED Office of Oil and Gas
Sizes:	
Depths Set:	NOV 1 8 2 024
Depuis set.	
	WV Department of Environmental Protection
	Environmental Pro

WW-6B (10/14)

API NO.47 03 3 3 0 6 0 4 7

OPERATOR WELL NO. Abbey South 6MH

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 7,176' and continue to drill the curve and horizontal leg per the proposed plan in the Marcellus formation to an estimated horizontal length of 18,025' (26,044' 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:

Conductor: None

Fresh Water: Every 3rd joint from shoe to surface Intermediate: Every 3rd joint from shoe to surface Production: Every other joint from shoe to Top of Cement RECEIVED
Office of Oil and Gas

NOV 18 2024

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

WV Department of Environmental Protection

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.

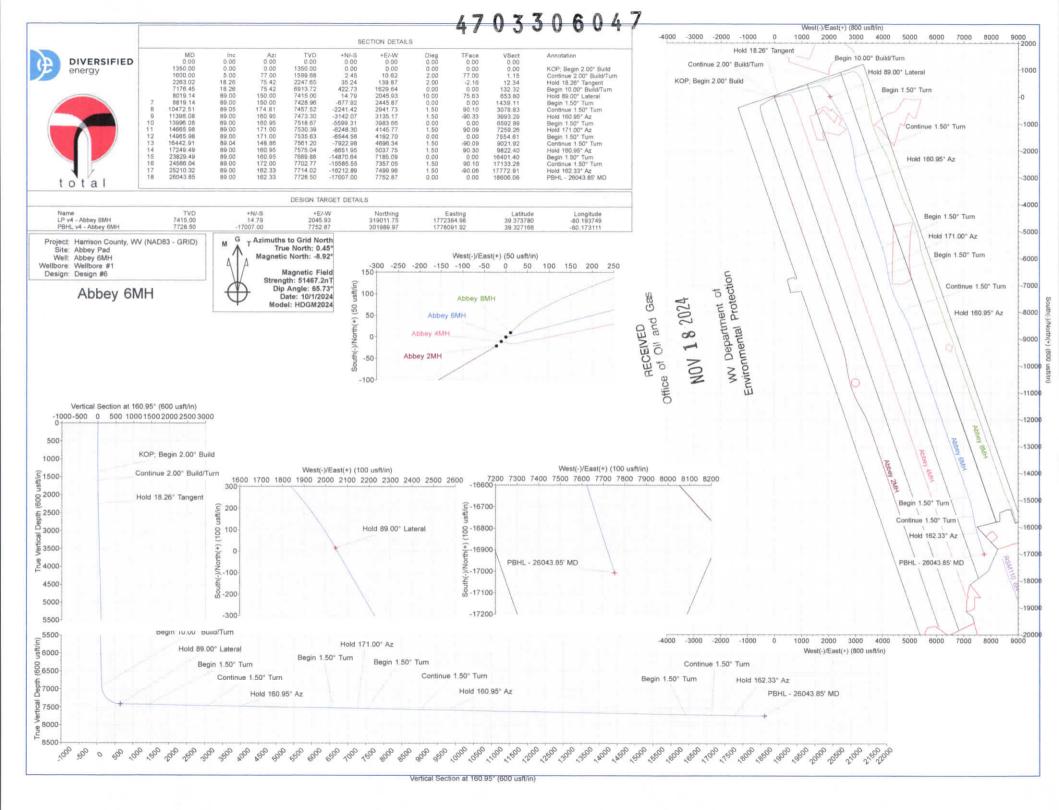
Intermediate: Condition hole with air or water based drilling fluid at TD until visibly clean; pumping sweeps if needed,

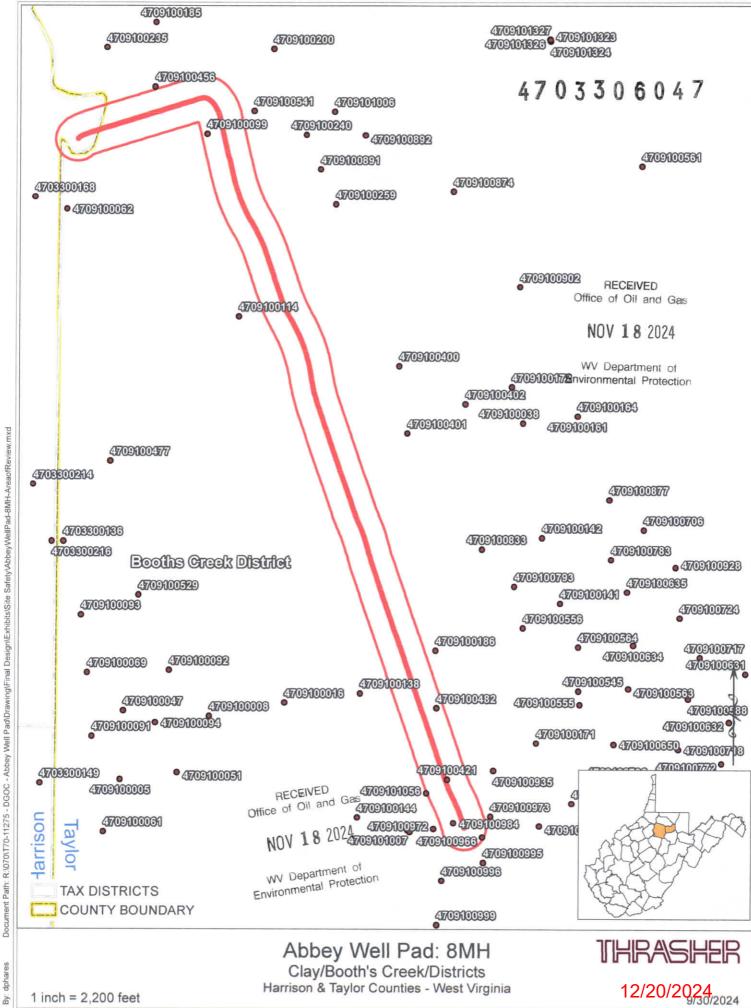
run casing, circulate and clear 1.5x pipe volume with water before cementing.

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.

Pad N	ame:	Abbey South 6MH Abbey	D en	IVERSIFIED LO	ONG RIDGE	AUXENERGY	Notes: - Formation depths are estimates - Casing Depths subject to change based on as-drilled geologic depths - Casing weights/grades subject to change, but only if a higher weight/grade is used
Rig KE		Marcellus		EN	ERGT & FOWER	A CALL VENO	- Cement additives may include Antifoam, LCM, accelerator, Retarder, Fluid Loss, Gas Migration, etc to meet needed properties Detailed program will be distributed before drilling the well
TVD		Geology		Hole Size & MW	Casing	Cement	Centralizers & Wellbore Conditioning
			Wellhead	26 "	(Size Wt Grade Connection) 20" 52.73# Grade A PE&B		
12	g,	Conductor	13-5/8" 5k	26	Conductor		No Centralizers Hole is auger drilled: No conditioning required.
121		Conductor	13-5/6 SK	17-1/2"	Conductor		note is auger driffed: No conditioning required.
90 16 62 58	3'	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
1,14 1,20 1,29 1,66 1,76	07' 91' 66'	Little Lime Big Lime Big Injun Sandstone Berea Sandstone	750' TVD	12-1/4" Air/FW Mist Fluid Drill with FW if air pack unavailable		Lead (25% OH excess) 14.5 ppg class A Cement to surface Tail (25% OH excess)	Every 3rd joint from shoe to surface
2,05 2,22 2,25 2,54	55' 25' 95'	Fifty Foot Sandstone 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 @ ~2036'	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.
2,97 4,30		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
7,04 7,08	40'	KOP (TVD) Burkett Shale Tully Limestone	<u>KOP</u> 7176' MD 6914' TVD	8-1/2" Curve & Lateral 11.5 - 12.5 ppg MW	Premium	15.2 ppg Class A Top of Tail @ ~6176'	Circulate hole with synthetic based drilling fluid at TD until hole clean and free of excess gas above background. TOOH and circulate minimum of 1 bottoms up and until returns are minima at the base of the curve. Run casing, circulate and ensure good
7.14 7,29		Hamilton Shale Marcellus Shale	Landing Point 8019' MD		18,025' Lateral		returns and low gas before cementing. BHL 26044' MD
7,42 7,42	55.55	Landing Point (TVD) Onondaga	7415' TVD Dip Angle =	89	16,025 Lateral =		7729' TVD
		RECEIVED Office of Oil and Gas NOV 18 2024					





Area of Review for Communication Purposes Report

Abbey South 6MH

					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
47-091-00456	Energy Corporation of America	N/A	N/A	N/A	no	Never Drilled
47-091-00099	Ross & Wharton Gas Company, Inc.	1462'	Big Injun	unknown	no	Abandonded Vertical Well
47-091-00482	Eastern Gas Transmission & Storage, Inc.	2940'	Speechley	unknown	yes	Vertical Well
47-091-00421	Berry Energy, Inc.	2824'	Speechley	unknown	yes	Abandonded Vertical Well
47-091-00084	Unknown Operator	N/A	N/A	N/A	no	Abandonded Vertical Well
47-091-00966	Bowie, Inc.	N/A	N/A	N/A	no	Never Drilled
47-091-01056	Berry Energy, Inc.	2143'	N/A	N/A	yes	Vertical Well

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

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W Department of Environmental Protection

Diversified Production, LLC

Harrison County, WV (NAD83 - GRID) Abbey Pad Abbey 6MH

Wellbore #1

Plan: Design #6



Standard Plan Report

26 September, 2024

Office of Oil and Gas

NOV 18 2024

WV Department of Environmental Protection

Total Report Version 1.70

COMPASS 5000.16 Build 97





Diversified Production, LLC Company:

Harrison County, WV (NAD83 - GRID) Project:

Abbey Pad Site: Well

Abbey 6MH Wellbore #1

Design #6

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well Abbey 6MH

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

Grid

Minimum Curvature

.Total Directional Production DB

Project Harrison County, WV (NAD83 - GRID)

Map System: Geo Datum:

Map Zone:

Wellbore:

Design:

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

System Datum:

Mean Sea Level

Site Abbey Pad

Site Position: From:

Мар

Northing: Easting:

319,064.16 usft 1,770,510.16 usft

Latitude: Longitude: 39.373884

Position Uncertainty:

0.00 usft

Slot Radius:

13-3/16 '

-80.200383

Well Abbey 6MH

Well Position

+N/-S +E/-W

0.00 usft 0.00 usft 0.00 usft

Northing:

Easting:

318,996.96 usft 1,770,339.05 usfi

Latitude: Longitude:

39.373696 -80.200986

Position Uncertainty

Wellhead Elevation:

usfi

Ground Level:

996.00 usfl

Grid Convergence:

-0.45 °

Wellbore #1

Magnetics

Wellbore

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

HDGM2024

10/1/2024

-9.37

65.73

51,467.20000000

Design

Design #6

Audit Notes:

Version:

Phase:

PLAN

Tie On Depth:

0.00

0.00

Vertical Section:

Depth From (TVD)

+N/-S

+E/-W

Direction

(usft)

(usft) 0.00 (usft)

(°)

160.95

Survey Tool Program

Date 9/26/2024

From (usft) To

(usft)

Survey (Wellbore)

Tool Name

Description

0.00

26,043.85

Design #6 (Wellbore #1)

0.00

MWD+HRGM

OWSG MWD + HRGM

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NOV 18 2024

WV Department of Environmental Protection





Company:

Diversified Production, LLC

Project:

Harrison County, WV (NAD83 - GRID)

Site: Well:

Design:

Abbey Pad Abbey 6MH

Design #6

Well: Abbey 6MH Wellbore: Wellbore #1 Local Co-ordinate Reference:

TVD Reference:

MD Reference:

Well Abbey 6MH

Grid

WELL @ 1024.00usft (28' RKB)

WELL @ 1024.00usft (28' RKB)

North Reference:

Survey Calculation Method:

Database:

Minimum Curvature

.Total Directional Production DB

Plan 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	
1,350.00	0.00	0.00	1,350.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,600.00	5.00	77.00	1,599.68	2.45	10.62	2.00	2.00	0.00	77.00	
2,263.02	18.26	75.42	2,247.65	35.24	139.87	2.00	2.00	-0.24	-2.16	
7,176.45	18.26	75.42	6,913.72	422.73	1,629.64	0.00	0.00	0.00	0.00	
8,019.14	89.00	150.00	7,415.00	14.79	2,045.93	10.00	8.39	8.85	75.63	LP v4 - Abbey 6MH
8,819.14	89.00	150.00	7,428.96	-677.92	2,445.87	0.00	0.00	0.00	0.00	
10,472.51	89.05	174.81	7,457.52	-2,241.42	2,941.73	1.50	0.00	1.50	90.10	
11,396.08	89.00	160.95	7,473.30	-3,142.07	3,135.17	1.50	-0.01	-1.50	-90.33	
13,996.08	89.00	160.95	7,518.67	-5,599.31	3,983.66	0.00	0.00	0.00	0.00	
14,665.98	89.00	171.00	7,530.39	-6,248.30	4,145.77	1.50	0.00	1.50	90.09	
14,965.98	89.00	171.00	7,535.63	-6,544.56	4,192.70	0.00	0.00	0.00	0.00	
16,442.91	89.04	148.86	7,561.20	-7,922.98	4,696.34	1.50	0.00	-1.50	-90.09	
17,249.49	89.00	160.95	7,575.04	-8,651.95	5,037.75	1.50	-0.01	1.50	90.30	
23,829.49	89.00	160.95	7,689.88	-14,870.64	7,185.09	0.00	0.00	0.00	0.00	
24,566.04	89.00	172.00	7,702.77	-15,585.55	7,357.05	1.50	0.00	1.50	90.10	
25,210.32	89.00	162.33	7,714.02	-16,212.89	7,499.96	1.50	0.00	-1.50	-90.06	
26,043.85	89.00	162.33	7,728.50	-17,007.00	7,752.87	0.00	0.00	0.00	0.00	PBHL v4 - Abbey 61

