

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

Tuesday, March 2, 2021 WELL WORK PERMIT Horizontal 6A / New Drill

NORTHEAST NATURAL ENERGY LLC 707 VIRGINIA STREET EAST STE 1200 CHARLESTON, WV 25301

Re: Permit approval for BUNNER 8H

47-061-01870-00-00

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

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

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

James A. Martin

Chief Z

Operator's Well Number: BUNNER 8H

PATRICIA A. BUNNER

Farm Name:

Horizontal 6A New Drill

U.S. WELL NUMBER: 47-061-01870-00-00

Date Issued: 3/2/2021

Promoting a healthy environment.

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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

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. 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.

API Number:	

PERMIT CONDITIONS

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.

WW-6B (04/15)

API NO. 47-706101	87	0						
OPERATOR WELL NO. 8H								
Well Pad Name: Bunner								

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

1) Well Operate	or: Northeast	Natural Ene	ergy	494498281	Monongalia	Clay	Blacksville, WV
*				Operator ID	County	District	Quadrangle
2) Operator's V	Vell Number: <u>8</u>	H		Well Pa	d Name: Bunne	er	
3) Farm Name/	Surface Owner:	Patricia A.	Bunr	ner Public Roa	ad Access: Upp	er Days R	un Rd
4) Elevation, cu	irrent ground:	1328'	E	levation, proposed	post-construction	on: 1308'	
5) Well Type	(a) Gas X Other	C)il	Und	erground Storag	ge	
	(b)If Gas Sh	nallow X		Deep			
	Н	orizontal X					
6) Existing Pad	: Yes or No No	0			_		
•	rget Formation(024' (GL), 104',		Antic	cipated Thickness a	and Expected Pr	ressure(s):	
8) Proposed To	tal Vertical Dep	oth: 8,024'					
9) Formation at	Total Vertical	Depth: Mar	cellus	S			
10) Proposed T	otal Measured I	Depth: 23,3	340'	<i>′</i>			
11) Proposed H	orizontal Leg L	ength: 14,4	87'	/			
12) Approxima	te Fresh Water	Strata Depths	:	150', 1100' (GL)	<u>,</u> √	· · · · · · · · · · · · · · · · · · ·	
13) Method to I		•	-	Drillers Log from	Offset Wells		
14) Approxima	te Saltwater De	pths: 1500',	2180) (GL)			
15) Approxima	te Coal Seam D	epths: 416',	553',	, 814', 919' (GL)			
16) Approxima	te Depth to Pos	sible Void (co	oal m	ine, karst, other):	none	 	Office of Oil and Ga
17) Does Propo directly overlyi				ms Yes	No	X	JAN 26 2021
(a) If Yes, pro	vide Mine Info	: Name:					WV Department of Environmental Protection
		Depth:					
		Seam:					
		Owner:					

WW-6B (04/15)

API NO. 47	
OPERATOR WELL NO.	81-1
Well Pad Name: Bunn	ner

18)

CASING AND TUBING PROGRAM

TYPE	$\begin{array}{c c} \text{YPE} & \underline{\text{Size}} & \underline{\text{New}} \\ \underline{\text{(in)}} & \underline{\text{or}} \\ \underline{\text{Used}} & \underline{\text{Grade}} & \underline{\text{W}} \end{array}$		Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS	
Conductor	24	New	NA	94.7	100'	100' /	113/GTS
Fresh Water	13-3/8	New	J-55	54.5	1,230'	1,200	961/CTS
Coal				1			
Intermediate	9-5/8	New	J-55	36	2,530'	2,500	864/CTS
Production	5-1/2 New P-110 20 23,340'		23,340'	23,310' /	5,536		
Tubing	2-7/8	New	P-110	6.5	NA	8000 √	NA
Liners							

Bugan Hain

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	24	28	0.375	NA	NA	Type 1	1.18
Fresh Water	13-3/8	17-1/2	0.380	2730	500	Class A	1.19
Coal							
Intermediate	9-5/8	12-3/8	0.395	3520	2800	Class A	1.19
Production	5-1/2	8-3/4 & 8-1/2	0.361	14,360	11,500 (frac)	50:50 POZ	1.07
Tubing	2-7/8	NA	0.217	13,870	NA	NA	NA
Liners							

PACKERS

Kind:	NA	
Sizes:		BEO.
Depths Set:	:	Office of Oil and
,		JAN 2 6 202

WW-6B (10/14)

API NO. 47
OPERATOR WELL NO. 8H
Well Pad Name: Bunner

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

Utilize auger rig to set cellar & conductor. The conductor will be grouted with cement to surface. Mobilize top hole drilling rig. Drill surface section on air. Run surface (freshwater & coal string) casing to desired depth. The surface section will not penetrate sea level. Surface casing will be cemented to surface. Drill intermediate section on air. Run intermediate casing to desired depth. Intermediate casing will be cemented to surface. Drill on air the production section to the start of the curve (KOP). The well will be loaded with synthetic oil base drilling mud (SOBM). Demobilize top hole rig. Mobilize horizontal drilling rig. Finish drilling the production section utilizing MWD surveys and geosteering practices to maintain the wellbore in the Marcellus shale and prevent anti-collision. Production casing will be ran to TD and cement top will be inside the intermediate casing.

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

A cement bond log will determine the top of production casing cement.

The production casing will be pressure tested. The hydraulic fracturing equipment will then open the toe sleeves and begin pumping the first stage. The plug-and-perf method will be used for the remaining stages. The max anticipated pressure during frac is 11,500psi and a max rate of 90bpm. After frac, the drillout rig will drill all plugs out of the well. Land production tubing at desired depth. Then flowback well until ready to turn in line to production facilities.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 16.36
- 22) Area to be disturbed for well pad only, less access road (acres): 6.79
- 23) Describe centralizer placement for each casing string:

Surface: shoe track & every 3rd joint to surface

Intermediate: shoe track & every 3rd joint to surface
Production: Rigid bow centralizers at shoe track & every other joint in the lateral to KOP. Bow springs Office of Oil and Gas

JAN 2 6 2021

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

Intermediate string cement will be a Type 1 Cement + Max 3% bwoc Calcium Chloride + Fresh Water. Production string cement will be (50:50) Poz (Fly Ash): Type I Cement with a gas migration additive.

25) Proposed borehole conditioning procedures:

Surface & intermediate on air will utilize high volumetric flow rates of air to ensure the wellbore is clean prior to TOH.

Production section will utilize synthetic oil based drilling mud to properly clean the wellbore. At TD, pump rate and rotation will be maximized and tripping will not begin until shakers flow clean. Production casing will be circulated prior to cementing to ensure a prepared wellbore for cement.

*Note: Attach additional sheets as needed.



NORTHEAST NATURAL ENERGY, LLC

Location: Monongalia County, WV Field: Monongalia

Facility: Bunner Pad

Well: Bunner 8H

Wellbore: Bunner 8H PWB

Plot reference wellpath is Burner 8H PWP Ex-04	Grid System: NAD83 / Lambort West Virginia SP, Northern Zone (4701), US feet
True vertical depths are referenced to Patterson 334 (KB)	North Reference; Grid north
Reference wellpath measured depths are referenced to Patterson 334 (KB)	State: True distance
Patterson 334 (KB) to Mean See Levet 1302 feet	Coordinates are in feet referenced to Slot
Mean See Level to Ground lovel (At Slot: Slot 8H): -1277 feet	Depths are infeet
Offsat well path MDs are referenced to each path's default MD datum	Created by: Hibitiop on 2021-01-06; Database: WA_MPL_EASTERNUS_Defo

Scale 1 Inch = 3500



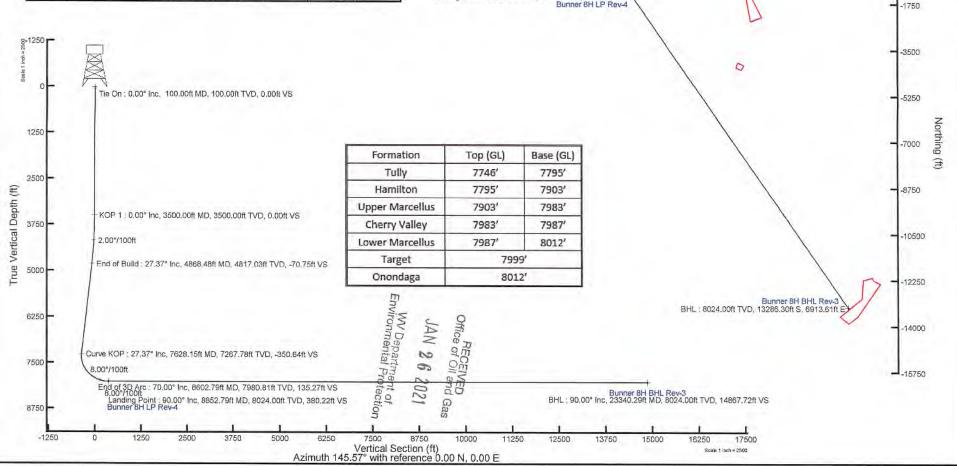
8750 1750

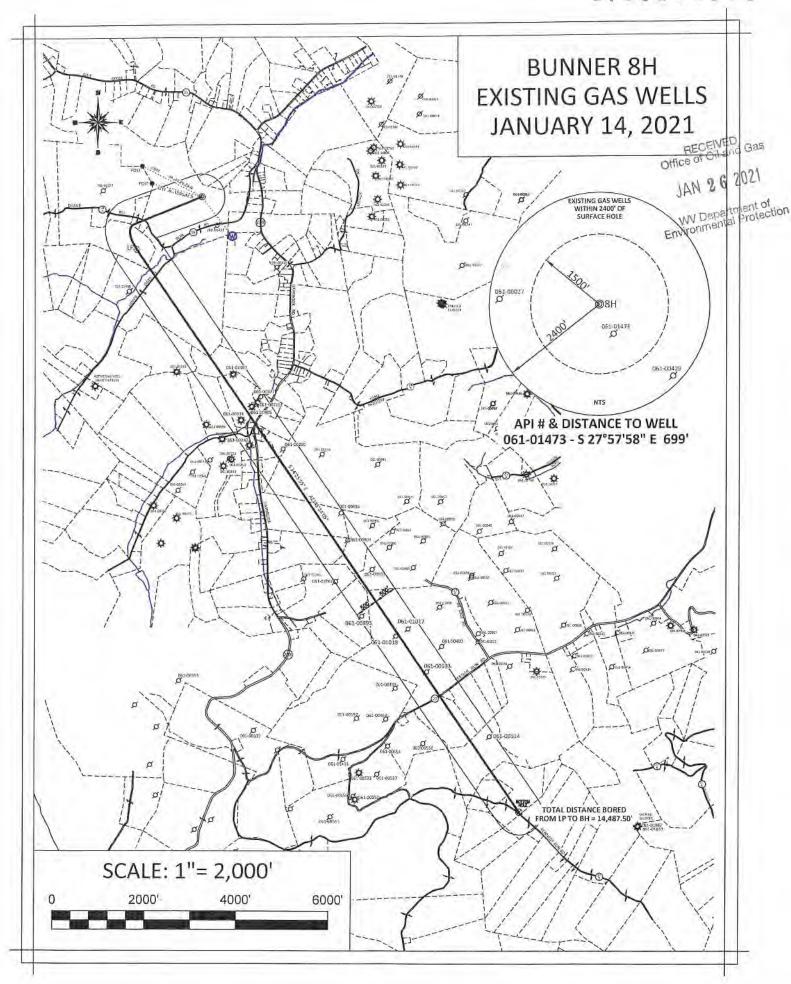
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Casing Type	Hole Size	Casing Size	Grade	Weight	Casing Depth (GL)	Drill Depth (GL)
Conductor	28"	24"	N/A	N/A	100'	100*
Surface	17.5"	13.375"	J-55	54.5	1200'	1230'
Intermediate	12.25"	9.675"	J-55	36	2500'	2530'

-8750 -7000 3500 Slot 8H
Tie On: 25.00ft TVD, 0.00ft N, 0.00ft E
KOP 1: 3500.00ft TVD, 0.00ft N)0.00ft E
End of Build: 4817.03ft TVD, 18.49ft S, 297.89ft W Curve KOP : 7267.78ft TVD, 587.28ft S, 1476.94ft End of 3D Arc : 7980.81ff TVD, 1135.02ff S, 1416.54ff W Landing Point : 8024.00ff TVD, 1337.06ff S, 1278.04ff W Bunner 8H LP Rev-4

Easting (ft)





Bunner 8H Area of Review								
API Number	Well Name	Well Number	Operator	Latitude (NAD 27)	Longitude (NAD 27)	TMP	TVD	Comments
47-061-01587	Daybrook Development	21	Sitter Drilling LLC	39.661392	-80.227299	4-17-16.3	2500	NA
47-061-00377	Larry Yost	12	Yost & Yost Inc	39.650490	-80.212814	4-17-16.2	707	Plugged 6/29/1983
47-061-00721	Larry Yost	13	Yost & Yost Inc	39.649636	-80.213570	4-17-16.2	2104	NA
47-061-00905	Murby Yost	14	Daybrook Development	39.650071	-80.213757	4-17-16.3	2105	NA
47-061-00373	Larry Yost	11	Yost & Yost Inc	39.650993	-80.212421	4-17-16.3	3285	NA
47-061-00242	Edward Yost	1	NA	39.647671	-80.213653	4-17-16	3255	NA
47-061-00290	Richard Malott	1	Yost & Yost Inc	39.647606	-80.211319	4-17-19	2233	NA
47-061-00903	H&M Hamilton	NA	Consolidation Coal	39.642241	-80.206225	4-20-08	NA	Plugged 5/3/1989
47-061-01062	J L & P D Foley	NA	Consolidation Coal	39.639776	-80.207161	4-20-32	NA	Plugged 4/10/1992
47-061-00901	H&M Hamilton	NA	Consolidation Coal	39.640501	-80.204348	4-20-11	NA	Plugged 6/18/1991
47-061-00895	D&C Ammons	NA	Consolidation Coal	39.637746	-80.205097	4-20-31	NA	NA
47-061-01017	J & S Moore	NA	Consolidation Coal	39.637021	-80.201533	4-20-25.1	NA	Plugged 5/9/1991
47-061-01018	J & S Moore	NA	Consolidation Coal	39.636586	-80.202471	4-20-25.1	NA	Plugged 5/11/1991
47-061-00533	Jeffrey & Sandra Moore	5	East Resources Inc.	39.634456	-80.200074	4-20-25.1	NA	Plugged 1/21/2010
47-061-00514	Neal Ercolano	1	NNE Resources LLC	39.630698	-80.195194	4-20-49	NA	Plugged 8/14/2020



Northeast Natural Energy LLC Mine Contingency Plan



On all wells drilled, Northeast Natural Energy LLC ("NNE") has contingency strategies in place should an unanticipated void or mine be encountered while drilling the surface section of the well. If encountered, any accumulated gases will be diverted a safe distance away from the drilling operations through the blooey line and/or flare.

