



 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, May 10, 2019
 WELL WORK PERMIT
 Horizontal 6A / New Drill

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

Re: Permit approval for CUMMINS 4H
 47-061-01836-00-00

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 4H
 Farm Name: JERRY L. YOST ET AL
 U.S. WELL NUMBER: 47-061-01836-00-00
 Horizontal 6A New Drill
 Date Issued: 5/10/2019

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. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. 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.

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.

05/17/2019

WW-6B
(04/15)

API NO. 47- _____
OPERATOR WELL NO. 4H _____
Well Pad Name: Cummins _____

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

1) Well Operator: Northeast Natural Energy | 494498281 | Monongalia | Clay | Blacksville, WV
Operator ID County District Quadrangle

2) Operator's Well Number: 4H Well Pad Name: Cummins

3) Farm Name/Surface Owner: Jerry L Yost et al Public Road Access: CR 25/3 (Yank Hollow Rd.)

4) Elevation, current ground: 1360' Elevation, proposed post-construction: 1358'

5) Well Type (a) Gas X Oil _____ Underground Storage _____
Other _____

(b) If Gas Shallow X Deep _____
Horizontal X

6) Existing Pad: Yes or No No

MSJK 3/7/2019

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus; 8,073', 101', 3,600 psi

8) Proposed Total Vertical Depth: 8,070'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 19,449'

11) Proposed Horizontal Leg Length: 10,810'

12) Approximate Fresh Water Strata Depths: 50'; 1,250'

13) Method to Determine Fresh Water Depths: Drillers Log from offset wells

14) Approximate Saltwater Depths: 1,648'; 2,408'

15) Approximate Coal Seam Depths: 1,248'

16) Approximate Depth to Possible Void (coal mine, karst, other): NA

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes _____ No X

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

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Environmental Protection

4706101836

05/17/2019

API NO. 47-

OPERATOR WELL NO. 4H

Well Pad Name: Cummins

WW-6B
(04/15)

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	19,449'	19,419'	4536 Cu Ft
Tubing	2-7/8"	New	N-80	6.5			NA
Liners							

MJK 3/17/2019

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:				

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05/17/2019

API NO. 47- _____ - _____

OPERATOR WELL NO. 4H _____

Well Pad Name: Cummins _____

WW-6B
(10/14)

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

Drilling and completion of a horizontal Marcellus well. The well will be drilled on air to an approximate depth of 6,550' TVD/MD. The well will then be horizontally drilled on synthetic based mud from the KOP to approximately 8,070' TVD/19,449' MD along a 143° 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 ac22) 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.

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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.

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*Note: Attach additional sheets as needed.



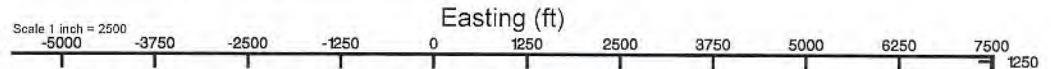
NORTHEAST NATURAL ENERGY, LLC

Location: Monongalia County, WV
 Field: Monongalia
 Facility: Cummins Pad

Slot: Slot 4H
 Well: Cummins 4H
 Wellbore: Cummins 4H PWB



Plot reference wellpath is Cummins 4H PWP Ex-00	Grid System: NAD83 / Lambert West Virginia SP, Northern Zone (4701), US feet
True vertical depths are referenced to Rig on Slot 4H (RKB)	North Reference: Grid north
Measured depths are referenced to Rig on Slot 4H (RKB)	Scale: True distance
Rig on Slot 4H (RKB) to Mean Sea Level: 1374 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: Slot 4H): -1358 feet	Created by: atenj on 2018-11-28
Coordinates are in feet referenced to Slot	Database: WA_MPL_EASTERNUS_Defn



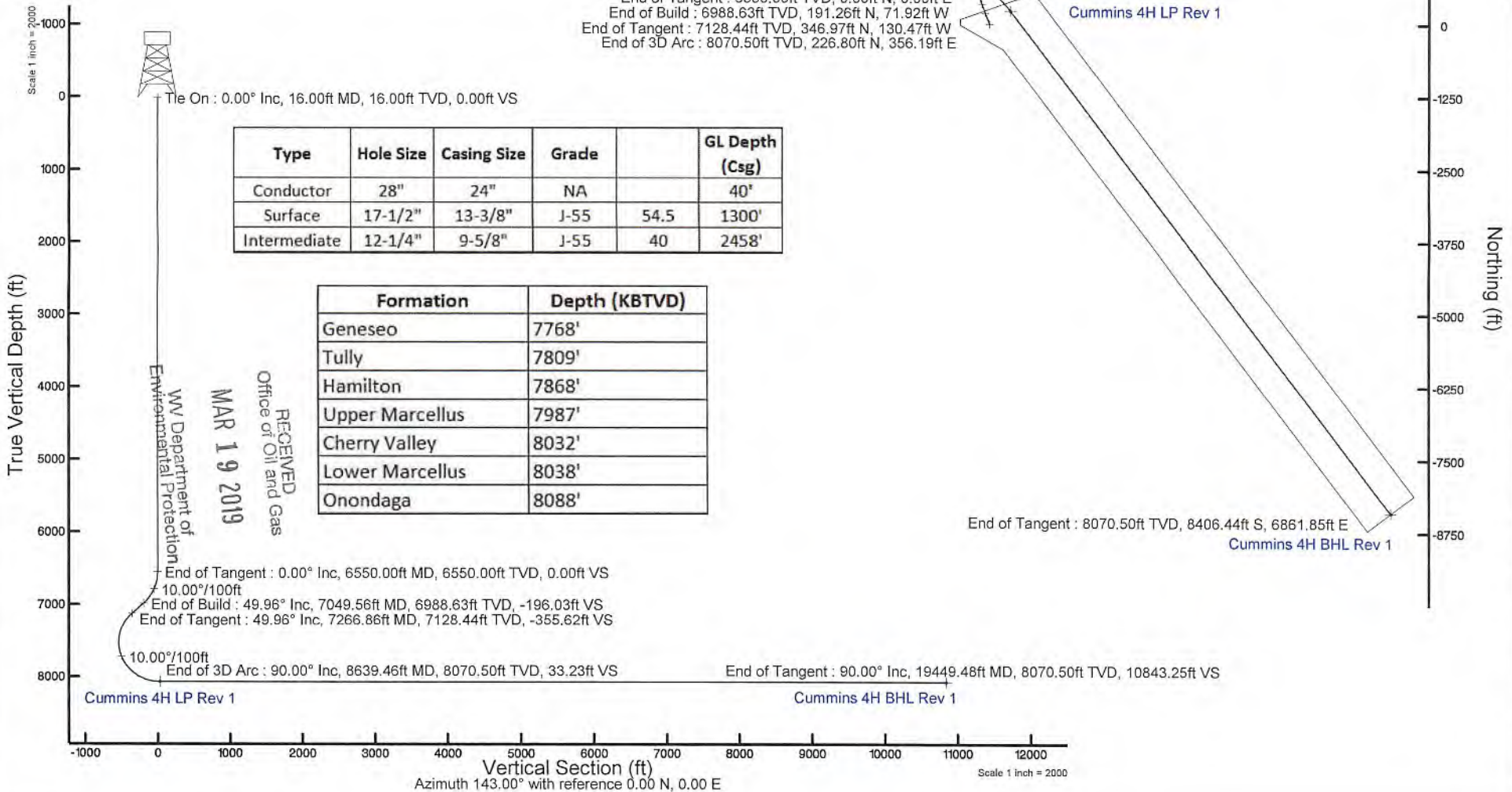
Tie On : 16.00ft TVD, 0.00ft N, 0.00ft E
 End of Tangent : 6550.00ft TVD, 0.00ft N, 0.00ft E
 End of Build : 6988.63ft TVD, 191.26ft N, 71.92ft W
 End of Tangent : 7128.44ft TVD, 346.97ft N, 130.47ft W
 End of 3D Arc : 8070.50ft TVD, 226.80ft N, 356.19ft E