Planned Su	irvey												
Measured			Vertical	Local Coo		Map Coo		Geo Coord		Vertical			
Depth (usft)	(°)	AZI (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude (°)	Longituge (°)	Section (usft)	Rate (*/100usft)	Rate (*/100usft)	Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
1,350.00	0.00	0.00	1,350.00	0.00	0.00	318,996.96	1,770,339.05	39.373696	-80.200986	0.00	0.00	0.00	0.00
1,400.00	1.00	77.00	1,400.00	0.10	0.43	318,997.06	1,770,339.48	39.373696	-80.200985	0.05	2.00	2.00	0.00
1,500.00	3.00	77.00	1,499.93	0.88	3.83	318,997.85	1,770,342.88	39.373698	-80.200973	0.41	2.00	2.00	0.00
1,600.00	5.00	77.00	1,599.68	2.45	10.62	318,999.41	1,770,349.68	39.373703	-80.200949	1.15	2.00	2.00	0.00





Company: Diversified Production, LLC

Design #6

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 6MH Wellbore: Wellbore #1

Design:

WV (NAD83 - GRID)

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Local Co-ordinate Reference:

Database:

Well Abbey 6MH

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

Grid

Minimum Curvature

.Total Directional Production DB

easured Depth	INC	AZI	Vertical Depth	Local Cod +N/-S	rdinates +E/-W	Map Coo Northing	ordinates Easting	Geo Coord Latitude	inates Longituge	Vertical Section	Dogleg Rate	Build Rate	Turr
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(°)		(*/100usft)		
1,700.00	7.00	76.38	1,699.13	4.87	20.79	319,001.83	1,770,359.84	39.373709	-80.200913	2.19	2.00	2.00	-0.6
1,800.00	9.00	76.04	1,798.15	8.19	34.30	319,005.15	1,770,373.36	39.373719	-80.200865	3.46	2.00	2.00	-0.3
1,900.00	11.00	75.82	1,896.63	12.41	51.14	319,009.38	1,770,390.19	39.373731	-80.200806	4.96	2.00	2.00	-0.2
2,000.00	13.00	75.67	1,994.44	17.54	71.29	319,014.50	1,770,410.34	39.373745	-80.200735	6.69	2.00	2.00	-0.
2,100.00	15.00	75.55	2,091.46	23.55	94.71	319,020.51	1,770,433.77	39.373762	-80.200652	8.66	2.00	2.00	-0.
2,200.00	17.00	75.47	2,187.59	30.45	121.40	319,027.41	1,770,460.45	39.373782	-80.200558	10.84	2.00	2.00	-0.
2,263.02	18.26	75.42	2,247.65	35.24	139.87	319,032.20	1,770,478.92	39.373795	-80.200492	12.34	2.00	2.00	-0.
2,300.00	18.26	75.42	2,282.77	38.16	151.08	319,035.12	1,770,490.13	39.373804	-80.200453	13.24	0.00	0.00	0.
2,400.00	18.26	75.42	2,377.73	46.04	181.40	319,043.01	1,770,520.45	39.373826	-80.200346	15.68	0.00	0.00	0
2,500.00	18.26	75.42	2,472.70	53.93	211.72	319,050.89	1,770,550.77	39.373848	-80.200239	18.13	0.00	0.00	0
2,600.00	18.26	75.42	2,567.66	61.82	242.04	319,058.78	1,770,581.09	39.373871	-80.200132	20.57	0.00	0.00	0.
2,700.00	18.26	75.42	2,662.63	69.70	272.36	319,066.67	1,770,611.42	39.373893	-80.200025	23.01	0.00	0.00	0
2,800.00	18.26	75.42	2,757.59	77.59	302.68	319,074.55	1,770,641.74	39,373915	-80.199918	25.45	0.00	0.00	0
2,900.00	18.26	75.42	2,852.56	85.48	333.00	319,082.44	1,770,672.06	39.373937	-80.199811	27.89	0.00	0.00	0
,000.00	18.26	75.42	2,947.52	93.36	363.32	319,090.33	1,770,702.38	39.373960	-80.199704	30.34	0.00	0.00	0
,100.00	18.26	75.42	3,042.49	101.25	393.64	319,098.21	1,770,732.70	39.373982	-80.199597	32.78	0.00	0.00	0
3,200.00	18.26	75.42	3,137.46	109.14	423.96	319,106.10	1,770,763.02	39.374004	-80.199490	35.22	0.00	0.00	0
3,300.00	18.26	75.42	3,232.42	117.02	454.28	319,113.98	1,770,793.34	39.374027	-80,199383	37.66	0.00	0.00	0
,400.00	18.26	75.42	3,327.39	124.91	484.61	319,121.87	1,770,823.66	39.374049	-80.199275	40.10	0.00	0.00	0
3,500.00	18.26	75.42	3,422.35	132.79	514.93	319,129.76	1,770,853.98	39.374071	-80.199168	42.55	0.00	0.00	0
3,600.00	18.26	75.42	3,517.32	140.68	545.25	319,137.64	1,770,884.30	39.374094	-80.199061	44.99	0.00	0.00	0
3,700.00	18.26	75.42	3,612.28	148.57	575.57	319,145.53	1,770,914.62	39.374116	-80.198954	47.43	0.00	0.00	0
,800.00	18.26	75.42	3,707.25	156.45	605.89	319,153.42	1,770,944.94	39.374138	-80.198847	49.87	0.00	0.00	0
,900.00	18.26	75.42	3,802.22	164.34	636.21	319,161.30	1,770,975.26	39.374160	-80.198740	52.31	0.00	0.00	0
,000.00	18.26	75.42	3,897.18	172.23	666.53	319,169.19	1,771,005.58	39.374183	-80.198633	54.76	0.00	0.00	0
,100.00	18.26	75.42	3,992.15	180.11	696.85	319,177.08	1,771,035.90	39.374205	-80.198526	57.20	0.00	0.00	0
,200.00	18.26	75.42	4,087.11	188.00	727.17	319,184.96	1,771,066.22	39.374227	-80.198419	59.64	0.00	0.00	0
,300.00	18.26	75.42	4,182.08	195.89	757.49	319,192.85	1,771,096.54	39.374250	-80.198312	62.08	0.00	0.00	C
,400.00	18.26	75.42	4,277.04	203.77	787.81	319,200.73	1,771,126.86	39.374272	-80.198205	64.52	0.00	0.00	C
,500.00	18.26	75.42	4,372.01	211.66	818.13	319,208.62	1,771,157.18	39.374294	-80.198098	66.97	0.00	0.00	0
,600.00	18.26	75.42	4,466.97	219.54	848.45	319,216.51	1,771,187.50	39.374316	-80.197991	69.41	0.00	0.00	0
,700.00	18.26	75.42	4,561.94	227.43	878.77	319,224.39	1,771,217.83	39.374339	-80.197884	71.85	0.00	0.00	C
,800.00	18.26	75.42	4,656.91	235.32	909.09	319,232.28	1,771,248.15	39.374361	-80.197777	74.29	0.00	0.00	0
,900.00	18.26	75.42	4,751.87	243.20	939.41	319,240.17	1,771,278.47	39.374383	-80.197670	76.73	0.00	0.00	0
,000.00	18.26	75.42	4,846.84	251.09	969.73	319,248.05	1,771,308.79	39.374406	-80.197563	79.18	0.00	0.00	0
,100.00	18.26	75.42	4,941.80	258.98	1,000.05	319,255.94	1,771,339.11	39.374428	-80.197456	81.62	0.00	0.00	0
,200.00	18.26	75.42	5,036.77	266.86	1,030.37	319.263.83	1,771,369.43	39.374450	-80.197349	84.06	0.00	0.00	0





Company: Diversified Production, LLC

Design #6

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 6MH Wellbore:

Design:

Wellbore #1

Local Co-ordinate Reference: Well Abbey 6MH

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	irvey						THE REAL PROPERTY.			NEW SOL		He k Turkey	
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
5,300.00	18.26	75.42	5,131.73	274.75	1,060.70	319,271.71	1,771,399.75	39.374473	-80.197242	86.50	0.00	0.00	0.00
5,400.00	18.26	75.42	5,226.70	282.64	1,091.02	319,279.60	1,771,430.07	39.374495	-80.197135	88.94	0.00	0.00	0.00
5,500.00	18.26	75.42	5,321.67	290.52	1,121.34	319,287.48	1,771,460.39	39.374517	-80.197028	91.39	0.00	0.00	0.00
5,600.00	18.26	75.42	5,416.63	298.41	1,151.66	319,295.37	1,771,490.71	39.374539	-80,196921	93.83	0.00	0.00	0.00
5,700.00	18.26	75.42	5,511.60	306.29	1,181.98	319,303.26	1,771,521.03	39.374562	-80.196814	96.27	0.00	0.00	0.00
5,800.00	18.26	75.42	5,606.56	314.18	1,212.30	319,311.14	1,771,551.35	39.374584	-80,196707	98.71	0.00	0.00	0.00
5,900.00	18.26	75.42	5,701.53	322.07	1,242.62	319,319.03	1,771,581.67	39.374606	-80.196600	101.15	0.00	0.00	0.00
6,000.00	18.26	75.42	5,796.49	329.95	1,272.94	319,326.92	1,771,611.99	39.374629	-80.196493	103.60	0.00	0.00	0.00
6,100.00	18.26	75.42	5,891.46	337.84	1,303.26	319,334.80	1,771,642.31	39.374651	-80.196385	106.04	0.00	0.00	0.00
6,200.00	18.26	75.42	5,986.43	345.73	1,333.58	319,342.69	1,771,672.63	39.374673	-80.196278	108.48	0.00	0.00	0.00
6,300.00	18.26	75.42	6,081.39	353.61	1,363.90	319,350.57	1,771,702.95	39.374696	-80.196171	110.92	0.00	0.00	0.00
6,400.00	18.26	75.42	6,176.36	361.50	1,394.22	319,358.46	1,771,733.27	39.374718	-80.196064	113.36	0.00	0.00	0.00
6,500.00	18.26	75.42	6,271.32	369.39	1,424.54	319,366.35	1,771,763.59	39.374740	-80.195957	115.81	0.00	0.00	0.00
6,600.00	18.26	75.42	6,366.29	377.27	1,454.86	319,374.23	1,771,793.91	39,374762	-80.195850	118.25	0.00	0.00	0.00
6,700.00	18.26	75.42	6,461.25	385.16	1,485.18	319,382.12	1,771,824.24	39.374785	-80.195743	120.69	0.00	0.00	0.00
6,800.00	18.26	75.42	6,556.22	393.04	1,515.50	319,390.01	1,771,854.56	39.374807	-80.195636	123.13	0.00	0.00	0.00
6,900.00	18.26	75.42	6,651.18	400.93	1,545.82	319,397.89	1,771,884.88	39.374829	-80.195529	125.57	0.00	0.00	0.00
7,000.00	18.26	75.42	6,746.15	408.82	1,576.14	319,405.78	1,771,915.20	39.374852	-80.195422	128.02	0.00	0.00	0.00
7,100.00	18.26	75.42	6,841.12	416.70	1,606.46	319,413.67	1,771,945.52	39.374874	-80.195315	130.46	0.00	0.00	0.00
7,176.45	18.26	75.42	6,913.72	422.73	1,629.64	319,419.69	1,771,968.70	39.374891	-80.195233	132.32	0.00	0.00	0.00
7,200.00	18.98	82.45	6,936.04	424.16	1,637.01	319,421.13	1,771,976.06	39.374895	-80.195207	133.37	10.00	3.05	29.86
7,250.00	21.27	95.41	6,983.01	424.38	1,654.11	319,421.34	1,771,993.16	39.374896	-80.195147	138.75	10.00	4.59	25.92
7,300.00	24.35	105.60	7,029.11	420.75	1,673.08	319,417.71	1,772,012.13	39,374886	-80.195080	148.38	10.00	6.17	20.37
7,350.00	27.97	113.46	7,073.99	413.31	1,693.78	319,410.27	1,772,032.83	39.374866	-80.195006	162.17	10.00	7.23	15.72
7,400.00	31.93	119.58	7,117.32	402.10	1,716.04	319,399.07	1,772,055.10	39.374836	-80.194927	180.02	10.00	7.93	12.24
7,450.00	36.13	124.45	7,158.76	387.23	1,739.71	319,384.19	1,772,078.76	39.374796	-80.194843	201.81	10.00	8.39	9.73
7,500.00	40.48	128.41	7,197.99	368.80	1,764.60	319,365.76	1,772,103.65	39.374746	-80.194754	227.35	10.00	8.71	7.93
7,550.00	44.95	131.71	7,234.72	346.95	1,790.52	319,343.91	1,772,129.57	39.374686	-80.194662	256.47	10.00	8.94	6.61
7,600.00	49.50	134.54	7,268.67	321.85	1,817.27	319,318.81	1,772,156.33	39.374618	-80.194567	288.93	10.00	9.10	5.64
7,650.00	54.12	137.00	7,299.58	293.68	1,844.66	319,290.64	1,772,183.71	39.374541	-80.194469	324.49	10.00	9.22	4.92
7,700.00	58.77	139.18	7,327.21	262.67	1,872.46	319,259.63	1,772,211.52	39.374457	-80.194370	362.87	10.00	9.31	4.38
7,750.00	63.46	141.17	7,351.35	229.05	1,900.48	319,226.01	1,772,239.53	39.374365	-80.194270	403.80	10.00	9.38	3.96
7,800.00	68.18	142.99	7,371.83	193.07	1,928.49	319,190.03	1,772,267.55	39.374267	-80.194170	446.95	10.00	9.43	3.65
7,850.00	72.91	144.70	7,388.48		1,956.29		1,772,295.34	39.374163	-80.194070	492.00	10.00	9.47	3.42
7,900.00	77.66	146.32	7,401.18	115.16	1,983.66	319,112.12	1,772,322.71	39.374054	-80.193973	538.60	10.00	9.49	3.25
7,950.00	82.41	147.89	7,409.83	73.82	2,010.39	319,070.78	1,772,349.44	39.373941	-80.193877	586.40	10.00	9.51	3.13
8,000.00	87.18	149.42	7,414.36	31.31	2,036.28	319,028.27	1,772,375.34	39.373825	-80.193784	635.04		9.52	3.06
8,019.14	89.00	150.00	7,415.00	14.79	2,045.93	319,011.75	1,772,384.98	39.373780	-80.193750	653.80	10.00	9.53	3.04