All casings programs submitted to the state incorporate the use of a 24" conductor over the previously used 20" that has long been the industry standard for a typical Marcellus design. The use of 24" conductor casing allows the use of a 22" bit to ream the surface hole, and drill 50' below the void to run a string of 18-5/8" 87.50#/ft J-55 through the section when needed.

The 18-5/8" would be set 30-50' below the void with cement baskets placed directly above and below. The section of pipe below the void would be cemented using the balance method with 100% excess. The section above the void would be cemented separately by using remedial top fill techniques and 30% excess.

With the use of these string sizes and techniques, the surface and intermediate strings do not need to be altered. After a proper WOC time, the surface section of the well would continue to be drilled with a 17-1/2" bit and the 13-3/8" 54.50#/ft freshwater casing would be set at the originally permitted depth.

*The diagram below visually shows the alternative casing plan should an unanticipated void be encountered.

Casing Schematic w/ Mine String Casing Schematic w/o Mine String 24° Conductor Set 10' Below 24" Conductor Set 10' Below Non-Compacted Soils Non-Compacted Soils 22" Hole Drilled to 50' Below Void 18-5/8" 87.5#/ft. J-55 BTC Set 30'-50' Below 17-1/2" Hole Drilled, 13-3/8" 54.5#/ ft. J-55 BTC/STC Set at Originally Permitted Depth 17-1/2" Hole Drilled, 13-3/8" 54.5#/ Cement-to-Surface ft. J-55 BTC/STC Set at Originally Permitted Depth Cement-to-Surface 12 1/4" Hole Drilled, 9-5/8" 40#/ft. J-55 8RD LTC Set at Originally Permitted 12 1/2" Hole Drilled, 9-5/8" 40#/ft. J-55 Depth 8RD LTC Set at Originally Permitted Cement-to-Surface Cement-to-Surface 8 3/4" Drilled, 5-1/2" 20#/ft. P-110 BTC 8 3/4" Drilled, 5-1/2" 20#/ft. P-110 BTC Set at Originally Permitted Depth Set at Originally Permitted Depth Cemented Top Minimum 200' Inside of Cemented Top Minimum 200' Inside of Intermediate Casing RECEIVED Office of Oil and Gas Intermediate Casing JAN 26 2021 WV Department 101/11 - IC Environmental Profession

WW-9 (4/16)

API Number 47 -	-
Opagotor's Wall No.	Busner 9U

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

Operator Name Notineast Natural Energy LLC Watershed (HUC 10) Durkard Creek Quadrangle Blacksville Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No Will a pit be used? Yes No If so, please describe anticipated pit waste: NA Will a synthetic liner be used in the pit? Yes No If so, what ml.? NA Proposed Disposal Method For Treated Pit Wastes: Land Application Underground Injection (UIC Permit Number Office of Oil and horizontal)? Air, freshwater, oil based, etc. Vertical API Number underword State (Supply form WW-9 for disposal location) Other (Explain Will closed loop system be used? If so, describe: Yes, Please See Attachment "A" Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Vertical API Number underword (Supply Notes and Supply Notes and Sup	FLUIDS/ CUTTINGS DIS	POSAL & RECLAMATION PLAN
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No Will a pit be used? Yes No If so, please describe anticipated pit waste: NA Will a synthetic liner be used in the pit? Yes No If so, what ml.? NA Proposed Disposal Method For Treated Pit Wastes: Land Application Underground Injection (UIC Permit Number Underground Injection (UIC Permit Number Off Site Disposal (Supply form WW-9 for disposal location) Other (Explain Off Site Disposal (Supply form WW-9 for disposal location) Other (Explain If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Based Mud Additives to be used in drilling medium? Organophic Clay Viscosifiers, Line, Unsaturated Fathy Acids, Cacl, Basile, Enudations, Mice LCM, Water Loss Agently, March Clark, State Clark, Water Loss Agently, March Clark, State Clark, Water Loss Agently, March Clark, State Clark, Water Loss Agently, March Clark, Cacl, Basile, Enudations, Mice LCM, Water Loss Agently, March Clark, Cacl, Basile, Enudations, Mice LCM, Water Loss Agently, March Clark, Cacl, Basile, Enudations, Mice LCM, Water Loss Agently, March Clark, Cacl, Basile, Enudations, Mice LCM, Water Loss Agently, March Clark, Water Loss Agently	Operator Name Northeast Natural Energy LLC	OP Code 494498281
Will a synthetic liner be used in the pit? Yes No No If so, please describe anticipated pit waste: NA Will a synthetic liner be used in the pit? Yes No If so, what ml.? NA Proposed Disposal Method For Treated Pit Wastes: Land Application Underground Injection (UIC Permit Number Underground Injection (UIC Permit Number Underground Injection (UIC Permit Number) Off Site Disposal (Supply form WW-9 for disposal location) Ofther (Explain) Will closed loop system be used? If so, describe: Yes, Please See Attachment "A" Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Various And Course & Houseast of Oil Based Additives to be used in drilling medium? Organophic Clay Viscasine, Lines, Unsastandard Fatly Acids, Caci, Berile, Emulaifiers, Mica LOM. Water Loss Agamby Inc. Proceed of Oil and Galling and Interest of Oil Based Mud Additives to be used in drilling medium? Organophic Clay Viscasines, Lines, Unsastandard Fatly Acids, Caci, Berile, Emulaifiers, Mica LOM. Water Loss Agamby Inc. Proceed of Oil and Galling Interest of Oil and Galling Interest of Oil Based Mud Additives to be used in drilling medium? Organophic Clay Viscasines, Lines, Unsastandard Fatly Acids, Caci, Berile, Emulaifiers, Mica LOM. Water Loss Agamby Inc. Proceed of Oil and Galling Interest of Oil and Galling I	Watershed (HUC 10) Dunkard Creek	Quadrangle Blacksville
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	Company Official Signature HOOLINCOL	
Company Official Title Regulatory Manager	Company Official (Typed Name) Hollie Medley	<u> </u>
Company Official Title Toggistor, Managor	Company Official Title Regulatory Manager	
Subscribed and sworn before me this 18th day of December 2020 Kusten Brooks Northeast Natural Energy LLC 48 Donley St., Suite 601 Morgantown, WV 26501 My commission expires My commission expires OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA Northeast Natural Energy LLC 48 Donley St., Suite 601 Morgantown, WV 26501 My Commission Expires My commission expires	Kristen Brooks	December 2020 Notary Public STATE of WEST VIRGINIA Kristen Brooks Northeast Natural Energy LLC 48 Donley St., Suite 601 Morgantown, WV 26501 MV Commission Engage Aug. 10

Date: 1-19-21

X) Yes

Environmental Protection

Comments:

Field Reviewed?

Attachment A to WW-9

Northeast Natural Energy LLC ("NNE") plans to utilize a closed loop process for its drilling of the well. Return flow from the well will be separated into its liquid and solid form. Liquids will be held in steel tanks and reused in the drilling and completion process or disposed of at an approved facility listed below. Solids removed from the stream will be diverted to steel half-round tanks where they will be solidified on site and taken to disposal as they are accumulated.

The Drill Cuttings will be taken to disposal at one or more of the following disposal/approved waste facilities, unless listed facilities are no longer approved to accept waste at time of disposal:

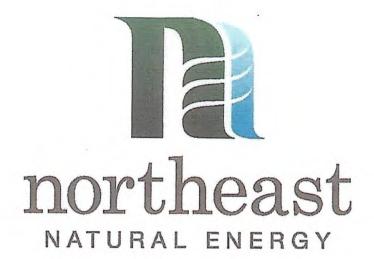
- Westmoreland Landfill (Tervita) Belle Vernon, PA (Permit # 100277)
- Meadowfill Landfill (Waste Management) Bridgeport, WV (Permit # SWF 103298)
- Max Environmental Yukon, PA (PAD004835146 and 301071)
- Max Environmental Bulger, PA (PAD059087072 and 301359)
- Chestnut Valley Landfill (Advanced Disposal) Export, PA (Permit # 101421)

NNE plans to reuse and recycle all flowback fluid and/or reach out to other operators in the area who may be able to reuse and recycle such fluid. However, in the event that reuse is not obtainable the fluid will be disposed of at one, or multiple, of the following disposal/approved waste facilities unless listed facilities are no longer approved to accept waste at time of disposal:

- Fairmont Brine Processing (WV NPDES #0116408)
- Green Hunter M. E. Elder 1 Disposal Well (Permit # 47-085-05151)
- Green Hunter Mason 1 Disposal Well (Permit #47-085-09721)
- Green Hunter Warren Disposal Well (Permit #34-121-2-3995)
- Green Hunter Travis Unit Disposal Well (Permit #34-121-2-4086)
- Viking Energy Corporation 20320 Disposal Well (Permit#47-039-02210)
- Ohio Oil Gathering Killbuck Disposal Well (Permit #34-075-24527)
- Ohio Oil Gathering Moran Disposal Well (Permit #34-089-24792)
- Ohio Oil Gathering Bells Run Disposal Well (Permit #34-167-29395)
- Ohio Oil Gathering Long Run Disposal Well (Permit #34-167-29658)
- Ohio Oil Gathering Newell Run Disposal Well (Permit #34-167-29685)
- Appalachian Oil Purchaser Greens Run Disposal Well (Permit #2D0732540)
- Appalachian Oil Purchaser BW#4 Disposal Well (Permit # 2D0732523)

Office of Oil and Gas

JAN 26 2021



Bunner 8H Site Safety Plan

December 2020

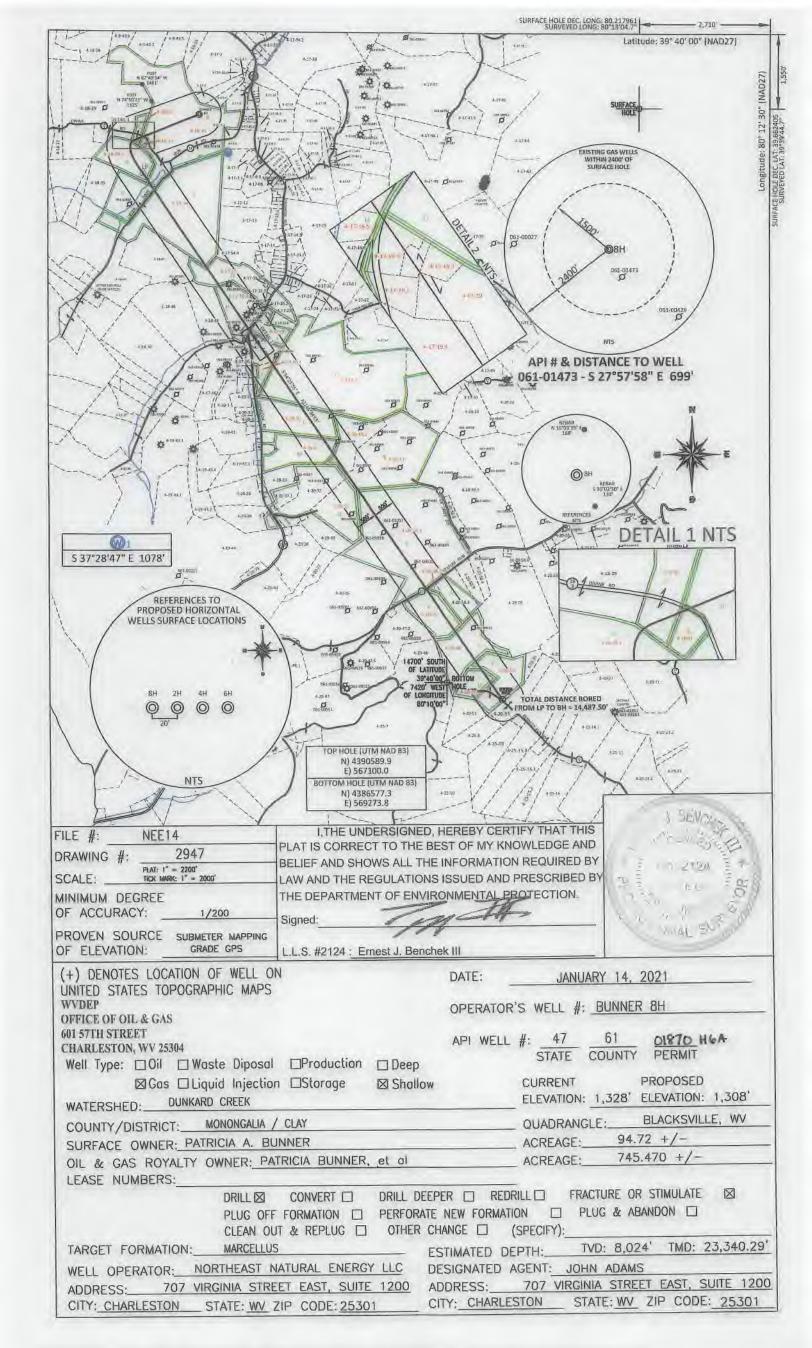
Buyan Harri 1-19-21

RECEIVED
Office of Oil and Gas

JAN 26 2021







	PROPERTY OWNER INDEX		
4-18-32	PATRICIA A. BUNNER		
4-18-30	PRUDENCE G BERRY		
4-18-31	ROBERT ELDON & PRUDENCE BERRY; GAIL & DEBRA JEAN JONES		
4-18-29.1 BILLY VON DEVINE			
4-18-34	GORDON PROPERTIES LLC		
4-17-15	DANIEL S. & KIMBERLY S. BRUMMAGE		
4-17-16.3	YOST HIRITAGE INC		
4-17-16.5	DOUGLAS J. & CHERAL A. SKINNER		
4-17-19.5	ROGER & LISA YOST		
4-17-19.3	ROGER & LISA YOST		
4-17-19.2	ROSE MALOTT		
4-17-19.4	ROGER & LISA YOST		
4-17-19	ROGER & LISA YOST		
4-17-19.1	CNX LAND LLC		
4-17-53	MARY D. & WILLIAM L. & LINDSAY J. & GEOGIE E. TENNAN		
4-17-20	BRIAN E. & MELISSA L. EDDY		
4-20-10	KAREN D. & KEVIN S. OWENS ET AL (LIFE - KAREN D. OWENS)		
4-20-11.1	M3 APPALACHIA GATHERING LLC		
4-20-8	JANICE WILSON		
4-20-11	HERBERT EARL HAMILTON		
4-20-31	RICHARD CHRISTOPHER TENNANT		
4-20-25.1	RONALD W & SHELIA A COSNER		
4-20-58.2	DEREK D & MIMI J WILLIAMS		
4-20-25	DEREK D & MIMI J WILLIAMS		
4-20-49	BRIAN KYLE LEMLEY		
4-20-54	DOROTHY WEST ESTATE ET AL		
4-20-50	WILLIAM FRANKLIN BOGGESS		

		LEASE INDEX			
1	A	WV-061-004154-001	K	WV-061-003539-003	1
1	В	WV-061-005368-015	L	WV-061-003299-013	V
1	C	WV-061-005378-013	M	WV-061-003747-001	1
1	D	WV-061-005639-001	N	WV-061-001052-002	/
V	E	WV-061-000175-000	0	WV-061-003862-001	1
1	F	WV-061-000683-120	P	WV-061-005714-001	1
1	G	WV-061-003325-011	Q	WV-061-005416-001	1
V	H	WV-061-001051-001	R	WV-061-005716-001	V
1	-	WV-061-003260-001	5	WV-061-005717-001	1
1	J	WV-061-003323-001	T	WV-061-004555-004	1
- 1	9		U	WV-061-005715-001	1

FILE #: NEE14	DATE:JANUARY 14, 2021
DRAWING #:2947	OPERATOR'S WELL #: BUNNER 8H
SCALE:N/A	API WELL #: 47 61 OUNTY PERMIT

Operator's Well No. Bunner 8H

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, Lessec, etc.

