

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

Austin Caperton, Cabinet Secretary www.dep.wv,gov

Friday, July 26, 2019 WELL WORK PERMIT Horizontal 6A / New Drill

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

Permit approval for CUMMINS 1H Re:

47-061-01854-00-00

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

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

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

James A. Martin

Chief

Operator's Well Number:

CUMMINS 1H JERRY L. YOST

Farm Name:

U.S. WELL NUMBER: 47-061-01854-00-00

Horizontal 6A New Drill

Date Issued: 7/26/2019

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: 4706101854

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	
OPERATOR V	WELL NO. 1H
	ame: Cummins

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

1) Well Operator: Northeast N	Natural Energy	494498281	Monongalia	Clay	Blacksville, WV
		Operator ID	County	District	Quadrangle
2) Operator's Well Number: 11		Well P	ad Name: Cumi	mins	
3) Farm Name/Surface Owner:	Jerry L Yost et a	Public Ro	ad Access: CR	25/3 (Yan	k Hollow Rd.)
4) Elevation, current ground:	1360' El	evation, proposed	d post-constructi	on: 1358'	5
5) Well Type (a) Gas X Other	Oil	Un	derground Stora	ge	
(b)If Gas Sha	allow X	Deep			
	rizontal X		MOK	2/13/2019	
6) Existing Pad: Yes or No No 7) Proposed Target Formation(s		inated Thickness			
Marcellus; 8,073', 101', 3,600	ed line of a result of the second	ipated Tillekiless	and Expected I		·
8) Proposed Total Vertical Dept	h: 8,070'				
9) Formation at Total Vertical D	6.4	3			
10) Proposed Total Measured D	epth: 19,423'				
11) Proposed Horizontal Leg Le	ength: 10,842'				
12) Approximate Fresh Water S	trata Depths:	50'; 1,250'			
13) Method to Determine Fresh	Water Depths:	Orillers Log from	offset wells		
14) Approximate Saltwater Dep	ths: 1,648'; 2,40	8'			
15) Approximate Coal Seam De	pths: 1,248'				
16) Approximate Depth to Poss	ible Void (coal m	ine, karst, other):	NA		
17) Does Proposed well location directly overlying or adjacent to		ms Yes	No	X	
(a) If Yes, provide Mine Info:	Name:				
	Depth:				DECEMEN
	Seam:			0	RECEIVED ffice of Oil and Gas
	Owner:				JUN 2 1 2019

WW-6B	
(04/15)	

47 06 101854 APINO.47-____

OPERATOR WELL NO. 1H
Well Pad Name: Cummins

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	24"	New	NA	94.71	40'	40'	GTS
Fresh Water	13-3/8"	New	J-55	54.5	1,330'	1,300'	CTS
Coal							
Intermediate	9-5/8"	New	J-55	40	2,488'	2,458'	CTS
Production	5-1/2"	New	P-110	20	19,423'	19,393'	4530 cu. ft.
Tubing	2-7/8"	New	N-80	6.5			NA
Liners							

MDR 6/13/2019

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"	30"	.375	415		4,500 pst grout	NA
Fresh Water	13-3/8"	17 1/2"	.38"	2,760	2,000	Type 1	1.18
Coal							
Intermediate	9-5/8"	12 1/4"	.395"	3,950	3,000	Type 1	1.18
Production	5-1/2"	8-3/4"	.361"	12,530	9,700	50:50 Poz	1.21
Tubing	2-7/8"	NA	.271"	10,570	3,600	NA	NA
Liners							

PACKERS

Kind:	
Sizes:	
Depths Set:	
	RECEIVED

Office of Oil and Gas

JUN 2 1 2019

WW-6B
(10/14)

47 API NO. 47	0.6	4	0	1	8	5	4
OPERATOR							_
Well Pad N	ame: c	umm	ins				

Describe proposed well work, including	g the drilling and	plugging back of	any pilot hole:
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Drilling and completion of a horizontal Marcellus well. The well will be drilled on air to an approximate depth of 6,050' TVD/MD. The well will then be horizontally drilled on synthetic based mud from the KOP to approximately 8,070' TVD/19,423' MD along a 320° azimuth

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

Multi-stage / high-rate slickwater fracture treatment using various size sands as proppant. First stage will be initiated via pressurization against a burst disc ran in the production casing string or perforated with coiled tubing. Subsequent stages will be perforated with pumped down guns ran on wireline. Individual stages will be isolated with composite frac plugs. Maximum pump rate during any stage will be 110 BPM with a maximum allowable surface pressure of 9,500 PSI. Composite bridge plugs will be set at the end of the last stage to isolate the treated formation.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 40.42 ac
- 22) Area to be disturbed for well pad only, less access road (acres): 11.99 ac

23) Describe centralizer placement for each casing string:

Surface and intermediate casing strings will have bow spring centralizers placed every third joint (~120') from the shoe joint to surface. Production casing will have rigid body centralizers placed at a minimum of every fourth joint (~160') from TD to surface.

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

Surface string cement will be a Type 1 + Max 3% bwoc Calcium Chloride Fresh Water blend. 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 string will use a 25.0 bbls Gel Pill + LCM + 25 lbs Cello Flake + 20 lbs/bbl Bentonite @ 8.4 ppg & 10 bbls fresh water spacer prior to cement. Intermediate string will use a 25.0 bbls Gel Pill + LCM + 25 lbs Cello Flake + 20 lbs/bbl Bentonite @ 8.4 ppg & 10 bbls fresh water spacer prior to cement. Production string will use a 50.0 bbls SealBond 25 + 1 gal/bbl US-40 + 275 lbs/bbl Barite + 1 gal/bbl SS-2 Spacer @ 13.5 ppg prior to cement.

JUN 2 1 2019

^{*}Note: Attach additional sheets as needed.



NORTHEAST NATURAL ENERGY, LLC

Location: Monongalia County, WV Field: Monongalia

Slot: Slot 1H Well: Cummins 1H Cummins 1H PWB Wellbore:

BAKER HUGHES

End of Tangent: 8070.50ft TVD, 8245.87ft N, 7736.10ft W

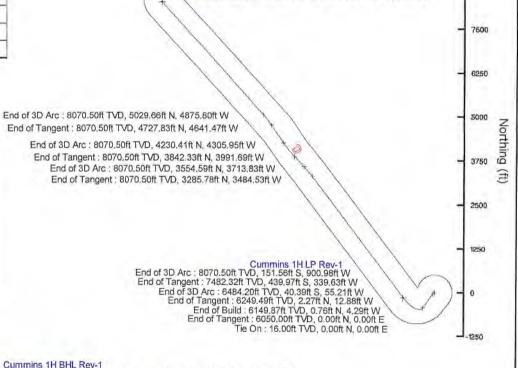
-1250

8750

Facility: Cummins Pad Plot reference wellpath is Cummins 1H PWP Ex-00 Grid System, NADB3 / Lambert West Virginia SP, Northern Zone (4701), US feet True vertical depths are referenced to Rig on Slot 1H (KB) North Reference: Grid north Measured depths are referenced to Rig on Slot 1H (KB) Scale. True distance Depths are in feet Rig on Slot 1H (KB) to Mean Sea Level. 1374 feet Created by: atenien on 2019-05-06 Mean Sea Level to Ground level (At Slot Slot 1H) -1358 feet Coordinates are in feet referenced to Slot Database: WA MPL EASTERNUS Defin

Scale 1 inch = 2500 -10000

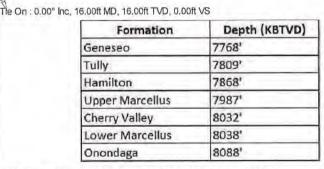
Туре	Hole Size	Casing Size	Grade		GL Depth (Csg)
Conductor	28"	24"	NA		40'
Surface	17-1/2"	13-3/8"	J-55	54.5	1300'
Intermediate	12-1/4"	9-5/8"	J-55	40	2458'



Easting (ft)

Cummins 1H BHL Rev-1

-5000



End of Tangent: 0.00° Inc, 6050.00ft MD, 6050.00ft TVD, 0.00ft VS E 00°/100ff End of Build: 5,00° Inc, 6150,00ft MD, 6149,87ft TVD, 3,30ft VS end of Jangent: 5,00° Inc, 6250.00ft MD, 6249.49ft TVD, 9,89ft VS 10,00°/100ff End of 3D Arc: 26,17° Inc, 6494,12ft MD, 6484,20ft TVD, 3,53ft VS

End of Tangent: 26.17° Inc, 7606.24ft MD, 7482.32ft TVD, -126.83ft VS

2.00°/100ft 10.00°/100ft

End of Tangent: 90.00° Inc, 19423.06ft MD, 8070.50ft TVD, 11278.77ft VS Cummins 1H LP Rev-1

End of 3D Arc : 90.00° Inc, 8582,99ft MD, 8070.50ft TVD, 451,22ft VS 22.99ft MID, 8070.50ft TVD, 451.22ft VS End of Tangent: 90.00° Inc, 12882.99ft MID, 8070.50ft TVD, 4748.01ft VS End of 3D Årc: 90.00° Inc, 13236.54ft MID, 8070.50ft TVD, 5101.24ft VS End of Tangent: 90.00° Inc, 13636.54ft MID, 8070.50ft TVD, 5499.80ft VS End of 3D Årc: 90.00° Inc, 14136.54ft MID, 8070.50ft TVD, 5999.17ft VS End of Tangent: 90.00° Inc, 14736.54ft MID, 8070.50ft TVD, 6596.75ft VS End of 3D Årc: 90.00° Inc, 15118.94ft MID, 8070.50ft TVD, 6978.76ft VS

4500 6000 9000 10500 12000 13500 15000 18500 10000 19500

Vertical Section (ft)
Azimuth 320.86° with reference 0.00 N, 0.00 E

Scale 1 inch = 3000

1500

4500

6000

7500

9000 NOC

D-20

2019

ffice

RECEIVE e of Oil an

200

Gas

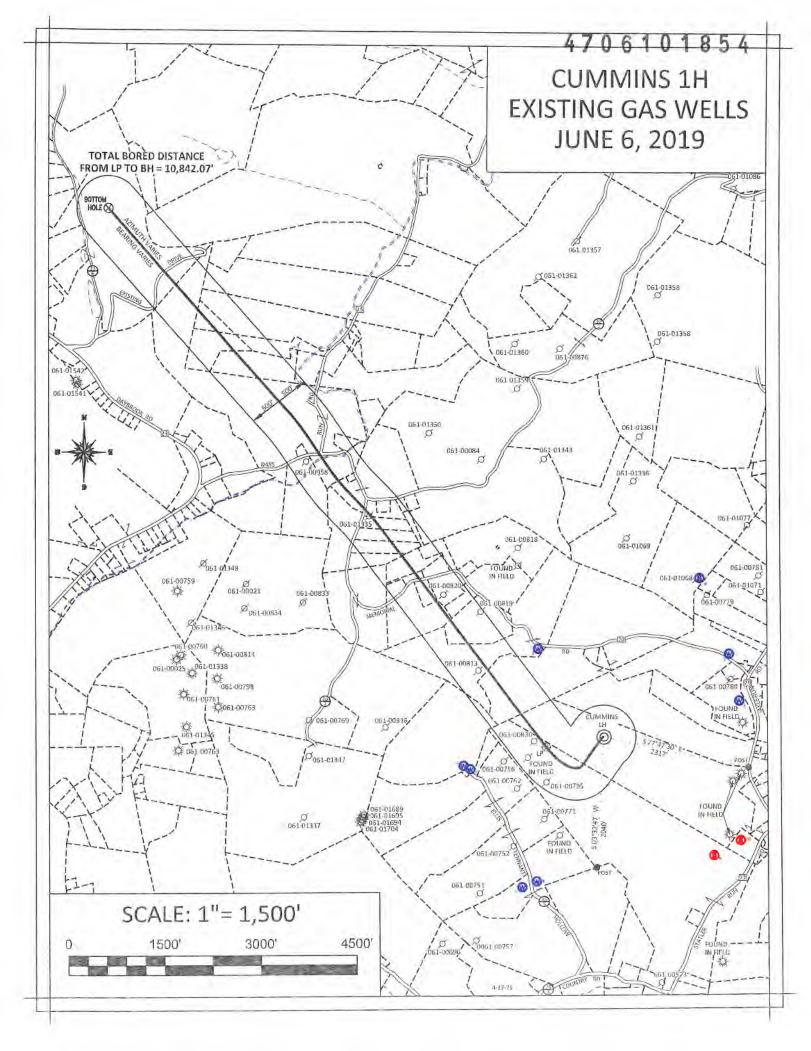
1 3000

Depth

Vertical I

True

API Number	Well Name	Well Number		Latitude (NAD 27)	Longitude (NAD 27)	TMP	TVD	Comments
47-061-00958	Frank & Nell Berry	NA	Consolidation Coal Co.	39.673757	-80.197609	4-10-41	2026	Plugged 4/13/90
47-061-01335	W G & M Tennant	NA	Noumenon Corp, a WV Corp	39.671415	-80.194086	4-10-47.4	300	Plugged 10/10/15
47-061-00820	R E & B B Wilson	NA	Consolidation Coal Co.	39.668102	-80.189914	4-10-75.8	NA	Plugged 10/3/86
47-061-00819	J & R Brummage	NA	Consolidation Coal Co.	39.667377	-80.18785	4-17-67	NA	Plugged 10/7/86
47-061-00813	Terry D & Lelia R Eddy	NA	Consolidation Coal Co.	39.664862	-80.18785	4-17-66	NA	Plugged 9/15/88
47-061-00830	J & A Yost	NA	Consolidation Coal Co.	39.661817	-80.184847	4-17-72	NA	Plugged 3/30/87
ound In Field	NA	NA	NA	NA	NA	4-17-72	NA	NA
47-061-00795	Jerry L & Audra E Yost	NA	Consolidation Coal Co.	39.660222	-80.184096	4-17-72	NA	Plugged 8/6/85



WW-9 (4/16)