Company: Diversified Production, LLC

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 6MH

Wellbore: Wellbore #1
Design: Design #6

Local Co-ordinate Reference: Well Abbey 6MH

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

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
8,100.00	89.00	150.00	7,416.41	-55.23	2,086.36	318,941.73	1,772,425.41	39.373588	-80.193605	733.18	0.00	0.00	0.00
8,200.00	89.00	150.00	7,418.16	-141.82	2,136.35	318,855.15	1,772,475.40	39.373352	-80.193425	831.34	0.00	0.00	0.00
8,300.00	89.00	150.00	7,419.90	-228.41	2,186.34	318,768.56	1,772,525.39	39.373115	-80.193246	929.50	0.00	0.00	0.00
8,400.00	89.00	150.00	7,421.65	-315.00	2,236.33	318,681.97	1,772,575.39	39.372878	-80.193067	1,027.67	0.00	0.00	0.00
8,500.00	89.00	150.00	7,423.39	-401.59	2,286.33	318,595.38	1,772,625.38	39.372642	-80.192888	1,125.83	0.00	0.00	0.00
8,600.00	89.00	150.00	7,425.14	-488.17	2,336.32	318,508.79	1,772,675.37	39.372405	-80.192709	1,224.00	0.00	0.00	0.00
8,700.00	89.00	150.00	7,426.88	-574.76	2,386.31	318,422.20	1,772,725.36	39.372168	-80.192529	1,322.16	0.00	0.00	0.00
8,800.00	89.00	150.00	7,428.63	-661.35	2,436.30	318,335.61	1,772,775.36	39.371932	-80.192350	1,420.33	0.00	0.00	0.00
8,819.14	89.00	150.00	7,428.96	-677.92	2,445.87	318,319.04	1,772,784.92	39.371886	-80 192316	1,439.11	0.00	0.00	0.00
8,900.00	89.00	151.21	7,430.37	-748.37	2,485.55	318,248.60	1,772,824.60	39.371694	-80.192174	1,518.65	1.50	0.00	1.50
9,000.00	89.00	152.71	7,432.12	-836.61	2,532.55	318,160.35	1,772,871.60	39.371453	-80.192005	1,617.40	1.50	0.00	1.50
9,100.00	89.00	154.21	7,433.88	-926.06	2,577.21	318,070.90	1,772,916.27	39.371208	-80.191845	1,716.53	1.50	0.00	1.50
9,200.00	89.00	155.71	7,435.63	-1,016.65	2,619.52	317,980.31	1,772,958.58	39.370960	-80.191692	1,815.97	1.50	0.00	1.50
9,300.00	89.00	157.21	7,437.38	-1,108.32	2,659.45	317,888.65	1,772,998.50	39.370709	-80.191549	1,915.64	1.50	0.00	1.50
9,400.00	89.00	158.72	7,439.13	-1,200.99	2,696.96	317,795.97	1,773,036.01	39.370456	-80.191414	2,015.49	1.50	0.00	1.50
9,500.00	89.00	160.22	7,440.88	-1,294.62	2,732.03	317,702.34	1,773,071.08	39.370199	-80.191287	2,115.44	1.50	0.00	1.50
9,600.00	89.00	161.72	7,442.63	-1,389.14	2,764.64	317,607.82	1,773,103.69	39.369941	-80.191169	2,215.42	1.50	0.00	1.50
9,700.00	89.00	163.22	7,444.37	-1,484.48	2,794.76	317,512.49	1,773,133.81	39.369680	-80,191060	2,315.37	1.50	0.00	1.50
9,800.00	89.01	164.72	7,446.10	-1,580.57	2,822.37	317,416.39	1,773,161.43	39.369416	-80.190960	2,415.21	1.50	0.00	1.50
9,900.00	89.01	166.22	7,447.83	-1,677.35	2,847.46	317,319.61	1,773,186.52	39,369151	-80.190868	2,514.88	1.50	0.00	1.50
10,000.00	89.02	167.72	7,449.55	-1,774.76	2,870.01	317,222.20	1,773,209.06	39.368884	-80.190786	2,614.31	1.50	0.01	1.50
10,100.00	89.02	169.22	7,451.26	-1,872.72	2,890.00	317,124.24	1,773,229.05	39.368616	-80.190712	2,713.44	1.50	0.01	1.50
10,200.00	89.03	170.72	7,452.96	-1,971.18	2,907.41	317,025.79	1,773,246.47	39.368346	-80.190648	2,812.18	1.50	0.01	1.50
10,300.00	89.04	172.22	7,454.64	-2,070.05	2,922.25	316,926.91	1,773,261.30	39.368075	-80.190593	2,910.49	1.50	0.01	1.50
10,400.00	89.05	173.72	7,456.31	-2,169.28	2,934.49	316,827.68	1,773,273.54	39.367802	-80.190547	3,008.28	1.50	0.01	1.50
10,472.51	89.05	174.81	7,457.52	-2,241.42	2,941.73	316,755.54	1,773,280.79	39.367604	-80.190519	3,078.83	1.50	0.01	1.50
10,500.00	89.05	174.39	7,457.97	-2,268.78	2,944.32	316,728.18	1,773,283.37	39.367529	-80.190510	3,105.54	1.50	-0.01	-1.50
10,600.00	89.04	172.89	7,459.64	-2,368.15	2,955.39	316,628.81	1,773,294.44	39.367257	-80.190468	3,203.08	1.50	-0.01	-1.50
10,700.00	89.03	171.39	7,461.32	-2,467.20	2,969.05	316,529.76	1,773,308.11	39.366985	-80,190417	3,301.16	1.50	-0.01	-1.50
10,800.00	89.03	169.89	7,463.01	-2,565.85	2,985.31	316,431.11	1,773,324.36	39.366715	-80.190357	3,399.71	1.50	-0.01	-1.50
10,900.00	89.02	168.39	7,464.72	-2,664.04	3,004.14	316,332.92	1,773,343.19	39.366445	-80.190287	3,498.68	1.50	-0.01	-1.50
11,000.00	89.02	166.89	7,466.43	-2,761.71	3,025.54	316,235.25	1,773,364.59	39.366178	-80.190209	3,597.98	1.50	-0.01	-1.50
11,100.00	89.01	165.39	7,468.15	-2,858.78	3,049.48	316,138.18	1,773,388.54	39.365912	-80.190122	3,697.55	1.50	0.00	-1.50
11,200.00	89.01	163.89	7,469.88	-2,955.19	3,075.96	316,041.77	1,773,415.02	39.365648	-80.190025	3,797.32	1.50	0.00	-1.50
11,300.00	89.00	162.39	7,471.62	-3,050.88	3,104.96	315,946.08	1,773,444.01	39.365386	-80.189920	3,897.23	1.50	0.00	-1.50
11,396.08	89.00	160.95	7,473.30	-3,142.07	3,135.17	315,854.89	1,773,474.22	39.365136	-80.189811	3,993.29	1.50	0.00	-1.50
11,400.00	89.00	160.95	7,473.36	-3,145.77	3,136.45	315,851.19	1,773,475.50	39.365126	-80.189806	3,997.21	0.00	0.00	0.00





Company: Diversified Production, LLC

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 6MH Wellbore: Wellbore #1 Local Co-ordinate Reference:

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

Well Abbey 6MH

North Reference: Grid

Survey Calculation Method: Minimum Curvature

Design:		sign #6				Database	alculation Met		imum Curvatu tal Directional		n DB		
Planned Su	rvey					- Was			e Britania di Santa				
Measured Depth (usft)	INC	AZI (°)	Vertical Depth (usft)	Local Cod +N/-S (usft)	+E/-W (usft)	Map Coo Northing (usft)	erdinates Easting (usft)	Geo Coord Latitude	inates Longituge (°)	Vertical Section (usft)		Rate	Rate
11,500.00	89.00	160.95	7,475.11	-3,240.28	3,169.08	315,756.68	1,773,508.13	39.364867	-80.189688	4,097.19	0.00	0.00	0.00
11,600.00	89.00	160.95	7,476.85	-3,334.79	3,201.71	315,662.17	1,773,540.77	39.364608	-80.189570			0.00	0.00
11,700.00	89.00	160.95	7,478.60	-3,429.30	3,234.35	315,567.66	1,773,573.40	39.364349	-80.189452			0.00	0.00
11,800.00	89.00	160.95	7,480.35	-3,523.81	3,266.98	315,473.15	1,773,606.04	39.364091	-80.189334	4,397.15		0.00	0.00
11,900.00	89.00	160.95	7,482.09	-3,618.32	3,299.62	315,378.64	1,773,638.67	39.363832	-80.189216			0.00	0.00
12,000.00	89.00	160.95	7,483.84	-3,712.83	3,332.25	315,284.14	1,773,671.31	39.363573	-80.189098	4,597.12	0.00	0.00	0.00
12,100.00	89.00	160.95	7,485.58	-3,807.34	3,364.89	315,189.63	1,773,703.94	39.363314	-80.188980	4,697.10		0.00	0.00
12,200.00	89.00	160.95	7,487.33	-3,901.85	3,397.52	315,095.12	1,773,736.57	39.363055	-80.188862	4,797.09		0.00	0.00
12,300.00	89.00	160.95	7,489.07	-3,996.35	3,430.16	315,000.61	1,773,769.21	39.362797	-80.188744	4,897.07		0.00	0.00
12,400.00	89.00	160.95	7,490.82	-4,090.86	3,462.79	314,906.10	1,773,801.84	39.362538	-80.188626	4,997.05		0.00	0.00
12,500.00	89.00	160.95	7,492.56	-4,185.37	3,495.42	314,811.59	1,773,834.48	39.362279	-80.188508	5,097.04	0.00	0.00	0.00
12,600.00	89.00	160.95	7,494.31	-4,279.88	3,528.06		1,773,867.11	39.362020	-80.188390	5,197.02		0.00	0.00
12,700.00	89.00	160.95	7,496.05	-4,374.39	3,560.69		1,773,899.75	39.361762	-80.188272	5,297.01		0.00	0.00
12,800.00	89.00	160.95	7,497.80	-4,468.90	3,593.33	314,528.06	1,773,932.38	39.361503	-80.188154	5,396.99		0.00	0.00
12,900.00	89.00	160.95	7,499.54	-4,563.41	3,625.96	314,433.55	1,773,965.01	39.361244	-80.188036	5,496.98		0.00	0.00
13,000.00	89.00	160.95	7,501.29	-4,657.92	3,658.60	314,339.05	1,773,997.65	39.360985	-80.187918	5,596.96	0.00	0.00	0.00
13,100.00	89.00	160.95		-4,752.43	3,691.23		1,774,030.28	39.360726	-80.187800	5,696.95		0.00	0.00
13,200.00	89.00	160.95	7,504.78	-4,846.94	3,723.86	314,150.03	1,774,062.92	39.360468	-80.187683	5,796.93		0.00	0.00
13,300.00	89.00	160.95	7,506.52	-4,941.44	3,756.50	314,055.52	1,774,095.55	39.360209	-80.187565	5,896.92		0.00	0.00
13,400.00	89.00	160.95	7,508.27	-5,035.95	3,789.13	313,961.01	1,774,128.19	39.359950	-80.187447	5,996.90		0.00	0.00
13,500.00	89.00	160.95	7,510.01	-5,130.46	3,821.77	313,866.50	1,774,160.82	39.359691	-80.187329	6,096.89	0.00	0.00	0.00
13,600.00	89.00	160.95	7,511.76	-5,224.97	3,854.40	313,771.99	1,774,193.45	39.359432	-80.187211	6,196.87		0.00	0.00
13,700.00	89.00	160.95	7,513.50	-5,319.48	3,887.04	313,677.48	1,774,226.09	39.359174	-80.187093	6,296.86		0.00	0.00
13,800.00	89.00	160.95	7,515.25	-5,413.99	3,919.67		1,774,258.72	39.358915	-80.186975	6,396.84		0.00	0.00
13,900.00	89.00	160.95	7,517.00	-5,508.50	3,952.30	313,488.46	1,774,291.36	39.358656	-80.186857	6,496.83		0.00	0.00
13,996.08	89.00	160.95	7,518.67	-5,599.31	3,983.66	313,397.66	1,774,322.71	39.358407	-80.186743	6,592.89	0.00	0.00	0.00
14,000.00	89.00	161.01	7,518.74	-5,603.01	3,984.94	313,393.95	1,774,323.99	39.358397	-80.186739	6,596.81	1.50	0.00	1.50
14,100.00	89.00	162.51	7,520.49	-5,697.97	4,016.23	313,299.00	1,774,355.29	39.358137	-80.186625	6,696.78		0.00	1.50
14,200.00	89.00	164.01	7,522.24	-5,793.71	4,045.03	313,203.25	1,774,384.09	39.357875	-80.186521	6,796.68		0.00	1.50
14,300.00	89.00	165.51	7,523.99	-5,890.18	4,071.32	313,106.79	1,774,410.37	39.357611	-80.186426	6,896.44	1.50	0.00	1.50
14,400.00	89.00	167.01	7,525.74	-5,987.30	4,095.06	313,009.67	1,774,434.12	39.357345	-80.186339	6,996.00	1.50	0.00	1.50
14,500.00	89.00	168.51	7,527.49	-6,085.01	4,116.26	312,911.96	1,774,455.31	39.357077	-80.186261	7,095.27	1.50	0.00	1.50
14,600.00	89.00	170.01	7,529.24	-6,183.24	4,134.89	312,813.73	1,774,473.95	39.356808	-80.186193	7,194.21		0.00	1.50
14,665.98	89.00	171.00	7,530.39	-6,248.30	4,145.77	312,748.66	1,774,484.83	39.356629		7,259.26		0.00	1.50
14,700.00	89.00	171.00	7,530.99	-6,281.90	4,151.10		1,774,490.15	39.356537		7,292.75		0.00	0.00
14,800.00	89.00	171.00	7,532.73	-6,380.65	4,166.74	312,616.31	1,774,505.79	39.356266	-80.186075	7,391.20	0.00	0.00	0.00
14,900.00	89.00	171.00	7,534.48	-6,479.40	4,182.38	312,517.56	1,774,521.43	39.355995		7,489.65		0.00	0.00
14,965.98	89.00	171.00	7,535.63	-6,544.56	4,192.70		1,774,531.75	39.355817		7,554.61		0.00	0.00