Royalty

Book/Page

See Attached

RECEIVED
Office of Oil and Gas

JAN 2 6 2021

WV Department of Environmental Protection

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

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

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

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

Well Operator: Northeast Natural Energy LLC

By: Hollie Medley

Its: Regulatory Manager

WW-6A1

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
Α	WV-061-004154-001	Patrícia Bunner	Northeast Natural Energy, LLC	12.5% or Greater	1563	435
В	WV-061-005368-015	Anthony J. Stanley	Northeast Natural Energy, LLC	12.5% or Greater	142	323
В	WV-061-005378-013	Darby Lynn McDonald	Northeast Natural Energy, LLC	12.5% or Greater	1688	581
В	WV-061-005378-002	Eleanor K. Kosienski	Northeast Natural Energy, LLC	12.5% or Greater	1638	666
В	WV-061-005368-011	Gary W. Spragg	Northeast Natural Energy, LLC	12.5% or Greater	1643	40
В	WV-061-005368-012	John T. Stanley	Northeast Natural Energy, LLC	12.5% or Greater	1660	358
В	WV-061-005378-006	Lois Evelyn Holder	Northeast Natural Energy, LLC	12.5% or Greater	1666	143
В	WV-061-005368-013	Lois Smith	Northeast Natural Energy, LLC	12.5% or Greater	1666	139
В	WV-061-005368-014	Martha Wilcox	Northeast Natural Energy, LLC	12.5% or Greater	1647	816
В	WV-061-005378-011	Micah Riggenbach	Northeast Natural Energy, LLC	12.5% or Greater	1673	297
В	WV-061-005378-012	Patricia Ann Virgili	Northeast Natural Energy, LLC	12.5% or Greater	1679	290
В	WV-061-005378-004	Paul Stebelton	Northeast Natural Energy, LLC	12.5% or Greater	1664	727
В	WV-061-005378-010	Rachel Asbury	Northeast Natural Energy, LLC	12.5% or Greater	1673	295
В	WV-061-005378-008	Rebekah Stebelton	Northeast Natural Energy, LLC	12.5% or Greater	1666	147
В	WV-061-005378-007	Sarah Brandt	Northeast Natural Energy, LLC	12.5% or Greater	1666	145
В	WV-061-005378-009	Shelba Stebelton Roach	Northeast Natural Energy, LLC	12.5% or Greater	1666	149
В	WV-061-005378-003	Shirley Ann Blalock	Northeast Natural Energy, LLC	12.5% or Greater	1664	725
В	WV-061-005378-005	Terry Spivey	Northeast Natural Energy, LLC	12.5% or Greater	1666	141
C	WV-061-005378-013	Darby Lynn McDonald	Northeast Natural Energy, LLC	12.5% or Greater	1688	581
С	WV-061-005361-015	Anthony J. Stanley	Northeast Natural Energy, LLC	12.5% or Greater	142	319
C	WV-061-005361-001	Gary W. Spragg	Northeast Natural Energy, LLC	12.5% or Greater	1637	60
C	WV-061-005361-013	John T. Stanley	Northeast Natural Energy, LLC	12.5% or Greater	1660	358
C	WV-061-005378-006	Lois Evelyn Holder	Northeast Natural Energy, LLC	12.5% or Greater	1666	143
C	WV-061-005361-014	Lois Smith	Northeast Natural Energy, LLC	12.5% or Greater	1662	743
C	WV-061-005361-012	Martha Wilcox	Northeast Natural Energy, LLC	12.5% or Greater	1647	816
C	WV-061-005378-011	Micah Riggenbach	Northeast Natural Energy, LLC	12.5% or Greater	1673	297
C	WV-061-005378-012	Patricia Ann Virgili	Northeast Natural Energy, LLC	12.5% or Greater	1679	290
C	WV-061-005378-004	Paul Stebelton Rachel Asbury	Northeast Natural Energy, LLC	12.5% or Greater	1664	727
C	WV-061-005378-010	Rachel Asbury	Northeast Natural Energy, LLC	12.5% or Greater	1673	295
C	WV-061-005378-008	Rebekah Stebelton	Northeast Natural Energy, LLC	12.5% or Greater	1666	147
С	WV-061-005378-007	Sarah Brandt	Northeast Natural Energy, LLC	12.5% or Greater	1666	145
C	WV-061-005378-009	Shelba Stebelton Roach	Northeast Natural Energy, LLC	12.5% or Greater	1666	149
C	WV-061-005378-003	Shirley Ann Blalock	Northeast Natural Energy, LLC	12.5% or Greater	1664	725
C	WV-061-005378-005	Terry Spivey	Northeast Natural Energy, LLC	12.5% or Greater	1666	141
D	WV-061-005639-001	Billy Von Devine	Northeast Natural Energy, LLC	12.5% or Greater	1697	764
E	WV-061-000175-000	Bob R. Chisler	Northeast Natural Energy, LLC	12.5% or Greater	1435	767
E	WV-061-000175-000	Charles D. Chisler	Northeast Natural Energy, LLC	12.5% or Greater	1435	767
E	WV-061-000175-000	John Chisler	Northeast Natural Energy, LLC	12.5% or Greater	1435	767
E	WV-061-000175-000	Roy Dale Chisler	Northeast Natural Energy, LLC	12.5% or Greater	1435	767
F	WV-061-000683-120	Alan Bowling	Northeast Natural Energy, LLC	12.5% or Greater	1509	709
F	WV-061-000683-067	Alison N. Paulson	Northeast Natural Energy, LLC	12.5% or Greater	1505	399
P.	WV-061-000683-071	Allen B. Taylor	Northeast Natural Energy, LLC	12.5% or Greater	1505	265

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
F	WV-061-000683-063	Barbara Huber	Northeast Natural Energy, LLC	12.5% or Greater	1500	583
F	WV-061-000683-075	Bernice Pratt	Northeast Natural Energy, LLC	12.5% or Greater	1503	120
F	WV-061-000683-035	Betty Fultz	Northeast Natural Energy, LLC	12.5% or Greater	1485	370
F	WV-061-000683-114	Beulah Royston	Northeast Natural Energy, LLC	12.5% or Greater	1507	575
F	WV-061-000683-101	Beverly A. Houchin	Northeast Natural Energy, LLC	12.5% or Greater	1506	95
F	WV-061-000683-039	Burl H. Henry	Northeast Natural Energy, LLC	12.5% or Greater	1485	380
F	WV-061-000683-116	Byron Jones	Northeast Natural Energy, LLC	12.5% or Greater	1506	695
F	WV-061-000683-057	Carl E. Swartz	Northeast Natural Energy, LLC	12.5% or Greater	1498	197
F	WV-061-000683-092	Carol A. Luckey	Northeast Natural Energy, LLC	12.5% or Greater	1505	462
F	WV-061-000683-132	Carol Gardner	Northeast Natural Energy, LLC	12.5% or Greater	1516	631
F	WV-061-000683-112	Carol Jean Hunnell	Northeast Natural Energy, LLC	12.5% or Greater	1509	554
F	WV-061-000683-136	Cathy J. Adkins	Northeast Natural Energy, LLC	12.5% or Greater	1521	680
F	WV-061-000683-082	Cindy Zace	Northeast Natural Energy, LLC	12.5% or Greater	1503	554
F	WV-061-000683-015	Connie Geissinger	Northeast Natural Energy, LLC	12.5% or Greater	1484	230
F	WV-061-000683-125	Crystal Christensen	Northeast Natural Energy, LLC	12.5% or Greater	1532	551
F	WV-061-000683-093	Cynthia A. Sharp	Northeast Natural Energy, LLC	12.5% or Greater	1505	519
F	WV-061-000683-130	Cynthia Chambers	Northeast Natural Energy, LLC	12.5% or Greater	1516	629
F	WV-061-000683-018	D. Ray Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1484	247
F	WV-061-000683-020	Daniel T. Sims	Northeast Natural Energy, LLC	12.5% or Greater	1484	261
F	WV-061-000683-102	Darrell R. Collins	Northeast Natural Energy, LLC	12.5% or Greater	1505	505
F	WV-061-000683-055	David Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1492	562
F	WV-061-000683-030	David Watkins	Northeast Natural Energy, LLC	12.5% or Greater	1484	566
F	WV-061-000683-008	Don Jones	Northeast Natural Energy, LLC	12.5% or Greater	1506	697
F	WV-061-000683-074	Donald K. Miller	Northeast Natural Energy, LLC	12.5% or Greater	1503	534
F	WV-061-000683-056	Donald L. Shane	Northeast Natural Energy, LLC	12.5% or Greater	1492	544
F	WV-061-000683-126	Donna C. Weselius	Northeast Natural Energy, LLC	12.5% or Greater	1510	17
F	WV-061-000683-121	Donna Gail Bowling	Northeast Natural Energy, LLC	12.5% or Greater	1509	707
F	WV-061-000683-040	Doris Mae Henry	Northeast Natural Energy, LLC	12.5% or Greater	1485	376
F	WV-061-000683-087	Dorothy Sine	Northeast Natural Energy, LLC	12.5% or Greater	1503	815
F	WV-061-000683-024	Douglas D. Watkins	Northeast Natural Energy, LLC	12.5% or Greater	1484	269
F	WV-061-000683-115	Earl Bowling	Northeast Natural Energy, LLC	12.5% or Greater	1527	648
F	WV-061-000683-129	Emma Tedrick	Northeast Natural Energy, LLC	12.5% or Greater	1513	643
F	WV-061-000683-046	Eva L. Ellis	Northeast Natural Energy, LLC	12.5% or Greater	1487	687
F	WV-061-000683-066	Goldene B. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1502	618
F	WV-061-000683-109	☐ Helen Gregg Helen Jeffers Lowry	Northeast Natural Energy, LLC	12.5% or Greater	1510	23
F		Helen Jeffers Lowry	Northeast Natural Energy, LLC	12.5% or Greater	1503	544
F	WV-061-000683-069	Jacquelyn M. Halbrook Jaimee C. Sharp	Northeast Natural Energy, LLC	12.5% or Greater	1504	770
F	WV-061-000683-090	Jaimee C. Sharp Property And James Chambers	Northeast Natural Energy, LLC	12.5% or Greater	1503	862
F	WV-061-000683-131		Northeast Natural Energy, LLC	12.5% or Greater	1516	124
F	WV-061-000683-068	g James Paulson	Northeast Natural Energy, LLC	12.5% or Greater	1505	402
F	WV-061-000683-119	James R. Sine	Northeast Natural Energy, LLC	12.5% or Greater	1507	253
F	WV-061-000683-051	James Ray Lambert	Northeast Natural Energy, LLC	12.5% or Greater	1490	857
F	WV-061-000683-019	Janet Coleman	Northeast Natural Energy, LLC	12.5% or Greater	1484	259
F	WV-061-000683-014	Janet S. Martin	Northeast Natural Energy, LLC	12.5% or Greater	1483	493

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
F	WV-061-000683-049	Jean-Clare Sims Bohm	Northeast Natural Energy, LLC	12.5% or Greater	1488	880
F	WV-061-000683-021	Jerry E. Sims	Northeast Natural Energy, LLC	12.5% or Greater	1484	263
F	WV-061-000683-100	Jo Ann Collins	Northeast Natural Energy, LLC	12.5% or Greater	1505	507
F	WV-061-000683-017	Jo Ann Watkins	Northeast Natural Energy, LLC	12.5% or Greater	1484	245
F	WV-061-000683-052	John Alan Lambert	Northeast Natural Energy, LLC	12.5% or Greater	1490	859
F	WV-061-000683-077	John Michael Paulson	Northeast Natural Energy, LLC	12.5% or Greater	1503	713
F	WV-061-000683-110	John R. Jones	Northeast Natural Energy, LLC	12.5% or Greater	1508	499
F	WV-061-000683-048	Joseph B. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1488	898
F	WV-061-000683-031	Joyce Sell	Northeast Natural Energy, LLC	12.5% or Greater	1484	564
F	WV-061-000683-023	Judy I. Wilson	Northeast Natural Energy, LLC	12.5% or Greater	1574	528
F	WV-061-000683-037	Keith Henry	Northeast Natural Energy, LLC	12.5% or Greater	1485	386
F	WV-061-000683-027	Kent S. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1484	275
F	WV-061-000683-059	Kim David Fritz	Northeast Natural Energy, LLC	12.5% or Greater	1500	573
F	WV-061-000683-088	Larry G. Collins	Northeast Natural Energy, LLC	12.5% or Greater	1506	779
F	WV-061-000683-085	Larry M. Sine	Northeast Natural Energy, LLC	12.5% or Greater	1503	653
F	WV-061-000683-142	Laura Ann Rogers	Northeast Natural Energy, LLC	12.5% or Greater	1688	551
F	WV-061-000683-072	Leo K. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1502	666
F	WV-061-000683-034	Leroy Sine	Northeast Natural Energy, LLC	12.5% or Greater	1486	567
F	WV-061-000683-043	Linda Lorraine Makin	Northeast Natural Energy, LLC	12.5% or Greater	1487	312
F	WV-061-000683-062	Lisa Cortes	Northeast Natural Energy, LLC	12.5% or Greater	1500	573
F	WV-061-005627-001	Lisa Emler	Northeast Natural Energy, LLC	12.5% or Greater	1692	225
F	WV-061-000683-084	Lori Kirby	Northeast Natural Energy, LLC	12.5% or Greater	1503	880
F	WV-061-000683-050	Lorita Marie Zastrow	Northeast Natural Energy, LLC	12.5% or Greater	1488	878
F	WV-061-000683-128	Louis Bowling	Northeast Natural Energy, LLC	12.5% or Greater	1513	645
F	WV-061-000683-007	Luana S. Alicandri	Northeast Natural Energy, LLC	12.5% or Greater	1453	219
F	WV-061-000683-032	Mack Watkins	Northeast Natural Energy, LLC	12.5% or Greater	1484	562
F	WV-061-000683-079	Marion Lavern Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1503	548
F	WV-061-000683-123	Marjorie C. Robinette	Northeast Natural Energy, LLC	12.5% or Greater	1510	21
F	WV-061-000683-078	Mary Ann Sine	Northeast Natural Energy, LLC	12.5% or Greater	1503	205
F	WV-061-000683-094	Mary Anne Ketelsen	Northeast Natural Energy, LLC	12.5% or Greater	1505	145
F	WV-061-000683-127	Mary Brown	Northeast Natural Energy, LLC	12.5% or Greater	1510	633
F	WV-061-000683-111	Mary M. Field	Northeast Natural Energy, LLC	12.5% or Greater	1510	372
F	WV-061-000683-095	Mary S. Pirie	Northeast Natural Energy, LLC	12.5% or Greater	1505	523
F	WV-061-000683-122	Nancy Bovenizer	Northeast Natural Energy, LLC	12.5% or Greater	1507	251
F	WV-061-000683-107	Nellie Bichard	Northeast Natural Energy, LLC	12.5% or Greater	1509	705
F	WV-061-000683-033	Nellie G. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1485	372
F	WV-061-000683-089	O Pamela E. Sharp	Northeast Natural Energy, LLC	12.5% or Greater	1503	864
F	WV-061-000683-060	Pamela E. Sharp Patricia JoAnn Wagner Paul Marvin Collins	Northeast Natural Energy, LLC	12.5% or Greater	1500	458
F		Paul Marvin Collins	Northeast Natural Energy, LLC	12.5% or Greater	1505	491
F	WV-061-000683-104	Perry W. Miller Jr.	Northeast Natural Energy, LLC	12.5% or Greater	1505	161
F	WV-061-000683-103	Philip E. Miller	Northeast Natural Energy, LLC	12.5% or Greater	1504	760
F		Philip J. Sims	Northeast Natural Energy, LLC	12.5% or Greater	1484	271
F	WV-061-000683-070	Phillip D. Sine	Northeast Natural Energy, LLC	12.5% or Greater	1505	470
F	WV-061-000683-099	Robert Alan Sharp	Northeast Natural Energy, LLC	12.5% or Greater	1504	748