Cummins 4H LP Rev 1

Tie On : 0.00° Inc, 16.00ft MD, 16.00ft TVD, 0.00ft VS

Type	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'

Formation	Depth (KBTVD)
Geneseo	7768'
Tully	7809'
Hamilton	7868'
Upper Marcellus	7987'
Cherry Valley	8032'
Lower Marcellus	8038'
Onondaga	8088'



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4706101836

WW-9
(4/16)

API Number 47 - _____ - _____

Operator's Well No. Cummins 4H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION 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? Yes No

Will a pit be used? Yes No

If so, please describe anticipated pit waste: N/A

Will a synthetic liner be used in the pit? Yes No If so, what ml.? 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, 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, Barite, 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, sawdust) _____

-Landfill or offsite name/permit number? Please See Attachment "A"

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

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

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

Company Official Signature Hollie Medley
Company Official (Typed Name) Hollie Medley
Company Official Title Regulatory Manager

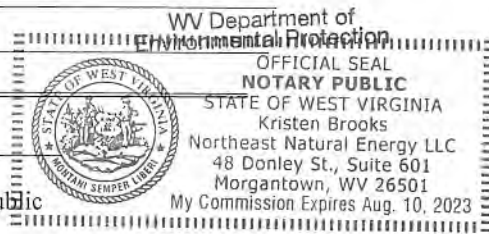
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Subscribed and sworn before me this 12th day of March, 2019, 20

Kristen Brooks

Notary Public

My commission expires Aug 10, 2023



Northeast Natural Energy LLC

Proposed Revegetation Treatment: Acres Disturbed 54.52 Prevegetation pH _____

Lime 2 Tons/acre or to correct to pH 7

Fertilizer type 10-20-20

Fertilizer amount 300 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type	lbs/acre
Orchard Grass	46
Red Clover	8
Perennial Rye	16
Timothy 15 Annual Rye 15	

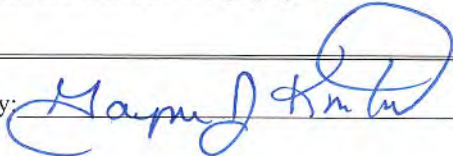
Seed Type	lbs/acre
Orchard Grass	46
Red Clover	8
Perennial Rye	16
Timothy 15 Annual Rye 15	

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), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: _____



Comments: _____

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Title: INSPECTION

Date: 3/7/2019

Field Reviewed? () Yes () No

Attachment A to WW-9

Northeast Natural Energy LLC (“NNE”) plans to utilize a closed loop process for its drilling of the Cummins 4H 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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northeast