API Number	47 -	-
Oper	stor's Well No.	Commiss 411

Operator's Well No. Cummins 1H STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION I	PLAN
Operator Name Northeast Natural Energy LLC OP Code	494498281
Watershed (HUC 10) Dunkard Creek Quadrangle Blacksville	
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Will a pit be used? Yes No	Yes / No No
If so, please describe anticipated pit waste: N/A	
Will a synthetic liner be used in the pit? Yes No If so, what m	1.? N/A
Proposed Disposal Method For Treated Pit Wastes:	
Land Application Underground Injection (UIC Permit Number Reuse (at API Number unknown at this time, TBD Off Site Disposal (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	l, etc. Vertical - Air/ Curve & Horizontal - Oil Based
-If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Based Mud	
Additives to be used in drilling medium? Organophilic Clay Viscosifiers, Lime, Unsaturated Fatty Acids, CaCl, B	arite, Emulsifiers, Mica LCM, Water Loss Agents
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Removed Offsite -	Please See Attachment "A"
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdus	
-Landfill or offsite name/permit number? Please See Attachment "A"	
	The second second second
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cutting West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection a where it was properly disposed.	s or associated waste rejected at any and the permittee shall also disclose
I certify that I understand and agree to the terms and conditions of the GENERAL on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environ provisions of the permit are enforceable by law. Violations of any term or condition of the law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and am familiar application form and all attachments thereto and that, based on my inquiry of those in obtaining the information, I believe that the information is true, accurate, and complete, penalties for submitting false information, including the possibility of fine or imprisonment.	mental Protection. I understand that the general permit and/or other applicable with the information submitted on this adviduals immediately responsible for
Company Official Signature	JUN 2 1 2019
Company Official (Typed Name) Hollie Medley	
Company Official Title Regulatory Manager	WV Department of Environmental Protection III
Subscribed and sworn before me this 6th day of 14th, 2019 No. 100 No.	STATE OF WEST VIRGINIA Kristen Brooks Northeast Natural Energy LLC 48 Donley St., Suite 601 Morgantown, WV 26501 My Commission Expires Aug. 10, 2023
My commission expires Aug. 10, 2023	2000 mm manufullum militari (1, 2023

Lime 2 Tons/acre or to correct to pH 7 Fertilizer type 10-20-20 Fertilizer amount 300 Ibs/acre Mulch 2 Tons/acre Seed Mixtures Temporary Permanent Seed Type Ibs/acre Seed Type Ibs/acre Orchard Grass 46 Orchard Grass 46 Red Clover 8 Red Clover 8 Perennial Rye 16 Perennial Rye 16 Timothy 15 Annual Rye 15 Attach: Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), a acreage, of the land application area. Photocopied section of involved 7.5' topographic sheet.	Proposed Revegetation Treatm	nent: Acres Disturbed 5	4.52 Prevegetation p	Н
Fertilizer amount 300 Ibs/acre Mulch 2 Tons/acre	Lime 2	Tons/acre or to correc	ct to pH 7	
Seed Mixtures Temporary Seed Type Ibs/acre Orchard Grass 46 Red Clover 8 Perennial Rye 16 Perennial Rye 16 Timothy 15 Annual Rye 15 Attach: Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), a acreage, of the land application area. Photocopied section of involved 7.5' topographic sheet.	Fertilizer type 10-20	0-20		
Temporary Seed Type Orchard Grass 46 Red Clover 8 Perennial Rye 16 Timothy 15 Annual Rye Timothy 15 Annual Rye Timothy 15 Annual Rye Timothy Timoth	Fertilizer amount 30	0	lbs/acre	
Seed Type Ibs/acre Seed Type Ibs/acre Orchard Grass 46 Orchard Grass 46 Red Clover 8 Red Clover 8 Perennial Rye 16 Perennial Rye 16 Timothy 15 Annual Rye 15 Attach: Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), a careage, of the land application area. Photocopied section of involved 7.5' topographic sheet.	Mulch 2		_Tons/acre	
Seed Type Ibs/acre Seed Type Ibs/acre Orchard Grass 46 Orchard Grass 46 Red Clover 8 Red Clover 8 Perennial Rye 16 Perennial Rye 16 Timothy 15 Annual Rye 15 Attach: Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), a careage, of the land application area. Photocopied section of involved 7.5' topographic sheet.			Seed Mixtures	
Orchard Grass 46 Red Clover 8 Perennial Rye 16 Timothy 15 Annual Rye 15 Attach: Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), a acreage, of the land application area. Photocopied section of involved 7.5' topographic sheet.	Tem	nporary	Perm	anent
Red Clover 8 Perennial Rye 16 Perennial Rye 16 Timothy 15 Annual Rye 15 Attach: Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), a acreage, of the land application area. Photocopied section of involved 7.5' topographic sheet.	Seed Type	lbs/acre	Seed Type	lbs/acre
Perennial Rye 16 Timothy 15 Annual Rye 15 Attach: Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), a acreage, of the land application area. Photocopied section of involved 7.5' topographic sheet.	Orchard Grass	46	Orchard Grass	46
Timothy 15 Annual Rye 15 Attach: Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), a acreage, of the land application area. Photocopied section of involved 7.5' topographic sheet.	Red Clover	8	Red Clover	8
Attach: Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), a acreage, of the land application area. Photocopied section of involved 7.5' topographic sheet.	Perennial Rye	16	Perennial Rye	16
Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), a acreage, of the land application area. Photocopied section of involved 7.5' topographic sheet.	Timothy 15 Annua	al Rye 15	Timothy 15 Ann	ual Rye 15
	Maps(s) of road, location, pit a provided). If water from the pi acreage, of the land application	t will be land applied, inc n area.	lude dimensions (L x W x D) of the pit, and	ding this info have bee d dimensions (L x W),
	Maps(s) of road, location, pit a provided). If water from the pi acreage, of the land application Photocopied section of involve	t will be land applied, inc n area. ed 7.5' topographic sheet.	lude dimensions (L x W x D) of the pit, and	ding this info have bee d dimensions (L x W),
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	Maps(s) of road, location, pit a provided). If water from the pit acreage, of the land application Photocopied section of involve Plan Approved by:	t will be land applied, inc n area. ed 7.5' topographic sheet.	lude dimensions (L x W x D) of the pit, and	ding this info have bee
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Title: Tospuro Date: (4/3/2019 Office o	Maps(s) of road, location, pit a provided). If water from the pit acreage, of the land application Photocopied section of involved Plan Approved by:	t will be land applied, inc n area. ed 7.5' topographic sheet.	elude dimensions (L x W x D) of the pit, and	d dimensions (L x W),

Attachment A to WW-9

Northeast Natural Energy LLC ("NNE") plans to utilize a closed loop process for its drilling of the Cummins 1H 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:

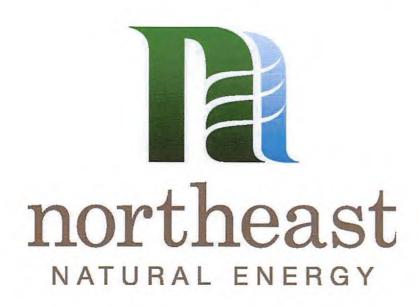
- Westmoreland Landfill (Tervita) Belle Vernon, PA (Permit # 100277)
- Meadowfill Landfill (Waste Management) Bridgeport, WV (Permit # SWF 103298)
- Max Environmental Yukon, PA (PAD004835146 and 301071)
- Max Environmental Bulger, PA (PAD059087072 and 301359)
- Chestnut Valley Landfill (Advanced Disposal)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