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F	WV-061-000683-091	Robert Lee Collins	Northeast Natural Energy, LLC	12.5% or Greater	1507	269
F	WV-061-000683-041	Robert Lee Henry	Northeast Natural Energy, LLC	12.5% or Greater	1485	384
F	WV-061-000683-064	Robert M. Shane	Northeast Natural Energy, LLC	12.5% or Greater	1500	571
F	WV-061-000683-073	Robert Paulson	Northeast Natural Energy, LLC	12.5% or Greater	1502	668
F	WV-061-000683-038	Robert W. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1485	382
F	WV-061-000683-106	Ronald Hadley	Northeast Natural Energy, LLC	12.5% or Greater	1505	175
F	WV-061-000683-097	Rosemary Gae Penhorwood	Northeast Natural Energy, LLC	12.5% or Greater	1532	418
F	WV-061-000683-028	Ruth Ellen Larry	Northeast Natural Energy, LLC	12.5% or Greater	1484	277
F	WV-061-000683-108	Ruth Holmes	Northeast Natural Energy, LLC	12.5% or Greater	1507	585
F	WV-061-000683-124	Sandra K. Krider	Northeast Natural Energy, LLC	12.5% or Greater	1511	771
F	WV-061-000683-047	Sharon K. Schuster	Northeast Natural Energy, LLC	12.5% or Greater	1487	691
F	WV-061-000683-080	Sherry L. Harrison	Northeast Natural Energy, LLC	12.5% or Greater	1505	373
F	WV-061-003618-001	Shuman Inc.	Northeast Natural Energy, LLC	12.5% or Greater	1539	411
F	WV-061-000683-029	Stephen A. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1484	279
F	WV-061-000683-096	Steve B. Paulson	Northeast Natural Energy, LLC	12.5% or Greater	1511	550
F	WV-061-000683-042	Sue Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1487	308
F	WV-061-000683-081	Susan J. Sine	Northeast Natural Energy, LLC	12,5% or Greater	1503	649
F	WV-061-000683-105	Susan Ranae Lentz	Northeast Natural Energy, LLC	12.5% or Greater	1505	133
F	WV-061-000683-036	Teresa Leigh Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1485	368
F	WV-061-000683-135	Thomas A. Dawson	Northeast Natural Energy, LLC	12.5% or Greater	1516	771
F	WV-061-000683-026	Tommy D. Watkins	Northeast Natural Energy, LLC	12.5% or Greater	1484	273
F	WV-061-000683-117	Victoria Hammersley	Northeast Natural Energy, LLC	12.5% or Greater	1506	704
F	WV-061-000683-113	Wayne McElwee	Northeast Natural Energy, LLC	12.5% or Greater	1510	19
F	WV-061-000683-083	William E. Sharp	Northeast Natural Energy, LLC	12.5% or Greater	1505	367
F	WV-061-000683-053	Yuri Dmitri Popov	Northeast Natural Energy, LLC	12.5% or Greater	1492	435
G	WV-061-003325-011	Adrian Kyle Wells II	Northeast Natural Energy, LLC	12.5% or Greater	1502	752
G	WV-061-003325-005	David Lee Wells	Northeast Natural Energy, LLC	12,5% or Greater	1502	756
G	WV-061-003325-001	Lelia Kimberly Wells Fournet	Northeast Natural Energy, LLC	12.5% or Greater	1503	102
G	WV-061-003325-007	Olivia Keth Wells Sullivan	Northeast Natural Energy, LLC	12.5% or Greater	1502	758
G	WV-061-001035-018	Barry Hollandsworth	Northeast Natural Energy, LLC	12.5% or Greater	1486	895
G	WV-061-005323-006	Judith Wilson	Northeast Natural Energy, LLC	12.5% or Greater	1483	483
G	WV-061-005323-002	Jacqueline C. Cowell	Northeast Natural Energy, LLC	12.5% or Greater	1483	483
G	WV-061-005323-001	Joyce A. Clark	Northeast Natural Energy, LLC	12.5% or Greater	1483	483
G	WV-061-005323-012	Jerry L. Wilson	Northeast Natural Energy, LLC	12.5% or Greater	1483; 1640	483; 355
G	WV-061-005323-010	Jeffrey L. Wilson	Northeast Natural Energy, LLC	12.5% or Greater	1483	483
G	WV-061-005323-007	Janice Kay Wilson	Northeast Natural Energy, LLC	12.5% or Greater	1483	483
G	WV-061-005323-006	James L. Wilson	Northeast Natural Energy, LLC	12.5% or Greater	1483	483
G	WV-061-004721-009	Q Sharon Lyons Rock	Northeast Natural Energy, LLC	12.5% or Greater	1608	55
G	WV-061-004721-008	Robert Lyons	Northeast Natural Energy, LLC	12.5% or Greater	1608	52
G	WV-061-005467-001	Billy Ray Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1645	174
G	WV-061-003324-001	Brian E. Davis	Northeast Natural Energy, LLC	12.5% or Greater	1505	404
G	WV-061-003325-014		Northeast Natural Energy, LLC	12.5% or Greater	1503	858
G	WV-061-001035-041	Guy S. Graziano Jr. Celeste M. Williams	Northeast Natural Energy, LLC	12.5% or Greater	1517	399
G	WV-061-001035-035	Charles Bradley Davis	Northeast Natural Energy, LLC	12.5% or Greater	1503	86

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G	WV-061-003325-013	Charles J. Altamore	Northeast Natural Energy, LLC	12.5% or Greater	1503	866
G	WV-061-003803-001	Cheryl L. Gallagher	Northeast Natural Energy, LLC	12.5% or Greater	1559	272
G	WV-061-003867-001	Cliff Evan Wilson	Northeast Natural Energy, LLC	12.5% or Greater	1566	5
G	WV-061-003934-002	Daniel G. Dinius	Northeast Natural Energy, LLC	12.5% or Greater	1566	3
G	WV-061-001035-036	David Wayne Williams	Northeast Natural Energy, LLC	12.5% or Greater	1503	870
G	WV-061-002401-007	Dennis Keith Williams	Northeast Natural Energy, LLC	12.5% or Greater	1441	724
G	WV-061-003872-001	Don R. Williams	Northeast Natural Energy, LLC	12.5% or Greater	1576	426
G	WV-061-003325-003	Donald Wheeler Jr.	Northeast Natural Energy, LLC	12.5% or Greater	1503	92
G	WV-061-005323-003	Ellen J. Woodruff	Northeast Natural Energy, LLC	12.5% or Greater	1483	487
G	WV-061-003325-016	Fred J. Altamore	Northeast Natural Energy, LLC	12.5% or Greater	1505	369
G	WV-061-003325-025	Jack L. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1493	273
G	WV-061-005323-011	James F. Williams	Northeast Natural Energy, LLC	12.5% or Greater	1640	353
G	WV-061-003934-003	Stephen A. Jones	Northeast Natural Energy, LLC	12.5% or Greater	1662	755
G	WV-061-003934-007	Trisha Jones	Northeast Natural Energy, LLC	12.5% or Greater	1638	642
G	WV-061-003757-001	Nancy A. Kallas	Northeast Natural Energy, LLC	12.5% or Greater	1557	492
G	WV-061-002401-004	James Everett Williams II	Northeast Natural Energy, LLC	12.5% or Greater	1441	20
G	WV-061-003934-006	Janet D. Crabtree	Northeast Natural Energy, LLC	12.5% or Greater	1635	492
G	WV-061-003325-004	Jerry Wayne Moore	Northeast Natural Energy, LLC	12.5% or Greater	1503	104
G	WV-061-00467-003	Jimmy Randall Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1647	118
G	WV-061-003331-001	Jo Statler	Northeast Natural Energy, LLC	12.5% or Greater	1502	599
G	WV-061-003934-005	John C. Jones	Northeast Natural Energy, LLC	12.5% or Greater	1635	490
G	WV-061-001035-026	Joseph Anthony Haught	Northeast Natural Energy, LLC	12.5% or Greater	1493	884
G	WV-061-002401-006	Joyce Ann Berga	Northeast Natural Energy, LLC	12.5% or Greater	1440	686
G	WV-061-001035-032	Judy D. Rose	Northeast Natural Energy, LLC	12.5% or Greater	1500; 1642	395; 164
G	WV-061-002401-005	Karen J. Taylor	Northeast Natural Energy, LLC	12.5% or Greater	1440	691
G	WV-061-005323-009	Kathleen A. Williams	Northeast Natural Energy, LLC	12.5% or Greater	1484	560
G	WV-061-003840-001	Kimberly Brummage	Northeast Natural Energy, LLC	12.5% or Greater	1562	347
G	WV-061-001035-028	Larry L. Rush	Northeast Natural Energy, LLC	12.5% or Greater	1493	893
G	WV-061-003934-004	Loruma B. Brokaw	Northeast Natural Energy, LLC	12.5% or Greater	1636	227
G	WV-061-001035-012	Correll W. Cummins	Northeast Natural Energy, LLC	12.5% or Greater	1610	481
G	WV-061-002416-001	Correll W. Cummins Mabel L. McAfee Malorie Jane Evans	Northeast Natural Energy, LLC	12.5% or Greater	1440	697
G	WV-061-003694-001		Northeast Natural Energy, LLC	12.5% or Greater	1642	166
G	WV-061-003325-006	Marilyn Jane Moore	Northeast Natural Energy, LLC	12.5% or Greater	1504	768
G	WV-061-001035-036	Page 20 d Mark Allen Williams	Northeast Natural Energy, LLC	12.5% or Greater	1503	870
G	WV-061-002401-001	हिं ट्रे व्रि Mary Jane Pemberton	Northeast Natural Energy, LLC	12.5% or Greater	1441	724
G	WV-061-001035-022	ਰੂੰ Mary V. Cole	Northeast Natural Energy, LLC	12.5% or Greater	1492	431
G	WV-061-001035-044	George W. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1636	134
G	WV-061-005372-001	Randall E. Dinius	Northeast Natural Energy, LLC	12.5% or Greater	1637	593
G	WV-061-002401-003	Rebecca Lynn Stahler	Northeast Natural Energy, LLC	12.5% or Greater	1441	8
G	WV-061-003325-004	Richard Lane Moore	Northeast Natural Energy, LLC	12.5% or Greater	1503	104
G	WV-061-003325-004	Robert Lynn Moore	Northeast Natural Energy, LLC	12.5% or Greater	1503	104
G	WV-061-002401-002	Robert Ora Wheeler	Northeast Natural Energy, LLC	12.5% or Greater	1441	14
G	WV-061-005323-008	Robin K. Walls	Northeast Natural Energy, LLC	12.5% or Greater	1481	269
G	WV-061-005467-002	Rodney Wayne Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1645	176