NATURAL ENERGY

Cummins 4H

SITE SAFETY PLAN

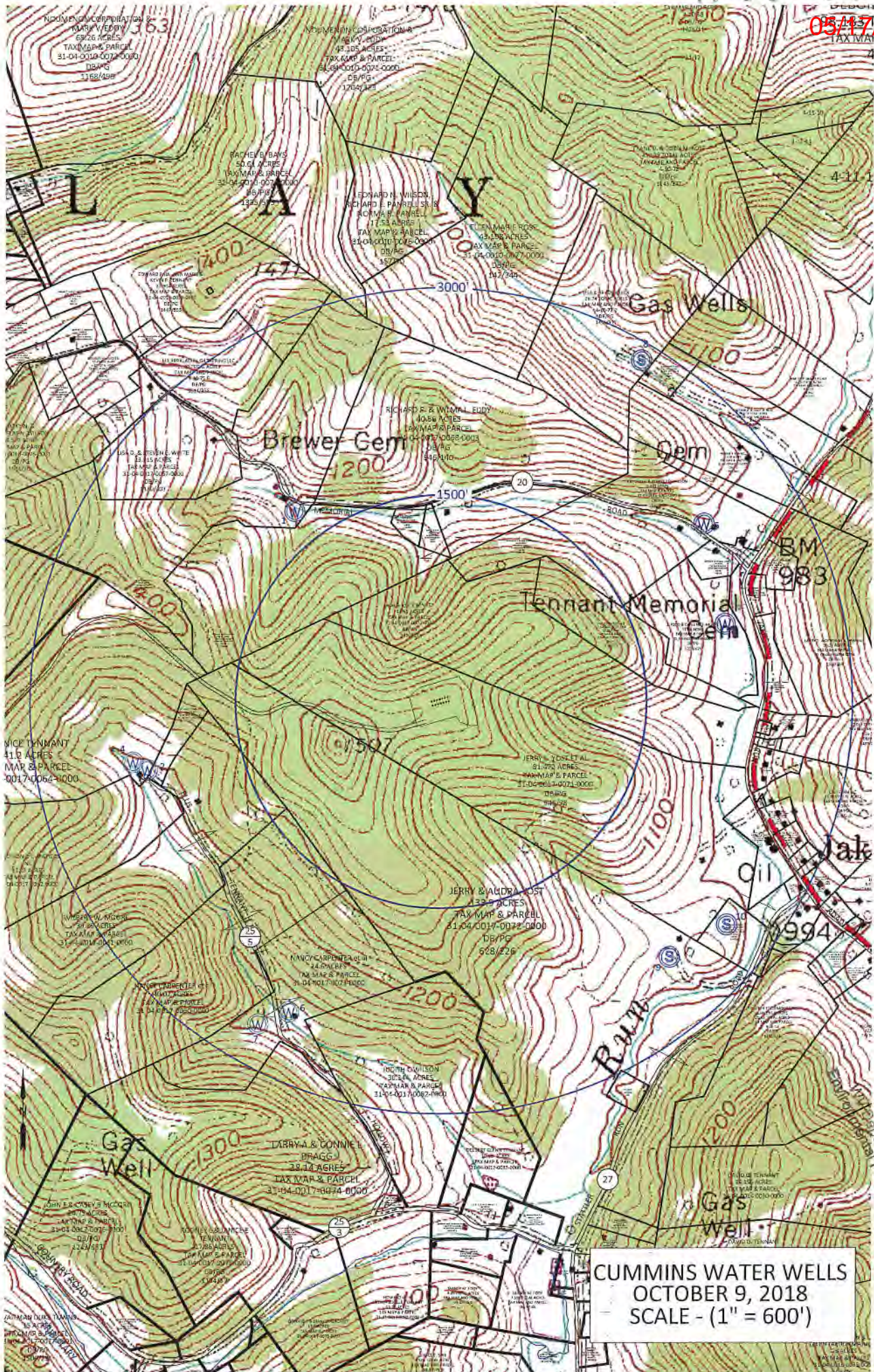
February 2019

Haynes Kato
3/2/2019

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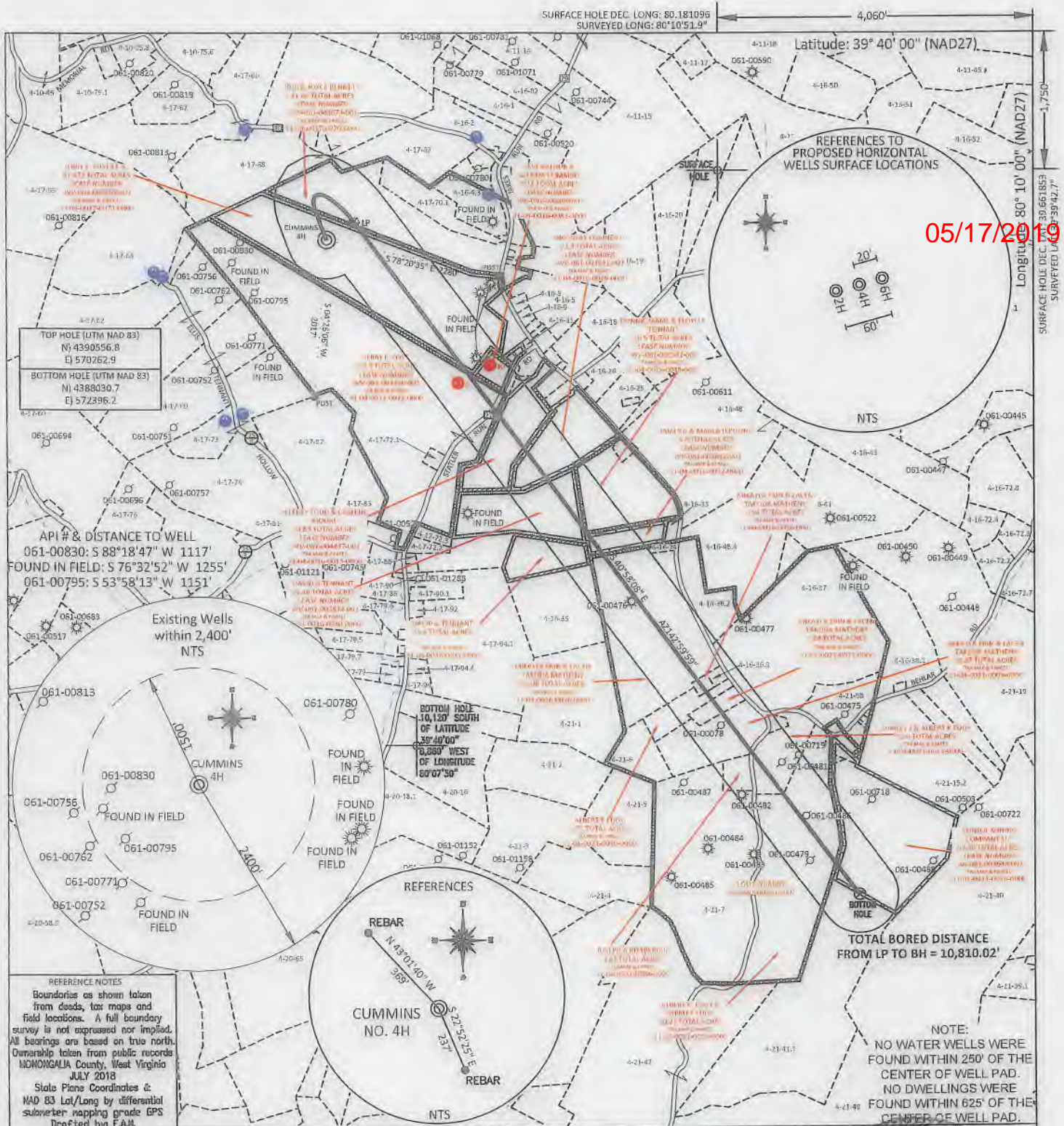
MAR 19 2019

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Environmental Protection



CUMMINS WATER WELLS
OCTOBER 9, 2018
SCALE - (1" = 600')

On: [unclear]
 Min: 15 [unclear]
 Department of
 Environmental Protection



REFERENCE NOTES
 Boundaries as shown taken from deeds, tax maps and field locations. A full boundary survey is not expressed nor implied. All bearings are based on true north. Ownership taken from public records MONONGALIA County, West Virginia JULY 2018
 State Plane Coordinates & NAD 83 Lat/Long by differential submeter mapping grade GPS
 Drafted by EAM

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

Signed: *[Signature]*
 L.L.S. #2124 : Ernest J. Benchek III



FILE #:	NNE15	DATE:	DECEMBER 11, 2018
DRAWING #:	2883	OPERATOR'S WELL #:	CUMMINS 4H
SCALE:	PLAT: 1" = 1800' TICK: 1" = 2000'	API WELL #:	47 61 01836
MINIMUM DEGREE OF ACCURACY:	1/200	STATE COUNTY PERMIT	CURRENT ELEVATION: 1,374' PROPOSED ELEVATION: 1,358.25'
PROVEN SOURCE OF ELEVATION:	SUBMETER MAPPING GRADE GPS	WATERSHED:	DUNKARD CREEK
		COUNTY/DISTRICT:	MONONGALIA / CLAY
		SURFACE OWNER:	JERRY L. YOST ET AL
		OIL & GAS ROYALTY OWNER:	NNE LLC, et al
		LEASE NUMBERS:	
		QUADRANGLE:	BLACKSVILLE
		ACREAGE:	81.472 +/-
		ACREAGE:	580.252 +/-
		DRILL <input checked="" type="checkbox"/> CONVERT <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input checked="" type="checkbox"/>	
		PLUG OFF FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/> PLUG & ABANDON <input type="checkbox"/>	
		CLEAN OUT & REPLUG <input type="checkbox"/> OTHER CHANGE <input type="checkbox"/> (SPECIFY):	
TARGET FORMATION:	MARCELLUS	ESTIMATED DEPTH:	TVD: 8,070.5' TMD: 19,449.48'
WELL OPERATOR:	NORTHEAST NATURAL ENERGY LLC	DESIGNATED AGENT:	JOHN ADAMS
ADDRESS:	707 VIRGINIA STREET EAST, SUITE 1200	ADDRESS:	707 VIRGINIA STREET EAST, SUITE 1200
CITY:	CHARLESTON STATE: WV ZIP CODE: 25301	CITY:	CHARLESTON STATE: WV ZIP CODE: 25301