Company: Diversified Production, LLC

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 6MH Wellbore:

Design:

Wellbore #1 Design #6

Local Co-ordinate Reference: TVD Reference:

> MD Reference: North Reference:

Grid Survey Calculation Method: Minimum Curvature

Well Abbey 6MH

WELL @ 1024.00usft (28' RKB)

WELL @ 1024.00usft (28' RKB)

Database: .Total Directional Production DB

Measured Depth	INC	AZI	Vertical Depth	Local Cod +N/-S	rdinates +E/-W	Map Coo Northing	rdinates Easting	Geo Coord Latitude	inates Longituge	Vertical Section		Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(°)			(°/100usft)	
15,000.00	89.00	170.49	7,536.22	-6,578.13	4,198.17	312,418.83	1,774,537.22	39.355725	-80.185958	7,588.13	1.50	0.00	-1.5
15,100.00	89.00	168.99	7,537.97	-6,676.52	4,215.98	312,320.45	1,774,555.03	39.355455	-80.185893	7,686.94	1.50	0.00	-1.5
15,200.00	89.00	167.49	7,539.72	-6,774.40	4,236.35	312,222.56	1,774,575.40	39.355187	-80.185818	7,786.11	1.50	0.00	-1.5
15,300.00	89.00	165.99	7,541.47	-6,871.72	4,259.28	312,125.24	1,774,598.33	39.354920	-80.185734	7,885.58	1.50	0.00	-1.5
15,400.00	89.00	164.49	7,543.23	-6,968.40	4,284.75	312,028.56	1,774,623.80	39.354655	-80.185642	7,985.28	1.50	0.00	-1.5
15,500.00	89.00	162.99	7,544.98	-7,064.39	4,312.74	311,932.58	1,774,651.79	39.354392	-80.185540	8,085.15	1.50	0.00	-1.5
15,600.00	89.00	161.49	7,546.72	-7,159.61	4,343.23	311,837.36	1,774,682.28	39.354131	-80.185430	8,185.10	1.50	0.00	-1.5
15,700.00	89.00	160.00	7,548.47	-7,253.99	4,376.20	311,742.97	1,774,715.25	39.353873	-80.185310	8,285.08	1.50	0.00	-1.5
15,800.00	89.00	158.50	7,550.21	-7,347.49	4,411.63	311,649.47	1,774,750.68	39.353617	-80.185183	8,385.02	1.50	0.00	-1.5
15,900.00	89.01	157.00	7,551.94	-7,440.02	4,449.49		1,774,788.54	39,353364	-80.185046	8,484.85		0.00	-1.5
16,000.00	89.01	155.50	7,553.67	-7,531.54	4,489.76	311,465.43	1,774,828.82	39.353113	-80.184901	8,584.49		0.00	-1.5
16,100.00	89.02	154.00	7,555.39	-7,621.97	4,532.41	311,375.00	1,774,871.47	39.352866	-80.184748	8,683.89	1.50	0.01	-1.5
16,200.00	89.02	152.50	7,557.10	-7,711.25	4,577.42	311,285.71	1,774,916.47	39.352622	-80.184587	8,782.97	1.50	0.01	-1.5
16,300.00	89.03	151.00	7,558.79	-7,799.32	4,624.74		1,774,963.79	39.352381	-80.184417	8,881.67	1.50	0.01	-1.5
16,400.00	89.04	149.50	7,560.48	-7,886.13	4,674.35	311,110.84	1,775,013.41	39.352144	-80.184239	8,979.91		0.01	-1.5
16,442.91	89.04	148.86	7,561.20	-7,922.98	4,696.34	311,073.99	1,775,035.39	39.352043	-80.184160	9,021.92		0.01	-1.5
16,500.00	89.04	149.71	7,562.16	-7,972.05	4,725.49	311,024.92	1,775,064.54	39.351909	-80.184056	9,077.82	1.50	-0.01	1.5
16,600.00	89.03	151.21	7,563.85	-8,059.04	4,774.78	310,937.93	1,775,113.83	39.351671	-80.183879	9,176.13	1.50	-0.01	1.5
16,700.00	89.02	152.71	7,565.55	-8,147.28	4,821.78	310,849.68	1,775,160.83	39.351430	-80.183711	9,274.89			1.5
16,800.00	89.02	154.21	7,567.26	-8,236.73	4,866.45	310,760.23	1,775,205.50	39.351185	-80.183550	9,374.02			1.5
16,900.00	89.01	155.71	7,568.98	-8,327.32	4,908.76	310,669.64	1,775,247.82	39.350937	-80.183398	9,473.45		-0.01	1.5
17,000.00	89.01	157.21	7,570.70	-8,418.98	4,948.70	310,577.98	1,775,287.75	39.350686	-80.183255	9,573.13	1.50	0.00	1.5
17,100.00	89.00	158.71	7,572.44	-8,511.66	4,986.21	310,485.31	1,775,325.27	39.350433	-80.183119	9,672.97	1.50	0.00	1.5
17,200.00	89.00	160.21	7,574.18	-8,605.28	5,021.30	310,391.68	1,775,360.35	39.350176	-80.182993	9,772.92		0.00	1.5
17,249.49	89.00	160.95	7,575.04	-8,651.95	5,037.75	310,345.02	1,775,376.80	39.350049	-80.182933	9,822.40	1.50	0.00	1.5
17,300.00	89.00	160.95	7,575.92	-8,699.68	5,054.23	310,297.28	1,775,393.29	39.349918	-80.182874	9,872.91	0.00	0.00	0.0
17,400.00	89.00	160.95	7,577.67	-8,794.19	5,086.87	310,202.77	1,775,425.92	39.349659	-80.182756	9,972.89	0.00	0.00	0.0
17,500.00	89.00	160.95	7,579.42	-8,888.70	5,119.50	310,108.26	1,775,458.56	39.349400	-80.182638	10,072.87	0.00	0.00	0.0
17,600.00	89.00	160.95	7,581.16	-8,983.21	5,152.14	310,013.75	1,775,491.19	39.349142		10,172.86		0.00	0.0
17,700.00	89.00	160.95	7,582.91	-9,077.72	5,184.77	309,919.24	1,775,523.82	39.348883		10,272.84		0.00	0.0
17,800.00	89.00	160.95	7,584.65	-9,172.23	5,217.41	309,824.73	1,775,556.46	39.348624		10,372.83		0.00	0.0
17,900.00	89.00	160.95		-9,266.74		309,730.22	1,775,589.09	39.348365		10,472.81		0.00	0.0
18,000.00	89.00	160.95	7,588.14	-9,361.25	5,282.67	309,635.72	1,775,621.73	39.348106	-80.182048	10,572.80	0.00	0.00	0.0
18,100.00	89.00	160.95	7,589.89	-9,455.76	5,315.31		1,775,654.36	39.347848		10,672.78		0.00	0.0
8,200.00	89.00	160.95	7,591.63	-9,550.26	5,347.94		1,775,687.00	39.347589		10,772.77		0.00	0.0
18,300.00	89.00	160.95	7,593.38	-9,644.77	5,380.58	309,352.19	1,775,719.63	39.347330		10,872.75		0.00	0.0
18,400.00	89.00	160.95	7,595.12	-9,739.28	5,413.21		1,775,752.26	39.347071		10,972.74		0.00	0.0





Company: Diversified Production, LLC

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 6MH Wellbore:

Design:

Wellbore #1 Design #6

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Database:

Well Abbey 6MH

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

Grid

Minimum Curvature

.Total Directional Production DB

Planned Su	irvey			8 15 17	XIII TO E			SELECTION OF SERVE				10/11/2	
Measured Depth (usft)	INC	AZI (°)	Vertical Depth (usft)	Local Cod +N/-S (usft)	rdinates +E/-W (usft)	Map Coo Northing (usft)	erdinates Easting (usft)	Geo Coord Latitude	inates Longituge (°)	Vertical Section (usft)		Rate	Rate
18,500.00	89.00	160.95	7,596.87	-9,833.79	5,445.85	309,163.17	1,775,784.90	39.346812	-80.181459	11,072.72	0.00	0.00	0.00
18,600.00	89.00	160.95	7,598.61	-9,928.30	5,478.48	309,068.66	1,775,817.53	39.346554		11,172.71		0.00	0.00
18,700.00	89.00	160.95	7,600.36	-10,022.81	5,511.11	308,974.15	1,775,850.17	39.346295	-80.181223	11,272.69	0.00	0.00	0.00
18,800.00	89.00	160.95	7,602.10	-10,117.32	5,543.75	308,879.64	1,775,882.80	39.346036		11,372.68		0.00	0.00
18,900.00	89.00	160.95	7,603.85	-10,211.83	5,576.38	308,785.13	1,775,915.44	39.345777		11,472.66		0.00	0.00
19,000.00	89.00	160.95	7,605.59	-10,306.34	5,609.02	308,690.63	1,775,948.07	39.345519	-80.180869	11,572.65	0.00	0.00	0.00
19,100.00	89.00	160.95	7,607.34	-10,400.85	5,641.65	308,596.12	1,775,980.71	39.345260		11,672.63		0.00	0.00
19,200.00	89.00	160.95	7,609.08	-10,495.36	5,674.29	308,501.61	1,776,013.34	39.345001		11,772.62		0.00	0.00
19,300.00	89.00	160.95	7,610.83	10,589.86	5,706.92	308,407.10	1,776,045.97	39.344742		11,872.60		0.00	0.00
19,400.00	89.00	160.95	7,612.57	-10,684.37	5,739.56	308,312.59	1,776,078.61	39.344483		11,972.59		0.00	0.00
19,500.00	89.00	160.95	7,614.32	-10,778.88	5,772.19	308,218.08	1,776,111.24	39.344225	-80.180279	12,072.57	0.00	0.00	0.00
19,600.00	89.00	160.95	7,616.07	-10,873.39	5,804.82	308,123.57	1,776,143.88	39.343966		12,172.55		0.00	0.00
19,700.00	89.00	160.95	7,617.81	10,967.90	5,837.46	308,029.06	1,776,176.51	39.343707		12,272.54		0.00	0.00
19,800.00	89.00	160.95	7,619.56	-11,062.41	5,870.09	307,934.55	1,776,209.15	39.343448		12,372.52		0.00	0.00
19,900.00	89.00	160.95	7,621.30	-11,156.92	5,902.73	307,840.04	1,776,241.78	39.343189		12,472.51		0.00	0.00
20,000.00	89.00	160.95	7,623.05	-11,251.43	5,935.36	307,745.54	1,776,274.41	39.342931	-80.179690	12,572.49	0.00	0.00	0.00
20,100.00	89.00	160.95	7,624.79	-11,345.94	5,968.00	307,651.03	1,776,307.05	39.342672		12,672.48		0.00	0.00
20,200.00	89.00	160.95	7,626.54	-11,440.45	6,000.63	307,556.52	1,776,339.68	39.342413		12,772.46		0.00	0.00
20,300.00	89.00	160.95	7,628.28	-11,534.95	6,033.26	307,462.01	1,776,372.32	39.342154		12,872.45		0.00	0.00
20,400.00	89.00	160.95	7,630.03	-11,629.46	6,065.90		1,776,404.95	39.341895		12,972.43		0.00	0.00
20,500.00	89.00	160.95	7,631.77	-11,723.97	6,098.53	307,272.99	1,776,437.59	39.341637	-80.179100	13,072.42	0.00	0.00	0.00
20,600.00	89.00	160.95	7,633.52	11,818.48	6,131.17	307,178.48	1,776,470.22	39.341378	-80.178982	13,172.40	0.00	0.00	0.00
20,700.00	89.00	160.95	7,635.26	11,912.99	6,163.80	307,083.97	1,776,502.85	39.341119	-80.178864	13,272.39	0.00	0.00	0.00
20,800.00	89.00	160.95	7,637.01	12,007.50	6,196.44	306,989.46	1,776,535.49	39.340860	-80.178747	13,372.37	0.00	0.00	0.00
20,900.00	89.00	160.95	7,638.75	12,102.01	6,229.07	306,894.95	1,776,568.12	39.340601	-80.178629	13,472.36	0.00	0.00	0.00
21,000.00	89.00	160.95	7,640.50	12,196.52	6,261.70	306,800.45	1,776,600.76	39.340343	-80.178511	13,572.34	0.00	0.00	0.00
21,100.00	89.00	160.95	7,642.24	12,291.03	6,294.34	306,705.94	1,776,633.39	39.340084	-80.178393	13,672.33	0.00	0.00	0.00
21,200.00	89.00	160.95	7,643.99-	12,385.54	6,326.97	306,611.43	1,776,666.03	39.339825	-80.178275	13,772.31	0.00	0.00	0.00
21,300.00	89.00	160.95	7,645.73	12,480.04	6,359.61	306,516.92	1,776,698.66	39.339566	-80.178157	13,872.30	0.00	0.00	0.00
21,400.00	89.00	160.95	7,647.48-	12,574.55	6,392.24	306,422.41	1,776,731.30	39.339307		13,972.28		0.00	0.00
21,500.00	89.00	160.95	7,649.22-	12,669.06	6,424.88	306,327.90	1,776,763.93	39.339049	-80.177921	14,072.27	0.00	0.00	0.00
21,600.00	89.00	160.95	7,650.97-	12,763.57	6,457.51	306,233.39	1,776,796.56	39.338790	-80.177803	14,172.25	0.00	0.00	0.00
21,700.00	89.00	160.95	7,652.72-	12,858.08	6,490.15	306,138.88	1,776,829.20	39.338531		14,272.24		0.00	0.00
21,800.00	89.00	160.95	7,654.46-	12,952.59	6,522.78	306,044.37	1,776,861.83	39.338272	-80.177568	14,372.22	0.00	0.00	0.00
21,900.00	89.00	160.95	7,656.21-	13,047.10	6,555.41	305,949.86	1,776,894.47	39.338014	-80.177450	14,472.20	0.00	0.00	0.00
22,000.00	89.00	160.95	7,657.95-	13,141.61	6,588.05	305,855.36	1,776,927.10	39.337755	-80.177332	14,572.19	0.00	0.00	0.00
22,100.00	89.00	160.95	7,659.70-	13,236.12	6,620.68	305,760.85	1,776,959.74	39.337496	-80.177214	14,672.17	0.00	0.00	0.00
22,200.00	89.00	160.95	7,661.44-	13,330.63	6,653.32	305,666.34	1,776,992.37	39.337237		14,772.16		0.00	0.00