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G	WV-061-005467-004	Roxanna Cahill and Michael Cahill	Northeast Natural Energy, LLC	12.5% or Greater	1647	120
G	WV-061-001035-024	Russell D. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1492	419
G	WV-061-001035-018	Shirley Hollandsworth	Northeast Natural Energy, LLC	12.5% or Greater	1486	895
G	WV-061-001035-015	Bob Williams	Northeast Natural Energy, LLC	12.5% or Greater	1486	144
G	WV-061-005323-004	Sue Ann Strickland	Northeast Natural Energy, LLC	12.5% or Greater	1483	485
G	WV-061-003325-004	Susan Gail Moore	Northeast Natural Energy, LLC	12.5% or Greater	1503	104
G	WV-061-002401-008	Susan L. Michael	Northeast Natural Energy, LLC	12.5% or Greater	1441	724
G	WV-061-001035-027	Tana D. Butler	Northeast Natural Energy, LLC	12.5% or Greater	1493	891
G	WV-061-001035-036	Teresa Jane Swanson	Northeast Natural Energy, LLC	12.5% or Greater	1503	870
G	WV-061-003934-009	Thomas D. Jones	Northeast Natural Energy, LLC	12.5% or Greater	1636	217
G	WV-061-001035-030	Todd A. Rupert	Northeast Natural Energy, LLC	12.5% or Greater	1498	209
G	WV-061-001035-010	Wilma G. Williams	Northeast Natural Energy, LLC	12.5% or Greater	1485	364
G	WV-061-003325-010	Linda L. Barker	Northeast Natural Energy, LLC	12.5% or Greater	1503	96
G	WV-061-004072-006	Linda Lee Brown	Northeast Natural Energy, LLC	12.5% or Greater	1566	333
G	WV-061-003325-009	Susan R. Edwards	Northeast Natural Energy, LLC	12.5% or Greater	1503	94
G	WV-061-001035-031	Beulah Farley	Northeast Natural Energy, LLC	12.5% or Greater	1498	363
G	WV-061-001035-023	Charles A. Filbey	Northeast Natural Energy, LLC	12.5% or Greater	1594	222
G	WV-061-001035-029	Gary R. Filbey	Northeast Natural Energy, LLC	12.5% or Greater	1495	5
G	WV-061-001035-009	Janet L. Filbey	Northeast Natural Energy, LLC	12.5% or Greater	1485	175
G	WV-061-001035-009	Richard L. Filbey	Northeast Natural Energy, LLC	12.5% or Greater	1485	175
G	WV-061-003325-015	Ronald D. Gump Jr.	Northeast Natural Energy, LLC	12.5% or Greater	1503	819
G	WV-061-004072-002	Deborah A. Haught	Northeast Natural Energy, LLC	12.5% or Greater	1565	513
G	WV-061-001035-045	Susan Lynn James	Northeast Natural Energy, LLC	12.5% or Greater	1638	466
G	WV-061-002430-003	Michelle Dawn Johnson	Northeast Natural Energy, LLC	12.5% or Greater	1446; 1447	621; 457
G	WV-061-001035-038	Charles R. Miller	Northeast Natural Energy, LLC	12.5% or Greater	1505	121
G	WV-061-001035-034	Donald L. Miller	Northeast Natural Energy, LLC	12.5% or Greater	1505	269
G	WV-061-004072-008	David Nicholson	Northeast Natural Energy, LLC	12.5% or Greater	1566	696
G	WV-061-004072-001	James E. Nicholson	Northeast Natural Energy, LLC	12.5% or Greater	1565	515
G	WV-061-004072-003	Jeffrey L. Nicholson	Northeast Natural Energy, LLC	12.5% or Greater	1565	849
G	WV-061-004072-005	Joseph B. Nicholson	Northeast Natural Energy, LLC	12.5% or Greater	1565	517
G	WV-061-001035-011	Martha T. Price	Northeast Natural Energy, LLC	12.5% or Greater	1485	362
G	WV-061-004072-004	Charlotta M. Simpson	Northeast Natural Energy, LLC	12.5% or Greater	1566	1
G	WV-061-003325-012	Rhonda E. Taylor	Northeast Natural Energy, LLC	12.5% or Greater	1503	645
G	WV-061-001035-037	Bruce M. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1505	521
G	WV-061-004072-009	O Conrad K. Tennant Jr.	Northeast Natural Energy, LLC	12.5% or Greater	1566	733
G	WV-061-005419-001	ਹੁੰ Sharon Kay Bussineau	Northeast Natural Energy, LLC	12.5% or Greater	1648	251
G	WV-061-001035-040	Mark B. Tennant Sign Wayne Tennant Jr.	Northeast Natural Energy, LLC	12.5% or Greater	1505	383
G	WV-061-001035-039	ਕੇ ਨੂੰ Om Wayne Tennant Jr.	Northeast Natural Energy, LLC	12.5% or Greater	1510	87
G	WV-061-002430-004	Diane Beth Thomas Cont Cont Cont Cont Cont Cont Cont Cont	Northeast Natural Energy, LLC	12.5% or Greater	1446; 1447	621; 478
G	WV-061-001035-014	OFF CO Patricia Van Tassell	Northeast Natural Energy, LLC	12.5% or Greater	1486	148
G	WV-061-003325-008	일을 생 Joyce Walls	Northeast Natural Energy, LLC	12.5% or Greater	1502	746
G	WV-061-004072-007	Didita 5. VVdiSii	Northeast Natural Energy, LLC	12.5% or Greater	1566	741
G	WV-061-002430-002	Jarrod Williams	Northeast Natural Energy, LLC	12.5% or Greater	1447	400
G	WV-061-001035-046	Jean Williams	Northeast Natural Energy, LLC	12.5% or Greater	1641	298

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
G	WV-061-001035-033	Peggy L. Williams	Northeast Natural Energy, LLC	12.5% or Greater	1503	844
G	WV-061-005519-001	Toby Williams	Northeast Natural Energy, LLC	12.5% or Greater	1654	254
G	WV-061-001035-042	Marsha Catherine Wilson	Northeast Natural Energy, LLC	12.5% or Greater	1521	169
H	WV-061-001051-001	Barry D. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1502	660
Н	WV-061-001051-001	Betty Gall Sutphin	Northeast Natural Energy, LLC	12.5% or Greater	1510	89
H	WV-061-001051-001	Carrie M. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1497	710
H	WV-061-001051-001	Charlotte Ann Cayavec	Northeast Natural Energy, LLC	12.5% or Greater	1511	552
H	WV-061-001051-001	Christina Stitchick	Northeast Natural Energy, LLC	12.5% or Greater	1497	706
H	WV-061-001051-001	Connie L. White	Northeast Natural Energy, LLC	12.5% or Greater	1503	672
H	WV-061-001051-001	Connie S. Copeland	Northeast Natural Energy, LLC	12.5% or Greater	1497	704
H	WV-061-001051-001	David Yost	Northeast Natural Energy, LLC	12.5% or Greater	1503	676
H	WV-061-001051-001	Dennis L. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1502	664
Н	WV-061-001051-001	Donny L. Moore	Northeast Natural Energy, LLC	12.5% or Greater	1503	684
Н	WV-061-001051-001	Danny J. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1506	88
H	WV-061-001051-001	Diana L. Fulps	Northeast Natural Energy, LLC	12.5% or Greater	1505	531
Н	WV-061-001051-001	Ellen R. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1497	668
H	WV-061-001051-001	G. Edward Stiles	Northeast Natural Energy, LLC	12.5% or Greater	1502	658
H	WV-061-001051-001	Ida M. Yost Osecky	Northeast Natural Energy, LLC	12.5% or Greater	1500	438
Н	WV-061-001051-001	Jack L. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1497	712
Н	WV-061-001051-001	Jessica McAninch	Northeast Natural Energy, LLC	12.5% or Greater	1497	708
Н	WV-061-001051-001	Jill Renee Maley	Northeast Natural Energy, LLC	12.5% or Greater	1503	678
Н	WV-061-001051-001	Jim Fae Yost	Northeast Natural Energy, LLC	12.5% or Greater	1500	407
Н	WV-061-001051-001	Jodie Lynn Maley Smith	Northeast Natural Energy, LLC	12.5% or Greater	1503	674
Н	WV-061-001051-001	Larry L. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1497	716
Н	WV-061-001051-001	Linn Jarrett	Northeast Natural Energy, LLC	12.5% or Greater	1503	686
Н	WV-061-001051-001	Margaret A. Berdine	Northeast Natural Energy, LLC	12.5% or Greater	1631	513
H	WV-061-001051-001	Mark J. Jarrett	Northeast Natural Energy, LLC	12.5% or Greater	1503	680
Н	WV-061-001051-001	Michael Stitchick	Northeast Natural Energy, LLC	12,5% or Greater	1523	428
Н	WV-061-001051-001	Molly E. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1500	442
Н	WV-061-001051-001	Nancy A. Maggard	Northeast Natural Energy, LLC	12.5% or Greater	1500	405
H	WV-061-001051-001	Norma Jean Stiles	Northeast Natural Energy, LLC	12.5% or Greater	1497	671
Н	WV-061-001051-001	Peggy L. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1500	387
Н	WV-061-001051-001	m Philip D. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1500	409
H	WV-061-001051-001	Randy D. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1497	714
H	WV-061-001051-001	Rhonda Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1503	682
Н	WV-061-001051-001	Richard Kyle Yost	Northeast Natural Energy, LLC	12.5% or Greater	1502	662
Н	WV-061-001051-001	Rhonda Tennant Richard Kyle Yost Robert M. Smith	Northeast Natural Energy, LLC	12.5% or Greater	1506	90
H	WV-061-001051-001	ਰੱਭ ਕੇ ਕੇ Robin L. Libert	Northeast Natural Energy, LLC	12.5% or Greater	1505	153
Н	WV-061-001051-001	Waynetta Jean Parker	Northeast Natural Energy, LLC	12.5% or Greater	1507	240
Н	WV-061-001051-001	9 William Robert Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1507	238
Н	WV-061-001051-001	Barry D. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1502	660
Н	WV-061-001051-001	Betty Gall Sutphin	Northeast Natural Energy, LLC	12.5% or Greater	1510	89
Н	WV-061-001051-001	Carrie M. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1497	710
Н	WV-061-001051-001	Charlotte Ann Cayavec	Northeast Natural Energy, LLC	12.5% or Greater	1511	552

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
H	WV-061-001051-001	Christina Stitchick	Northeast Natural Energy, LLC	12.5% or Greater	1497	706
Н	WV-061-001051-001	Connie L. White	Northeast Natural Energy, LLC	12.5% or Greater	1503	672
H	WV-061-001051-001	Connie S. Copeland, a/k/a Connie S. Yost Copeland	Northeast Natural Energy, LLC	12.5% or Greater	1497	704
Н	WV-061-001051-001	David Yost	Northeast Natural Energy, LLC	12.5% or Greater	1503	676
Н	WV-061-001051-001	Dennis L. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1502	664
Н	WV-061-001051-001	Donny L. Moore	Northeast Natural Energy, LLC	12.5% or Greater	1503	684
H	WV-061-001051-001	Danny J. Yost, heir of Donzel Joe Yost	Northeast Natural Energy, LLC	12.5% or Greater	1506	88
H	WV-061-001051-001	Diana L. Fulps, heir of Donzel Joe Yost	Northeast Natural Energy, LLC	12.5% or Greater	1505	531
H	WV-061-001051-001	Ellen R. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1497	668
$H_{i} = 0$	WV-061-001051-001	G. Edward Stiles, a/k/a George Edward Stiles	Northeast Natural Energy, LLC	12.5% or Greater	1502	658
H	WV-061-001051-001	lda M. Yost Osecky, a/k/a lda M. Yost Osaky	Northeast Natural Energy, LLC	12.5% or Greater	1500	438
Н	WV-061-001051-001	Jack L. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1497	712
H	WV-061-001051-001	Jessica McAninch	Northeast Natural Energy, LLC	12.5% or Greater	1497	708
H	WV-061-001051-001	Jill Renee Maley	Northeast Natural Energy, LLC	12.5% or Greater	1503	678
Н	WV-061-001051-001	Jim Fae Yost	Northeast Natural Energy, LLC	12.5% or Greater	1500	407
H	WV-061-001051-001	Jodie Lynn Maley Smith	Northeast Natural Energy, LLC	12,5% or Greater	1503	674
H	WV-061-001051-001	Larry L. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1497	716
H	WV-061-001051-001	Linn Jarrett	Northeast Natural Energy, LLC	12.5% or Greater	1503	686
H	WV-061-001051-001	Margaret A. Berdine	Northeast Natural Energy, LLC	12.5% or Greater	1631	513
Н	WV-061-001051-001	Mark J. Jarrett	Northeast Natural Energy, LLC	12.5% or Greater	1503	680
Н	WV-061-001051-001	Michael Stitchick	Northeast Natural Energy, LLC	12.5% or Greater	1523	428
Н	WV-061-001051-001	Molly E. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1500	442
Н	WV-061-001051-001	Nancy A. Maggard	Northeast Natural Energy, LLC	12.5% or Greater	1500	405
н	WV-061-001051-001	Norma Jean Stiles	Northeast Natural Energy, LLC	12.5% or Greater	1497	671
Н	WV-061-001051-001	Peggy L. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1500	387
Н	WV-061-001051-001	Philip D. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1500	409
Н	WV-061-001051-001	Randy D. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1497	714
Н	WV-061-001051-001	Rhonda Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1503	682
Н	WV-061-001051-001	Richard Kyle Yost	Northeast Natural Energy, LLC	12.5% or Greater	1502	662
Н	WV-061-001051-001	Robert M. Smith	Northeast Natural Energy, LLC	12.5% or Greater	1506	90
H	WV-061-001051-001	Robin Libert	Northeast Natural Energy, LLC	12.5% or Greater	1505	153
Н	WV-061-001051-001	Waynetta Jean Parker	Northeast Natural Energy, LLC	12.5% or Greater	1507	240
Н	WV-061-001051-001	William Robert Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1507	238
1	WV-061-003260-001	Brian E. and Melissa A. Eddy	Northeast Natural Energy, LLC	12.5% or Greater	1454; 1575	818; 253
J	WV-061-003323-001	Kelli D. Wilson	Northeast Natural Energy, LLC	12.5% or Greater	1502	748
1	WV-061-003323-001	Lorri E. Kuhn	Northeast Natural Energy, LLC		1502	748
j	WV-061-003323-001	Gary D. Yost	Northeast Natural Energy, LLC	12.5% or Greater		748
j	WV-061-003323-003	Peggy Jo Yost		12.5% or Greater	1502	
1	WV-061-003696-002	Dennis L, Yost	Northeast Natural Energy, LLC	12.5% or Greater	1502	715
j	WV-061-003696-001		Northeast Natural Energy, LLC	12.5% or Greater	1564	551
1	WV-061-003636-001 WV-061-003323-002	David D, Yost	Northeast Natural Energy, LLC	12.5% or Greater	1564	543
K	WV-061-003539-003	Larry L. Yost Charles Edward Bennett Jr.	Northeast Natural Energy, LLC	12.5% or Greater	1502	713
K	WV-061-003539-003		Northeast Natural Energy, LLC	12.5% or Greater	1538	348
K	WV-061-003539-012 WV-061-003539-004	Georgia Ellen Tennant a/k/a Gerogia E. Butcher	Northeast Natural Energy, LLC	12.5% or Greater	1684	434
IV.	VV V-001-003339-004	Amy Lynn Trickett	Northeast Natural Energy, LLC	12.5% or Greater	1568	246