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Cummins 1H SITE SAFETY PLAN

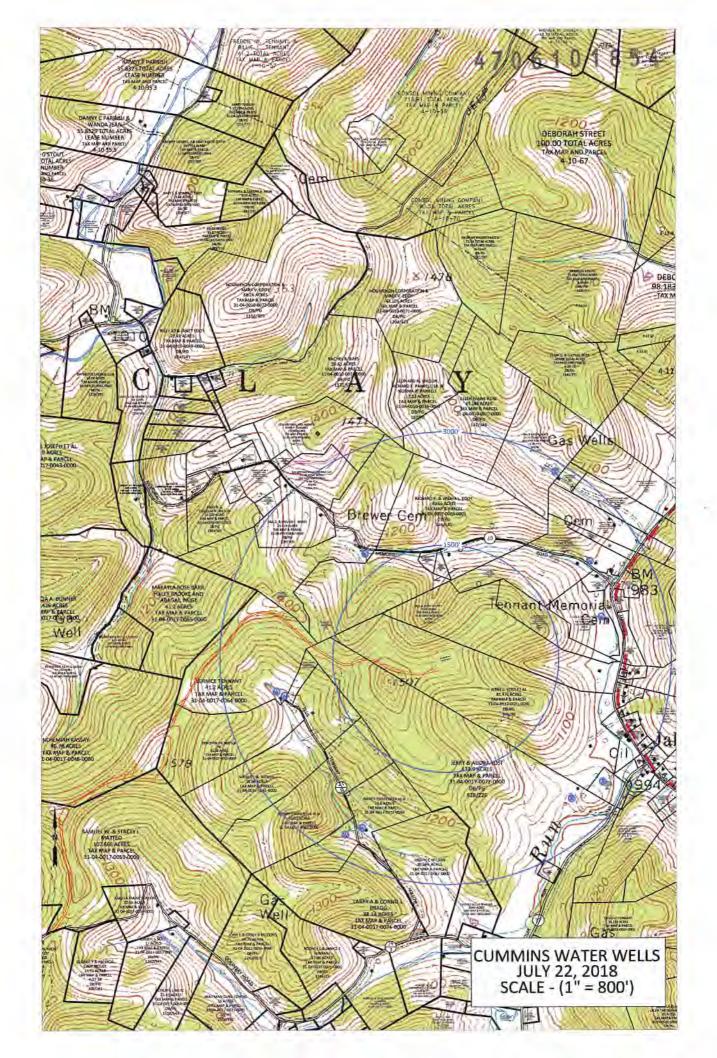
June 2019

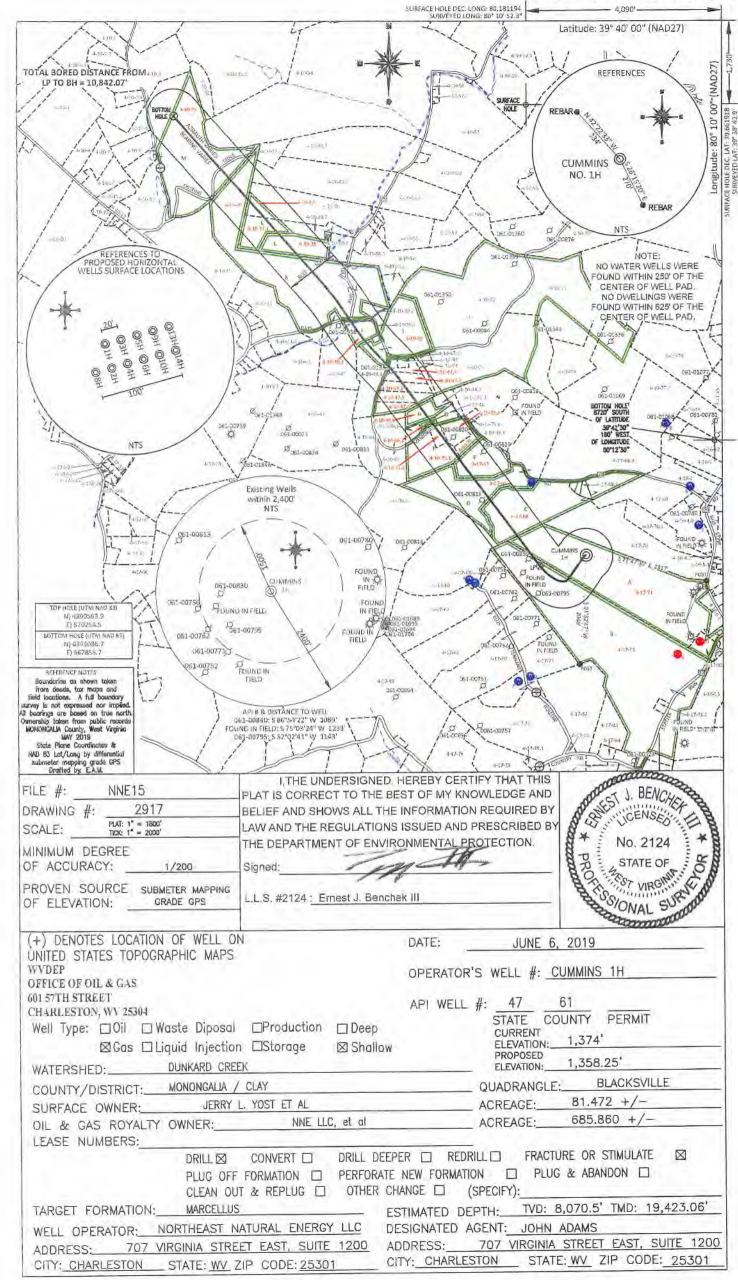
Lamber Jane 2019

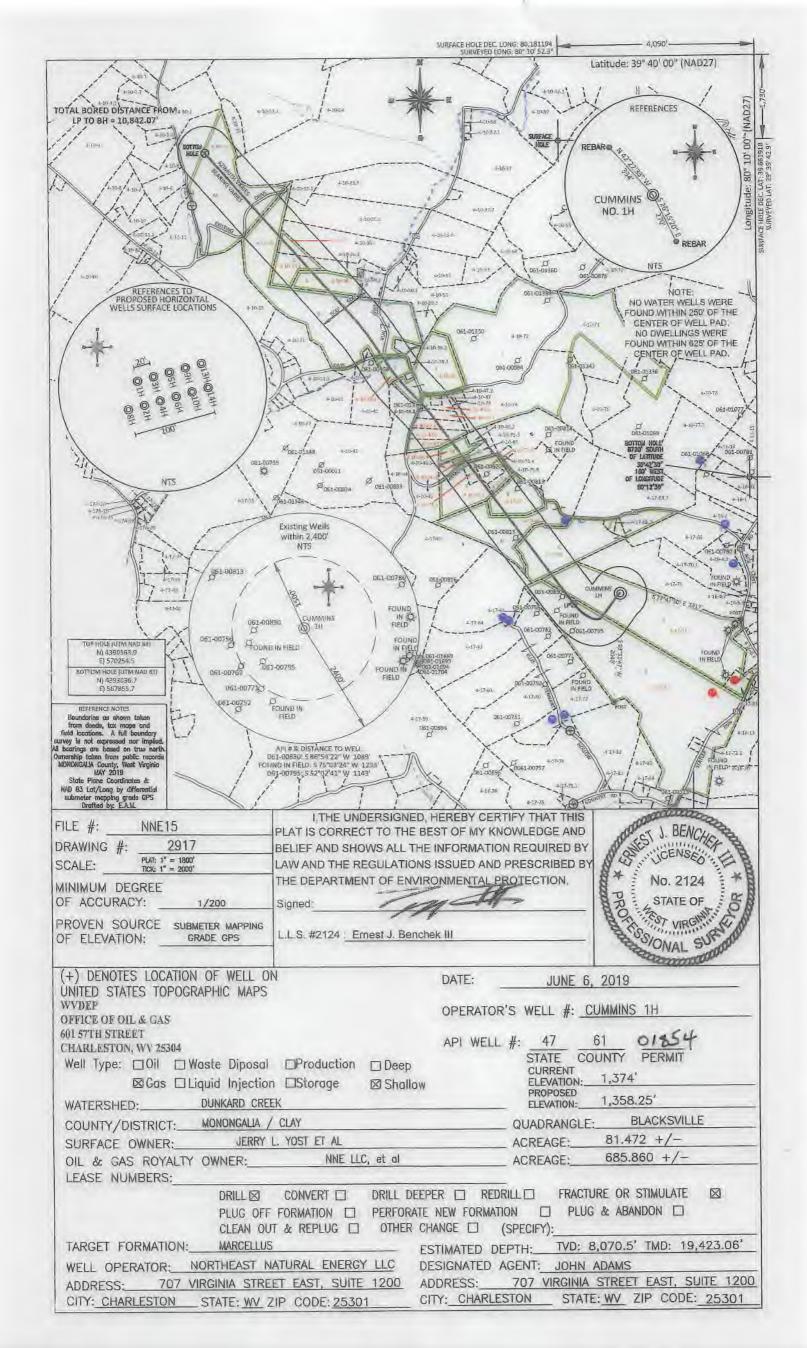
(a) 13 | 2019

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JUN 2 1 2019







	PROPERTY OWNER INDEX		
4-17-71	JERRY L. YOST ET AL		
4-17-72	JERRY AND AUDRA YOST		
4-17-68	LEONARD MICHAEL YOHO		
4-17-66	BILLY JO EDDY ET AL		
4-17-67	LISA D. & STEVEN E. WHITE		
4-10-75.1 RICKY N & DOUGLAS N WILS			
4-10-75	RICKY N WILSON		
4-10-75.2	RICKY N & DOUGLAS N WILSON		
4-10-75.8	DOUGLAS N WILSON & TELENA M. HARE		
1-10-46.3	JUDY C & RICHARD E. LASH		
4-10-46.5	EDWARD & AVA MARIE TENNANT		
4-10-47.6	WILLIAM G & MARY L TENNANT		
4-10-47.5	ROBERT JOE TENNANT		
4-10-47.3	ROBERT JOE TENNANT		
4-10-47.7	WILLIAM G & MARY L TENNANT		
4-10-47.4	WILLIAM G & MARY L TENNANT		
4-10-49	BILLY JO & JANET EDDY		
4-10-39.3	JOSHUA BLAINE & NOAH BLAINE LEMLEY		
4-10-39	MARY LOU VERBOSKY		
4-10-38	JASON G STOUT		
4-10-37.1	JASON G STOUT		
4-10-37	JASON G STOUT		
4-10-32	MARK T. CHISLER & MATT ALLEN CHISLER		

	LEASE INDEX		
A	WV-061-003499-001	H	WV-061-003255-001
В	WV-061-003750-096	1	WV-061-003693-002
C	WV-061-000127-001-LA	J	WV-061-004387-087
D	WV-061-003023-014	K	WV-061-001943-023
E	WV-061-001620-008	L	WV-061-005332-001
F	WV-061-003837-008	M	WV-061-002915-001
G	WV-061-003262-001		

DATE: JUNE 6, 2019

OPERATOR'S WELL #: CUMMINS 1H

API WELL #: 47 61 COUNTY PERMIT

WW-6A1 (5/13)

Operator's Well No. Cummins 1H

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

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

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

Lease Name or
Number

Grantor, Lessor, etc.

Grantee, Lessee, etc.

Royalty

Book/Page

See Attached

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

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
Α	WV-061-003499-001	LORING, GARY G.	Northeast Natural Energy LLC	12.5% or Greater	1545	764
A	WV-061-004591-002	MICHAEL, A.KEIT	Northeast Natural Energy LLC	12.5% or Greater	1594	66
A	WV-061-004591-001 WV-061-003676-001	REYNOLDS, JANE	Northeast Natural Energy LLC	12.5% or Greater	1595	384
B	WV-061-003750-096	SWIGER, JOSEPH	Northeast Natural Energy ILC	12.5% or Greater	1561	101
В	WV-061-003750-091	ADDLEMAN, BETTY	Northeast Natural Energy LLC	12.5% or Greater	1605	473
В	WV-061-003750-103	ASEBROOK, CANDA BARNES, BILLIE	Northeast Natural Energy LLC	12.5% or Greater	1600	155
В	WV-061-003750-089	BERNARDUCI, STA	Northeast Natural Energy LLC	12.5% or Greater	1616	359
B	WV-061-003750-009	BIERER, SUE A	Northeast Natural Energy LLC	12.5% or Greater	1596	494
В	WV-061-003750-058	BIRD, CONSTANCE	Northeast Natural Energy LLC Northeast Natural Energy LLC	12,5% or Greater	1561	642
8	WV-061-003750-092	BORDNER, LISA	Northeast Natural Energy LLC	12.5% or Greater	1575	262
В	WV-061-003750-036	BREWER, JANE ST	Northeast Natural Energy LLC	12.5% or Greater 12.5% or Greater	1604 1568	168 275
В.	WV-061-003750-090	BROWN, TAWNA L.	Northeast Natural Energy LLC	12.5% or Greater	1500	152
В	WV-061-003750-074	CASTEEL, COLLEE	Northeast Natural Energy LLC	12.5% or Greater	1582	55
В	WV-061-003750-040	CHANEY, ROY P.	Northeast Natural Energy LLC	12.5% or Greater	1559	468
В	WV-061-003750-042	CHANEY, IR, GEOR	Northeast Natural Energy LLC	12.5% or Greater	1568	157
В	WV-061-003750-101	CLOSSER, ARLEIG	Northeast Natural Energy LLC	12.5% or Greater	1625	816
В	WV-051-003750-100	CLOSSER, DOUGLA	Northeast Natural Energy LLC	12.5% or Greater	1625	814
В	WV-051-003750-044	CLOSSER, JAY E	Northeast Natural Energy LLC	12.5% or Greater	1573	458
В	WV-061-003750-017	CLOSSER,III, ER	Northeast Natural Energy LLC	12.5% or Greater	1559	456
В	WV-061-003750-003	CONJESKI, SALLY	Northeast Natural Energy LLC	12.5% or Greater	1562	437
В	WV-061-003750-032	DORSEY, SHARA L	Northeast Natural Energy LLC	12.5% or Greater	1561	179
В	WV-061-003750-081	DUSENBERRY, LIN	Northeast Natural Energy LLC	12.5% or Greater	1591	223
В	WV-061-003750-084	ECHARD, CHRISTY	Northeast Natural Energy LLC	12.5% or Greater	1593	444
В	WV-061-003750-066	EISIMINGER, CHR	Northeast Natural Energy LLC	12.5% or Greater	1577	20
В	WV-061-003750-067	EISIMINGER, KIM	Northeast Natural Energy LLC	12.5% or Greater	1577	22
В	WV-061-003750-026	FULLER, EVELYN	Northeast Natural Energy LLC	12,5% or Greater	1559	470
В	WV-061-003750-086	GATES, MELISSA	Northeast Natural Energy LLC	12.5% or Greater	1595	804
В	WV-061-003750-012	GILL, SHEILA V.	Northeast Natural Energy LLC	12.5% or Greater	1560	459
В	WV-061-003750-007	GOODWIN, ELIZA	Northeast Natural Energy LLC	12.5% or Greater	1565	558
В	WV-061-003750-008	GOODWIN, MARY K	Northeast Natural Energy LLC	12.5% or Greater	1564	563
В	WV-061-003750-004	GREENHALGH, MAR	Northeast Natural Energy LLC	12.5% or Greater	1565	560
8	WV-061-003750-060	GUMP, JOHN E	Northeast Natural Energy LLC	12.5% or Greater	1575	266
8	WV-061-003750-104	HARKINS, RAMONA	Northeast Natural Energy LLC	12,5% or Greater	1513 1554	779 478
B B	WV-061-003750-025	HARRIS, KATHLEE	Northeast Natural Energy LLC Northeast Natural Energy LLC	12,5% or Greater 12,5% or Greater	1557	443
В	WV-061-003750-024 WV-061-003750-062	HARTZELL, MARY HEADLEE, MELANI	Northeast Natural Energy LLC	12.5% or Greater	1575	714
В	WV-061-003750-110	HEBER, SHARON'S	Northeast Natural Energy LLC	12.5% or Greater	1375	478
В	WV-061-003750-018	HENDERSON, DAVI	Northeast Natural Energy LLC	12.5% or Greater	1557	453
В	WV-061-003750-021	HENDERSON, JOHN	Northeast Natural Energy LLC	12.5% or Greater	1557	750
В	WV-061-003750-027	HENDRIX, CARRIE	Northeast Natural Energy LLC	12.5% or Greater	1563	659
В	WV-061-003750-006	HOFFMAN, SYLVIA	Northeast Natural Energy LLC	12.5% or Greater	1551	164
В	WV-061-003750-073	HUGHES, GLENDA	Northeast Natural Energy LLC	12,5% or Greater	1582	48
В	WV-061-003750-094	HUGHES, JOHN H	Northeast Natural Energy LLC	12.5% or Greater	1604	100
В	WV-061-003750-064	HUTTER, TIFFANY	Northeast Natural Energy LLC	12.5% or Greater	1577	15
В	WV-061-003750-080	JOHNSTON, WENDY	Northeast Natural Energy LLC	12.5% or Greater	1589	559
В	WV-061-003750-030	KACZMARCZYK, ED	Northeast Natural Energy LLC	12.5% or Greater	1561	362
В	WV-061-003750-031	KACZMARCZYK, ER	Northeast Natural Energy LLC	12.5% or Greater	1561	182
В	WV-061-003750-002	KENNEDY, CASSAN	Northeast Natural Energy LLC	12.5% or Greater	1564	325
В	WV-061-003750-045	KING, BRIAN J.	Northeast Natural Energy LLC	12.5% or Greater	1573	462
В	WV-061-003750-046	KING, KARL P.	Northeast Natural Energy LLC	12,5% or Greater	1573	466
В	WV-061-003750-047	KING, STEPHAN A	Northeast Natural Energy LLC	12.5% or Greater	1573	468
В	WV-061-003750-088	KOTERAS, SHELLY	Northeast Natural Energy LLC	12.5% or Greater	1596	490
В	WV-061-003750-010	LAWSON, VICTORI	Northeast Natural Energy LLC	12,5% or Greater	1563	236 10
В	WV-061-003750-075	LEMLEY, DONALD	Northeast Natural Energy LLC	12.5% or Greater	1586 1586	13
В	WV-061-003750-076	LEMLEY, RALPH L	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater 12.5% or Greater	1586	594
В	WV-061-003750-083 WV-061-003750-109	LEMLEY, RICHARD LOWRY, RITA	Northeast Natural Energy LLC	12.5% or Greater	1646	41
В	WV-061-003750-057	MAXWELL, SARAH	Northeast Natural Energy LLC	12,5% or Greater	1575	260
В	WV-061-003750-085	MCAUILIFFE, GAB	Northeast Natural Energy LLC	12.5% or Greater	1593	446
В	WV-061-003750-014	MCDONALD, SALLY	Northeast Natural Energy LLC	12.5% or Greater	1561	579
B	WV-061-003750-041	MONTGOMERY, DEN	Northeast Natural Energy LLC	12.5% or Greater	1568	273
В	WV-061-003750-069	NEILL, SHEENA	Northeast Natural Energy LLC	12.5% or Greater	1578	489
В	WV-061-003750-005	NIDA, ABIGAIL	Northeast Natural Energy LLC	12.5% or Greater	1566	297
В	WV-061-003750-078	PALMA, DONNA R.	Northeast Natural Energy LLC	12.5% or Greater	1589	555
В	WV-061-003750-061	PALMA, DONNA RA	Northeast Natural Energy LLC	12,5% or Greater	1575	510
В	WV-061-003750-095		Northeast Natural Energy LLC	12,5% or Greater	1604	.822
В	WV-061-003750-093	PATTERSON, BONI	Northeast Natural Energy LLC	12.5% or Greater	1604	170
В	WV-061-003750-048	PATTERSON, LOR	Northeast Natural Energy LLC	12.5% or Greater	1574	269
В	WV-061-003750-082	PENNSYLVANIA DU	Northeast Natural Energy LLC	12.5% or Greater	1591	171
В	WV-061-003750-077	PLANK, STEPHEN	Northeast Natural Energy LLC	12.5% or Greater	1589	553