Company: Diversified Production, LLC

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 6MH Wellbore: Wellbore #1 Local Co-ordinate Reference: Well Abbey 6MH

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

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

North Reference: Grid

Survey Calculation Method: Minimum Curvature

Design: Design #6 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)	rdinates Easting	Geo Coord Latitude	inates Longituge	Vertical Section (usft)		Rate	Turn Rate
22,300.00	89.00	160.95	7,663.19	-13,425.13	6,685.95		1,777,025.00	39.336978	-80.176978	14 872 14		0.00	0.00
22,400.00	89.00	160.95		-13,519.64	6,718.59		1,777,057.64	39.336720	-80.176860			0.00	0.00
22,500.00	89.00	160.95	7,666.68	-13,614.15	6,751.22	305,382.81	1,777,090.27	39.336461	-80,176742	15,072.11	0.00	0.00	0.00
22,600.00	89.00	160.95	7,668.42	-13,708.66	6,783.85	305,288.30	1,777,122.91	39.336202	-80.176624			0.00	0.00
22,700.00	89.00	160.95	7,670.17	-13,803.17	6,816.49	305,193.79	1,777,155.54	39.335943	-80.176506			0.00	0.00
22,800.00	89.00	160.95	7,671.91	-13,897.68	6,849.12	305,099.28	1,777,188.18	39.335684	-80.176389			0.00	0.00
22,900.00	89.00	160.95	7,673.66	-13,992.19	6,881.76	305,004.77	1,777,220.81	39,335426	-80 176271			0.00	0.00
23,000.00	89.00	160.95	7,675.40	-14,086.70	6,914.39	304,910.27	1,777,253.44	39.335167	-80.176153	15,572.04	0.00	0.00	0.00
23,100.00	89.00	160.95	7,677.15	-14,181.21	6,947.03	304,815.76	1,777,286.08	39.334908	-80.176035			0.00	0.00
23,200.00	89.00	160.95	7,678.89	-14,275.72	6,979.66	304,721.25	1,777,318.71	39.334649	-80.175917			0.00	0.00
23,300.00	89.00	160.95	7,680.64	-14,370.22	7,012.29	304,626.74	1,777,351.35	39.334390	-80.175799			0.00	0.00
23,400.00	89.00	160.95	7,682.38	-14,464.73	7,044.93	304,532.23	1,777,383.98	39.334132	-80.175681			0.00	0.00
23,500.00	89.00	160.95	7,684.13	-14,559.24	7,077.56	304,437.72	1,777,416.62	39,333873	-80.175563	16,071.96	0.00	0.00	0.00
23,600.00	89.00	160.95	7,685.88	-14,653.75	7,110.20	304,343.21	1,777,449.25	39.333614	-80.175445			0.00	0.00
23,700.00	89.00	160.95	7,687.62	-14,748.26	7,142.83	304,248.70	1,777,481.89	39,333355	-80.175328			0.00	0.00
23,800.00	89.00	160.95	7,689.37	-14,842.77	7,175.47	304,154.19	1,777,514.52	39,333096	-80.175210			0.00	0.00
23,829.49	89.00	160.95	7,689.88	-14,870.64	7,185.09	304,126.32	1,777,524.14	39.333020	-80.175175			0.00	0.00
23,900.00	89.00	162.01	7,691.11	-14,937.49	7,207.48	304,059.48	1,777,546.54	39.332837	-80.175094	16,471.90	1.50	0.00	1.50
24,000.00	89.00	163.51	7,692.86	-15,032.98	7,237.12	303,963.99	1,777,576.17	39.332575	-80.174987	16,571.83	1.50	0.00	1.50
24,100.00	89.00	165.01	7,694.61	-15,129.21	7,264.25	303,867.75	1,777,603.30	39.332312	-80.174888	16,671.64	1.50	0.00	1.50
24,200.00	89.00	166.51	7,696.37	-15,226.12	7,288.84	303,770.85	1,777,627.89	39.332046	-80.174799	16,771.27	1.50	0.00	1.50
24,300.00	89.00	168.01	7,698.12	-15,323.64	7,310.89	303,673.33	1,777,649.95	39.331779	-80.174718	16,870.65	1.50	0.00	1.50
24,400.00	89.00	169.51	7,699.87	-15,421.70	7,330.38	303,575.26	1,777,669.44	39.331510	-80.174647	16,969.70	1.50	0.00	1.50
24,500.00	89.00	171.01	7,701.62	-15,520.24	7,347.30	303,476.72	1,777,686.35	39.331240	-80.174584	17,068.37	1.50	0.00	1.50
24,566.04	89.00	172.00	7,702.77	-15,585.55	7,357.05	303,411.41	1,777,696.11	39.331061	-80.174548	17,133.29	1.50	0.00	1.50
24,600.00	89.00	171.49	7,703.37	-15,619.15	7,361.93	303,377.81	1,777,700.98	39.330969	-80.174530	17,166.64	1.50	0.00	-1.50
24,700.00	89.00	169.99	7,705.11	-15,717.83	7,378.02	303,279.14	1,777,717.07	39.330698	-80.174470	17,265.16	1.50	0.00	-1.50
24,800.00	89.00	168.49	7,706.86	-15,816.05	7,396.68	303,180.91	1,777,735.74	39.330429	-80.174402	17,364.10	1.50	0.00	-1.50
24,900.00	89.00	166.99	7,708.61	-15,913.75	7,417.91	303,083.21	1,777,756.97	39.330161	-80.174324	17,463.38	1.50	0.00	-1.50
25,000.00	89.00	165.49	7,710.36	-16,010.87	7,441.70	302,986.10	1,777,780.75	39.329895	-80.174238	17,562.93	1.50	0.00	-1.50
25,100.00	89.00	163.99	7,712.10	-16,107.32	7,468.01	302,889.64	1,777,807.06	39.329631	-80.174142	17,662.70	1.50	0.00	-1.50
25,200.00	89.00	162.49	7,713.84	-16,203.06	7,496.84	302,793.91	1,777,835.90	39.329368	-80.174037	17,762.60	1.50	0.00	-1.50
25,210.32	89.00	162.33	7,714.02	-16,212.89	7,499.96	302,784.07	1,777,839.01	39.329341	-80.174026	17,772.91	1.50	0.00	-1.50
25,300.00	89.00	162.33	7,715.58	-16,298.33	7,527.17	302,698.63	1,777,866.22	39.329107	-80.173928	17,862.56	0.00	0.00	0.00
25,400.00	89.00	162.33	7,717.32	-16,393.60	7,557.51	302,603.36	1,777,896.57	39.328847	-80.173818	17,962.51	0.00	0.00	0.00
25,500.00	89.00	162.33	7,719.05	-16,488.87	7,587.85	302,508.09	1,777,926.91	39.328586	-80.173708	18,062.47	0.00	0.00	0.00
25,600.00	89.00	162.33	7,720.79	16,584.14	7,618.20	302,412.82	1,777,957.25	39.328325	-80.173598	18,162.42	0.00	0.00	0.00





Company: Diversified Production, LLC

Design #6

Project: Harrison County, WV (NAD83 - GRID)

Site: Abbey Pad Well: Abbey 6MH Wellbore: Wellbore #1

Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well Abbey 6MH

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

Grid

Minimum Curvature

.Total Directional Production DB

Planned Su	rvey												
Measured Depth (usft)	INC	AZI (°)	Vertical Depth	Local Coc +N/-S (usft)	rdinates +E/-W	Map Coo Northing	rdinates Easting	Geo Coord Latitude	inates Longituge	Vertical Section (usft)	-	Rate	Rate
25 700 00	2000							. ,	()	2 2		(/ roousit)	(mousit)
25,700.00	89.00	162.33	7,722.53	-16,679.41	7,648.54	302,317.55	1,777,987.59	39.328064	-80.173489	18,262.38	0.00	0.00	0.00
25,800.00	89.00	162.33	7,724.26	-16,774.68	7,678.88	302,222.28	1,778,017.93	39.327803	-80.173379	18,362.33	0.00	0.00	0.00
25,900.00	89.00	162.33	7,726.00	-16,869.95	7,709.22	302,127.01	1,778,048.27	39.327542	-80,173269	18,462.29	0.00	0.00	0.00
26,000.00	89.00	162.33	7,727.74	-16,965.22	7,739.56	302,031.74	1,778,078.62	39.327281	-80.173159	18,562.25	0.00	0.00	0.00
26,043.85	89.00	162.33	7,728.50	-17,007.00	7,752.87	301,989.97	1,778,091.92	39.327166	-80.173111	18,606.08	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir.	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LP v4 - Abbey 6MH - plan hits target ce - Point	0.00 enter	360.00	7,415.00	14.79	2,045.93	319,011.75	1,772,384.98	39.373780	-80.193750
PBHL v4 - Abbey 6MF - plan hits target ce - Point	0.00 enter	0.00	7,728.50	-17,007.00	7,752.87	301,989.96	1,778,091.92	39.327166	-80.173111

Plan Annotations

Measured	Vertical	Local Coor	rdinates	
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
1350	1350	0	0	KOP; Begin 2.00° Build
1600	1600	0	11	Continue 2.00° Build/Turn
2263	2248	35	140	Hold 18.26° Tangent
7176	6914	423	1630	Begin 10.00° Build/Turn
8019	7415	15	2046	Hold 89.00° Lateral
8819	7429	-678	2446	Begin 1.50° Turn
10,473	7458	-2241	2942	Continue 1.50° Turn
11,396	7473	-3142	3135	Hold 160.95° Az
13,996	7519	-5599	3984	Begin 1.50° Turn
14,666	7530	-6248	4146	Hold 171.00° Az
14,966	7536	-6545	4193	Begin 1.50° Turn
16,443	7561	-7923	4696	Continue 1.50° Turn
17,249	7575	-8652	5038	Hold 160.95° Az
23,829	7690	-14,871	7185	Begin 1.50° Turn
24,566	7703	-15,586	7357	Continue 1.50° Turn
25,210	7714	-16,213	7500	Hold 162.33° Az
26,044	7729	-17,007	7753	PBHL - 26043.85' MD

Checked By:	Approved By	Date:	
onconou by.	/\pricted by	Date.	

WW-9 (4/16)

API Numb	er 47	- 03	33		-	
0	nerato	r's V	Vell	No.	Abbey South 6MH	

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

TEODS COTTING	g Dist Ostil & the Later than the transfer of
Operator Name Diversified Production, LLC	OP Code 494524121
	Quadrangle Rosemont 7.5'
Do you anticipate using more than 5,000 bbls of water t	o complete the proposed well work? Yes V
Will a pit be used? Yes No ✓	
If so, please describe anticipated pit waste:	
Will a synthetic liner be used in the pit? Yes	No If so, what ml.?
Proposed Disposal Method For Treated Pit Wa	stes:
Land Application Underground Injection (UIC	Permit Number
Reuse (at API Number	NW 0.5 E 11 - 11 - 1 - 1
0.1 (F. 1.1	rm WW-9 for disposal location)
Will closed loop system be used? If so, describe:	op bonnutring of multiple half-mound lainks to encommodate oil drift outlieps that will be solidified on alte and transported via touck to a disposal she.
Drilling medium anticipated for this well (vertical and h	orizontal)? Air, freshwater, oil based, etc. *See attached Office of Oil and Gas
-If oil based, what type? Synthetic, petroleum,	NOV 1 8 2024
Additives to be used in drilling medium? *See attached	
Drill cuttings disposal method? Leave in pit, landfill, re	moved offsite, etc. landfill WV Department of Environmental Protection
-If left in pit and plan to solidify what medium	will be used? (cement, lime, sawdust)
-Landfill or offsite name/permit number? _*See	attached
Permittee shall provide written notice to the Office of O West Virginia solid waste facility. The notice shall be prwhere it was properly disposed.	il and Gas of any load of drill cuttings or associated waste rejected at any rovided within 24 hours of rejection and the permittee shall also disclose
on August 1, 2005, by the Office of Oil and Gas of the Provisions of the permit are enforceable by law. Viola law or regulation can lead to enforcement action. I certify under penalty of law that I have perapplication form and all attachments thereto and that obtaining the information, I believe that the information penalties for submitting false information, including the Company Official Signature Company Official Title Director - EHS Regulatory Subscribed and sworn before me this 29th day	yor October . 2024
Andreas, Hays Cindla	Notary Public
My commission expires 10 11012027	OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA ANDREA STIHL HAYS

4703306047 Operator's Well No. Abbey South 6MH

Diversified Production, LLC

Proposed Revegetation Treatment: Acres Disturbed 5.98 acr	res Prevegetation pH
Lime 2 Tons/acre or to correct to pH	approx. 7
Fertilizer type 10-20-20 or equivalent	
Fertilizer amount 500	os/acre
Mulch 100 bales Tons/a	acre
Seed	d Mixtures
Temporary	Permanent
Seed Type lbs/acre	Seed Type lbs/acre
30% Annual Ryegrass, 20% Pennate Orchard	30% Annual Ryegrass, 20% Pennate Orchard
10% Alsike Clover, 10% Trefoil Norcen Empire	10% Alsike Clover, 10% Trefoil Norcen Empire
15% Climax Timothy N.C., 15% Perennial Ryegrass	15% Climax Timothy N.C., 15% Perennial Ryegrass
Photocopied section of involved 7.5' topographic sheet. Plan Approved by: Ky Willets	
Comments:	RECEIVED Office of Oil and Gas
	NOV 1 8 2024
	WV Department of Environmental Protection
Title: O&G Inspector	Date: 10/24/24
Field Reviewed? () Yes () No