WW-6A1
(5/13)

Operator's Well No. Cummins 4H

**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
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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 *Hollie Medley*
 Its: Regulatory Manager

WW-6A1

Operators Well No. Cummins 4H

Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
WV-061-003499-001	LORING, GARY G.	Northeast Natural Energy LLC	DEED	1545	764
WV-061-003676-001	SWIGER, JOSEPH	Northeast Natural Energy LLC	DEED	1561	101
WV-061-004591-001	REYNOLDS, JANE	Northeast Natural Energy, LLC	0.125 or Greater	1595	384
WV-061-004591-002	MICHAEL, A.KEIT	Northeast Natural Energy LLC	0.125 or Greater	1594	66
WV-061-003674-001	WALKER, MARTHA	Northeast Natural Energy LLC	0.125 or Greater	1550	489
WV-061-003674-002	RAMSEY, KATHY J	Northeast Natural Energy LLC	0.125 or Greater	1554	482
WV-061-003674-003	WALKER, CHARLEN	Northeast Natural Energy LLC	0.125 or Greater	1550	573
WV-061-003674-004	MCCULLOUGH, MAR	Northeast Natural Energy LLC	0.125 or Greater	1541	834
WV-061-003674-005	TENNANT, BRENDA	Northeast Natural Energy LLC	0.125 or Greater	1541	842
WV-061-003674-006	ARNETT, ROBERT	Northeast Natural Energy LLC	0.125 or Greater	1550	487
WV-061-003674-007	BURKE, ARLEEN	Northeast Natural Energy LLC	0.125 or Greater	1550	491
WV-061-003674-008	MYERS, NICHOLAS	Northeast Natural Energy LLC	0.125 or Greater	1550	584
WV-061-003674-010	HIGGINS, WILMA	Northeast Natural Energy LLC	0.125 or Greater	1542	91
WV-061-003674-011	WILSON, BARBARA	Northeast Natural Energy LLC	0.125 or Greater	1542	96
WV-061-003674-012	LEMLEY, MARY LO	Northeast Natural Energy LLC	0.125 or Greater	1550	473
WV-061-003674-013	PIFER, DONNA IR	Northeast Natural Energy LLC	0.125 or Greater	1554	480
WV-061-003674-014	STEELE, REBECCA	Northeast Natural Energy LLC	0.125 or Greater	1550	475
WV-061-003674-015	TENNANT, CECIL	Northeast Natural Energy LLC	0.125 or Greater	1550	477
WV-061-003674-017	ARNETT, KENNETH	Northeast Natural Energy LLC	0.125 or Greater	1562	199
WV-061-003674-018	MOORE, ETHAN D	Northeast Natural Energy LLC	0.125 or Greater	1566	295
WV-061-003674-019	TENNANT, RICHA	Northeast Natural Energy LLC	0.125 or Greater	1562	201
WV-061-003674-020	ARNETT, W. KEIT	Northeast Natural Energy LLC	0.125 or Greater	1564	673
WV-061-003674-021	TENNANT, SYLVIA	Northeast Natural Energy LLC	0.125 or Greater	1564	715
WV-061-003674-022	STILES, GERALD	Northeast Natural Energy LLC	0.125 or Greater	1564	376
WV-061-003674-023	STILES, HAROLD	Northeast Natural Energy LLC	0.125 or Greater	1563	121
WV-061-003674-024	KENNEDY, HELEN	Northeast Natural Energy LLC	0.125 or Greater	1557	365
WV-061-003674-025	YOST, VERL LOYE	Northeast Natural Energy LLC	0.125 or Greater	1557	451
WV-061-003674-027	STILES, JANICE	Northeast Natural Energy LLC	0.125 or Greater	1566	27
WV-061-003674-029	THOMAS FAMILY	Northeast Natural Energy LLC	0.125 or Greater	1565	594
WV-061-003674-031	EBERHART, TERRY	Northeast Natural Energy LLC	DEED	1563	206
WV-061-003674-032	TENNANT, HELEN	Northeast Natural Energy LLC	0.125 or Greater	1568	319
WV-061-003674-033	NETZEL, DEBORAH	Northeast Natural Energy LLC	0.125 or Greater	1568	146
WV-061-003674-034	TENNANT, ROBERT	Northeast Natural Energy LLC	0.125 or Greater	1573	456
WV-061-003674-035	WRIGHT, MARY A	Northeast Natural Energy LLC	0.125 or Greater	1574	526
WV-061-003674-036	YOST, JASON G	Northeast Natural Energy LLC	0.125 or Greater	1574	524
WV-061-003674-037	TENNANT, GLENDA	Northeast Natural Energy LLC	0.125 or Greater	1577	4
WV-061-003750-001	VARNER, DAVID	Northeast Natural Energy LLC	0.125 or Greater	1566	513
WV-061-003750-002	KENNEDY, CASSAN	Northeast Natural Energy LLC	0.125 or Greater	1564	325
WV-061-003750-003	CONJESKI, SALLY	Northeast Natural Energy LLC	0.125 or Greater	1562	437
WV-061-003750-004	GREENHALGH, MAR	Northeast Natural Energy LLC	0.125 or Greater	1565	560
WV-061-003750-005	NIDA, ABIGAIL	Northeast Natural Energy LLC	0.125 or Greater	1566	297
WV-061-003750-006	HOFFMAN, SYLVIA	Northeast Natural Energy LLC	0.125 or Greater	1551	164
WV-061-003750-007	GOODWIN, ELIZA	Northeast Natural Energy LLC	0.125 or Greater	1565	558
WV-061-003750-008	GOODWIN, MARY K	Northeast Natural Energy LLC	0.125 or Greater	1564	663
WV-061-003750-009	BIERER, SUE A	Northeast Natural Energy LLC	DEED	1561	642
WV-061-003750-010	LAWSON, VICTORI	Northeast Natural Energy LLC	DEED	1563	236
WV-061-003750-011	THROCKMORTON, D	Northeast Natural Energy LLC	0.125 or Greater	1557	437
WV-061-003750-012	GILL, SHEILA V.	Northeast Natural Energy LLC	0.125 or Greater	1560	459
WV-061-003750-013	STAVISHECK, SI	Northeast Natural Energy LLC	0.125 or Greater	1557	748
WV-061-003750-014	MCDONALD, SALLY	Northeast Natural Energy LLC	DEED	1561	579
WV-061-003750-015	WHITTINGTON, TA	Northeast Natural Energy LLC	DEED	1559	387
WV-061-003750-016	VARNER, PEGGY A	Northeast Natural Energy LLC	0.125 or Greater	1565	297