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
В	WV-061-003750-079	PLANK, STEPHEN	Northeast Natural Energy LLC	12.5% or Greater	1589	55
В	WV-061-003750-028	RICKARD, IVAN D	Northeast Natural Energy LLC	12.5% or Greater	1557	45
В	WV-061-003750-035	RICKARD, LAUREN	Northeast Natural Energy LLC	12.5% or Greater	1568	14
В	WV-051-003750-051	ROHANNA, NICOLE	Northeast Natural Energy LLC	12,5% or Greater	1574	27
В	WV-061-003750-034	ROHR, REBECCA S	Northeast Natural Energy LLC	12.5% or Greater	1.563	24
В	WV-061-003750-059	ROHRER, LEE ANN	Northeast Natural Energy LLC	12.5% or Greater	1575	26
В	WV-061-003750-050	ROSE, DONNA ET	Northeast Natural Energy LLC	12.5% or Greater	1574	27
В	WV-061-003750-022	STATLER, PATRIC	Northeast Natural Energy LLC	12.5% or Greater	1557	45
В	WV-051-003750-013	STAVISCHECK, SI	Northeast Natural Energy LLC	12.5% or Greater	1557	74
В	WV-061-003750-072	STEPHENSON, CAS	Northeast Natural Energy LLC	12,5% or Greater	1580	2
В	WV-061-003750-071	STEPHENSON, COR	Northeast Natural Energy LLC	12.5% or Greater	1578	49
В	WV-061-003750-049	STEPHENSON, JAM	Northeast Natural Energy LLC	12.5% or Greater	1574	
В		STEPHENSON, JAM	Northeast Natural Energy LLC	12.5% or Greater	1574	27
В		STEPHENSON, JAM	Northeast Natural Energy LLC	12.5% or Greater	12.14.12	28
В		STEPHENSON, KEL	Northeast Natural Energy LLC	12.5% or Greater	1574 1605	28 43
В		STEPHENSON, ROB	Northeast Natural Energy LLC			
В		STEPHENSON, SCO		12.5% or Greater	1574	28
В		STEPHENSON, VIC	Northeast Natural Energy LLC	12.5% or Greater	1574	28
В	WV-061-003750-070		Northeast Natural Energy LLC	12.5% or Greater	1578	49
В		STEPHENSON, PAU	Northeast Natural Energy LLC	12.5% or Greater	1574	27
		STRGANAC, SALLY	Northeast Natural Energy LLC	12.5% or Greater	1557	37
B	WV-061-003750-043	TABARINI, CAROL	Northeast Natural Energy LLC	12.5% or Greater	1568	15.
В	WV-061-003750-112	TAYLOR, EDWARD	Northeast Natural Energy LLC	12.5% or Greater	135	48
В	WV-061-003750-105	TAYLOR, FRED	Northeast Natural Energy LLC	12.5% or Greater	1615	76
В	WV-061-003750-023	TAYLOR, MARY EL	Northeast Natural Energy LLC	12.5% or Greater	1557	44
В	WV-061-003750-029	TEAGARDEN, KATH	Northeast Natural Energy LLC	12.5% or Greater	1564	65
В	WV-061-003750-038	THARP, JERRY L.	Northeast Natural Energy LLC	12.5% or Greater	1563	23
В	WV-061-003750-039	THARP, MARTIN B	Northeast Natural Energy LLC	12.5% or Greater	1563	24
В	WV-061-003750-011	THROCKMORTON, D	Northeast Natural Energy LLC	12.5% or Greater	1557	43
В	WV-061-003750-108	TOOTHMAN, M DIA	Northeast Natural Energy LLC	12.5% or Greater	1633	35
В	WV-061-003750-063	TRAVAGLINI, LET	Northeast Natural Energy LLC	12.5% or Greater	1577	1
В	WV-061-003750-065	TRAVAGLINI, WHI	Northeast Natural Energy LLC	12:5% or Greater	1577	1
В	WV-061-003750-001	VARNER, DAVID	Northeast Natural Energy LLC	12.5% or Greater	1966	51
В	WV-061-003750-106	VARNER, DONALD	Northeast Natural Energy LLC	12.5% or Greater	1633	34
B	WV-061-003750-097	VARNER, DONNA H	Northeast Natural Energy LLC	12.5% or Greater	1605	48
В				12.5% or Greater	135	36
	WV-061-003750-113	VARNER, JOHN R	Northeast Natural Energy LLC			20
В	WV-061-003750-033	VARNER, MARY P	Northeast Natural Energy LLC	12,5% or Greater	1563	
В	WV-061-003750-016	VARNER, PEGGY A	Northeast Natural Energy LLC	12.5% or Greater	1565	29
В	WV-061-003750-102	VARNER, ROBERT	Northeast Natural Energy LLC	12.5% or Greater	1612	81
В	WV-061-003750-028	VARNER, THOMAS	Northeast Natural Energy LLC	12.5% or Greater	1561	37
В	WV-061-003750-087	VARNER, THOMAS	Northeast Natural Energy LLC	12.5% or Greater	1595	41
В	WV-061-003750-111	VARNER, THOMAS	Northeast Natural Energy LLC	12.5% or Greater	135	48
В	WV-061-003750-099	VARNER, W. TERR	Northeast Natural Energy LLC	12.5% or Greater	1612	56
В	WV-061-003750-107	VARNER, ALLAN S	Northeast Natural Energy LLC	12.5% or Greater	1633	35
В		WELSH, EARLE AG	Northeast Natural Energy LLC	12.5% or Greater	1568	20
В	WV-061-003750-015	WHITTINGTON, TA	Northeast Natural Energy LLC	12.5% or Greater	1559	31
В	WV-061-003750-068	YOUNG, BRIAN	Northeast Natural Energy LLC	12,5% or Greater	1578	4
è	WV-061-000127-001-L		Northeast Natural Energy LLC	12.5% or Greater	16601	5
_			Northeast Natural Energy LLC	12.5% or Greater	1518	
D		EDDY, BILLY IOE				
D	WV-061-003739-006	EDDY, DAVID W	Northeast Natural Energy LLC	12.5% or Greater	1562	1
D	WV-051-003023-015	EDDY, DENZIL	Northeast Natural Energy LLC	12.5% or Greater	1517	3
D	WV-061-003023-019	EDDY, MELVIN L.	Northeast Natural Energy LLC	12.5% or Greater	1534	1
D	WV-061-003023-016	EDDY, ORA	Northeast Natural Energy LLC	12.5% or Greater	1517	3
D	WV-061-003739-011	EDDY, TIMOTHY C	Northeast Natural Energy LLC	12,5% or Greater	1555	3
D.	WV-061-003739-004	EDDY, WALTER R	Northeast Natural Energy LLC	12.5% or Greater	1550	5
D	WV-061-003739-001	GONZALES, ANITA	Northeast Natural Energy LLC	12 5% or Greater	1557	4
D	WV-061-003739-007	HALL, WILLIAM D	Northeast Natural Energy LLC	12.5% or Greater	1557	3
D	WV-061-003023-006	HARRIS, JULIA M	Chesapeake Appalachia, L.L.C.	12.5% or Greater	120	7
D	WV-061-003023-006	CHESAPEAKE APPALACHIA, LLC	Northeast Natural Energy LLC	12.5% or Greater	120	- 7
D	WV-061-003023-013	LEMMON, DONNA E	Chesapeake Appalachia, L.L.C.	12.5% or Greater	120	7
D	WV-061-003023-013	CHESAPEAKE APPALACHIA, LUC	Northeast Natural Energy LLC	12.5% or Greater	120	7
D	WV-061-003023-020	LIPSCOMB, JUDY	Northeast Natural Energy LLC	12.5% or Greater	1.535	6
D	WV-061-003739-010	MEADE, DEBORAH	Northeast Natural Energy LLC	12.5% or Greater	1562	2
D	WV-061-003023-021	PHILLIPS, REBEC	Northeast Natural Energy LLC	12,5% or Greater	1535	6
D	WV-061-003023-018	POLANSKY, EMELI	Northeast Natural Energy LLC	12.5% or Greater	1521	
D		RAMSEY, KATHY J	Northeast Natural Energy LLC	12.5% or Greater	1,557	3
_	WV-061-003739-002					7
D	WV-061-003023-002	ROUPE, LARRY L.	Chesapeake Appalachia, L.L.C.	12.5% or Greater	120	
D	WV-061-003023-002	CHESAPEAKE APPALACHIA, LLC	Northeast Natural Energy LLC	12.5% or Greater	120	7
D	WV-061-003739-009	SHACKELFORD, SA	Northeast Natural Energy LLC	12.5% or Greater	1557	3
D	WV-061-003739-008	TENNANT, DOLLY	Northeast Natural Energy LLC	12.5% or Greater	1563	4
D	WV-061-003739-013	TROTTO, EDWINA	Northeast Natural Energy LLC	12.5% or Greater	1634	
D	WV-061-003739-003	WALKER, CHARLEN	Northeast Natural Energy LLC	12.5% or Greater	1562	3
D	WV-061-003739-005	WHITE, DELORES	Northeast Natural Energy LLC	12.5% or Greater	1563	1
	WV-061-003023-022	WHITE, TERRY	Northeast Natural Energy LLC	12.5% or Greater	1554	14
D		ALC: APRIL APPRIL APPRI	Chesapeake Appalachia, L.L.C.	12.5% or Greater	120	70

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
D	WV-061-003023-003 WV-061-003023-017	CHESAPEAKE APPALACHIA, LLC	Northeast Natural Energy LLC	12.5% or Greater	120	769
	WV-061-003023-017	WRIGHT, LENA A.	Northeast Natural Energy LLC	12.5% or Greater	1521	728
E	WV-061-001620-005	BRITVEC, STEVEN	Northeast Natural Energy LLC	12.5% or Greater	1514	47
E	WV-051-001620-003	BROOKOVER, BARB BURKE, KRISTA	Northeast Natural Energy LLC	12.5% or Greater	1516	126
В	WV-061-001620-007	The state of the s	Northeast Natural Energy LLC	12.5% or Greater	1576	646
E	WV-061-001620-024	DILLE, NANCY JO	Northeast Natural Energy LLC	12,5% or Greater	1550	569
E	WV-061-001620-024	HAMILTON, HERBE	Northeast Natural Energy LLC	12.5% or Greater	1550	571
E	WV-061-001620-018	KAVLICK, AMBER	Northeast Natural Energy LLC	12.5% or Greater	1545	449
E	WV-061-001620-014	KERNS, ROBERT	Northeast Natural Energy LLC	12.5% or Greater	1542	106
Ē	WV-061-001620-009	MARKO, DAVID	Northeast Natural Energy LLC	12.5% or Greater	1541	357
Ē	WV-061-001620-017	NUZUM, DONNA LO	Northeast Natural Energy LLC	12.5% or Greater	1524	3.27
E	WV-061-001620-022	PRICE, SUSAN R	Northeast Natural Energy LLC	12.5% or Greater	1550	565
	WV-061-001620-006	RALEY, MARY ANN	Northeast Natural Energy LLC	12.5% or Greater	1550	567
	WV-061-001620-008	RUSH, JAMES PAU	Northeast Natural Energy LLC	12.5% or Greater	1514	332
	WV-061-001620-029	SANCHEZ, BRANDI	Northeast Natural Energy LLC	12.5% or Greater	1565	303
	WV-061-004631-002	SANTEE, BETTY S	Northeast Natural Energy LLC	12.5% or Greater	1611	260
	WV-061-001620-016	SAUNDERS, ROSEM	Northeast Natural Energy LLC	12.5% or Greater	1600	376
	WV-061-001620-016	TENNANT, BETTY	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater	1550	563
	WV-061-001620-012	TENNANT, JESSE		12.5% or Greater	1535	91
	WV-061-001620-026	TENNANT, JESSE	Northeast Natural Energy LLC	12.5% or Greater	1566	31
	WV-061-001620-026		Northeast Natural Energy LLC	12.5% or Greater	1565	562
	WV-061-001620-015	TENNANT, LINDSA	Northeast Natural Energy LLC	12.5% or Greater	1550	561
	ALL DISCUSSION ASSESSMENT	TENNANT, MATTHE	Northeast Natural Energy LLC	12.5% or Greater	1500	373
	WV-061-001620-011 WV-061-001620-027	TENNANT, MOSES TENNANT, WILLIA	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater	1535	643
	WV-061-001620-019	WILSON, AMANDA	Northeast Natural Energy LLC	12.5% or Greater	1565 1542	286 822
	WV-061-003837-008	ICROFF, LINDA I.		12.5% or Greater	41.00	
_		Company of the Compan	Northeast Natural Energy LLC	12.5% or Greater	1562	205
	WV-061-003837-006 WV-061-003837-005	DUFFIELD, DOROT	Northeast Natural Energy LLC	12.5% or Greater	1560 1566	135 708
	WV-061-003106-004	ENGLER, GERALDI	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater	1565	554
		GRIFFIETH, CATH				
	WV-061-003837-002	HILL, DOUGLASS	Northeast Natural Energy LLC	12.5% or Greater 12.5% or Greater	1562 1564	178 238
	WV-061-003837-003 WV-061-003837-004	HILL, GEOFFREY	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater	1566	285
-		HILL, MARK R.	Northeast Natural Energy LLC			811
	WV-051-003837-007	SHERMAN, MARGAR	Northeast Natural Energy LLC	12.5% or Greater	1562 1559	847
-	WV-061-003837-001	THROOP, TRUST		12.5% or Greater 12.5% or Greater	1567	431
	WV-061-003837-012	VERNON, NANCY A WILDMAN, WINIFR	Northeast Natural Energy LLC Chesapeake Appalachia, L.L.C.	12.5% or Greater	1443	442
	WV-061-003106-003 WV-061-003023-003	CHESAPEAKE APPALACHIA, LLC	Northeast Natural Energy LLC	12.5% or Greater	120	769
	WV-061-003023-003	LASH, JUDY RICH	Chesapeake Appalachia, L.L.C.	12.5% or Greater	1454	811
	WV-061-003023-003	CHESAPEAKE APPALACHIA, LLC	Northeast Natural Energy LLC	12.5% or Greater	120	769
1	WV-061-003255-001	WILSON, BERTHA B.	Chesapeake Appalachia, L.L.C.	12.5% or Greater	1453	738
1	WV-061-003023-001	CHESAPEAKE APPALACHIA, LLC	Northeast Natural Energy LLC	12.5% or Greater	120	769
		ASKEW, CELIA P	Northeast Natural Energy LLC	12.5% or Greater	1557	441
	WV-061-003693-001	BROOKOVER, CARM	Northeast Natural Energy LLC	12.5% or Greater	1535	847
	WV-061-003693-001	CAMPBELL, JEFF	Northeast Natural Energy LLC	12,5% or Greater	1580	254
-	WV-061-004564-002	CANNATA, DEANNA	Northeast Natural Energy LLC	12.5% or Greater	1604	846
	WV-061-003693-007	FARRINGER, HELE	Northeast Natural Energy LLC	12.5% or Greater	1553	280
-	WV-061-003693-005	FLEMING, PATRIC	Northeast Natural Energy LLC	12.5% or Greater	1557	497
	WV-061-003653-003	FLOWERS, PAULET	Northeast Natural Energy LLC	12,5% or Greater	1550	209
	WV-051-003738-002	HOPKINS, BARBAR	Northeast Natural Energy LLC	12.5% or Greater	1586	424
-	WV-061-003693-004	KING, BETTY JO	Northeast Natural Energy LLC	12.5% or Greater	1544	112
	WV-061-004564-001	KING, ROBERTA M	Northeast Natural Energy LLC	12.5% or Greater	1591	730
	WV-061-003758-004	KRAUS, RHONDA	Northeast Natural Energy LLC	12,5% or Greater	1549	606
	WV-061-003/38-004 WV-061-003693-010	LOTH, JOHN L.	Northeast Natural Energy LLC	12,5% or Greater	1564	804
÷	WV-061-003693-010	MCLARTY, DEBBIE	Northeast Natural Energy LLC	12,5% or Greater	1554	438
	WV-061-003693-009	MCLARTY, JOHN M	Northeast Natural Energy LLC	12.5% or Greater	1551	239
	WV-061-003758-005	MILLER, ROBERT	Northeast Natural Energy LLC	12.5% or Greater	1559	584
	WV-061-003758-001	NEYLON, MYRA J	Northeast Natural Energy LLC	12.5% or Greater	1552	422
	WV-061-003693-003	PRICE, DORIS	Northeast Natural Energy LLC	12.5% or Greater	1553	309
	WV-061-003758-003	PRICE, GARY M	Northeast Natural Energy LLC	12.5% or Greater	1548	11
	WV-061-003693-005	ROY, BETTY EILE	Northeast Natural Energy LLC	12.5% or Greater	1554	440
	WV-061-003d33-00d	WACO OIL AND GA	Northeast Natural Energy LLC	12.5% or Greater	1564	219
	WV-051-004327-087	ADAMS, KENNETH	Northeast Natural Energy LLC	12.5% or Greater	1639	803
	WV-061-004387-016	BARRITT, PATRIC	Northeast Natural Energy LLC	12.5% or Greater	1612	773
	WV-061-004387-056	BOWDEN, JAMES B	Northeast Natural Energy LLC	12.5% or Greater	1619	814
	WV-061-004387-050	BOWDEN, ROY LEL	Northeast Natural Energy LLC	12.5% or Greater	1634	631
	WV-061-004387-002	BRIGGS, DAN BRU	Northeast Natural Energy LLC	12.5% or Greater	1578	523
i	WV-061-004387-002	BROWN, DAVID I	Northeast Natural Energy LLC	12.5% or Greater	1633	453
ſ	WV-061-004387-085	CAROSONE, DELI	Northeast Natural Energy LLC	12.5% or Greater	1639	807
	WV-061-004387-070	CARTER, LAURIE	Northeast Natural Energy LLC	12.5% or Greater	1634	296
,	WV-061-003927-013	CASPER, JODI M	Northeast Natural Energy LLC	12.5% or Greater	1575	443
1	WV-061-003927-013	CHEROKEE, MARY	Northeast Natural Energy LLC	12.5% or Greater	1630	255
_	WV-061-004387-077	COFFMAN, PAULIN	Northeast Natural Energy LLC	12.5% or Greater	1621	593
J						