Additional Information for WW-9

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

Vertical Surface: Air/FW 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

RECEIVED
Office of Oil and Gas

NOV 18 2024

WV Department of Environmental Protection



WELL SITE SAFETY PLAN

Well Name: Abbey South 6MH Pad Name: Abbey

> 911 Address: 39 Cathrine Drive Shinnston, WV 26431

County: Harrison
District: Clay - Outside
UTM (meters), NAD83, Zone 17
Northing: 4,358,551.747

Easting: 568,823.044

RECEIVED
Office of Oil and Gas

NOV 18 2024

WV Department of Environmental Protection

October 2024

Kenny Willett 10/29/24

ABBEY SOUTH WELL 6MH						
1D	SURFACE OWNER	DIST-TM-PAR				
1	LONG RIDGE WEST VIRGINIA LLC	5-210-44.2				
2	SANDRA LOU TAYLOR	P/O 3-6-16.1				
3	DOREEN M. & LEONARD L. LARSON	3-6-13				
4	CHARLES THOMAS & MILDRED C. LITTLE	3-6-12				
5	TERRY D. & PATRICIA WYER	3-6-26.1				
6	TRI-COUNTY WATER ASSOCIATION, INC.	3-6-26.3				
7	TERRY D. & PATRICIA WYER	3-6-26				
8	ROBERT & STEPHANIE WYER	3-6-26.4				
9	DAVID & BARBARA PYBUS	3-6-37.2				
10	ELTON O. JR & CONSTANCE C. FITZPATRICK	3-6-37.3				
11	JOHN R. & DEBORAH P. CORDEAU IRREV TRUST	3-6-39				
12	JOHN V. & NANCY A. BROSIUS	3-6-40.1				
13	SEAN ALAN YOUNG	3-6-40.3				
14	JOHN R. LINN HRS	3-6-48				
15	JOYCE A. BOWMAN	3-68-47.29				
16	EDWARD W. BRAND	3-68-47.54				
17	CODY MICHAEL JONES & ARIEL NICOLE HAYES	3-68-47.90				
18	JAMES ALLEN FRYMIER	3-68-47.94				
19	KEVIN L CUNNINGHAM	3-68-47.119				
20	TROY & ROBIN BLOSSER	3-68-47.113				
21	KEVIN L. CUNNINGHAM	3-68-47.105				
22	MARK V. SCHUMACHER	3-13-24				
23	JAMES E. LOUDIN	3-13-23				
24	KEVIN L. & DEBRA MANNING	3-13-22				
25	SELBY R. & ROSEMARY B. WOODS	3-13-36.3				
26	BRETT A. SCHROCK	P/O 3-13-39				
27	EVAN & WHITNEY HELMS KLIETHERMES	3-13-40				

ABBEY SOUTH WELL 6MH						
ID D	SURFACE OWNER	DIST-TM-PAR				
28	EVAN & WHITNEY HELMS KLIETHERMES	3-13-41				
29	EVEN M. & WHITNEY M. KLIETHERMES	3-13-44				
30	EVAN M. KUETHERMES	3-13-42				
31	EVAN & WHITNEY HELMS KLIETHERMES	3-14-20				
32	JAMES K. ALFRED	3-14-21				
33	BARBARA C. COMPTON	3-14-22				
34	DAVID L. BOOTH	3-14-23.1				
35	DARLENE VIVIAN & DUANE R. RHODES	3-14-23.4				
36	DAVID LEE BOOTH	3-14-23.9				
37	ROBIN O. FARIS	P/O 3-14-24				

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

THRASHER

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



FILE #:	I, THE UNDERSIGNED, HEREBY IS CORRECT TO THE BEST OF MY KNO SHOWS ALL THE INFORMATION REQU REGULATIONS ISSUED AND PRESCRIBE OF ENVIRONMENTAL PROTECTION.	WLEDGE AND BELIEF AND IRED BY LAW AND THE	ROBERT HOLES	BAKES *
MINIMUM DEGREE OF ACCURACY: 1/2500 PROVEN SOURCE SURVEY GRADE GPS OF ELEVATION: (NAVD 88, US FT)	SIGNED: LL.S	Hower .: P.S. No. 2357	STATE OF VIRGINIA	NO CONTRACTOR
(+) DENOTES LOCATION UNITED STATES TOPOC WVDEP OFFICE OF OIL & GAS 6 57TH STREET CHARLESTON, WV 2530	GRAPHIC MAPS 501	API WELL#: 47	33 OL COUNTY PER	047
WELL TYPE: OIL WASTE DISPOSAL WATERSHED: WEST FORK COUNTY/DISTRICT: HARRISON / CL SURFACE OWNER: LONG RIDGE WEST VIF OIL & GAS ROYALTY OWNER: W	AY-OUTSIDE QUADRAI	ROSEMO ACREAGE	996.00'± NT, WV 7.5' : 6.77±	
DRILL DRILL DEEPER REDRIL CONVERT PLUG & ABANDON OTHER CHANGE (SPECIFY): TARGET FORMATION: WARCELUS	L FRACTURE OR STIMULATE CLEAN OUT & REPLUG PER	PLUG OFF OLD FORATE NEW FORMAT	FORMATION	
WELL OPERATOR: DIVERSIFIED PRODUCTION,		D AGENT: CHRIS VEASE	Y	

CITY: CHARLESTON

STATE: PA ZIP CODE: 16133

CITY: JACKSON CENTER

STATE: W ZIP CODE:

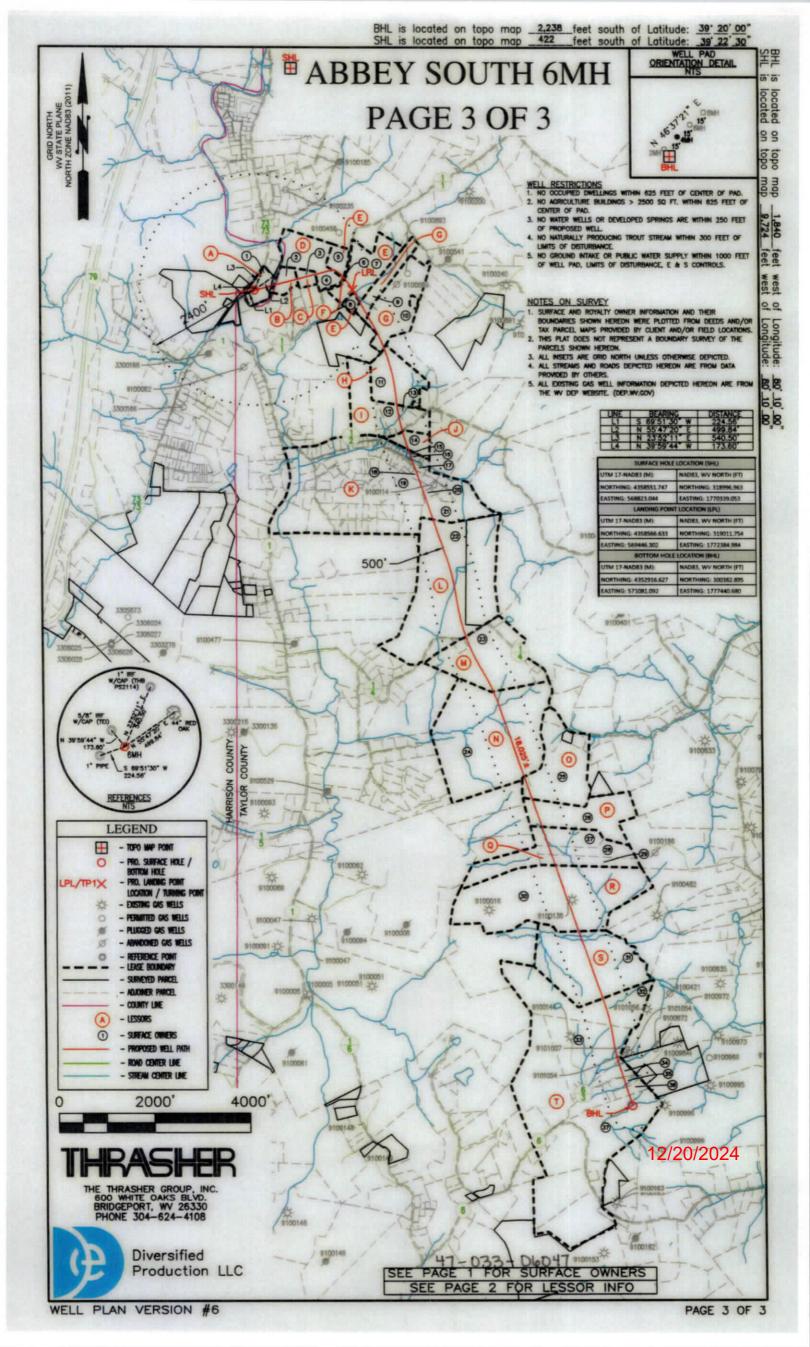
ABBEY SOUTH WELL GMH							
ID .	LEASE NUMBER	LESSOR	LEASE ACREAGE				
A	101263000	WILLOW CREEK MHV	6.77				
8	101282000, 101283000, 101272000, 101094000, 101069000, 101284000, 101271000, 101285000	SANDRA FAYE STACKHOUSE ET AL	4.39				
C	101286000	LARRY B. & LAURA L. WEAVER	4.00				
D	101250000	CHARLES THOMAS LITTLE	19.45				
£	101182000	TERRY D. & PATRICIA WYER	34.41				
F	101287000	TRI-COUNTY WATER ASSOCIATION, INC.	0.02				
£	101182000	TERRY D. & PATRICIA WYER	34.41				
E	101182000	TERRY D. & PATRICIA WYER	34.41				
6	101281000	AUGUSTA RESOURCES, LLC	47.52				
G	101281000	AUGUSTA RESOURCES, LLC	47.52				
н	101065000, 101065000, 101097000, 101288000, 101275000, 101295000, 101289000, 101290000, 101291000, 101292000, 101290000, 101291000, 101106000	DONALD R. REYNOLDS ET AL.	23.68				
1	8P070831	J.R. VALENTINE	33.50				
1	8P071104	MARY F. LINN	8.00				
K	8P070955	W.F. WHITE	148.00				
t.	8P070364	J.C. NUZUM	109.00				
M	BP062633	CLARA E. GOODWIN	50.00				
N	BP048028	VIONIA HERTZOG	108.00				
0	BP059113	ROY ELDER	50.00				
P	8P057189	RUFUS HOLDEN ET UX	43.00				
Q	BP067174	L.R. DAVIS	51.00				
R	BP049762	CHARLES H PAYNE	100.25				
\$	BP067173	MINNIE REED	51.00				
T	BP024535	HELEN COCHRAN ET AL	270.00				

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

THE THRASHER GROUP, INC.



BRIDGEPORT, WV 26330 PHONE 304-624-4108			THE STATE OF THE S
DRAWING #: ABBEY SOUTH 6MH IS CORRECT SHOWS ALL SCALE: 1" = 2,000' REGULATION	HE UNDERSIGNED, HEREBY OF TO THE BEST OF MY KNOW THE INFORMATION REQUIF IS ISSUED AND PRESCRIBED NMENTAL PROTECTION.	WLEDGE AND BELIEF AND RED BY LAW AND THE	ROBERT HOLENSED HOLEN
MINIMUM DEGREE OF ACCURACY: 1/2500 SIGNED: _ PROVEN SOURCE SURVEY GRADE GPS OF ELEVATION: (NAVD 88, US FT) R.P.E.:	L.L.S.	P.S. No. 2357	STATE OF THE STATE
(+) DENOTES LOCATION OF WELL OUNITED STATES TOPOGRAPHIC MAWVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25304		API WELL#: 47	ABBEY SOUTH 6MH 33 06047 COUNTY PERMIT
WELL TYPE: OIL WASTE DISPOSAL PRODUCTION WATERSHED: WEST FORK COUNTY/DISTRICT: HARRISON / CLAY-OUTSIDE SURFACE OWNER: LONG RIDGE WEST VIRGINIA LLC OIL & GAS ROYALTY OWNER: WILLOW CREEK MI	QUADRAN	ELEVATION: IGLE: ROSEMO ACREAGE	996.00'± NT, WV 7.5'
DRILL DRILL DEEPER REDRILL FRA CONVERT PLUG & ABANDON CLEAN OUT OTHER CHANGE (SPECIFY): TARGET FORMATION: MARCELLUS	T & REPLUG PERF		TION
WELL OPERATOR: DIVERSIFIED PRODUCTION, LLC ADDRESS: 101 MCQUISTON DRIVE CITY: JACKSON CENTER STATE: PA ZIP CODE: WELL PLAN VERSION #6	ADDRESS:	AGENT: CHRIS VEASE 400 SUMMER STREET STON STATE	A PROPERTY OF THE PARTY OF THE



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

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

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

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

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

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

Well Operator: Diversified Production, LLC

By:

Amy L. Morris

Its:

Director of Regulatory Affairs - Aux Energy, LLC (consultant)