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
K	WV-061-002472-004	Daniel M. Copeland	Northeast Natural Energy, LLC	12.5% or Greater	1427	190
K	WV-061-002472-002	Jimmie Dell Copeland	Northeast Natural Energy, LLC	12.5% or Greater	1427	130
K	WV-061-003539-006	John Max Copeland III	Northeast Natural Energy, LLC	12.5% or Greater	1641	314
K	WV-061-002472-005	Mary. L Copeland	Northeast Natural Energy, LLC	12.5% or Greater	1425	682
K	WV-061-002472-001	Robert Lyle Copeland	Northeast Natural Energy, LLC	12.5% or Greater	1426	117
K	WV-061-001552-020	Janie Louis Gram	Northeast Natural Energy, LLC	12,5% or Greater	1635	528
K	WV-061-003539-007	Deborah S. Hayhurt	Northeast Natural Energy, LLC	12.5% or Greater	1647	23
K	WV-061-001552-018	Judy Ann Heston	Northeast Natural Energy, LLC	12.5% or Greater	1630	187
K	WV-061-001552-021	Denzil Ray Hibbs	Northeast Natural Energy, LLC	12.5% or Greater	1647	11
K	WV-061-001552-019	Donnie Fay Hibbs	Northeast Natural Energy, LLC	12.5% or Greater	1635	340
K	WV-061-001552-023	John W. Higgins	Northeast Natural Energy, LLC	12.5% or Greater	1647	15
K	WV-061-001552-012;	Paula E. Higgins	Northeast Natural Energy, LLC	12.5% or Greater	1395	96
K	WV-061-001552-022	Mary L. Ogawa	Northeast Natural Energy, LLC	12.5% or Greater	1647	13
K	WV-061-002479-001	Ruby Jane Simpson	Northeast Natural Energy, LLC	12.5% or Greater	1426	777
K	WV-061-003539-005	Joan Sinclair	Northeast Natural Energy, LLC	12.5% or Greater	1641	312
K	WV-061-003539-013	Robin Delgado	Northeast Natural Energy, LLC	12.5% or Greater	140	371
K	WV-061-003539-009	Cristy Acree	Northeast Natural Energy, LLC	12.5% or Greater	139	448
K	WV-061-003539-014	Brandon Stokes	Northeast Natural Energy, LLC	12.5% or Greater	140	375
К	WV-061-003539-008	Bradley Stokes	Northeast Natural Energy, LLC	12.5% or Greater	1671	366
K	WV-061-003539-011	Jesse Thomas Tennant Jr.	Northeast Natural Energy, LLC	12.5% or Greater	1684	432
K	WV-061-003539-010	Lindsay J. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1684	430
K	WV-061-001552-017	William L. Tennant	Northeast Natural Energy, LLC	12.5% or Greater	1568	248
K	WV-061-001552-024	Sarah E. Thompson	Northeast Natural Energy, LLC	12.5% or Greater	1650	66
K	WV-061-005629-001	Mary Lou Verbosky	Northeast Natural Energy, LLC	12.5% or Greater	1557	501
L.	WV-061-003299-013	Kevin S. Owens	Northeast Natural Energy, LLC	12.5% or Greater	1597	144
L	WV-061-003299-010	Donny L. Moore	Northeast Natural Energy, LLC	12.5% or Greater	1506	41
L	WV-061-003299-014	Linn Jarrett	Northeast Natural Energy, LLC	12.5% or Greater	1653	545
L	WV-061-003299-016	Connie Burch	Northeast Natural Energy, LLC	12.5% or Greater	1653	549
L	WV-061-003299-015	Mark A. Jarrett	Northeast Natural Energy, LLC	12.5% or Greater	1653	547
L	WV-061-003299-012	Margaret A. Berdine	Northeast Natural Energy, LLC	12.5% or Greater	1511	825
L I	WV-061-003299-011	Robert M. Smith	Northeast Natural Energy, LLC	12.5% or Greater	1679	252
L	WV-061-003299-007	G. Edward Stiles	Northeast Natural Energy, LLC	12.5% or Greater	1506	424
L	WV-061-003299-005		Northeast Natural Energy, LLC	12.5% or Greater	1503	856
L	WV-061-003299-006	Jill Renee Maley	Northeast Natural Energy, LLC	12.5% or Greater	1505	157
L		Ellen R. Yost	Northeast Natural Energy, LLC	12,5% or Greater	1498	615
L		Peggy Jo Yost	Northeast Natural Energy, LLC	12.5% or Greater	1500	272
L	WV-061-003299-008	Dennis L. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1505; 1670	165; 170
L	WV-061-003299-004	David D. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1503; 1670	665; 169
L	WV-061-003299-001	Larry L. Yost	Northeast Natural Energy, LLC	12.5% or Greater	1495	896
M	WV-061-003747-001	Mabel Correll Cummins	Northeast Natural Energy, LLC	12.5% or Greater	1542	98
M	WV-061-004379-001	Yost Heritage Inc.	Northeast Natural Energy, LLC	12.5% or Greater	1578	529
М	WV-061-001050-002	Janice L. Wilson	Northeast Natural Energy, LLC	12.5% or Greater	1605	479
N	WV-061-001052-002	YOST HERITAGE	Northeast Natural Energy, LLC	12.5% or Greater	1670	16
0	WV-061-003862-001	Northeast Natural Energy LLC	Northeast Natural Energy, LLC	12.5% or Greater	1560	832

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
P	WV-061-005714-001	Jeffrey John Moore and Sandra Jean Moore	Northeast Natural Energy, LLC	12.5% or Greater	1639	177
P		EQT Production Company	Northeast Natural Energy, LLC		149	643
Q	WV-061-005416-001	H3, LLC	Northeast Natural Energy, LLC	12.5% or Greater	1641	432
Q	WV-061-003457-001	Master Minerals Holdings I, L.P	Northeast Natural Energy, LLC	12.5% or Greater	1513	613
Q	WV-061-005416-002	Shriner's Children Hospital of Sacramento California	Northeast Natural Energy, LLC	12.5% or Greater	136	44
Q	WV-061-003457-002	James Thorne	Northeast Natural Energy, LLC	12.5% or Greater	1605	591
Q	WV-061-004621-001	Westhawk Minerals LLC (DWG Oil and Gas Acquisitions,	Northeast Natural Energy, LLC	12.5% or Greater	134	217
Q	WV-061-003457-003	Fortune Development	Northeast Natural Energy, LLC	12.5% or Greater	1613	329
R	WV-061-005716-001	James & Arthela Eddy	South Penn Oil Company	12.5% or Greater	*SEE Lease	ehold Chain
S	WV-061-005717-001	Aliakbar Afshari (Daryoush Hooshar and Farzaneh Hassani interest)	EQT Production Company	12.5% or Greater	1509	582
S		EQT Production Company	Northeast Natural Energy, LLC		149	643
S	WV-061-005717-001	Pikewood Energy Corporation (Aliakbar Afshari interest)	EQT Production Company	12.5% or Greater	1509	582
5		EQT Production Company	Northeast Natural Energy, LLC		149	643
S	WV-061-005717-002	Amir H. Mohammadi (Daryoush Hooshar and Farzaneh Hassani interest)	EQT Production Company	12.5% or Greater	1509	586
S		EQT Production Company	Northeast Natural Energy, LLC		149	643
S	WV-061-005717-002	Pikewood Energy Corporation (Amir H. Mohammadi interest)	EQT Production Company	12.5% or Greater	1509	586
S		EQT Production Company	Northeast Natural Energy, LLC		149	643
T	WV-061-004555-004	Patricia Statler	Northeast Natural Energy, LLC	12.5% or Greater	1605	690
T	WV-061-004555-001	E. Marie Brunett-Sandridge	Northeast Natural Energy, LLC	12.5% or Greater	1591	710
T	WV-061-004555-003	Richard E. West	Northeast Natural Energy, LLC	12.5% or Greater	1606	84
T	WV-061-004555-005	William E. Boyce	Northeast Natural Energy, LLC	12.5% or Greater	1605	692
T	WV-061-004555-002	Worley D. Moore	Northeast Natural Energy, LLC	12.5% or Greater	1605	688
U	WV-061-005715-001	Douglas H. M. Boggess	EQT Production Company	12.5% or Greater	1565	392
U		EQT Production Company	Northeast Natural Energy, LLC		149	643
U	WV-061-005715-002	Pamela Louise Boggess Towns	EQT Production Company	12.5% or Greater	1565	383
U		EQT Production Company	Northeast Natural Energy, LLC		149	643
U	WV-061-005715-003	Carolyn Sue Boggess Watson	EQT Production Company	12.5% or Greater	1565	389
U		EQT Production Company	Northeast Natural Energy, LLC		149	643
U	WV-061-005715-004	Franklin M. Brand Boggess (Elizabeth M. Boggess interest)	EQT Production Company	12.5% or Greater	1565	395
U		EQT Production Company	Northeast Natural Energy, LLC		149	643

Office of Oil and Gas

JAN 2 6 2021

WV Department of Environmental Protection

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Book Type	Book No.	Page No.
James & Arthela Eddy	South Penn Oil Company	Deed	32	195
South Penn Oil Company	South Penn Natural Gas	Deed	304	457
South Penn Natural Gas	South Penn Oil Company	Deed	580	311
South Penn Oil Company, Penzoil Company	Penzoll Company	Miscellaneous	50	573
Penzoll Company	Penzoil Products Company	Assignment	23	280
Penzoll Company	Penzoil Products Company	Assignment	25	145
Penzoil Products Company	Penzoil Exploration and Production	Miscellaneous	53	69
Penzoil Exploration and Production	Devon Energy Production Company, L.P.	*Devon Purchase Penzoil in 1999. Confirmed via W Secretary of State		
Devon Energy Production Company, L.P.	East Resources Inc.	Deed	1207	146
East Resources Inc.	HG Energy, LLC	Assignment	110	500
East Resources Inc. & HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	123	43
American Energy - Marcellus, LLC	Ascent Resources - Marcellus, LLC	Miscellaneous	122	85
Ascent Resources - Marcellus, LLC	EQT Production Company	Assignment	132	166
EQT Production Company	Northeast Natural Energy, LLC	Assignment	149	643



January 18, 2021

WV Department of Environmental Protection Office of Oil and Gas Management 601 57th Street, SE Charleston, WV 25304

RE: Bunner 8H

Dear Permit Reviewer:

Please be advised that Northeast Natural Energy LLC has the right to drill, extract and produce the minerals beneath the roads identified as Upper Days Run Rd, Daybrook Rd., Statler Run Rd, and Devine Rd.

Sincerely,

Charles Dornetto Manager – Land Operations

Chalres M. Dornetto

Enclosure

RECEIVED Office of Oil and Gas

JAN 26 2021

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

Date of Notic	ce Certification: 01/21/2021	API No. 47-		
		Operator's \	Well No. 8H	
		Well Pad Na	ame: Bunner	
	ne provisions in West Virginia Code §	22-6A, the Operator has provided the requ	uired parties w	vith the Notice Forms listed
State:	tract of land as follows: West Virginia	Easting:	567100.0	
County:	Monongalia	IIIMINADX3	4390589.9	
District:	Clay		Upper Days Run	Rd./ CR 18
Quadrangle:	Blacksville, WV		Bunner	
Watershed:	Dunkard Creek			
information re of giving the requirements Virginia Code	equired by subsections (b) and (c), sec surface owner notice of entry to sur of subsection (b), section sixteen of	ed in subdivisions (1), (2) and (4), subsection sixteen of this article; (ii) that the requivey pursuant to subsection (a), section tends this article were waived in writing by the order proof of and certify to the secretary the	uirement was en of this artic he surface ow	deemed satisfied as a resu- cle six-a; or (iii) the notic vner; and Pursuant to Wes
that the Ope *PLEASE CHE 1. NOT 2. NOT	Trator has properly served the required ECK ALL THAT APPLY FICE OF SEISMIC ACTIVITY or FICE OF ENTRY FOR PLAT SURVI	erator has attached proof to this Notice Cerl parties with the following: NOTICE NOT REQUIRED BECAUSEISMIC ACTIVITY WAS CONDUCTED OF NO PLAT SURVEY WAS CONDUCTED NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED OF WRITTEN WAIVER BY SURFACT (PLEASE ATTACH)	SE NO ED NDUCTED SE EY	OOG OFFICE USE ONLY RECEIVED/ NOT REQUIRED RECEIVED/ RECEIVED/ NOT REQUIRED
■ 4. NO	FICE OF PLANNED OPERATION			☐ RECEIVED
■ 5. PUE	BLIC NOTICE	RECEI Office of Oi	VED I and Gas	□ RECEIVED
■ 6. NO	TICE OF APPLICATION	JAN 2 (6 2021	RECEIVED

Required Attachments:

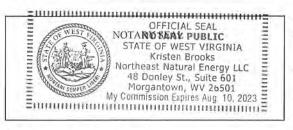
WV Department of Environmental Protection

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.

Certification of Notice is hereby given:

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

Well Operator:Northeast Natural Energy, LLCAddress:707 Virginia St, E, Suite 1200By:Hollie MedleyCharleston, WV 25301Its:Regulatory ManagerFacsimile:304-241-5972Telephone:304-241-5752Email:



Subscribed and sworn before me this 215 day of January .21

_ Notary Public

My Commission Expires August 10, 2023

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

JAN 26 2021

WW-6A (9-13)

API NO. 47	
OPERATOR WELL NO.	8H
Well Pad Name: Bunner	

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

Notice Time Requirement: notice shall be provide	ed no later than the filing date of permit application.
Date of Notice: 1/14/21 Date Permit Applicat	ion Filed: 1/24/21
PERMIT FOR ANY	CATE OF APPROVAL FOR THE UCTION OF AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Co	de § 22-6A-10(b)
☐ PERSONAL ☑ REGISTERED	☐ METHOD OF DELIVERY THAT REQUIRES A
SERVICE MAIL	RECEIPT OR SIGNATURE CONFIRMATION
registered mail or by any method of delivery that rec- sediment control plan required by section seven of the the surface of the tract on which the well is or is pro- oil and gas leasehold being developed by the propos- described in the erosion and sediment control plan s- operator or lessee, in the event the tract of land on w- more coal seams; (4) The owners of record of the su- well work, if the surface tract is to be used for the pla- impoundment or pit as described in section nine of the have a water well, spring or water supply source loca- provide water for consumption by humans or domes proposed well work activity is to take place. (c)(1) It subsection (b) of this section hold interests in the lar records of the sheriff required to be maintained purs provision of this article to the contrary, notice to a li Code R. § 35-8-5.7.a requires, in part, that the opera-	coundment or pit as required by this article shall deliver, by personal service or by ures a receipt or signature confirmation, copies of the application, the erosion and is article, and the well plat to each of the following persons: (1) The owners of record of cosed to be located; (2) The owners of record of the surface tract or tracts overlying the end well work, if the surface tract is to be used for roads or other land disturbance as abmitted pursuant to subsection (c), section seven of this article; (3) The coal owner, which the well proposed to be drilled is located [sic] is known to be underlain by one or face tract or tracts overlying the oil and gas leasehold being developed by the proposed accement, construction, enlargement, alteration, repair, removal or abandonment of any his article; (5) Any surface owner or water purveyor who is known to the applicant to ted within one thousand five hundred feet of the center of the well pad which is used to it animals; and (6) The operator of any natural gas storage field within which the more than three tenants in common or other co-owners of interests described in ds, the applicant may serve the documents required upon the person described in the lant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any on holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. tor shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any d water testing as provided in section 15 of this rule.
☑ Application Notice ☑ WSSP Notice ☑ E&	S Plan Notice Well Plat Notice is hereby provided to:
SURFACE & COAL OWNER Name: Patricia A. Bunner Address: 15 Devine Road Fairview, WV 26570	☐ COAL OWNER Name: Phoenix Energy Resources, LLC Address: 863 Quail Valley Drive Princeton, WV 24740
Name:Address:	☐ COAL OWNER Name: Consol Mining Company Address: 1000 Consol Energy Drive
□ SURFACE OWNER(s) (Road and/or Other Dis Name: Address: Name: Address:	urbance) Canonsburg, PA 15317 SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s) Name: Roger & Joyce Williams Trust Address: 2318 Daybrook Rd
SURFACE OWNER(s) (Impoundments or Pits)	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name:	Address: RECEIVED Gas
Address:	*Please attach additional forms if necessary JAN 2 6 2021
	JAN 20 LO

WW-6A (8-13) API NO. 47- 47061 0 1 RECEIVED GA

OPERATOR WELL NO. 8H Well Pad Name: Bunner

> WV Department of Environmental Protection

Notice is hereby given:

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

This Notice Shall Include:

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

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

Pursuant to W. Va. Code R. § 35-8-5,7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

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

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

Well Location Restrictions

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

WW-6A	
(8-13)	

API NO. 47-OPERATOR WELL NO. 8H Well Pad Name: Bunner

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

RECEIVED Office of Oil and Gas

JAN 26 2021

WV Department of

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

WW-6A (8-13) API NO. 47-___OPERATOR WELL NO. 8H
Well Pad Name: Bunner

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

RECEIVED Gas

JAN 26 2021

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

API NO. 47-OPERATOR WELL NO. 8H Well Pad Name: Bunner

Notice is hereby given by:

Well Operator: Northeast Natural Energy LLC

304-241-5752 Telephone:

Email:

Address: 707 Virginia St. E, Suite 1200

Charleston, WV 25301

Facsimile: 304-241-5972

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.