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book .	Page
J	WV-049-004628-001	COPESTICK, FLOR	Northeast Natural Energy LLC	12.5% or Greater	1617	420
J	WV-061-004387-067	DAWSON, JANICE	Northeast Natural Energy LLC	12.5% or Greater	1638	235
J	WV-061-004387-018	DEAL, DONNA	Northeast Natural Energy LLC	12.5% or Greater	1613	466
J	WV-061-004387-052	DENNIS, RUTHIE	Northeast Natural Energy LLC	12.5% or Greater	1618	573
J_	WV-061-004387-021	DICKENSON, CHRI	Northeast Natural Energy LLC	12.5% or Greater	1612	782
J	WV-061-004387-014	DICKENSON, ERNE	Northeast Natural Energy LLC	12.5% or Greater	1612	767
J	WV-061-004387-074	DONAHUE, BRUCE	Northeast Natural Energy LLC	12.5% or Greater	1630	13
J	WV-061-004387-076	DONAHUE, JACK W	Northeast Natural Energy LLC	12.5% or Greater	1631	265
- 	WV-061-004387-082 WV-061-004387-083	DONAHUE, JEANA	Northeast Natural Energy LLC	12.5% or Greater	1638	248
	WV-061-004387-081	DONAHUE, LEE DONAHUE, LORRAI	Northeast Natural Energy LLC	12.5% or Greater	1638	255
-	WV-061-004387-081	DULANEY, BARBAR	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater	1638	241
<u> </u>	WV-061-004292-002	FLETCHER, MONA	Northeast Natural Energy LLC	12.5% or Greater 12.5% or Greater	1571 1578	459 413
j	WV-061-004387-004	FONTANA, LESSIE	Northeast Natural Energy LLC	12.5% or Greater	1604	785
	WV-061-004387-011	FOX, HARRY JR.	Northeast Natural Energy LLC	12.5% or Greater	1612	687
J	WV-061-004443-002	GEE, BRENDA K.	Northeast Natural Energy LLC	12.5% or Greater	1604	211
J	WV-061-004387-039	GOURLEY, SAMMY	Northeast Natural Energy LLC	12.5% or Greater	1613	3
J	WV-061-004387-086	GRUDEVICH, SAND	Northeast Natural Energy LLC	12.5% or Greater	1639	805
J	WV-061-004387-071	HALL, BRENDA SU	Northeast Natural Energy LLC	12.5% or Greater	1628	228
J	WV-061-004387-055	HALVERSON, LUAN	Northeast Natural Energy LLC	12.5% or Greater	1620	306
J	WV-061-004387-092	HARDCASTLE, JUD	Northeast Natural Energy LLC	12.5% or Greater	1642	174
J	WV-061-003927-010	HAYTHORN, RICHA	Northeast Natural Energy LLC	12.5% or Greater	1575	278
J	WV-061-004387-010	HENSLEY, VICKI	Northeast Natural Energy LLC	12.5% or Greater	1607	770
	WV-061-004387-069	HIXENBAUGH, REB	Northeast Natural Energy LLC	12.5% or Greater	1627	288
	WV-061-004387-043	HOGAN, CHRISTIN	Northeast Natural Energy LLC	12.5% or Greater	1616	450
J	WV-061-004387-027	HOLT, SHERRY FO	Northeast Natural Energy LLC	12.5% or Greater	1612	794
J	WV-061-004387-003	HOMEPORT, CHURC	Northeast Natural Energy LLC	12.5% or Greater	1586	626
J	WV-061-003927-011	HUDNALL, VIRGIN	Northeast Natural Energy LLC	12.5% or Greater	1575	276
J .	WV-061-004387-008	HUFFMAN, GARY E	Northeast Natural Energy LLC	12.5% or Greater	1607	766
J	WV-061-004387-079 WV-061-004387-041	IANNACO, MERLA KEELE, FLORENCE	Northeast Natural Energy LLC	12.5% or Greater	1636	104
<u> </u>	WV-061-004387-041	KENNIE, MICHAEL	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater 12.5% or Greater	1613 1614	28 772
- j	WV-061-004387-089	KIRBY, CONNIE	Northeast Natural Energy LLC	12.5% or Greater	1646	37
	WV-061-003927-016	KNOOP, CAROLYN	Northeast Natural Energy LLC	12.5% or Greater	1575	449
j	WV-061-003927-017	KOERBER, JEFFRE	Northeast Natural Energy LLC	12.5% or Greater	1578	347
<u></u>	WV-061-003927-012	KOERBER, JERRY	Northeast Natural Energy LLC	12.5% or Greater	1575	441
j	WV-061-004387-031	LEDERER, CATHY	Northeast Natural Energy LLC	12.5% or Greater	1613	59
J	WV-061-002153-001	LEMLEY, JOSHUA	Chesapeake Appalachia, L.L.C.	12.5% or Greater	1397	623
J	WV-061-003023-003	CHESAPEAKE APPALACHIA, LLC	Northeast Natural Energy LLC	12.5% or Greater	120	769
J	WV-061-004387-001	LESEM, MICHAEL	Northeast Natural Energy LLC	12.5% or Greater	1578	527
J	WV-061-004387-006	LIGHTNER, CHARM	Northeast Natural Energy LLC	12.5% or Greater	1607	762
J	WV-061-004387-064	LOOMIS, KRIS E	Northeast Natural Energy LLC	12.5% or Greater	1626	64
J	WV-061-004387-044	MALONE, CAROL	Northeast Natural Energy LLC	12.5% or Greater	1619	106
J		MALONE, DEBRA A	Northeast Natural Energy LLC	12.5% or Greater	1636	114
J	WV-061-004387-091	MARZICH, SHEILA	Northeast Natural Energy LLC	12.5% or Greater	1643	521
		MCDONALD, TERES	Northeast Natural Energy LLC	12.5% or Greater	1575	445
	WV-061-004387-059	MCNUTT, JANET	Northeast Natural Energy LLC	12.5% or Greater	1621	595
J	WV-061-004387-084	MCNUTT, PATRICI	Northeast Natural Energy LLC	12.5% or Greater	1638	510
<u> </u>	WV-061-004387-040	MELTON, JOANNE	Northeast Natural Energy LLC	12.5% or Greater	1613	26
J	WV-061-004387-042	MILLER, DAWN	Northeast Natural Energy LLC	12.5% or Greater	1613	787
J	WV-061-004387-060 WV-061-003927-006	MOCK, DEBORAH L MOORE, RANDALL	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater 12.5% or Greater	1634 1571	628 461
J	WV-061-003927-006 WV-061-004443-005	MYERS, HOLLY G.	Northeast Natural Energy LLC	12.5% or Greater	1600	579
J	WV-061-004443-005 WV-061-004387-075	NAYPAVER, LINDA	Northeast Natural Energy LLC	12.5% or Greater	1630	15
	WV-061-004387-050	NOVAK, ANTOINET	Northeast Natural Energy LLC	12.5% or Greater	1620	299
	WV-061-004387-005	OLDHAM, ANGELA	Northeast Natural Energy LLC	12.5% or Greater	1610	429
J	WV-061-004387-038	PARKER, PATRIC	Northeast Natural Energy LLC	12.5% or Greater	1613	1
	WV-061-004387-022	PATTERSON, CHRI	Northeast Natural Energy LLC	12.5% or Greater	1612	785
J	WV-061-004387-033	PATTERSON, HEAT	Northeast Natural Energy LLC	12.5% or Greater	1613	65
J	WV-061-004387-032	PATTERSON, JOHN	Northeast Natural Energy LLC	12.5% or Greater	1613	62
J	WV-061-004387-036	PATTERSON, LEAN	Northeast Natural Energy LLC	12.5% or Greater	1614	769
j	WV-061-004387-020	PATTERSON, MAUR	Northeast Natural Energy LLC	12.5% or Greater	1612	779
J	WV-061-004387-030	PATTERSON, STEV	Northeast Natural Energy LLC	12.5% or Greater	1613	56
J	W.V-061-004387-007	PEARSON, CONSTA	Northeast Natural Energy LLC	12.5% or Greater	1607	764
J	WV-061-003927-015	PIATT, MARTHA E	Northeast Natural Energy LLC	12.5% or Greater	1575	447
J	WV-061-004387-024	PIERCE, ROBIN W	Northeast Natural Energy LLC	12.5% or Greater	1613	472
J	WV-061-003927-005	POSTLETHWAIT, M	Northeast Natural Energy LLC	12.5% or Greater	1571	463
J	WV-061-004387-026	ROBBINS, CHARLE	Northeast Natural Energy LLC	12.5% or Greater	1612 1619	791 378
J	WV-061-004387-047	ROBBINS, MICHEL	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater 12.5% or Greater	1623	517
J	WV-061-004387-062 WV-061-004387-088	SALISBURY, LEST SANCHEZ, KENNET	Northeast Natural Energy LLC	12.5% or Greater	1623	423
	WV-061-004387-088	SHEETS, BENJAMI	Northeast Natural Energy LLC	12.5% or Greater	1600	61
J J	WV-061-004387-048	SHEETS, EUGENE	Northeast Natural Energy LLC	12.5% or Greater	1617	772
J ,	WV-061-004387-048	SHEETS, JEFFREY	Northeast Natural Energy LLC	12.5% or Greater	1573	480
	1 002 000527 000		1	1		