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WV-061-003750-017	CLOSSER,III, ER	Northeast Natural Energy LLC	0.125 or Greater	1559	456
WV-061-003750-018	HENDERSON, DAVI	Northeast Natural Energy LLC	0.125 or Greater	1557	453
WV-061-003750-019	STRGANAC, SALLY	Northeast Natural Energy LLC	0.125 or Greater	1557	379
WV-061-003750-020	RICKARD, IVAN D	Northeast Natural Energy LLC	0.125 or Greater	1557	455
WV-061-003750-021	HENDERSON, JOHN	Northeast Natural Energy LLC	0.125 or Greater	1557	750
WV-061-003750-022	STATLER, PATRIC	Northeast Natural Energy LLC	0.125 or Greater	1557	457
WV-061-003750-023	TAYLOR, MARY EL	Northeast Natural Energy LLC	0.125 or Greater	1557	445
WV-061-003750-024	HARTZELL, MARY	Northeast Natural Energy LLC	0.125 or Greater	1557	443
WV-061-003750-025	HARRIS, KATHLEE	Northeast Natural Energy LLC	0.125 or Greater	1554	478
WV-061-003750-026	FULLER, EVELYN	Northeast Natural Energy LLC	0.125 or Greater	1559	470
WV-061-003750-027	HENDRIX, CARRIE	Northeast Natural Energy LLC	DEED	1563	659
WV-061-003750-028	VARNER, THOMAS	Northeast Natural Energy LLC	DEED	1561	372
WV-061-003750-029	TEAGARDEN, KATH	Northeast Natural Energy LLC	0.125 or Greater	1564	667
WV-061-003750-030	KACZMARCZYK, ED	Northeast Natural Energy LLC	DEED	1561	362
WV-061-003750-031	KACZMARCZYK, ER	Northeast Natural Energy LLC	DEED	1561	182
WV-061-003750-032	DORSEY, SHARA L	Northeast Natural Energy LLC	DEED	1561	179
WV-061-003750-033	VARNER, MARY P.	Northeast Natural Energy LLC	DEED	1563	209
WV-061-003750-034	ROHR, REBECCA S	Northeast Natural Energy LLC	DEED	1563	245
WV-061-003750-035	RICKARD, LAUREN	Northeast Natural Energy LLC	0.125 or Greater	1568	148
WV-061-003750-036	BREWER, JANE ST	Northeast Natural Energy LLC	0.125 or Greater	1568	275
WV-061-003750-037	WELSH, EARLE AG	Northeast Natural Energy LLC	0.125 or Greater	1568	269
WV-061-003750-038	THARP, JERRY L.	Northeast Natural Energy LLC	DEED	1563	239
WV-061-003750-039	THARP, MARTIN B	Northeast Natural Energy LLC	DEED	1563	242
WV-061-003750-040	CHANEY, ROY P.	Northeast Natural Energy LLC	0.125 or Greater	1559	468
WV-061-003750-041	MONTGOMERY, DEN	Northeast Natural Energy LLC	0.125 or Greater	1568	273
WV-061-003750-042	CHANEY, JR, GEOR	Northeast Natural Energy LLC	0.125 or Greater	1568	157
WV-061-003750-043	TABARINI, CAROL	Northeast Natural Energy LLC	0.125 or Greater	1568	155
WV-061-003750-044	CLOSSER, JAY E	Northeast Natural Energy LLC	0.125 or Greater	1573	458
WV-061-003750-045	KING, BRIAN J.	Northeast Natural Energy LLC	0.125 or Greater	1573	462
WV-061-003750-046	KING, KARL P.	Northeast Natural Energy LLC	0.125 or Greater	1573	466
WV-061-003750-047	KING, STEPHAN A	Northeast Natural Energy LLC	0.125 or Greater	1573	468
WV-061-003750-048	PATTERSON, LOR	Northeast Natural Energy LLC	0.125 or Greater	1574	269
WV-061-003750-049	STEPHENSON, JAM	Northeast Natural Energy LLC	0.125 or Greater	1574	271
WV-061-003750-050	ROSE, DONNA ET	Northeast Natural Energy LLC	0.125 or Greater	1574	273
WV-061-003750-051	ROHANNA, NICOLE	Northeast Natural Energy LLC	0.125 or Greater	1574	275
WV-061-003750-052	STEPHENSON, PAU	Northeast Natural Energy LLC	0.125 or Greater	1574	277
WV-061-003750-053	STEPHENSON, JAM	Northeast Natural Energy LLC	0.125 or Greater	1574	282
WV-061-003750-054	STEPHENSON, SCO	Northeast Natural Energy LLC	0.125 or Greater	1574	284
WV-061-003750-055	STEPHENSON, JAM	Northeast Natural Energy LLC	0.125 or Greater	1574	286
WV-061-003750-056	STEPHENSON, ROB	Northeast Natural Energy LLC	0.125 or Greater	1574	288
WV-061-003750-057	MAXWELL, SARAH	Northeast Natural Energy LLC	0.125 or Greater	1575	260
WV-061-003750-058	BIRD, CONSTANCE	Northeast Natural Energy LLC	0.125 or Greater	1575	262
WV-061-003750-059	ROHRER, LEE ANN	Northeast Natural Energy LLC	0.125 or Greater	1575	264
WV-061-003750-060	GUMP, JOHN E	Northeast Natural Energy LLC	0.125 or Greater	1575	266
WV-061-003750-061	PALMA, DONNA RA	Northeast Natural Energy LLC	0.125 or Greater	1575	510
WV-061-003750-062	HEADLEE, MELANI	Northeast Natural Energy LLC	0.125 or Greater	1575	714
WV-061-003750-063	TRAVAGLINI, LET	Northeast Natural Energy LLC	0.125 or Greater	1577	14
WV-061-003750-064	HUTTER, TIFFANY	Northeast Natural Energy LLC	0.125 or Greater	1577	16
WV-061-003750-065	TRAVAGLINI, WHI	Northeast Natural Energy LLC	0.125 or Greater	1577	18
WV-061-003750-066	EISIMINGER, CHR	Northeast Natural Energy LLC	0.125 or Greater	1577	20
WV-061-003750-067	EISIMINGER, KIM	Northeast Natural Energy LLC	0.125 or Greater	1577	22
WV-061-003750-068	YOUNG, BRIAN	Northeast Natural Energy LLC	0.125 or Greater	1578	487
WV-061-003750-069	NEILL, SHEENA	Northeast Natural Energy LLC	0.125 or Greater	1578	489
WV-061-003750-070	STEPHENSON, VIC	Northeast Natural Energy LLC	0.125 or Greater	1578	490
WV-061-003750-071	STEPHENSON, COR	Northeast Natural Energy LLC	0.125 or Greater	1578	491