NOTARY PUBLIC
STATE OF WEST VIRGINIA
Kristen Brooks
Northeast Natural Energy LLC
48 Donley St., Suite 601
Morgantown, WV 26501
My Commission Expires Aug. 10, 2023 OFFICIAL SEAL NOTARY PUBLIC

Subscribed and sworn before me this 18th day of December 20

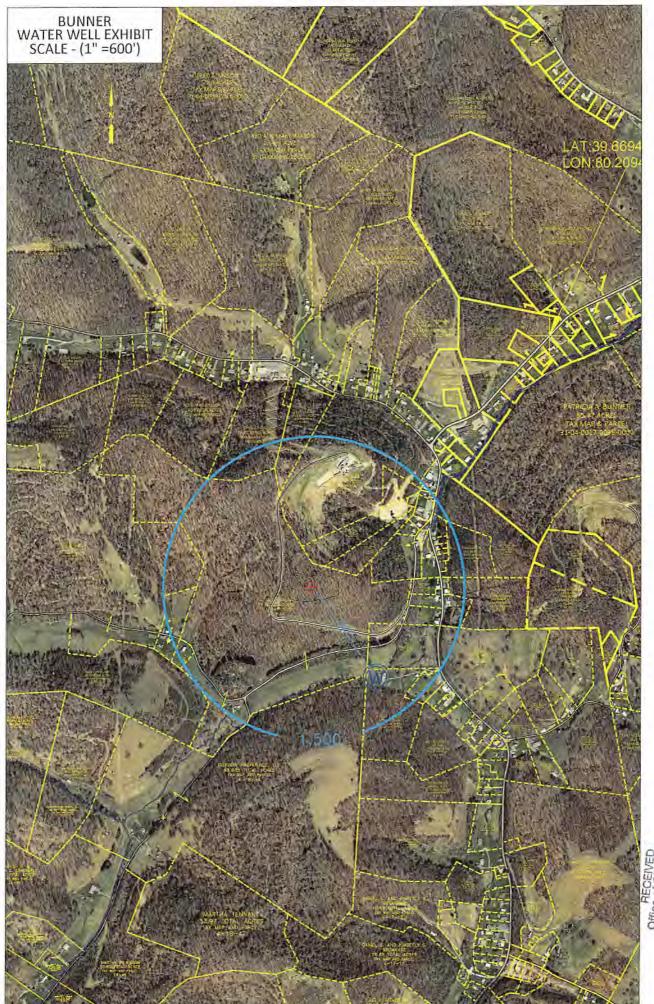
Kusten Brooks Notary Public

My Commission Expires August 10, 2023

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JAN 2 6 2021

WV Department of Environmental Protection



WW-6A3 (1/12)

Operator	Well	No.	Bunner Pad
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STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

entry	A		vided at least SEVEN (7)	augs out no more un		- (-)
Date of Notic	e: //25/2019	Date of Pla	nned Entry: 8/5/2019			
Delivery met	hod pursuant (to West Virginia C	ode § 22-6A-10a			
PERSON	NAL I	REGISTERED	☐ METHOD OF D	ELIVERY THAT RI	EQUIRES A	
SERVIC		MAIL	RECEIPT OR SI	GNATURE CONFIR	RMATION	
on to the surfa but no more the beneath such towner of mine and Sediment Secretary, whi	nce tract to cond nan forty-five d tract that has fil erals underlying Control Manua ich statement sh	luct any plat survey ays prior to such en ed a declaration put g such tract in the co Il and the statutes ar	Prior to filing a permit app s required pursuant to this try to: (1) The surface ow suant to section thirty-six bunty tax records. The no ad rules related to oil and information, including the ne secretary.	article. Such notice ner of such tract; (2) article six, chapter t ice shall include a st gas exploration and p	shall be provide to any owner or wenty-two of th atement that cop production may be	d at least seven days lessee of coal seams is code; and (3) any ies of the state Erosion be obtained from the
Notice is here	by provided to	D:				
■ SURFAC	E OWNER(s)			AL OWNER OR LE	ESSEE	
	la A Bunner			7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
Address: 15 De	evine Rd		Address	:		
Fairvi	ew, WV 26570		1	V		
Name:			Пун			
Address:				NERAL OWNER(s)		
Jamar			Name:	r		
Address			Address	· ——		
10000			*please at	tach additional forms if ne	ecessary	_
	est Virginia Co on the tract of la West Virginia	and as follows:		titude & Longitude:	Dunkard Creek	nning entry to conduct
District:	24		Whitehal		Dunkard Creek	
ANCHORES THE	Blacksville			sed farm name:	Bunner	
may be obtain Charleston, W obtained from	ed from the Sec V 25304 (304- the Secretary b reby given by	cretary, at the WV I -926-0450). Copies by visiting <u>www.dep</u> :	I Manual and the statutes Department of Environment of such documents or add www.gov/oil-and-gas/page	ntal Protection headq litional information r s/default.aspx.	uarters, located a related to horizon	at 601 57th Street, SE,
Telephone:	A control of the control	ir Energy LLC	Addiess:	707 Virginia St. E, Suite Charleston, WV 25301	1200	Office of On
Email:	304-241-5752		Facsimile	The state of the s		IAN 26 2021
	Privacy Noti	ce:			nhono numbor o	WV Department WV Departmental Protests part brother regulatory

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

WW-6A3 (1/12)

	4.4.4.4.00		
Operator	Well No.	Bunner Pad	

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

Notice Time entry	Requirement:	Notice shall be prov	vided at least SEV	EN (7) da	ys but no more tha	n FORTY-FIVE (4	45) days prior to
	ce: 7/25/2019	Date of Plan	nned Entry: 8/5/20	019			
Delivery met	thod pursuant	to West Virginia Co	ode § 22-6A-10a				
☐ PERSO	NAL I	REGISTERED	□ метно	D OF DEL	LIVERY THAT RE	EQUIRES A	
SERVIC	Œ	MAIL	RECEIPT	OR SIGN	NATURE CONFIR	MATION	
on to the surf but no more t beneath such owner of min and Sediment Secretary, wh enable the sur	ace tract to con han forty-five of tract that has fi erals underlyin Control Manu- lich statement serface owner to o	ode § 22-6A-10(a), F duct any plat surveys days prior to such ent led a declaration pur g such tract in the co al and the statutes an shall include contact obtain copies from th	s required pursual try to: (1) The sur suant to section the unty tax records. Id rules related to information, inclu	nt to this an face owne nirty-six, a The notic oil and gas	rticle. Such notice r of such tract; (2) rticle six, chapter t e shall include a st s exploration and p	shall be provided at to any owner or less wenty-two of this co atement that copies roduction may be o	least seven days see of coal seams ode; and (3) any of the state Erosion btained from the
Notice is her	eby provided t	to:					
	CE OWNER(s)				L OWNER OR LE		
Name: Dayb	prook Church of Chris	l .	_	Name:			_
Address: 14 U	pper Days Run view, WV 26570		_	Address:			-
Address:				☐ MINI	ERAL OWNER(s)		
Name .			-	Name:	***************************************		Y
Address			-ii	Address:			-
				*please attac	h additional forms if ne	cessary	7
	Vest Virginia Co on the tract of I West Virginia Monongalia Clay	ode § 22-6A-10(a), n and as follows:	App Pub Wa	prox. Latit blic Road A tershed:	ude & Longitude:	Dunkard Creek CR 25/2 Dunkard Creek Bunner	g entry to conduct
may be obtain Charleston, W	ned from the Se VV 25304 (304	nd Sediment Control ceretary, at the WV DI-926-0450). Copies by visiting www.dep	Department of Env of such documen	ironmenta ts or addit	d Protection headq ional information r	uarters, located at 60	01 57 th Street, SE, drilling may be
	reby given by			.2000			RECEIVED Gas
Well Operato		al Energy LLC	A	ddress:	707 Virginia St. E, Suite	1200	0.000
Telephone: Email:	304-241-5752			acsimile:	Charleston, WV 25301		JAN 26 2021
Oil and Gas	Privacy Not	ice:					WV Department of Environmental Protection

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

WW-6A3 (1/12) Operator Well No. Bunner Pad

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

entry	ce: 7/25/2019		ided at least SEVEN (7) da ined Entry: <u>8/5/2019</u>			
Delivery me	thod pursuant	to West Virginia Co	ode § 22-6A-10a			
□ PERSO	NAI.	REGISTERED	☐ METHOD OF DEL	IVERY THAT RE	COUIRES A	
SERVIC		MAIL	RECEIPT OR SIGN			
		1 000 (1 10() T		at a de comme	al all seasoide no	tion of planned entry
on to the surf out no more to beneath such owner of min and Sediment Secretary, who	ace tract to con han forty-five of tract that has fi erals underlying t Control Manu tich statement s	duct any plat surveys days prior to such ent iled a declaration pur- g such tract in the co al and the statutes an	Prior to filing a permit applic is required pursuant to this a ry to: (1) The surface owner suant to section thirty-six, a unty tax records. The notice d rules related to oil and ga- information, including the a e secretary.	rticle, Such notice : r of such tract; (2) rticle six, chapter t e shall include a sta s exploration and p	shall be provided to any owner or l wenty-two of this atement that copi roduction may be	at least seven days lessee of coal seams s code; and (3) any es of the state Erosion e obtained from the
Notice is her	eby provided	to:				
SURFAC	CE OWNER(s)	(-1 -		L OWNER OR LE		
	ela L Chisler		Name:			/
Address: 153			Address:			/
	view, WV 26570					
Name:			Път	and ounings.		V
Address:				ERAL OWNER(s)		
			Name:			
Name:			Address:			
Address			*please attac	h additional forms if ne	cessary	_
Pursuant to V	on the tract of	ode § 22-6A-10(a), n land as follows:	Public Road	ude & Longitude:	Operator is plans Dunkard Creek CR 25/2 Dunkard Creek	ning entry to conduct
Quadrangle:	Blacksville			d farm name:	Bunner	
may be obtain Charleston, Vobtained from Notice is he Well Operato	ned from the Se VV 25304 (304) the Secretary reby given by	ecretary, at the WV D 4-926-0450). Copies by visiting <u>www.dep</u> y:	Manual and the statutes an epartment of Environmenta of such documents or addit .wv.gov/oil-and-gas/pages/d	al Protection headq ional information r	uarters, located a elated to horizon	t 601 57 th Street, SE, tal drilling may be
Telephone:	304-241-5752			Charleston, WV 25301		JAN 26 202
Email:			Facsimile;			JAN 20
	S Privacy Not		al information, such as nam		voca sudacti	W Department Environmental Prof

needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact

DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

WW-6A4 (1/12)

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

AT 11 PM	w	CL L A COURT MAN I	encard lace Park Ca
Date of Notice		provided at least TEN (10) days prior to filing Date Permit Application Filed: 01/24/2021	a permit application.
Date of Fracti		and I come apparent and I near	
Delivery met	hod pursuant to West Virgin	ia Code § 22-6A-16(b)	
☐ HAND	☐ CERTIFIED M	4AIL	
DELIVE		CEIPT REQUESTED	
receipt request drilling a hore of this subsect subsection mand if availab	sted or hand delivery, give the standard well: Provided, That notion as of the date the notice way be waived in writing by the sle, facsimile number and electroreby provided to the SURF	east ten days prior to filing a permit application surface owner notice of its intent to enter upon totice given pursuant to subsection (a), section that as provided to the surface owner: <i>Provided, ho</i> surface owner. The notice, if required, shall inconic mail address of the operator and the o	the surface owner's land for the purpose of the of this article satisfies the requirements twever, That the notice requirements of this blude the name, address, telephone number,
13:0:0 2 3	cía A. Bunner	Name:	
Address: 15 D		Address:	
Fairy	iew, WV 26570		
State: County: District: Quadrangle:	West Virginia Monongalia Clay Blacksville, WV	UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name:	567100.0 4390589.9 Upper Days Run Rd/CR 18 Bunner
Watershed:	Dunkard Creek		
Pursuant to V facsimile num related to hor	nber and electronic mail addre izontal drilling may be obtaine	16(b), this notice shall include the name, address of the operator and the operator's authorized from the Secretary, at the WV Department of V 25304 (304-926-0450) 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.