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
1	WV-061-004443-004	SHEETS, MARY	Northeast Natural Energy LLC	12.5% or Greater	1600	57
1	WV-061-003927-009	SHEETS, ROBERT	Northeast Natural Energy LLC	12.5% or Greater	1573	.48
1	WV-061-004387-068	SILLIMAN, RICHD	Northeast Natural Energy LLC	12.5% or Greater	1636	52
1	WV-061-003927-004	SIMMONS, ETHEL	Northeast Natural Energy LLC	12.5% or Greater	1571	46
1.	WV-061-003927-003	SIMMONS, VIRGIL	Northeast Natural Energy LLC	12.5% or Greater	1571	46
J	WV-061-004387-065	SMITH, KAREN DE	Northeast Natural Energy LLC	12.5% or Greater	1626	6
1	WV-061-004387-053	STEWART, JOHN W	Northeast Natural Energy LLC	12.5% or Greater	1618	60
-11° -11°	WV-061-004387-009	STRAIT, DON CAR	Northeast Natural Energy LLC	12.5% or Greater	1607	76
1	WV-061-004387-093	SWARTZ, WILLIAM	Northeast Natural Energy LLC	12.5% or Greater	1007	
1	WV-061-004387-072	TAYLOR, RALANA	Northeast Natural Energy LLC	12.5% or Greater	1634	29
1	WV-061-003927-002	TENNANT, REX B.	Northeast Natural Energy LLC	12.5% or Greater	1565	56
4	WV-061-003927-001	TENNANT, SHERRI	Northeast Natural Energy LLC	12.5% or Greater	1566	70
-J-	WV-061-004387-073	THOUHSAENT, CYN	Northeast Natural Energy LLC	12.5% or Greater	1629	13
J)	WV-061-004387-063	TOUHSAENT, CYNT	Northeast Natural Energy LLC	12.5% or Greater	1626	
1	WV-061-004387-090	TOUHSAENT, R ET	Northeast Natural Energy LLC			5
	WV-061-004387-046	TOUHSAENT, THOM	Northeast Natural Energy LLC	12.5% or Greater	1641	34
	WV-061-004443-007	VOGEL, JACK ET		12.5% or Greater	1615	49
Î	WV-051-004443-001	VOGEL, JOE A.	Northeast Natural Energy LLC	12.5% or Greater	1627	2.9
1	WV-061-004387-034		Northeast Natural Energy LLC	12.5% or Greater	1580	75
		VOORHEIS, G ET	Northeast Natural Energy LLC	12.5% or Greater	1611	66
J	WV-061-004387-035	VOORHEIS, TERI	Northeast Natural Energy LLC	12.5% or Greater	1611	57
1	WV-061-004443 006	WARNER, JAMES A	Northeast Natural Energy LLC	12.5% or Greater	1613	47
1	WV-061-004387-028	WARRINGTON, ERN	Northeast Natural Energy LLC	12.5% or Greater	1512	81
1	WV-061-004387-025	WARRINGTON, FRA	Northeast Natural Energy LLC	12.5% or Greater	1619	39
J	WV-061-004387-051	WELLS, MICHAEL	Northeast Natural Energy LLC	12.5% or Greater	1617	7
J	WV-061-004387-054	WILLIS, NANCY J	Northeast Natural Energy LLC	12.5% or Greater	1620	30
1	WV-061-004387-057	WOLFE, CAROL AN	Northeast Natural Energy LLC	12.5% or Greater	1622	
1	WV-061-004387-013	WOOD, HENRI	Northeast Natural Energy LLC	12.5% or Greater	1612	78
J	WV-061-004387-017	WOOD, WALTER	Northeast Natural Energy LLC	12.5% or Greater	1512	7.
1	WV-061-004387-012	WOOD, WILLIAM	Northeast Natural Energy LLC	12.5% or Greater	1612	70
1	WV-061-004387-049	WRIGHT, BRAD	Northeast Natural Energy LLC	12.5% or Greater	1622	47
1	WV-061-004387-023	WRIGHT, IRA ROS	Northeast Natural Energy LLC	12.5% or Greater	1612	78
1	WV-061-004387-045	WRIGHT, JAMES C	Northeast Natural Energy LLC	12.5% or Greater	1619	3
J	WV-061-004387-015	74 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Northeast Natural Energy LLC	12.5% or Greater	1512	7
		WRIGHT, JOHN W			and the second s	
1	WV-061-004387-019	WRIGHT, LYNETTE	Northeast Natural Energy LLC	12.5% or Greater	1612	1
J	WV-061-004387-029	WRIGHT, SUSAN I	Northeast Natural Energy LLC	1.2.5% or Greater	1612	8,
K	WV-061-001942-023	CORESTICK, FLORENCE	Northeast Natural Energy LLC	12,5% or Greater	1564	1
K.	WV-061-004387-087	ADAMS, KENNETH	Northeast Natural Energy LLC	12.5% or Greater	1639	80
K	WV-051-004387-016	BARRITT, PATRIC	Northeast Natural Energy LLC	12,5% or Greater	1612	73
K-	WV-061-004387-056	BOWDEN, JAMES B	Northeast Natural Energy LLC	1,2,5% or Greater	1619	81
K	WV-061-004387-061	BOWDEN, ROY LEL	Northeast Natural Energy LLC	12.5% or Greater	1634	63
K	WV-061-004387-002	BRIGGS, DAN BRU	Northeast Natural Energy LLC	12.5% or Greater	1578	57
K	WV-061-004387-078	BROWN, DAVID J	Northeast Natural Energy LLC	12.5% or Greater	1633	4
K	WV-061-004387-035	CAROSONE, DELI	Northeast Natural Energy LLC	12.5% or Greater	1639	8
K	WV-061-004387-070	CARTER, LAURIE	Northeast Natural Energy LLC	12.5% or Greater	1634	2
K	WV-061-001943-006	CASPER, JODI M.	Northeast Natural Energy LLC	12.5% or Greater	1541	7
K	WV-061-004387-077	CHEROKEE, MARY	Northeast Natural Energy LLC	12.5% or Greater	1630	2
K	WV-061-004387-058	COFFMAN, PAULIN	Northeast Natural Energy LLC	12.5% or Greater	1621	5
K	WV-061-004387-066	COFFMAN, STEWAR	Northeast Natural Energy LLC	12.5% or Greater	1627	2
K	WV-061-001943-003	CORLEY, BONNIE	Northeast Natural Energy LLC	12.5% or Greater	1529	
	WV-061-001343-067	DAWSON, JANICE	Northeast Natural Energy LLC	12.5% or Greater	1638	2
K						
K.	WV-061-004387-018	DEAL, DONNA	Northeast Natural Energy LLC	12.5% or Greater	1613	4
K	WV-061-004387-052	DENNIS, RUTHIE	Northeast Natural Energy LLC	12.5% or Greater	1618	5
K	WV-061-004387-021	DICKENSON, CHRI	Northeast Natural Energy LLC	12.5% or Greater	1612	7
K	WV-061-004387-014	DICKENSON, ERNE	Northeast Natural Energy LLC	12.5% or Greater	1612	7
K	WV-061-004387-074	DONAHUE, BRUCE	Northeast Natural Energy LLC	12.5% or Greater	1530	
K	WV-061-004387-076	DONAHUE, JACK W	Northeast Natural Energy LLC	12,5% or Greater	1631	2
K	WV-061-004387-082	DONAHUE, JEANA	Northeast Natural Energy LLC	12.5% or Greater	1638	2
K	WV-061-004387-083	DONAHUE, LEE	Northeast Natural Energy LLC	12.5% or Greater	1638	2
Κ.	WV-061-004387-081	DONAHUE, LORRAI	Northeast Natural Energy LLC	12,5% or Greater	1638	2
K	WV-061-001943-019	DULANEY, BARBAR	Northeast Natural Energy LLC	12.5% or Greater	1557	3
K	WV-061-004292-002	FLETCHER, MONA	Northeast Natural Energy LLC	12.5% or Greater	1578	Z
K	WV-061-004387-004	FONTANA, LESSIE	Northeast Natural Energy LLC	12.5% or Greater	1604	J
K	WV-061-004387-011	FOX, HARRY JR.	Northeast Natural Energy LLC	12.5% or Greater	1612	E
K	WV-061-003881-001	GEE, BRENDA K	Northeast Natural Energy LLC	12.5% or Greater	1553	
K.	WV-061-001943-027	GOFF, CINDY A	Northeast Natural Energy LLC	12.5% or Greater	1562	2
K	WV-061-004387-039	GOURLEY, SAMMY	Northeast Natural Energy LLC	12,5% or Greater	1613	
K	WV-061-004387-086	GRUDEVICH, SAND	Northeast Natural Energy LLC	12.5% or Greater	1639	- 8
K	WV-061-004387-088	HALL, BRENDA SU	Northeast Natural Energy (LC	12.5% or Greater	1628	- 2
K	WV-061-004387-055	HALVERSON, LUAN	Northeast Natural Energy LLC	12.5% or Greater	1620	
			Northeast Natural Energy LLC	12.5% or Greater	1642	1
К	WV-061-004387-092	HARDCASTLE, JUD			1564	
10	WV-061-001943-024	HAYTHORN, RICHA	Northeast Natural Energy LLC	12.5% or Greater		7
К	WV-061-004387-010	HENSLEY, VICKI	Northeast Natural Energy LLC	12.5% or Greater	1607	7
K	WV-061-004387-069	HIXENBAUGH, REB	Northeast Natural Energy LLC	12,5% or Greater	1627	- 2
K	WV-061-004387-043	HOGAN, CHRISTIN	Northeast Natural Energy LLC	12.5% or Greater	1616	.4

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
K		HOLT, SHERRY FO	Northeast Natural Energy LLC	12.5% or Greater	1612	794
K		HOMEPORT, CHURC	Northeast Natural Energy LLC	12.5% or Greater	1586	626
K		HUDNALL, VIRGIN	Northeast Natural Energy LLC	12.5% or Greater	1557	391
K		HUFFMAN, GARY E	Northeast Natural Energy LLC	12.5% or Greater	1607	766
K	WV-061-004387-079	IANNACO, MERLA	Northeast Natural Energy LLC	12.5% or Greater	1636	104
K	WV-061-004387-041	KEELE, FLORENCE	Northeast Natural Energy LLC	12.5% or Greater	1613	28
K		KENNIE, MICHAEL	Northeast Natural Energy LLC	12.5% or Greater	1614	772
K		KIRBY, CONNIE	Northeast Natural Energy LLC	12.5% or Greater	1646	37
K		KNOOP, CAROLYN KOERBER, BARRY	Northeast Natural Energy LLC	12.5% or Greater	1562	365
K		KOERBER, GERALD	Northeast Natural Energy LLC	12.5% or Greater	1562	9
K		KOERBER, JEFFRE	Northeast Natural Energy LLC	12.5% or Greater	1569	772
K		KOERBER, JERRY	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater	1553	122
K		LEDERER, CATHY	Northeast Natural Energy LLC	12.5% or Greater 12.5% or Greater	1553	183
K		LESEM, MICHAEL	Northeast Natural Energy LLC	12.5% or Greater	1613 1578	59 527
К		LIGHTNER, CHARM	Northeast Natural Energy LLC	12.5% or Greater	1607	762
К		LOOMIS, KRIS E	Northeast Natural Energy LLC	12.5% or Greater	1626	64
K		MALONE, CAROL	Northeast Natural Energy LLC	12.5% or Greater	1619	106
K	WV-061-004387-080	MALONE, DEBRA A	Northeast Natural Energy LLC	12.5% or Greater	1636	114
K	WV-061-004387-091	MARZICH, SHEILA	Northeast Natural Energy LLC	12.5% or Greater	1643	521
K	WV-061-001943-025	MCDONALD, TERES	Northeast Natural Energy LLC	12.5% or Greater	1566	438
K		MCNUTT, JANET	Northeast Natural Energy LLC	12.5% or Greater	1621	595
K		MCNUTT, PATRICI	Northeast Natural Energy LLC	12.5% or Greater	1638	510
K		MELTON, JOANNE	Northeast Natural Energy LLC	12.5% or Greater	1613	26
K		MILLER, DAWN	Northeast Natural Energy LLC	12.5% or Greater	1613	787
K		MOCK, DEBORAH L	Northeast Natural Energy LLC	12.5% or Greater	1634	628
K		MOORE, RANDALL	Northeast Natural Energy LLC	12.5% or Greater	1562	7
K		MYERS, HOLLY G.	Northeast Natural Energy LLC	12.5% or Greater	1554	791
K K		NAYPAVER, LINDA	Northeast Natural Energy LLC	12.5% or Greater	1630	15
K		NOVAK, ANTOINET OLDHAM, ANGELA	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater 12.5% or Greater	1620 1610	299 429
K		PARKER, PATRIC	Northeast Natural Energy LLC	12.5% or Greater	1613	423
K		PATTERSON, CHRI	Northeast Natural Energy LLC	12.5% or Greater	1612	785
К		PATTERSON, HEAT	Northeast Natural Energy LLC	12.5% or Greater	1613	65
K		PATTERSON, JOHN	Northeast Natural Energy LLC	12.5% or Greater	1613	62
K		PATTERSON, LEAN	Northeast Natural Energy LLC	12.5% or Greater	1614	769
К		PATTERSON, MAUR	Northeast Natural Energy LLC	12.5% or Greater	1612	779
K	WV-061-004387-030	PATTERSON, STEV	Northeast Natural Energy LLC	12.5% or Greater	1613	56
K	WV-061-004387-007	PEARSON, CONSTA	Northeast Natural Energy LLC	12.5% or Greater	1607	764
K	WV-061-001943-030	PIATT, MARTHA	Northeast Natural Energy LLC	12.5% or Greater	1562	5
K	WV-061-004387-024	PIERCE, ROBIN W	Northeast Natural Energy LLC	12.5% or Greater	1613	472
K		POSTLETHWAIT, M	Northeast Natural Energy LLC	12.5% or Greater	1557	405
K		ROBBINS, CHARLE	Northeast Natural Energy LLC	12.5% or Greater	1612	791
K		ROBBINS, MICHEL	Northeast Natural Energy LLC	12.5% or Greater	1619	378
K		SALISBURY, LEST	Northeast Natural Energy LLC	12.5% or Greater	1623	517
K		SANCHEZ, KENNET	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater 12.5% or Greater	1647 1562	423 367
K		SHEETS, BENJAMI	Northeast Natural Energy LLC	12.5% or Greater	1617	772
K		SHEETS, EUGENE SHEETS, JEFFREY	Northeast Natural Energy LLC	12.5% or Greater	1557	387
K		SHEETS, MICHAEL	Northeast Natural Energy LLC	12.5% or Greater	1562	371
K		SHEETS, ROBERT	Northeast Natural Energy LLC	12.5% or Greater	1557	403
K		SILLIMAN, RICHD	Northeast Natural Energy LLC	12.5% or Greater	1636	521
K		SIMMONS, ETHEL	Northeast Natural Energy LLC	12.5% or Greater	1552	456
K		SIMMONS, VIRGIL	Northeast Natural Energy LLC	12.5% or Greater	1551	276
K	WV-061-004387-065	SMITH, KAREN DE	Northeast Natural Energy LLC	12.5% or Greater	1626	66
K		STEWART, JOHN W	Northeast Natural Energy LLC	12.5% or Greater	1618	609
K	WV-061-004387-009	STRAIT, DON CAR	Northeast Natural Energy LLC	12.5% or Greater	1607	768
K		SWARTZ, WILLIAM	Northeast Natural Energy LLC	12.5% or Greater		
K	WV-061-004387-072	TAYLOR, RALANA	Northeast Natural Energy LLC	12.5% or Greater	1634	299
K		TENNANT, REX II	Northeast Natural Energy LLC	12.5% or Greater	1538	548
K	WV-061-001943-005	TENNANT, SHERRI	Northeast Natural Energy LLC	12.5% or Greater	1538	336
K	WV-061-004387-073	THOUHSAENT, CYNT	Northeast Natural Energy LLC	12.5% or Greater	1629 1626	130 56
K	WV-061-004387-063	TOUHSAENT, CYNT	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater 12.5% or Greater	1641	348
K	WV-061-004387-090 WV-061-004387-046	TOUHSAENT, R ET	Northeast Natural Energy LLC Northeast Natural Energy LLC	12.5% or Greater	1615	492
K	WV-061-004387-046 WV-061-003684-001	VERBOSKY, MARY	Northeast Natural Energy LLC	12.5% or Greater	1557	501
K	WV-061-003684-001	VOGEL, JACK D.	Northeast Natural Energy LLC	12.5% or Greater	1557	401
K	WV-061-001943-014	VOGEL, JOE A ET	Northeast Natural Energy LLC	12.5% or Greater	1557	389
K	WV-061-001343-014 WV-061-004387-034	VOORHEIS, G ET	Northeast Natural Energy LLC	12.5% or Greater	1611	668
K	WV-061-004387-035	VOORHEIS, TERI	Northeast Natural Energy LLC	12.5% or Greater	1611	670
K	WV-061-001943-029	WARNER, CHARLOT	Northeast Natural Energy LLC	12.5% or Greater	1559	422
K	WV-061-004387-028	WARRINGTON, ERN	Northeast Natural Energy LLC	12.5% or Greater	1612	817
K	WV-061-004387-025	WARRINGTON, FRA	Northeast Natural Energy LLC	12.5% or Greater	1619	391
K	WV-061-001943-031	WELCH, SHANNON	Northeast Natural Energy LLC	12.5% or Greater	1561	828

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
K	WV-061-004387-051	WELLS, MICHAEL	Northeast Natural Energy LLC	12.5% or Greater	1617	774
K	WV-061-004430-001	WILLARD, CLAREN	Northeast Natural Energy LLC	12.5% or Greater	1591	828
K	WV-061-004387-054	WILLIS, NANCY J	Northeast Natural Energy LLC	12.5% or Greater	1620	302
K	WV-061-004387-057	WOLFE, CAROL AN	Northeast Natural Energy LLC	12.5% or Greater	1622	12
K	WV-061-004387-013	WOOD, HENRI	Northeast Natural Energy LLC	12.5% or Greater	1612	764
K	WV-061-004387-017	WOOD, WALTER	Northeast Natural Energy LLC	12.5% or Greater	1612	776
K	WV-061-004387-012	WOOD, WILLIAM	Northeast Natural Energy LLC	12.5% or Greater	1612	761
K	WV-061-004387-049	WRIGHT, BRAD	Northeast Natural Energy LLC	12.5% or Greater	1622	474
K	WV-061-004387-023	WRIGHT, IRA ROS	Northeast Natural Energy LLC	12.5% or Greater	1612	788
К	WV-061-004387-045	WRIGHT, JAMES C	Northeast Natural Energy LLC	12.5% or Greater	1619	99
K	WV-061-004387-015	WRIGHT, JOHN W	Northeast Natural Energy LLC	12.5% or Greater	1612	770
K	WV-061-004387-019	WRIGHT, LYNETTE	Northeast Natural Energy LLC	12.5% or Greater	1612	110
K	WV-061-004387-029	WRIGHT, SUSAN I	Northeast Natural Energy LLC	12.5% or Greater	1612	820
L	WV-061-005332-001	CNX GAS COMPANY	Northeast Natural Energy LLC	12.5% or Greater	1632	789
M	WV-061-002915-001	CHISLER, MARK T	West Augusta Resources, L.L.C.	12.5% or Greater	1402	622
M	WV-061-002915-001	WEST AUGUSTA RESOURCES, LLC	Chesapeake Appalachia, L.L.C.	12.5% or Greater	113	134
M	WV-061-003023-003	CHESAPEAKE APPALACHIA, LLC	Northeast Natural Energy LLC	12.5% or Greater	120	769
M	WV-061-003846-001	COPELAND, CONNI	Northeast Natural Energy LLC	12.5% or Greater	1554	683
M	WV-061-003846-002	WADE, GLADYS	Northeast Natural Energy LLC	12.5% or Greater	1557	499

4706101854

RECEIVED Office of Oil and Gas

JUN 2 1 2019



June 14, 2019

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

Re: Cummins North – 1H, 3H, 5H, 9H, and 13H

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 Days Run Rd (State Route 25), Tennant Memorial Rd (State Route 20), and Dooley Run Road (State Route 20/1) on the enclosed survey plats.