Page 1 of

Abbey South	LEASE NUMBER	TAX MAP	CURRENT LEASE NUMBER	GRANTOR/LESSOR	GRANTEE/LESSEE	ROYALTY	DEED BOOK	PAGE	
A	112961.11395	5-210-44.2	101263000	WILLOW CREEK MHV LLC	LONG RIDGE WEST VIRGINIA, LLC	AND SAME S			
	112501.11353	5-210-44.2	101282000	ROGER LEE STACKHOUSE	LONG RIDGE WEST VIRGINIA, LLC	16%	1776		
			101283000	LINDA LOU SMITH		15%	75		
			101272000	SANDRA FAYE STACKHOUSE	LONG RIDGE WEST VIRGINIA, LLC	15%	75		
			101272000	SANDRA L. TAYLOR	LONG RIDGE WEST VIRGINIA, LLC	15%	74		
В	112961.10687	P/O 3-6-16.1	101069000	STEPHANIE A. BOWERS	LONG RIDGE WEST VIRGINIA, LLC	15%	72		
	_		101284000	LARRY SUMMERS	LONG RIDGE WEST VIRGINIA, LLC	15%	72		
			101271000	RANDY SUMMERS	LONG RIDGE WEST VIRGINIA, LLC	15%	74		
			101285000	DALTON R. SUMMERS	LONG RIDGE WEST VIRGINIA, LLC LONG RIDGE WEST VIRGINIA, LLC	15% 15%	74		
С	112961.10684	3-6-13	101286000			Barro.	Co-ten		
D	112961.10683			LARRY B. WEAVER AND LAURA L. WEAVER	LONG RIDGE WEST VIRGINIA, LLC	15%	75		
		3-6-12	101250000	CHARLES THOMAS LITTLE	LONG RIDGE WEST VIRGINIA, LLC	16%	74	- 7	
t	112961.10677	3-6-26.1	101182000	TERRY D. WYER AND PATRICIA WYER	LONG RIDGE WEST VIRGINIA, LLC	16%	73	4	
F	112961.11475	3-6-26.3	101287000	TRI-COUNTY WATER ASSOCIATION, INC.	LONG RIDGE WEST VIRGINIA, LLC	15%	75	1	
E	112961.10676 112961.10370	3-6-26 3-6-26.4	101182000	TERRY D. WYER AND PATRICIA WYER	LONG RIDGE WEST VIRGINIA, LLC	16%	73	4	
G	112961.10371 112961.10372	3-6-37.2 3-6-37.3	101281000	AUGUSTA RESOURCES, LLC	LONG RIDGE WEST VIRGINIA, LLC	16%	75		
			101065000	DONALD R. REYNOLDS	LONG RIDGE WEST VIRGINIA, LLC	16%	394	1	
			101065000	DIANE K. REYNOLDS	LONG RIDGE WEST VIRGINIA, LLC	16%	394	1	
			101097000	CGI % MICHAEL P. GEHO	LONG RIDGE WEST VIRGINIA, LLC	16%	73	- 1	
			101288000	SARAH BETH ANDERSON FKA SARAH BETH CORBIN	LONG RIDGE WEST VIRGINIA, LLC	15%	75		
			101275000	CHARLES WAYNE FOUTZ	LONG RIDGE WEST VIRGINIA, LLC	15%	74	5	
			101295000	KAISE LYNN FOUTZ MAICH	LONG RIDGE WEST VIRGINIA, LLC	15%	74		
н	112961.10373	3-6-39	101289000	EMILY ANN FOUTZ HARTT	LONG RIDGE WEST VIRGINIA, LLC	15%			
		2000000	101290000	MELANIE LYNN FOUTZ QUARLE	LONG RIDGE WEST VIRGINIA, LLC	15%	Co-tena		
			101291000	CHARLENE A. BENNETT	LONG RIDGE WEST VIRGINIA, LLC	15%	Co-tena		
				101292000	WACO OIL AND GAS CO,, INC.	LONG RIDGE WEST VIRGINIA, LLC	15%	Co-tena 75	
			101293000	MICHAEL ROSS	LONG RIDGE WEST VIRGINIA, LLC	15%	75		
			101294000	COLLINGWOOD APPALACHIAN MINERALS II, LLC	LONG RIDGE WEST VIRGINIA, LLC	16%	73	6	
			101106000	COLLINGWOOD APPALACHIAN MINERALS III, LLC	LONG RIDGE WEST VIRGINIA, LLC	15%	73	1	
				JAMES R. VALENTINE AND CLARA D. VALENTINE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8			
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	25 138	2	
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	138		
	800 (000000)	3-6-40.1		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	5	
,	BP070831	3-6-40.3	100812000	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE			
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	58		
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT		3	
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39 39	1	
				MARY F. LINN, WIDOW; VELA E. VINCENT, WIDOW; OPAL A. LINN,	Edita Made West Vinditia, Eec	ASSIGNMENT PARMOOT AGREEMENT	39	1	
				SINGLE; DESSIE S. STEMPLE AND JAMES A. STEMPLE, HER HUSBAND;					
				SARAH A. SINSEL AND GRANT SINSEL, HER HUSBAND; AND REYMOND C.					
				LINN AND ARIE L. LINN, HIS WIFE		NOT LESS THAN 1/2			
	1 1			HOPE NATURAL GAS COMPANY	HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	25	3	
				CONSOLIDATED GAS SUPPLY CORPORATION		CONFIRMATORY DEED	138	2	
J	BP071104	3-6-48	100817000	CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION	ASSIGNMENT	5	5	
				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	ASSIGNMENT	33	3	
				INMIAN ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39		
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	14	

	1 1		1	CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	55
		3-68-47.29	-	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	79
		3-6B-47.54 3-6B-47.90		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36
к	BP070955	3-6B-47.94 3-6B-47.119	100815000	DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	37
		3-68-47.113 3-68-47.105		TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	6
		3-06-47.103			_	_		
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	14
ı	BP070384	3-13-24	100807000	JESSE C. NUZUM AND LOIS A. NUZUM, HIS WIFE; NARCISSUS WHITESCARVER AND L.W. WHITESCARVER, HER HUSBAND; NOLA MATTHEW, SINGLE; BESSIE FLEMING AND W. FRED FLEMING, HER HUSBAND; C.B. STARK AND ORA B. STARK, HIS WIFE; LILLIAN CHRISLIP, SINGLE; CHARLES CHRISLIP AND EVA M. CHRISLIP, HIS WIFE; CLARENCE E. STARK AND MARY M. STARK, HIS WIFE; JOHN H. CHRISLIP AND STELLA CHRISLIP, HIS WIFE; M.B. TOLLEY AND BLANCHE TOLLEY, HIS WIFE; AND MARY H. CHRISLIP, WIFE OF ALLEN R. CHRISLIP HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CONGULDATED GAS TRANSMISSION, INC. TRIANA ENERGY, LLC M4 ENERGY, LLC LETT HATTAN, LORI HATTEN AS POA PAUL CURREY H/S/A OF PAUL CURREY	HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. TRIANA ENERGY, LLC M4 ENERGY, LLC LONG RIDGE WEST VIRGINIA, LLC	NOT LESS THAN 1/8 CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MERGER/NAME CHANGE PARTIAL ASSIGNMENT ASSIGNMENT ASSIGNMENT ASSIGNMENT FARMOUT AGREEMENT 15% 12.5%	25 138 5 51 58 33 39 39 39 Co-tenanc 75	13
				SARAH A. CURREY FKA SARAH ANN WELLS	LONG RIDGE WEST VIRGINIA, LLC	15% 12.5%	Co-tenano 74	36
				W. CLYDE HERTZOG, SINGLE; ALICE M. HOLDEN, WIDOW; MARTIN GOODWIN, WIDOWER; VIRGIL R. HERTZOG AND FAITHE HERTZOG, HIS WIFE; MAUDE JANES, WIDOW; CLARENCE J. RECTOR AND LIZA M. RECTOR, HIS WIFE; HAYWARD H. REED AND MILDRED C. REED, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	22	32
М	BP062633	3-13-23	100690000	HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	27
				CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION	ASSIGNMENT MERGER/NAME CHANGE	5	55 79
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	37
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	6
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	14

				Throng No.		····		
				VIONIA HERTZOG	GRAFTON DRILLING COMPANY	NOT LESS THAN 1/8	7	30
				GRAFTON DRILLING COMPANY	COMET OIL AND GAS COMPANY	ASSIGNMENT	8	8
]				COMET OIL AND GAS COMPANY	PITTSBURGH AND WEST VIRGINIA GAS COMPANY	ASSIGNMENT	77	1
1				PITTSBURGH AND WEST VIRGINIA GAS COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	19	21
Ì				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	27
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	55
	l i		Į.	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	79.
N	BP048028	3-13-22	100690000	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36:
"	BF048020	3*13*22	100090000	DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	37
				TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
		_				<u>-</u> -		
				RORY ELDER AND LENA ELDER, EACH IN THEIR OWN RIGHT AND AS HUSBAND AND WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	22	71
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	SSS
О	BP059113	3-13-36.3	100735000	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	
			!	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
	·			TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	. 69
				M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148

							1
			RUFUS HOLDEN AND AGNES T. HOLDEN, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	21	195
				<u>"-</u>			
			HOPE NATURAL GAS COMPANY	CONTROLIDATED CAS CURRING CORROBATION			1
1 1			HOPE NATURAL GAS CONFANT	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	138	270
							1
1		İ	CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
1	ŀ					1 -	
P BP057189	P/O 3-13-39	100726000	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
5/32/203	1,032333	100720000	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
1							
			DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
1		i			- Antina rasiding in		
				1			1
i I	1						1
			TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	39	69
1		1		1			
			M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	1551511451175101401/714014715		1
		-	INT ENERGY, ELC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148
]		1	LOUISE & DAVIS MUDOW MINAUS BEED SINGLE, MUDIAAAD MADD & D		ľ	1	<i>l</i> '
1		Ĭ	LOUISE R. DAVIS, WIDOW; MINNIE REED, SINGLE; MIRIAM R. HARR & R.				,
I i			LEE HARR, HER HUSBAND; ETHEL REED DAVIS & GEORGE R. DAVIS, HER HUSBAND; J. ROBERT REED & AGNES VIRGINIA REED, HIS WIFE;				,
	Ì		CHARLES EARL REED & BERYL REED, HIS WIFE	LICOT NATURAL CAS CONTRANS	A107 4 505 74444 4 fo		, ,
	3-13-40		HOPE NATURAL GAS COMPANY	HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	23	389
Q BP067174	3-13-41	100791000	CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION	CONFIRMATORY DEED	138	270
1 1	3-13-44	3-13-44	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	ASSIGNMENT	5	555
1			CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	51	795
1 1			DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	MERGER/NAME CHANGE PARTIAL ASSIGNMENT	58	362
1			TRIANA ENERGY, LLC	M4 ENERGY, LLC	ASSIGNMENT	33	377
	i i		M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39 39	69 148
			CHAS. H. PAYNE AND JEAN M. PAYNE, HIS WIFE; F.C. PAYNE, SINGLE;	torro table trees transacting the	ASSIGNMENT TANNOOT AGREEMENT	39	146
			MODENA TIGHE AND T.H. TIGHE, HER HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8		4.50
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1			DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	302
	ŀ		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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			LOUISE R. DAVIS, WIDOW; MINNIE REED, SINGLE; MIRIAM R. HARR & R.				J
1			LEE HARR, HER HUSBAND; ETHEL REED DAVIS & GEORGE R. DAVIS, HER	ļ	i]	,
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1			CHARLES EARL REED & BERYL REED, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	23	386
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J 0F00/1/3	3-14-20	100/30000	CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	5	555
]		1	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
1			CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
]		1	DOMINION TRANSMISSION, INC.	TRIANA ENERGY, LLC	PARTIAL ASSIGNMENT	33	377
1				M4 ENERGY, LLC	ASSIGNMENT	39	69
ı l		L	M4 ENERGY, LLC	LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148

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							M4 ENERGY, LLC	ASSIGNMENT	33	377
	·				LONG RIDGE WEST VIRGINIA, LLC	ASSIGNMENT FARMOUT AGREEMENT	39	148		





November 14, 2024

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

RE: Road Crossings

Dear Taylor:

On behalf of Diversified Production Company, LLC and Long Ridge West Virginia LLC, Aux Energy is submitting this road crossing letter for the Abbey South 6MH.

Diversified Production LLC has obtained the right to drill, extract and produce the minerals under the following country roads in the area reflected on the Abbey South 6MH well plat.

CR 1/1

CR 1/2

CR 1/4

CR 6/3

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

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

Sincerely,

Amy L. Morris

Director of Regulatory Affairs

anyshour

RECEIVED Office of Oil and Gas

NOV 18 2024

WV Department of Environmental Protection

4703306047

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

Date of Notic	ce Certification: 11/12/2024	API No. 4	API No. 47- 033 -				
			Operator's Well No. Abbey South 6MH				
			Name: Abbey				
Notice has I	been given:						
		\$ 22-6A, the Operator has provided the re	quired parties v	with the Notice Forms listed			
below for the	tract of land as follows:	,	F				
State:	West Virginia	Easting:	568,823.044				
County:	Harrison	UTM NAD 83 Northing:	4,358,551.747				
District:	Clay- Outside	Public Road Access:	Middletown Rod	Rt. 73/73			
Quadrangle:	Rosemont 7.5'	Generally used farm name:	Long Ridge Wes	t Virginia LLC			
Watershed:	West Fork						
of giving the requirements Virginia Code	surface owner notice of entry to su of subsection (b), section sixteen o	ection sixteen of this article; (ii) that the receive pursuant to subsection (a), section f this article were waived in writing by ender proof of and certify to the secretary it.	ten of this arti	icle six-a; or (iii) the notice wner; and Pursuant to West			
	West Virginia Code § 22-6A, the Operator has properly served the require	erator has attached proof to this Notice (Certification				
mat the Ope	rator has properly served the require	d parties with the following:		OOG OFFICE USE			
*PLEASE CHE	ECK ALL THAT APPLY			ONLY			
☐ 1. NO?	FICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED BECA SEISMIC ACTIVITY WAS CONDUC		RECEIVED/ NOT REQUIRED			
■ 2. NO	TICE OF ENTRY FOR PLAT SURV	YEY or D NO PLAT SURVEY WAS C	ONDUCTED	L RECEIVED			
☐ 3. NO	TICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED BECANOTICE OF ENTRY FOR PLAT SUR WAS CONDUCTED or		□ RECEIVED/ NOT REQUIRED			
		WRITTEN WAIVER BY SURFA (PLEASE ATTACH) RECEIVED	`				
■ 4. NO	TICE OF PLANNED OPERATION	Office of On a		RECEIVED			
■ 5. PUE	BLIC NOTICE	NOV 18	2024	RECEIVED			

Required Attachments:

■ 6. NOTICE OF APPLICATION

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.