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WV-061-003750-072	STEPHENSON, CAS	Northeast Natural Energy LLC	0.125 or Greater	1580	20
WV-061-003750-073	HUGHES, GLENDA	Northeast Natural Energy LLC	DEED	1582	48
WV-061-003750-074	CASTEEL, COLLEE	Northeast Natural Energy LLC	DEED	1582	55
WV-061-003750-075	LEMLEY, DONALD	Northeast Natural Energy LLC	DEED	1586	10
WV-061-003750-076	LEMLEY, RALPH L	Northeast Natural Energy LLC	DEED	1586	13
WV-061-003750-077	PLANK, STEPHEN	Northeast Natural Energy LLC	0.125 or Greater	1589	553
WV-061-003750-078	PALMA, DONNA R.	Northeast Natural Energy LLC	0.125 or Greater	1589	555
WV-061-003750-079	PLANK, STEPHEN	Northeast Natural Energy LLC	0.125 or Greater	1589	557
WV-061-003750-080	JOHNSTON, WENDY	Northeast Natural Energy LLC	0.125 or Greater	1589	559
WV-061-003750-081	DUSENBERRY, LIN	Northeast Natural Energy LLC	DEED	1591	223
WV-061-003750-083	LEMLEY, RICHARD	Northeast Natural Energy LLC	DEED	1594	594
WV-061-003750-084	ECHARD, CHRISTY	Northeast Natural Energy LLC	0.125 or Greater	1593	444
WV-061-003750-085	MCAULIFFE, GAB	Northeast Natural Energy LLC	0.125 or Greater	1593	446
WV-061-003750-086	GATES, MELISSA	Northeast Natural Energy LLC	DEED	1595	804
WV-061-003750-087	VARNER, THOMAS	Northeast Natural Energy LLC	0.125 or Greater	1595	417
WV-061-003750-088	KOTERAS, SHELLY	Northeast Natural Energy LLC	0.125 or Greater	1596	490
WV-061-003750-089	BERNARDUCI, STA	Northeast Natural Energy LLC	0.125 or Greater	1596	494
WV-061-003750-090	BROWN, TAWNA L.	Northeast Natural Energy LLC	DEED	1600	152
WV-061-003750-091	ASEBROOK, CANDA	Northeast Natural Energy LLC	DEED	1600	155
WV-061-003750-092	BORDNER, LISA	Northeast Natural Energy, LLC	0.125 or Greater	1604	168
WV-061-003750-093	PATTERSON, BONI	Northeast Natural Energy LLC	0.125 or Greater	1604	170
WV-061-003750-094	HUGHES, JOHN H	Northeast Natural Energy LLC	0.125 or Greater	1604	100
WV-061-003750-095	PARDON & PARDON	Northeast Natural Energy, LLC	0.125 or Greater	1604	822
WV-061-003750-096	ADDLEMAN, BETTY	Northeast Natural Energy LLC	0.125 or Greater	1605	473
WV-061-003750-098	STEPHENSON, KEL	Northeast Natural Energy LLC	0.125 or Greater	1605	485
WV-061-003750-099	VARNER, W. TERR	Northeast Natural Energy LLC	DEED	1612	666
WV-061-003750-100	CLOSSER, DOUGLA	Northeast Natural Energy LLC	0.125 or Greater	1625	814
WV-061-003750-101	CLOSSER, ARLEIG	Northeast Natural Energy LLC	0.125 or Greater	1625	816
WV-061-003750-102	VARNER, ROBERT	Northeast Natural Energy LLC	0.125 or Greater	1612	811
WV-061-003750-103	BARNES, BILLIE	Northeast Natural Energy LLC	DEED	1616	359
WV-061-003750-104	HARKINS, RAMONA	Northeast Natural Energy LLC	0.125 or Greater	1613	779
WV-061-003750-106	VARNER, DONALD	Northeast Natural Energy LLC	0.125 or Greater	1633	348
WV-061-003750-107	VARNER,ALLAN S	Northeast Natural Energy LLC	0.125 or Greater	1633	350
WV-061-003750-108	TOOTHMAN, M DIA	Northeast Natural Energy LLC	0.125 or Greater	1633	352
WV-061-003750-109	LOWRY, RITA	Northeast Natural Energy LLC	DEED	1646	41
WV-061-003750-082	PENNSYLVANIA DU	Northeast Natural Energy LLC	0.125 or Greater	1591	171
WV-061-003750-097	VARNER, DONNA H	Northeast Natural Energy LLC	0.125 or Greater	1605	483
WV-061-003750-105	TAYLOR, FRED	Northeast Natural Energy LLC	0.125 or Greater	1615	761
WV-061-004447-001	REED ENERGY SER	Northeast Natural Energy LLC	DEED	1586	470
WV-061-004447-002	MINOR, JUNE LEM	Northeast Natural Energy LLC	0.125 or Greater	1647	425
WV-061-004360-001	LEMLEY, LAURA E	Northeast Natural Energy LLC	0.125 or Greater	1576	484
WV-061-004717-001	FRAZIER, SHERRY	Northeast Natural Energy LLC	0.125 or Greater	16124	60
WV-061-004717-002	MOORE, JEFFREY	Northeast Natural Energy LLC	0.125 or Greater	1612	462
WV-061-003541-001	LORING, GARY G.	Northeast Natural Energy LLC	DEED	1548	750
WV-061-005276-001	GAINER, NICHOLA	Northeast Natural Energy LLC	0.125 or Greater	1630	73
WV-061-003834-001	DWG OIL & GAS	Northeast Natural Energy LLC	DEED	1559	394
WV-061-003834-002	BAPTIST INTERNA	Northeast Natural Energy, LLC	0.125 or Greater	1604	172
WV-061-003834-003	MCDANIELS, DEBR	Northeast Natural Energy, LLC	DEED	1613	475
WV-061-003834-004	BUCK, MARY R	Northeast Natural Energy LLC	DEED	1610	257
WV-061-003834-006	BERDINE, JESSE	Northeast Natural Energy LLC	DEED	1613	481
WV-061-003834-007	BERDINE, MARGAR	Northeast Natural Energy LLC	DEED	1634	432
WV-061-003975-001	EFAW, RUTH ANN	Northeast Natural Energy LLC	0.125 or Greater	1564	579
WV-061-004168-001	DWG OIL & GAS	Northeast Natural Energy LLC	DEED	1561	600
WV-061-004169-001	DWG OIL & GAS	Northeast Natural Energy LLC	DEED	1570	133
WV-061-004311-001	GOLD, ARTHUR	Northeast Natural Energy LLC	DEED	1579	874