Sincerely,

Christa A Dotson

Manager - Land Operations Development

Enclosure

RECEIVED Office of Oil and Gas

JUN 2 1 2019

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

Date of Notice Certification: 06/17/2019			API No. 47- Operator's Well No. 1H				
					Name: Cummin	s	
ursuant to tl	been given: ne provisions in West Virginia Co	de § 22-6A, th	ne Operator has pro			W. The same of the same of	
	tract of land as follows:			APR 134			
tate: County:	West Virginia Monongalia		UTM NAD 83	Easting: Northing:	570254.5 4390563.9		
District:	Clay		Public Road Acc		4390503.9 CR 25/3 (Yank H	illow Road)	
Quadrangle:					Cummins		
Vatershed:	Dunkard Creek		and the same same same same same same same sam				
nformation r of giving the equirements Virginia Cod of this article	ed the owners of the surface desequired by subsections (b) and (c) surface owner notice of entry to of subsection (b), section sixtee e § 22-6A-11(b), the applicant sha have been completed by the appli), section sixte o survey pursum of this artical all tender prooficant.	en of this article; (in the subsection the were waived in the of and certify to the the subsection of the subsection	ii) that the re (a), section writing by the secretary	quirement was ten of this arti- the surface ow that the notice	deemed satisfied as a result cle six-a; or (iii) the notice /ner; and Pursuant to West	
that the Ope	rator has properly served the requects	uired parties w	with the following:		2310,235,071,227	OOG OFFICE USE	
i principal cit						ONLY	
	TICE OF SEISMIC ACTIVITY		TICE NOT REQUI			ONLY RECEIVED/ NOT REQUIRED	
□ 1. NO	TICE OF SEISMIC ACTIVITY	SEISMIC	C ACTIVITY WAS	CONDUC	TED	☐ RECEIVED/	
□ 1. NO′ ■ 2. NO	TICE OF ENTRY FOR PLAT SU	SEISMIC JRVEY or or NOTICE	C ACTIVITY WAS	S CONDUC EY WAS CORED BECA	TED ONDUCTED USE	RECEIVED/ NOT REQUIRED	
□ 1. NO′ ■ 2. NO	TICE OF ENTRY FOR PLAT SU	SEISMIC JRVEY or or NOTICE WAS CO	C ACTIVITY WAS NO PLAT SURV FICE NOT REQUI OF ENTRY FOR	EY WAS CORED BECA PLAT SUR BY SURFA	TED ONDUCTED USE VEY	☐ RECEIVED/ NOT REQUIRED ☐ RECEIVED/	
□ 1. NO	TICE OF ENTRY FOR PLAT SU	SEISMIC JRVEY or or NOTICE WAS CO WR (P	C ACTIVITY WAS NO PLAT SURV TICE NOT REQUIT OF ENTRY FOR ONDUCTED or ITTEN WAIVER	EY WAS CORED BECA PLAT SUR BY SURFA	TED ONDUCTED USE VEY	☐ RECEIVED/ NOT REQUIRED ☐ RECEIVED/	
□ 1. NO 2. NO 3. NO 4. NO	TICE OF ENTRY FOR PLAT SU	SEISMIC JRVEY or or NOTICE WAS CO WR (P	C ACTIVITY WAS NO PLAT SURV TICE NOT REQUIT OF ENTRY FOR ONDUCTED or ITTEN WAIVER	EY WAS CORED BECA PLAT SUR BY SURFA	TED ONDUCTED USE VEY	☐ RECEIVED/ NOT REQUIRED ☐ RECEIVED/ NOT REQUIRED	

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 LLC Address: 707 Virginia St. E., Suite 1200 By: Hollie Medley Charleston, WV 25301 Its: Regulatory Manager Facsimile: 304-241-5972 Telephone: Email: hmedlev@nne-llc.com 304-212-0422 OFFICIAL SEAL
NOTINEY AP UBLIC
STATE OF WEST VIRGINIA
Kristen Brooks
Northeast Natural Energy LLC
48 Donley St., Suite 601
Morgantown, WV 26501
My Commission Expires Aug. 10, 2023 May of June, 2019 Subscribed and sworn before me this Notary Public My Commission Expires

Oil and Gas Privacy Notice:

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

RECEIVED Office of Oil and Gas

JUN 2 1 2019

WW-6A (9-13)

API NO. 47-	1		
OPERATOR WE	ELL NO.	1H	
Well Pad Name:	Cummins		

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 6/6/2019 Date Permit Application Filed: 6/17/2019 Notice of: PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT WELL WORK Delivery method pursuant to West Virginia Code § 22-6A-10(b) PERSONAL. REGISTERED ✓ METHOD OF DELIVERY THAT REQUIRES A SERVICE MAIL RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5,7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. ☐ Application Notice ☐ WSSP Notice ☐ E&S Plan Notice ☐ Well Plat Notice is hereby provided to: COAL OWNER OR LESSEE M SURFACE OWNER(s) Name: see attached Name: Jerry L Yost et al Address: 74 Statler Run Road Address: Fairview, WV 26570 COAL OPERATOR Name: Name: Address: Address: Office of Oil and Gas ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) ☑ SURFACE OWNER OF WATER WELL Name: see attached JUN 2 1 2019 AND/OR WATER PURVEYOR(s) Address: Name: see attached WV Department of Address: Environmental Protection Name: Address: **DOPERATOR OF ANY NATURAL GAS STORAGE FIELD** ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: Address: Name: Address: *Please attach additional forms if necessary

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WW-6A (8-13)

API NO. 47-	
OPERATOR WI	ELL NO. 1H
Well Pad Name:	Cummins

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_RECEIVED and-gas/pages/default.aspx.

Office of Oil and Gas

Well Location Restrictions

JUN 2 1 2019

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 with papartment of 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. 1H
Well Pad Name: Cummins

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:

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Office of Oil and Gas

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

JUN 2 1 2019

WV Department of Environmental Protection

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

WW-6A (8-13)

API NO. 47-	
OPERATOR W	ELL NO, 1H
Well Pad Name:	Cummins

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

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JUN 2 1 2019

WW-6A (8-13) 47 06 10 18 54

API NO. 47OPERATOR WELL NO. 1H
Well Pad Name: Cummins

Notice is hereby given by:

Well Operator: Northeast Natural Energy LLC

Telephone: 304-212-0422

Email: hmedley@nne-llc.com

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.

OFFICIAL SEAL
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

Subscribed and sworn before me this 6th day of June 2019.

Notary Public

My Commission Expires_

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JUN 2 1 2019

Cummins 1H

<u>Surface Owner(s) – Road and/or Other</u> Disturbance:

Samuel W. & Stacey L. Matteo 404 Country Road Fairview, WV 26570

Patty Ann Kassay 1991 Daybrook Road Fairview, WV 26570

Bernice Tennant 299 Ellis Tennant Hollow Fairview, WV 26570

Precision Oil & Gas Inc. PO Box 884 Bridgeport, WV 26330

Coal Owner(s) or Lessee(s):

CONSOL Mining Company LLC 1000 Consol Energy Drive Canonsburg, PA 15317

Gary G. Loring, et al 1176 Sands Drive Fairmont, WV 26554

<u>Surface Owner of Water Well and/or Water</u> <u>Purveyor(s)</u>

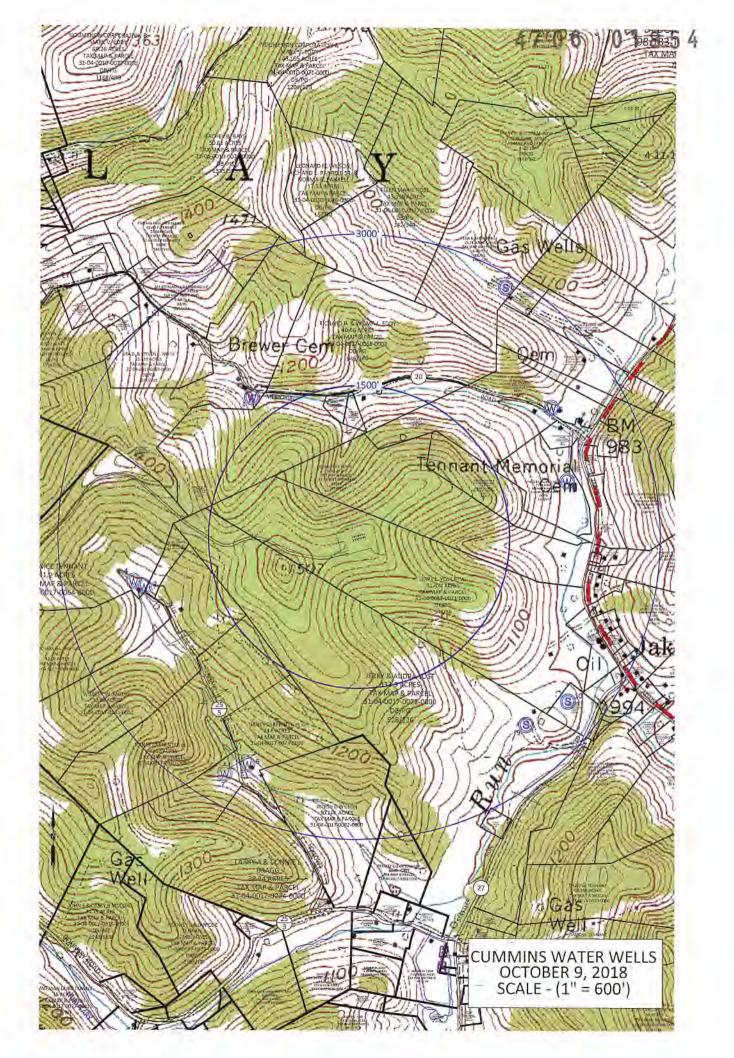
Melvin Luther Eddy et al 528 Memorial Road Fairview, WV 26570

Bernice Tennant 299 Ellis Tennant Hollow Fairview, WV 26570

Todd J. & Carlene S. Moore 800 Memorial Rd Fairview, WV 26570

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> > JUN 2 1 2019



WW-6A3 (1/12)

Operator	Well	No.	Cummins Pad	
- her men	10.00	4 101		

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

	Requirement:	Notice shall be prov	ided at	least SEVEN (7) da	ays but no more tha	ın FORTY-FIVI	E (45) days prior to
entry Date of Notic	e: 10/25/2017	Date of Plan	ned E	ntry: 11/1/2017			
					_		
Delivery met	hod pursuant	to West Virginia C	ode § 2	2-6A-10a			
☐ PERSON	NAL 🗆	REGISTERED		METHOD OF DEI	LIVERY THAT RI	EOUIRES A	
SERVIC	E	MAIL		RECEIPT OR SIGI			
on to the surfa but no more the beneath such to owner of mine and Sediment Secretary, white enable the sur	ce tract to cond nan forty-five d ract that has fil erals underlying Control Manua ich statement sh face owner to o	luct any plat surveys ays prior to such ent ed a declaration pur- s such tract in the co- il and the statutes an hall include contact in btain copies from the	requir ry to: (suant to unty ta d rules informa	ed pursuant to this a 1) The surface owne 2) section thirty-six, a 3x records. The notic related to oil and ga tion, including the a	rticle. Such notice or of such tract; (2) article six, chapter to se shall include a st s exploration and p	shall be provided to any owner or wenty-two of thi atement that copi production may b	lessee of coal seams is code; and (3) any les of the state Erosion is obtained from the
	by provided to);		■ 204	ANARIN ON LE	NACTOR .	
	E OWNER(s)				L OWNER OR LE		
A TANKSANA	e Tennant (-		CONSOL Mining Company		_
Address: 299 E			-	10211122	1000 Consol Energy Drive Canonsburg, PA 15317		
	ew, WV 26570 . & Audra Errol Yost	1	-	7	Canonsoung, FA 10017		
Name: Jerry L Address: 74 St		1		MINI	ERAL OWNER(s)		
	ew, WV 26570	Y	-	Name: see			
	ion Oil & Gas, Inc.			Address:	attacricu		
Address: P.O.		1	7	Audiess.			
	port, WV 26330			*please attac	h additional forms if ne	cessary	
	est Virginia Co on the tract of la West Virginia Monongalia Clay		otice is		ude & Longitude:	operator is plan 570274.51,4390561. CR 25/3 (Yank Hollov Dunkard Creek	
	Blacksville			Generally use	d farm name:	Cummins	
Copies of the s may be obtain Charleston, W obtained from	ed from the Sec V 25304 (304- the Secretary b	cretary, at the WV D 1926-0450). Copies y visiting <u>www.dep</u>	epartm of such	Il and the statutes an ent of Environmenta documents or addit v/oil-and-gas/pages/d	al Protection headq ional information r	uarters, located a elated to horizon	ation and production t 601 57 th Street, SE, tal drilling may be RECEIVED Office of Oil and Gas
Telephone:	304-212-0422				Charleston, WV 25301		UNI 0 1 2010
Email:	hmedley@nne-llc	.com		Facsimile:	304-241-5972		JUN 2 1 2019
	Privacy Noti						WV Department of Environmental Protecti

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.