WV Department ⊖

Environmental Protection

Certification of Notice is hereby given:

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

Well Operator: Diversified Production, LLC

By: Amy L. Morris (Authorized Permitting Agent) Its: Director of Regulatory Affairs, Aux Energy, LLC

Telephone: 304-376-0111 Address:

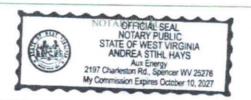
101 McQuiston Drive

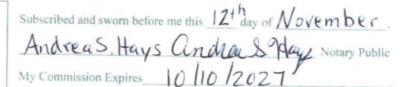
Jackson Center, PA 16133

Facsimile:

Email:

amy@aux-energy.com





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

> > NOV 18 2024

WV Department of Environmental Protection WW-6A (9-13)

API NO.447.00 3 3 0 6 0 4 7 OPERATOR WELL NO. Abbey South 6MH Well Pad Name: Abbey

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

Not	ice Time Requirement	: notice shall be provided	no later than th	e filing date of permit applicat	ion.	
	e of Notice: 11/12/2024 ice of:	Date Permit Application	Filed: 11/13/202	4		
✓	PERMIT FOR ANY	☐ CERTIFICAT	E OF APPRO	VAL FOR THE		
_	WELL WORK			MPOUNDMENT OR PIT		
Deli	very method pursuant	to West Virginia Code {	22-6A-10(b)			
	PERSONAL	REGISTERED	1 метнор	OF DELIVERY THAT REQUI	RES A	
	SERVICE	MAIL		OR SIGNATURE CONFIRMA		
sedin the soil a description oper more well important provents of the second provents of th	ment control plan require surface of the tract on wh and gas leasehold being d ribed in the erosion and s ator or lessee, in the ever e coal seams; (4) The own work, if the surface tract oundment or pit as descri- a water well, spring or vide water for consumption osed well work activity if ection (b) of this section rds of the sheriff required ision of this article to the e R. § 35-8-5.7.a require	ed by section seven of this a sich the well is or is proposed eveloped by the proposed we sediment control plan subment the tract of land on which ners of record of the surface is to be used for the placer bed in section nine of this a water supply source located on by humans or domestic as to take place. (c)(1) If mo hold interests in the lands, if to be maintained pursuant e contrary, notice to a lien his, in part, that the operator	eticle, and the wid to be located; ell work, if the titted pursuant to the well propositive or tracts of the titted pursuant to the well propositive; (5) Any swithin one thousimals; and (6) we than three terms to section eight older is not noticall also provided.	gnature confirmation, copies of the sell plat to each of the following p (2) The owners of record of the sell plat to each of the following p (2) The owners of record of the sell surface tract is to be used for road a subsection (c), section seven of the sell to be drilled is located [sic] is overlying the oil and gas leasehold on, enlargement, alteration, repair, surface owner or water purveyor we sand five hundred feet of the cent. The operator of any natural gas sto ants in common or other co-owners are the documents required up, article one, chapter eleven-a of the total andowner, unless the lient the Well Site Safety Plan ("WS ovided in section 15 of this rule.	ersons: (1) The owners of curface tract or tracts over so or other land disturbar his article; (3) The coal of known to be underlain by the ing developed by the removal or abandonment of the well pad which orage field within which orage field within which or of interests described pon the person described his code. (2) Notwithstan holder is the landowner.	of record of rlying the nice as owner, by one or proposed nt of any icant to the in the nding any. W. Va.
☑ A	pplication Notice 🛛	WSSP Notice ☑ E&S P	an Notice 🏻	Well Plat Notice is hereby pro	ovided to:	
_	JRFACE OWNER(s)			COAL OWNER OR LESSEE		
	e: Long Ridge West Virginia, L			me: Long Ridge West Virginia, LLC	Office of Oil ar	D
	ress: 501 Corporate Drive, Sunsburg, PA 15317	ILE 210		dress: 501 Corporate Drive, Suite 210 nonsburg, PA 15317		id Gaz.
Nam		 		COAL OPERATOR	NOV 18 20	
	ress:				101 18 20)24
,			Ad	dress:	W/ b	
Ø SU	JRFACE OWNER(s) (F	Road and/or Other Disturb	ance)	me: N/A dress: SURFACE OWNER OF WATE	Environment Environment	Ot .
	e: Long Ridge West Virginia, L			SURFACE OWNER OF WATE	R WELL	Ctior.
Add	ress: 501 Corporate Drive, Su	ite 210		D/OR WATER PURVEYOR(s		
Canor	nsburg, PA 15317			tDan attached		
Nam	ie:		Ad	dress:		
Add	ress:					
			_	PERATOR OF ANY NATURA		ELD
_	JRFACE OWNER(s) (I	-	Na	me: N/A		
Nam	ne:		Ad	dress:		
Add	ress:		14.75			
			*P	ease attach additional forms if n	ecessarv	

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.

Office of Oil and Gas

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-24-and-gas/pages/default.aspx.

Well Location Restrictions

WV Department of Environmental Protection

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

APIN47-03306047 OPERATOR WELL NO. Abbey South 6MH

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: RECEIVED 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

NOV 18 2024

WV Department of

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

WW-6A (8-13) 47033306047

OPERATOR WELL NO. Abbey South 6MH

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

NOV 18 2024

WV Department of Environmental Protection WW-6A (8-13) 47.033306047

OPERATOR WELL NO. Abbey South 6MH

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 awv.gov.



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

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NOV 18 2024

WV Department of Environmental Protection

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

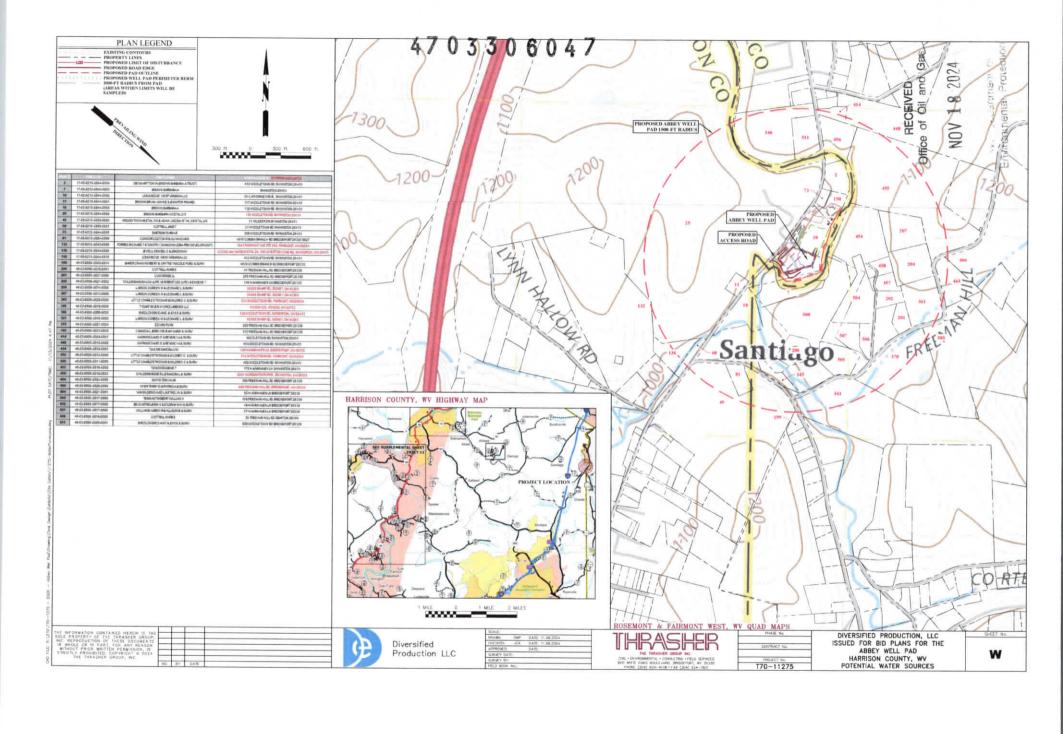
NOV 18 2024



COMPLEX PROJECTS
REQUIRE RESOLVE

4703306047

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



STATE OF WEST VIRGINIA 47 0 3 3 0 6 0 4 7 DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

Noti	ce Time l	Requireme	it: Notice shall be pro	vided at least SEV	/EN (7) da	ys but no more tha	n FORTY-	FIVE (45)	days prior to
entry Date		e: 8/23/2024	Date of Pla	nned Entry: 8/30/	2024				
Deli	very metl	nod pursua	nt to West Virginia C	ode § 22-6A-10a					
	PERSON	IAL [REGISTERED	■ метно	D OF DEI	LIVERY THAT RE	EOUIRES A		
	SERVICE		MAIL			NATURE CONFIR			
on to but no bene owned and Secre enab	o the surfa no more the eath such the er of mine Sediment etary, while the surfa	ce tract to c nan forty-fiv ract that has rals underly Control Ma ch statemen	Code § 22-6A-10(a), onduct any plat survey e days prior to such er filed a declaration puring such tract in the conual and the statutes at shall include contact to obtain copies from the day.	s required pursua try to: (1) The sur rsuant to section to bunty tax records. and rules related to information, included	nt to this a rface owne hirty-six, a The notic oil and ga	rticle. Such notice s r of such tract; (2) rticle six, chapter t e shall include a sta s exploration and p	shall be pro- to any owned wenty-two of atement that production in	vided at leaser or lessee of this code t copies of may be obta	ast seven days of coal seams e; and (3) any the state Erosion ained from the
					-				
		E OWNER			COAL OWNER OR LESSEE				
			Pad and Access Road)	_	Name: Long Ridge WV LLC Address: 501 Corporate Drive, Suite 210				
Address: 501 Corporate Drive, Suite 210 Canonsburg, PA 15317			_			210			
				_	Canonsburg,	PA 15317			
Nam Addı	ress:			_	■ MINI	ERAL OWNER(s)			
						low Creek MHV LLC			
Nam	e:			_		485 Long Run Road			
Addı	ress:			_	Flemington, W	MIN HOSTAGE			
				_	*please attac	ch additional forms if ne	ecessary		
Pursi a pla State Cour Distr	uant to W it survey o :: nty:		Code § 22-6A-10(a), of land as follows:	Ap	prox. Latit blic Road A atershed:	ude & Longitude:	39.373545; -8 73/73 Middlets West Fork Riv	30.200870 rown Road ver	entry to conduct
Quad	arangie:	Rosemont 7.5		Ge	nerally use	ed farm name:	Long Ridge W	VLLC	
may Char obtai	be obtaing leston, Wined from	ed from the V 25304 (3	n and Sediment Control Secretary, at the WV 1 04-926-0450). Copies by visiting www.de	Department of En	vironmenta nts or addit	al Protection headq ional information r	uarters, loca	ated at 601 prizontal dri	57th Street, SE,
	Operator		roduction, LLC		Address:	101 McQuiston Drive		NOV	18 2024
	phone:	304-376-011	1			Jackson Center, PA 16	133	INO A	10 202.
Ema		amy@aux-e	nergy.com		Facsimile:			MAL DI	epartment of
			2 CONTRACTOR (CONTRACTOR)			()		Environm	ental Protection
								Seed 1 will Constitute	

Oil and Gas Privacy Notice:

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

12/20/2024

Operator Well No. Abbey South 6MH

4703306047

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

gas/pages/def Well Operato Telephone: Email:	Diversified Production, LLC 304-376-0111 amy@aux-energy.com	Address: Facsimile	Jackson Center, PA	
Well Operato		Address:		
	1. Diversified Production 11.0	Address.	101 McQuieton Drive	6
gas/pages/def				
Pursuant to V to be provide horizontal we surface affect information r headquarters,	ed by W. Va. Code § 22-6A-10(b) ell; and (3) A proposed surface use a ged by oil and gas operations to the elated to horizontal drilling may be	to a surface owner whose and compensation agreem extent the damages are of the obtained from the Secretary	te land will be usent containing are compensable und etary, at the WV	code section; (2) The information required used in conjunction with the drilling of an offer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting

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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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Office of the District Engineer/Manager
District Four
Post Office Box 4220 · Clarksburg, West Virginia 26302 · (304) 842-1500

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

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

October 11, 2024

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

Subject: DOH Permit for the Abbey Well Pad, Harrison County Abbey South 6MH 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

Hacy D. Pratt

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NOV 18 2024

NV Department of Environmental Protection

Cc: Amy Morris

Diversified Production, LLC OM, D-4

File

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

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

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NOV 18 2024

WV Department of Environmental Protection WW-6A7 (6-12)

OPERATOR:_	Diversified Production, LLC	WELL NO: Abbey South 6MH
PAD NAME:_	Abbey	
REVIEWED B	Amy L. Morris (Aux Energy - Consultant)	SIGNATURE: MUY LLOVUS

WELL RESTRICTIONS CHECKLIST

HORIZONTAL 6A WELL

Well	Restr	ictions				
	At Least 100 Feet from Pad and LOD (including any E&S Control Feature) to any Perennial Stream, Lake, Pond, Reservoir or Wetland; OR					
		DEP Waiver and Permit Conditions				
	\checkmark	At Least 300 Feet from Pad and LOD (including any E&S Control Feat Naturally Producing Trout Stream; OR	ure) to any RECEIVED Office of Oil and Gas			
		DEP Waiver and Permit Conditions	NOV 18 2024			
	\checkmark	At Least 1000 Feet from Pad and LOD (including any E&S Control Feat Groundwater Intake or Public Water Supply; OR	ature)\toapartment of Environmental Protection			
		DEP Waiver and Permit Conditions				
	\checkmark	At Least 250 Feet from an Existing Water Well or Developed Spring to Drilled; OR	Well Being			
		Surface Owner Waiver and Recorded with County Clerk, OR				
		DEP Variance and Permit Conditions				
	\checkmark	At Least 625 Feet from an Occupied Dwelling Structure to Center of the	e Pad; OR			
		Surface Owner Waiver and Recorded with County Clerk, OR				
		DEP Variance and Permit Conditions				
	\checkmark	At Least 625 Feet from Agricultural Buildings Larger than 2500 Square of the Pad; OR	Feet to the Center			
		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.