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WV-061-004311-002	GOFF, NELSON	Northeast Natural Energy Llc	DEED	1582	283
WV-061-004311-003	LAMBERT, HELEN	Northeast Natural Energy LLC	DEED	1582	303
WV-061-004311-004	JOHNSON, EVA	Northeast Natural Energy LLC	DEED	1582	327
WV-061-004311-005	TANNER, JOE	Northeast Natural Energy LLC	DEED	1586	60
WV-061-004311-006	HABERLE, BRENDA	Northeast Natural Energy Llc	DEED	1586	63
WV-061-004311-007	HERRINGTON, DAV	Northeast Natural Energy LLC	DEED	1588	709
WV-061-004311-008	HIBBARD, BONITA	Northeast Natural Energy LLC	DEED	1588	694
WV-061-004311-009	SNODGRASS, RICK	Northeast Natural Energy LLC	0.125 or Greater	1605	487
WV-061-004311-010	PATCH, SHARON	Northeast Natural Energy LLC	0.125 or Greater	1607	70
WV-061-004311-011	HOOVER, JEROME	Northeast Natural Energy, LLC	0.125 or Greater	1607	72
WV-061-004311-012	SNODGRESS, BRYA	Northeast Natural Energy LLC	0.125 or Greater	1607	584
WV-061-004311-013	SNODGRASS, RICH	Northeast Natural Energy, LLC	0.125 or Greater	1607	756
WV-061-004311-014	GATZKE, LORI	Northeast Natural Energy LLC	0.125 or Greater	1607	842
WV-061-004311-015	GOFF, MARY E.	Northeast Natural Energy LLC	DEED	1612	675
WV-061-004311-016	GOFF, FOREST H.	Northeast Natural Energy, LLC	0.125 or Greater	1610	358
WV-061-004311-017	GIBSON, CARLOTT	Northeast Natural Energy, LLC	0.125 or Greater	1612	29
WV-061-004311-018	SNODGRASS, JAME	Northeast Natural Energy LLC	0.125 or Greater	1612	31
WV-061-004311-019	COOK, TIMOTHY M	Northeast Natural Energy LLC	0.125 or Greater	1611	19
WV-061-004311-020	SNODGRASS, MICH	Northeast Natural Energy LLC	0.125 or Greater	1611	21
WV-061-004311-021	MASHBURN, LINDA	Northeast Natural Energy LLC	DEED	1612	678
WV-061-004311-022	FRIDLEY, SANDRA	Northeast Natural Energy LLC	0.125 or Greater	1611	23
WV-061-004311-023	WILSON, EDGAR J	Northeast Natural Energy LLC	DEED	1612	681
WV-061-004311-024	BERDINE, RAY P	Northeast Natural Energy LLC	0.125 or Greater	1612	268
WV-061-004311-025	MORRISON ESTATE	Northeast Natural Energy LLC	0.125 or Greater	1612	847
WV-061-004311-026	BERDINE, BARBAR	Northeast Natural Energy LLC	0.125 or Greater	1612	849
WV-061-004311-027	REED, BRYAN D.	Northeast Natural Energy, LLC	0.125 or Greater	1613	783
WV-061-004311-028	REED, LARRY D.	Northeast Natural Energy LLC	0.125 or Greater	1613	785
WV-061-004311-029	HOOVER, MARK	Northeast Natural Energy LLC	0.125 or Greater	1619	810
WV-061-004313-001	PATTERSON, TERR	Northeast Natural Energy LLC	DEED	1579	847
WV-061-004313-002	DURNELL, GERA	Northeast Natural Energy LLC	DEED	1576	341
WV-061-004313-003	COFFMAN, MICHA	Northeast Natural Energy LLC	0.125 or Greater	1575	722
WV-061-004313-004	MORRIS, DAVID O	Northeast Natural Energy LLC	0.125 or Greater	1580	88
WV-061-004313-005	MORROW, JEFFREY	Northeast Natural Energy Llc	0.125 or Greater	1580	92
WV-061-004313-006	SMITH, PAMELA	Northeast Natural Energy LLC	0.125 or Greater	1580	584
WV-061-004313-007	MORROW, KENT R.	Northeast Natural Energy LLC	0.125 or Greater	1581	329
WV-061-004313-008	MORROW, DOUGLAS	Northeast Natural Energy LLC	0.125 or Greater	1581	331
WV-061-004313-009	GASKINS, SHIRLE	Northeast Natural Energy LLC	0.125 or Greater	1581	333
WV-061-004313-010	EATON, LINDA	Northeast Natural Energy LLC	0.125 or Greater	1586	546
WV-061-004313-011	HOOVER, CAROLYN	Northeast Natural Energy LLC	0.125 or Greater	1586	548
WV-061-004313-012	MOYERS, ELLIS E	Northeast Natural Energy LLC	0.125 or Greater	1586	496
WV-061-004313-013	HOOVER, GAYFORD	Northeast Natural Energy Llc	0.125 or Greater	1587	253
WV-061-004313-014	DAVIS, PAULETTA	Northeast Natural Energy LLC	0.125 or Greater	1589	239
WV-061-004313-015	ULDERICH, DOYLE	Northeast Natural Energy LLC	0.125 or Greater	1590	335
WV-061-004313-016	SWEET, BRENDA S	Northeast Natural Energy LLC	0.125 or Greater	1590	339
WV-061-004313-017	SNODGRESS, LOIS	Northeast Natural Energy LLC	0.125 or Greater	1591	163
WV-061-004313-018	MORRIS, DAVID O	Northeast Natural Energy LLC	DEED	1613	496
WV-061-005127-001	KILLIMAYER, JOS	Northeast Natural Energy LLC	DEED	1629	788
WV-061-004303-001	TENNANT, DAVID	Northeast Natural Energy LLC	0.125 or Greater	1572	784
WV-061-004311-030	WILSON, LEWIS	Northeast Natural Energy LLC	0.125 or Greater	1643	94
WV-061-004311-031	GOFF, KEVIN ETU	Northeast Natural Energy LLC	0.125 or Greater	1643	96
WV-061-003541-001	LORING, GARY G.	Northeast Natural Energy LLC	DEED	1548	750
WV-061-003852-001	POLING, JAMES	Northeast Natural Energy LLC	0.125 or Greater	1562	213
WV-061-003531-001	BOWSER, WADE D	Northeast Natural Energy LLC	DEED	1529	709
WV-061-003531-002	BOWSER, ANNABEL	Northeast Natural Energy LLC	DEED	1530	75
WV-061-003531-003	MORRIS, DEBORAH	Northeast Natural Energy LLC	DEED	1534	645