Cummins Pad Notice of Entry for Plat Survey (WW-6A3) Attachment

Mineral Owners

A Keith Michael 241 Jefferson Street Bridgeport, WV 26330

Jane Ann Reynolds 2 West Hill Drive Fairmont, WV 26554

Gregory G. Michael \
1176 Sands Drive
Fairmont, WV 26554

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JUN 2 1 2019

WW-6A4 (1/12)

Operator Well No. Cummins 1H

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS $\frac{\text{NOTICE OF INTENT TO DRILL}}{\text{NOTICE OF INTENT TO DRILL}}$

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.

Notice Time Date of Notic		ed at least TEN (10) days prior to filing a Permit Application Filed: 06/17/2019	permit application.	
Delivery met	hod pursuant to West Virginia Cod	e § 22-6A-16(b)		
☐ HAND	■ CERTIFIED MAIL			
DELIVE		REQUESTED		
receipt request drilling a hore of this subsect subsection mater and if availab	sted or hand delivery, give the surface izontal well: <i>Provided</i> , That notice gition as of the date the notice was provay be waived in writing by the surface le, facsimile number and electronic management.	owner notice of its intent to enter upon the iven pursuant to subsection (a), section to ided to the surface owner: <i>Provided, how</i> owner. The notice, if required, shall include all address of the operator and the operator	an operator shall, by certified mail return the surface owner's land for the purpose of en of this article satisfies the requirements ovever, That the notice requirements of this ude the name, address, telephone number, or's authorized representative.	
	reby provided to the SURFACE	Name: See attached		
Address: 74 S	· ·	Address:		
	ew, WV 26570			
State: County: District:	West Virginia Monongalia Clav	UTM NAD 83 Easting: Northing: Public Road Access:	570262.9 4390556.8 SR 15/7 (Harvey Run Rd)	
District:	Clay	Public Road Access:	SR 15/7 (Harvey Run Rd)	
Quadrangle:	Blacksville, WV	Generally used farm name:	Cummins	
Watershed:	Dunkard Creek			
Pursuant to Y facsimile nur related to hor	nber and electronic mail address of trizontal drilling may be obtained from	the operator and the operator's authorized the Secretary, at the WV Department of	ress, telephone number, and if available, ed representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.	
Notice is he	reby given by:			
Well Operato	r: Northeast Natural Energy LLC	Authorized Representative:	Hollie Medley, Regulatory Manager	
Address:	707 Virginia Street E., Suite 1200	Address:	48 Donley Street, Suite 601	
	Charleston, WV 25301		Morgantown, WV 26501	
Telephone:	304-414-7060	Telephone:	304-414-7060 RECEIVED	
Email:	hmedley@nne-llc.com	Email:	hmedley@nne-llc.com Office of Oil and Gas	
Facsimile:	304-241-5972	Facsimile:	304-241-5972 JUN 2 1 2019	
Oil and Ga	s Privacy Notice:		WV Department of	

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as the Department of 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.

CUMMINS 1H - WW-6A5 Attachment

Surface Owner(s) - Road and/or Other Disturbance:

Samuel W. & Stacey L. Matteo 404 Country Road Fairview, WV 26570

Patty Ann Kassay 1991 Daybrook Road Fairview, WV 26570

Bernice Tennant
299 Ellis Tennant Hollow
Fairview, WV 26570

Precision Oil & Gas Inc. PO Box 884 Bridgeport, WV 26330

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JUN 2 1 2019

06 101854 Operator Well No. Cummins 1H

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

		Requirement: notice shall be pro		o later than the filing pplication Filed: 06/		application.
Delive	ry meth	od pursuant to West Virginia	Code § 2	22-6A-16(c)		
	CERTIF	ED MAIL	П	HAND		
		N RECEIPT REQUESTED	_	DELIVERY		
return : the pla require drilling damage (d) The of notice	receipt renned oped to be ped to be ped to the enotices ce.	equested or hand delivery, give peration. The notice required by provided by subsection (b), section prizontal well; and (3) A proposurface affected by oil and gas	the surface the surface the surface the surface the surface the surface given to the surface given to the surface	ace owner whose land absection shall include this article to a surface use and compens as to the extent the date of the surface owner at the surface owner at the compensation of the surface owner at the compensation of the surface owner at the surface owner.	I will be used for de: (1) A copy ace owner whose ation agreement agreement the address list	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
Notice Pursua operati	Fairvier is herel and to We con on the	oy given: est Virginia Code § 22-6A-16(c) ne surface owner's land for the p		f drilling a horizonta	ne undersigned	well operator has developed a planned act of land as follows:
Notice Pursua operati State:	Fairvier is herel nt to We on on th	oy given: sst Virginia Code § 22-6A-16(c) ne surface owner's land for the p		s hereby given that th	ne undersigned	et of land as follows:
Notice Pursua operati State: County	Fairvier is herel not to We non on the	oy given: est Virginia Code § 22-6A-16(c) ne surface owner's land for the p West Virginia		s hereby given that the fulling a horizonta UTM NAD 8 Public Road	ne undersigned of lawell on the trade and lawell on the trade and lawell and	et of land as follows: 570254.5
Notice Pursua operati State: County Distric Quadra	ris herelon to We fon on the to the to the to the total to the total to the total to	oy given: sst Virginia Code § 22-6A-16(c) ne surface owner's land for the p West Virginia Monongalia Clay Blacksville		s hereby given that the f drilling a horizonta	ne undersigned of lawell on the trade and lawell on the trade and lawell and	oct of land as follows: 570254.5 4390563.9
Notice Pursua operati State: County Distric Quadra Waters This N Pursua to be p horizon surface inform headqu gas/pas	ss: 74 Stat Fairvier is herel int to We fon on the con on the c	by given: est Virginia Code § 22-6A-16(c) ne surface owner's land for the p West Virginia Monongalia Clay Blacksville Dunkerd Creek all Include: est Virginia Code § 22-6A-16(c) by W. Va. Code § 22-6A-10(; and (3) A proposed surface us d by oil and gas operations to b lated to horizontal drilling may ocated at 601 57th Street, SE, alt.aspx.), this no b) to a see and co	s hereby given that the fidrilling 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 Secret eston, WV 25304	ne undersigned of well on the tra 3 Easting: Northing: Access: ad farm name: A copy of this of land will be understand arm papersable understand; at the WV (304-926-0450)	tet of land as follows: 570254.5 4390563.9 CR 25/3 (Yank Hollow Road) Cummins code section; (2) The information required used in conjunction with the drilling of an offer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-
Notice Pursua operati State: County Distric Quadra Waters This N Pursua to be p horizon surface inform headqu gas/pas	ris herel int to We provided int to We provided intal well interes affecte interes, l interes,	by given: set Virginia Code § 22-6A-16(c) ne surface owner's land for the p West Virginia Monongalia Clay Blacksville Dunkerd Creek all Include: set Virginia Code § 22-6A-16(c) by W. Va. Code § 22-6A-10(c) c; and (3) A proposed surface us d by oil and gas operations to a lated to horizontal drilling may ocated at 601 57 th Street, SE, alt.aspx. Northeast Natural Energy LLC), this no b) to a see and co	s hereby given that the farilling a horizontal UTM NAD 8 Public Road A Generally use tice shall include: (1) surface owner whose impensation agreement the damages are coined from the Secret	ne undersigned of well on the tra 3 Easting: Northing: Access: ad farm name: A copy of this of land will be understable unders	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-suite 1200
Notice Pursua operati State: County Distric Quadra Waters This N Pursua to be p horizon surface inform headqu gas/pas	ris herel is herel int to We int to	by given: est Virginia Code § 22-6A-16(c) ne surface owner's land for the p West Virginia Monongalia Clay Blacksville Dunkerd Creek all Include: est Virginia Code § 22-6A-16(c) by W. Va. Code § 22-6A-10(; and (3) A proposed surface us d by oil and gas operations to b lated to horizontal drilling may ocated at 601 57th Street, SE, alt.aspx.), this no b) to a see and co	s hereby given that the fidrilling 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 Secret eston, WV 25304	ne undersigned of well on the tra 3 Easting: Northing: Access: ad farm name: A copy of this of land will be understand arm papersable understand; at the WV (304-926-0450)	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-suite 1200

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.

CUMMINS 1H - WW-6A5 Attachment

Surface Owner(s) - Road and/or Other Disturbance:

Samuel W. & Stacey L. Matteo 404 Country Road Fairview, WV 26570

Patty Ann Kassay 1991 Daybrook Road Fairview, WV 26570

Bernice Tennant 299 Ellis Tennant Hollow Fairview, WV 26570

Precision Oil & Gas Inc. PO Box 884 Bridgeport, WV 26330

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JUN 2 1 2019

4706 01854

API NO. 47-	-
OPERATOR WE	ELL NO. 1H
Well Pad Name:	Cummins

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

State: County: District:	the well plat, all for proposed well work on the tra	— UTM NAD 83 Pasting. Northing:		570254.5
	Monongalia			4390563.9 CR 25/3 (Yank Hollow Road)
	Cidy			
Quadrangle:	Diganomic	Jenerally used	tarm name.	Guintina
Watershed:	be that I have no objection to the planned work description			
Please chec	k the box that applies	T.	III IIII III III	ION BY A NATURAL PERSON
*Please chec	k the box that applies			
C or mark		o:	//	Offinal
	CE OWNER	De	gnature:	I from
		Pr	//	Paul Smith
□ SURFA	CE OWNER) Pr Da	gnature: / int Name: hte: 6 13	I from
□ SURFA	CE OWNER CE OWNER (Road and/or Other Disturbance)	Pr Dr FO	gnature: int Name ate: 6 / 13/ OR EXECUT	Paul Smith 19 PION BY A CORPORATION, ETC.
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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.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

February 15, 2019

Thomas J. Smith, P. E. Secretary of Transportation/ Commissioner of Highways

Jill M. Newman 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 Cummins Pad, Monongalia County

Cummins 1H

Dear Mr. Martin,

This well site will be accessed from a permit #04-2014-0914 issued to Northeast Natural Energy Corporation for access to the State Road for a well site located off of Monongalia Route 25/3 SLS.

The 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 revised October 1, 2018.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Kristen Brooks

Northeast Natural Energy Corporation

CH, OM, D-4

File

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

CUMMINS WELL PAD CLAY DISTRICT, MONONGALIA COUNTY, WV OCTOBER 2018



TWO WORKING DAYS PRIOR TO EXCAVATION, THE CONTRACTOR MUST CONTACT THE WV ONE CALL SYSTEM, INC., 1-800-245-4848 (WV ONE CALL TICKET#1731378158)

OWNER



707 VIRGINIA STREET SUITE 1200

CHARLESTON, WV 253 01

MERCER

MCDOWELL

WVDEP OOG 7/2/3 1/24/2019

APPROVED

NATURAL ENERGY NORTHEAST NATURAL ENERGY, LLC

SHEET INDEX 1. TITLE SHEET

2-3. EVACUATION ROUTE/PREVAILING WIND 4. E&S CONTROL LAYOUT OVERVIEW 5-11. E&S CONTROL LAYOUT 12. E&S CONTROL AND SITE PLAN OVERVIEW

13-19. E&S CONTROL AND SITE PLAN 20, WELL PAD CROSS-SECTIONS AND UNDER DRAIN PROFILES

21. KASSAY ACCESS ROAD PROFILE 22. CUMMINS ACCESS ROAD PROFILE 23-24. KASSAY ACCESS ROAD CROSS-SECTIONS 25-31, CUMMINS ACCESS ROAD CROSS-SECTIONS 32-34. DETAILS

35. RECLAMATION PLAN OVERVIEW 36-42, RECLAMATION PLAN

TOTAL PROJECT BOUNDARY: 54,47 AC. TOTAL LIMITS OF DISTURBANCE: 40.42 AC. ACCESS ROAD DISTURBANCE AREA: 28.43 AC. WELL PAD DISTURBANCE AREA: 11.99 AC.

PROPERTY PROJECT BOUNDARY ACREAGE GEORGE F. McCOY & PATRICIA EDDY (TAX MAP AND PARCEL 04-17-55): 0.06 AC. SAMUEL W & STACEY L MATTEO (TAX MAP AND PARCEL 04-17-59): 6.71 AC. PATTY ANN KASSAY (YAX MAP AND PARCEL 04-17-48): 8.24 AC. PRECISION OIL AND GAS INC. (TAX MAP AND PARCEL 04-17-62): 5.63 AC. BERNICE TENNANT (TAX MAP AND PARCEL 04-17-64): 15.50 AC. BERNICE TENNANT (TAX MAP AND PARCEL 04-17-63): 0.04 AC JERRY LAND AUBRA ERROL YOST (TAX MAP AND PARCEL 04-17-72): 6.07 AC. JERRY LYOST ET AL (TAX MAP AND PARCEL 04-17-71): 12.22 AC.

PLANS PREPARED BY:

BOORD BENCHEK & ASSOCIATES, INC.

ENGINEERING, SURVEYING, CONSTRUCTION AND MINING SERVICES SOUTHPOINTE, PA 15317 PHONE: 724-746-1055



10-22-18

ANDREW BENCHEK P.E.



IN ACCORDANCE WITH WV 35 CSR 8 THE FOLLOWING EROSION & SEDIMENT CONTROL PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES ESTABLISHED BY THE CHIEF AND PROVIDED IN THE OFFICE'S EROSION AND SEDIMENT CONTROL FIELD MANUAL, A GENERAL CONSTRUCTION SEQUENCE, DESCRIPTION OF STABILIZATION METHODS, AND DETAILS & SPECIFICATIONS FOR EROSION & SEDIMENT BEST MANAGEMENT PRACTICES HAVE BEEN INCLUDED IN THE PROVIDED DETAIL SHEETS.

TITLE SHEET

CUMMINS WELL PAD CUMMINS WELL PAD CLAY DISTRICT, MONONGALIA COUNTY, WV COORDINATES CENTER OF WELLS

(NAD 83) LAT: 39° 39' 43.15" LONG: 80° 10' 51.01" (NAD 27) LAT: 39° 39' 42.86" LONG: 80° 10' 51.74"

SITE ENTRANCE (NAD 83) LAT: 39° 39' 06.92" LONG: 80° 11' 57.82" (NAD 27) LAT: 39° 39' 06.63" LONG: 80° 11' 58.55'

SHEET

OF 42



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