WW-6A5 (1/12) Operator Well No. Bunner 8H

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

elivery met	hod pursuant to West Virginia (Code §	22-6A-16(c)		
■ CERTI	FIED MAIL		HAND		
	RN RECEIPT REQUESTED	7	DELIVERY		
eturn receipt he planned of equired to be lrilling of a lamages to the d) The notice	requested or hand delivery, give to operation. The notice required by a provided by subsection (b), section horizontal well; and (3) A propose we surface affected by oil and gas of	he surfa this son ten o ed surfa peration given t	ace owner whose land ubsection shall include if this article to a surfa- ace use and compens are to the extent the da to the surface owner a	will be used for e; (1) A copy ce owner whose tion agreemer mages are com	cation, an operator shall, by certified mains the drilling of a horizontal well notice of of this code section; (2) The information selland will be used in conjunction with the not containing an offer of compensation for pensable under article six-b of this chapter sted in the records of the sheriff at the time
at the addres	s listed in the records of the sheriff		time of notice):		
tunie.			Name:		
Addresses In Di	evine Road		Address		
Notice is her Pursuant to Wiperation on	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the pu		of drilling a horizontal	e undersigned well on the tra	
Notice is her Pursuant to Woperation on State: County: District:	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the pu West Virginia Monongalia Clay		s hereby given that the straight of drilling a horizontal UTM NAD 8.	e undersigned well on the tra Easting: Northing:	act of land as follows: 567100.0 4390589.9 Upper Days Run Rd/ CR 18
Notice is her Pursuant to Woperation on State: County: District: Quadrangle:	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the pu West Virginia Monongalia		s hereby given that the sof drilling a horizontal UTM NAD 8:	e undersigned well on the tra Easting: Northing:	act of land as follows: 567100.0 4390589.9
Notice is here Pursuant to Woperation on State: County: District: Quadrangle: Watershed: Pursuant to Woo be provide norizontal we urface affect information readquarters,	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the pu West Virginia Monongalia Clay Blacksville, WV Dunkard Creek Shall Include: /est Virginia Code § 22-6A-16(c), ad by W. Va. Code § 22-6A-10(b all; and (3) A proposed surface use ed by oil and gas operations to the elated to horizontal drilling may located at 601 57th Street, SE,	this no) to a s and co e extended obta	s hereby given that the of drilling a horizontal UTM NAD 8. Public Road A Generally use tice shall include: (1) surface owner whose mpensation agreement the damages are coined from the Secreta	e undersigned well on the tra Beasting: Northing: Cocess: d farm name: A copy of this land will be a tontaining armpensable underly, at the WV	act of land as follows: 567100.0 4390589.9 Upper Days Run Rd/ CR 18 Bunner code section; (2) The information required used in conjunction with the drilling of an offer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection
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Notice is her Pursuant to Woperation on State: County: District: Quadrangle: Watershed: This Notice Solution of the provide for its provide f	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the put west Virginia Monongalia Clay Blacksville, WV Dunkard Creek Shall Include: /est Virginia Code § 22-6A-16(c), ed by W. Va. Code § 22-6A-10(b) Il; and (3) A proposed surface use ed by oil and gas operations to the elated to horizontal drilling may located at 601 57th Street, SE, ault.aspx. In Northeast Natural Energy LLC	this no) to a s and co e extended obta	s hereby given that the of drilling a horizontal UTM NAD 8. Public Road A Generally use tice shall include: (1) surface owner whose mpensation agreement the damages are coined from the Secreta	e undersigned well on the tra Beasting: Northing: Cocess: d farm name: A copy of this land will be a tontaining armpensable undury, at the WV 304-926-0450)	act of land as follows: 567100.0 4390589.9 Upper Days Run Rd/ CR 18 Bunner code section; (2) The information required used in conjunction with the drilling of an offer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-uite 1200
Notice is her Pursuant to Woperation on State: County: District: Quadrangle: Watershed: Pursuant to Woo be provided porizontal we purface affect information r	eby given: /est Virginia Code § 22-6A-16(c), the surface owner's land for the put West Virginia Monongalia Clay Blacksville, WV Dunkard Creek Shall Include: /est Virginia Code § 22-6A-16(c), ed by W. Va. Code § 22-6A-10(b ed; and (3) A proposed surface use ed by oil and gas operations to the elated to horizontal drilling may located at 601 57th Street, SE, ault.aspx.	this no) to a s and co e extended obta	s hereby given that the of drilling a horizontal UTM NAD 8: Public Road A Generally use tice shall include: (1) surface owner whose mensation agreement the damages are coined from the Secreta eston, WV 25304 (e undersigned well on the trase Easting: Northing: A copy of this land will be at containing armpensable underly, at the WV 304-926-0450)	act of land as follows: 567100.0 4390589.9 Upper Days Run Rd/ CR 18 Bunner code section; (2) The information required used in conjunction with the drilling of a noffer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-uite 1200

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 to the DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

JAN 2 6 2021

WV Department of Environmental Protection

BH

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS VOLUNTARY STATEMENT OF NO OBJECTION

Instructions to Persons Named on Page WW-6A

The well operator named on page WW-6A is applying for a permit from the State of West Virginia to conduct oil or gas well work. Well work permits are valid for twenty-four (24) months. Please contact the listed well operator and the Office of Oil and Gas if you do not own any interest in the listed surface tract.

Comment and Waiver Provisions

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.

Pursuant to West Virginia Code § 22-6A-8(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except a permit for plugging or replugging a dry hole: *Provided*, That if the applicant certifies that all persons entitled to notice of the application under the provisions of subsection (b), section ten of this article have been served in person or by certified mail, return receipt requested, with a copy of the well work application, including the erosion and sediment control plan, if required, and the well plat, and further files written statements of no objection by all such persons, the secretary may issue the well work permit at any time.

VOLUNTARY STATEMENT OF NO OBJECTION

WW-6A and	, hereby state that I have read to sted above, and that I have received copies of a N attachments consisting of pages one (1) throug the well plat, all for proposed well work on the tra	Notice of Ap	plication, an App	amed on Page WW-6A and the associated plication for a Well Work Permit on Form the erosion and sediment control plan, if
State:	West Virginia	UTMNAD	Easting:	567100.0
County:	Monongalia		Northing:	4390589.9
District:		Public Road		Upper Days Run Rd./CR 18
Quadrangle: Watershed:	Blacksville, WV	Generally us	sed farm name:	Bunner
*Please check	k the box that applies		FOR EXECUT	ION BY A NATURAL PERSON OF Oil and o
□ SURFA	CE OWNER	1	Signature:	JAN 2 6 2021
□ SURFAC	CE OWNER (Road and/or Other Disturbance	(e)	Print Name: Date:	Environ Departm
□ SURFAC	CE OWNER (Impoundments/Pits)			Environmental Protecti
COALC	OWNER OR LESSEE		Company: P	noenix Energy Resources.
□ COAL C	PPERATOR		By; Its:	
□ WATER	RPURVEYOR		Signature:	h & Hali e
□ OPERA	TOR OF ANY NATURAL GAS STORAGE	FIELD	Date: 6	1-19-2021

Oil and Gas Privacy Notice:

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

April 2, 2020

Byrd E. White, III Secretary of Transportation/ Commissioner of Highways

Jimmy Wriston, P. E. Deputy Secretary/ Deputy Commissioner

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 Bunner Pad, Monongalia County Bunner 8H

Dear Mr. Martin,

This well site will be accessed from a DOH permit #04-2019-0982 which has been issued to Northeast Natural Energy for access to the State Road for a well site located off Monongalia County Route 18 SLS.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a DISTRICT WIDE 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 October 1, 2018.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer

Central Office O&G Coordinator

Cc: Hollie Medley

Northeast Natural Energy

CH, OM, D-6

File

RECEIVED Gas Office of Oil and Gas

WV Department of Environmental Protection

Planned Additives To Be Used In Fracturing Stimulations

Trade Name	Purpose	Ingredients	Cemical Abstract Service Numner (CAS#)
Water	Carrier	Water	7732-18-5
HCI, 10.1-15%	Acidizing	Hydrochloric Acid Water	7647-01-0 7732-18-5
Alpha 1427	Biocide	Alkyl Dimethyl Benzyl Ammonium Chloride (C12-16) Ethanol Glutaraldehyde Quaternary Ammonium Chloride Water	68424-85-1 64-17-5 111-30-8 7173-51-5 7732-18-5
Enzyme G-NE	Breaker	Hemicellulase Enzyme Concentrate Water	9025-56-3 7732-18-5
Cl-14	Corrosion Inhibitor	Fatty Acids Methanol Olefin Polyozyalkylenes Propargyl Alcohol	NA 67-56-1 NA NA 107-19-7
GW-3LDF	Gelling Agent	Guar Gum Petroleum Distillate Blend	9000-30-0 CBI
FRW-18	Friction Reducer	Hydrotreated Light Distillate	64742-47-8
Ferrotrol 300L	Iron Crontrol	Citric Acid	77-92-9
Sand, White, 40/70	Proppant	Cystalline Silica (Quartz)	14808-60-7
Sand, White, 100 mesh	Proppant	Cystalline Silica (Quartz)	14808-60-7
Scaletrol 720	Scale Inhibitor	Diethylene Glycol	111-46-6





BUNNER WELL PAD SITE PLAN NORTHEAST NATURAL ENERGY

LAT./LONG: N 39.662601° W -80.217606° (APPROXIMATE CENTER OF PROJECT)

LOCAL	EMERGENCY SERVICES	
	NAME	TELEPHONE NO
AMBULANCE		811
HOSPITAL EMERGENCY ROOM	JUNE BLIEFY MEMORIAL HIDSPITAL	(304) 598-4000
FRE DEPARTMENT		011
POLICE DEFARTMENT		911
POISON CONTROL CENTER	WEST VERGINIA POISON CENTER	(900) 222-1232

FLOOD F	LAIN CONDITIONS	
DO SITE CONSTRUCTION ACTIVITY	ES TAKE PLACE IN FLOCOPLAIN	NO
PERMIT MEEDED FROM COUNTY F	LOCOPLAN COORDINATOR:	NO
HEC-RAS STUDY COMPLETED.		N/A
FLODOPLAIN/SHOWN ON DRAWIN	GS:	MA
FIRM MAP MUMBER(S) FOR SITE:	54081D0075E	
ADREAGE OF CONSTRUCTION IN	COOPPIAIN: 0.00 AC	

PROJECT CONTACTS

OPERATOR: NORTHEAST NATURAL ENERGY LLC

DAVE MCDOUGAL - CIVIL ENGINEERING WAXAGES OFFICE (MARGINETIC CELL (MC)MILSON

WEST VIRGINA STATE LAW
REQUIRES THAT YOU CALL
TWO BLISHESS DAYS
BEFORE YOU DIG IN THE
STATE OF MEST VIRGINA.
TOS THE LAW

Capito

ENGINEER/SUBVEYOR.
CIGIL & ERVIRONMENTAL CONSULTANTS, INC.
JOSEPHIA ROSMON PE, WIE PRESIDENT
OFFICE 2004 WISHING MACING PRESIDENT
OFFICE 2004 WISHING MACING PRESIDENT.

ENVIRONMENTAL:
GIVIL A ENVIRONMENTAL CONSULTANTS, INC.
JACULAN KESTER - PRINCIPAL
COTTOE DORSONIO 1845 1904 275-502 DELL (1804 394-600

GEOTECHNICAL:
CAUL & EMMERNHENTAL CONSULTANTS, INC.
KON ESHUN - PROJECT MINNAGER.
OFFICE: (SMI MILLITIE) - FAY: 280;983:2377 (SEL (AND TEXTIFIC

Northern Panhandle

PENNSYLVANIA PROJECT

VIRGINIA

PLAN REPECDUCTION WARNING

THE PLANS HAVE BEEN CREATED ON ANNI DID? X 3HY SHEETS, FOR BEDUCTIONS, REPER TO GRAPHIC SCALE.

Daybrook ū Daybrook McCov D Gen

LOCATION MAP BLACKSVILLE USGS 7.5' QUAD 1,000 1 (NC)(+1,000 FEET





TINCH - I MILE

Eastern Panhandle



SHEET INDEX
1. COVER SIZE
2. GENERAL NOTES
5. MATERIAL CLIANTITIES
4. MASTUR LEGINO
6. CONSTITUTO
7. SIGNACH MAP
7. SIGNACH MAP
8. SIZE PLAN
9. SIZE PLAN

18. STEPLAN
19. DEFAILS
11. PROFLES AND SECTIONS 20. DEFAILS
20. DEFAILS
20. DEFAILS
21. PROFLES AND SECTIONS 21. DEFAILS
21. PROFLES AND SECTIONS 22. RECLAMATION PLAN
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24. PROFLES AND SECTIONS
25. THE CAMATION PLAN
27. RICHARD AND SECTIONS
26. THE CAMATION PLAN
27. RICHARD AND SECTIONS
27. RICHARD AND S

LEMES WELL SAIL

Wyss Rechosoliconoli DTMst : SITE LOCATIONS LATITUDE LONGITUDE NORTHING EASTING 4390549.781 567395.892 MAIN ACCESS ROAD ENTRANCE 39.662097 -80.214312 39.662601 -80.217606 4390602.828 567112.948 CENTROID OF WELL PAD

- igit	ADING VOLUMES	State in	17 B
DESCRIPTION		CUT (CY)	MIT ICA)
MAIN ACCESS ROAD		14,509	1,308
WELL PAD		65,606	54,185
SPOIL1		D	5,754
SPOIL-2		0	9,419
SPOIL-S		0	9,531
TOTAL		80,175	80,175
TOPSOIL / STRIPPING WITH 20% SWELL	(10,545 CY)	3,78	8 C.Y

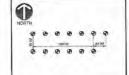
DESCRIPTION	ACRES
MAIN ACCESS ROAD	5.53
WELLPAD	5,79
TOPSON/ATBIPPING PILE 1	1,75
NEOR THE 1	0.45
SPOILPILE 2	1.12
SPOIL PILE 3	3.44
TOTAL	17,11
	Acre

Offic Envi

Civil & Environmental Consultants, Inc. 800 Markeplass Ave - Sans 200 - Bridgeon, WV 28330 Pri 204-803,1113 - 455,483,8639 - Few 304,333,3327

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			of ection
MOU MA	nent:	Stir	l .

	10000		TY, WEST VIRGIN		Lannaga
OWNER	TM-PARCEL	DEED-PAGE	TOTAL ACRES	TYPE OF DISTURBANCE	ACERAGE
WYDOH ROW				PARCEL INFORMATION	
				MAIN ACCESS ROAD	0.02
				PARCEL TOTAL	0,02
MNER, PATRICIA A.	18 32	E348 - 308	94.72	PARCEL INFORMATION	
		-		MAIN ACCESS ROAD	4.88
				WELL PAD	6.79
	1		-	TOPSON/STRIPPING PAE 1	1.78
	-			SPOILPLET	0.45
	1			SPOIL PILE Z	1.12
	_			SPOIL PILE 3	1.44
				PARCEL TOTAL	36.66
MMER, PATRICIA IS	17-51	1321 - 239	1.00	PARCEL INFORMATION	
APPLE OF THE PARTY				MAIN ACCESS ROAD	0.65
				PARCEL TOTAL	0.63
	+			IATOT	17.11



WELL HEAD LAYOUTS

WELL RESTRICTIONS CHECKLIST (HCRIZONTAL &A WELL)	
AT LEAST TOO REET PROMINED AND LOS (INCLUDING ANY FILS CONTROLL FEATURE) TO MAY PERENMAL STREAM, LAKE, POND, RESERVOR OR WETLAND:	YES
AT LEAST DOD FEET FROM PAD AND LOD TIMELTINGS ANY ESS CONTROL FEATURIS TO MAY NATURALLY PRODUCING TROUT STREAM	YES
AT LEAST 1996 FROM PAG AND TICO INCLUDING ANY EAS CONTROL FEATURE) TO ANY SHOUNDWATER INTAKE OR PUBLIC WATER SUPPLY:	YES
NT LEAST 259 FORT RITION AN EXISTING WATER WILL, ON DEVELOPED SPRING TO WILL SENG OF ULED:	YES
AT LEAST 815 FEET FROM AN COCUPIED DWELLING STRUCTURE TO CENTER OF PAD:	YES
AT LEAST RESIDENT FILM AURICULTURAL PULLANGS LARGED (HAN 250) SOLVARE FERT TO THE GENTER OF THE WAY:	YES

XXXXXX





NORTHEAST NATURAL ENERGY BUNNER WELL PAD CLAY DISTRICT MONONGALIA CO, WEST VIRGINIA

CFO