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WV-061-003531-004	MATHENY, MELISS	Northeast Natural Energy LLC	DEED	1533	689
WV-061-003531-005	MATHENY, LACEN	Northeast Natural Energy LLC	DEED	1536	255
WV-061-003531-006	WRIGHT, PAULINE	Northeast Natural Energy LLC	DEED	1534	675
WV-061-003531-007	MATHENY, BRANSO	Northeast Natural Energy LLC	DEED	1534	649
WV-061-003531-008	MATHENY, MIKAYL	Northeast Natural Energy LLC	DEED	1533	697
WV-061-003531-009	STEWART, BETH E	Northeast Natural Energy LLC	DEED	1534	142
WV-061-003531-010	EDDY, MERLE EST	Northeast Natural Energy LLC	DEED	1533	822
WV-061-003531-011	EDDY, SARA E.	Northeast Natural Energy LLC	DEED	1535	54
WV-061-003531-012	EDDY, NORMA LOU	Northeast Natural Energy LLC	DEED	1558	646
WV-061-003531-013	SCHATTNER, EILE	Northeast Natural Energy LLC	DEED	1559	686
WV-061-003531-014	SPIKER, LOIS JE	Northeast Natural Energy LLC	DEED	1537	281
WV-061-003531-015	CUMMINS, JAMES	Northeast Natural Energy LLC	DEED	1537	285
WV-061-003531-016	EDDY, ALBERT K.	Northeast Natural Energy LLC	DEED	1541	457
WV-061-003531-017	EDDY CHAPEL CEM	Northeast Natural Energy LLC	DEED	1558	546
WV-061-003531-018	PARKER, CAROL R	Northeast Natural Energy LLC	DEED	1548	246
WV-061-003531-019	EDDY, MARY J	Northeast Natural Energy LLC	DEED	1558	551
WV-061-003531-021	BRANTLEY, SYLVI	Northeast Natural Energy LLC	DEED	1569	390
WV-061-003531-022	POWELL, RONALD	Northeast Natural Energy LLC	DEED	1569	93
WV-061-004000-001	MONTLLOR, RUTH	Northeast Natural Energy LLC	DEED	1597	256
WV-061-004000-002	EDDY, ROY ET	Northeast Natural Energy LLC	DEED	1610	277
WV-061-004020-000	EDDY, MARK & B	Northeast Natural Energy LLC	DEED	1505	572
WV-061-004000-000	EDDY, D.J.	DEWITT, IRA	0.125 or Greater	123	363
WV-061-003648-001	MADISON INVESTM	Northeast Natural Energy LLC	DEED	1541	448
WV-061-003648-002	PING, RHODA, S.	Northeast Natural Energy LLC	DEED	1540	628
WV-061-003648-003	MADISON INVESTM	Northeast Natural Energy LLC	DEED	1569	55
WV-061-004012-000	EDDY, E.W.	Dewitt, Ira	0.125 or Greater	123	363

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D.J. Eddy & Elizabeth Eddy, h/w

Lease

DB 26/328

Ira DeWitt

Ira DeWitt & Lucy DeWitt, h/w, and William S.
Stevenson

Deed for Oil Interests Assignment of Oil and Gas
Leases

DB 27/485

Thomas M. Jackson and Israel C. White

Ira DeWitt

Assignment

DB 28/522

William S. Stevenson

Ira DeWitt

Assignment

DB 29/53

South Penn Oil Company

Israel C. White and Thomas M. Jackson
Assignment

DB 31/79

South Penn Oil Company

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Northern Central Trust Company and Grace Alice
DeWitt, Executors of the Last Will and Testament of
Lucy Smith DeWitt
Assignment
DB 162/192

Frances DeWitt Marshall, Elsie DeWitt Johns, and
Grace Alice DeWitt



Elsie DeWitt Johns & George H. Johns, wife and
husband, Grace Alice DeWitt, single, Frances DeWitt
Marshall & James F. Marshall, wife and husband

Assignment
DB 265/145
South Penn Oil Company



South Penn Oil Company
Assignment
DB 304/457

South Penn Natural Gas Company



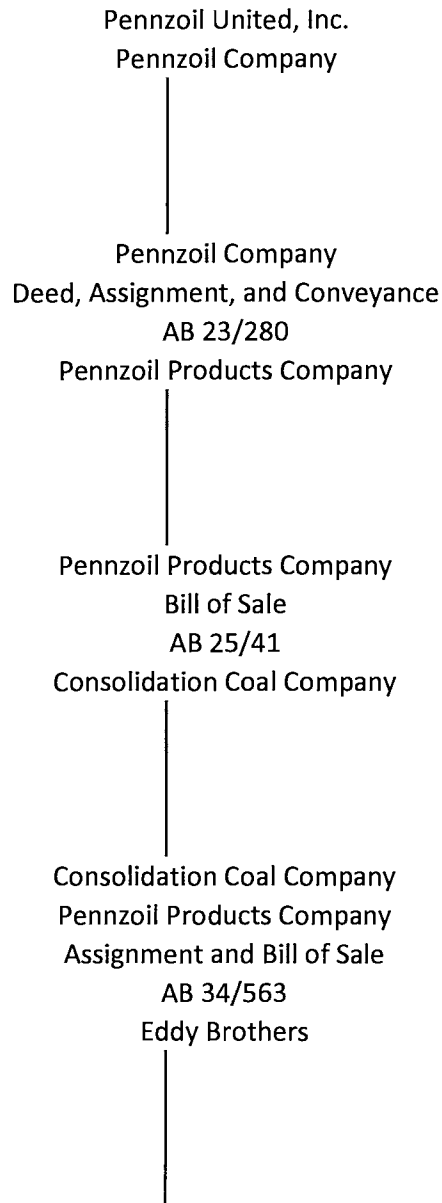
South Penn Natural Gas Company
Assignment
DB 580/311

South Penn Oil Company



Pennzoil Company and United Gas Corporation(South
Penn Oil Company changed it's name to Pennzoil
Company effective 7/31/1963 per WV Sec. of State)
Assignment
DB 672/665

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Deborah L. Morris, Beth Ellen Stewart, and Melissa
Kay Matheny, heirs of Harry Eddy
Memorandum of Buy-Out and Assignment of Interest
AB 123/356
Mark V. Eddy

—

Mark V. Eddy & Betty Eddy, h/w and Eddy Brothers
Assignment and Bill of Sale
AB 123/363

Northeast Natural Energy, LLC
and Pachira Energy, LLC

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November 12, 2018

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

Re: Cummins 2H and 4H

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 Statler Run Rd (State Route 27) and Jakes Run Rd (State Route 29) on the enclosed survey plats.

Sincerely,



Christa A. Dotson

Manager – Land Operations Development

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

Date of Notice Certification: 09/13/2019

API No. 47- _____

Operator's Well No. 4H

Well Pad Name: Cummins

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>570262.9</u>
County:	<u>Monongalia</u>		Northing:	<u>4390556.8</u>
District:	<u>Clay</u>	Public Road Access:	<u>CR 25/3 (Yank Hollow Road)</u>	
Quadrangle:	<u>Blacksville, WV</u>	Generally used farm name:	<u>Cummins</u>	
Watershed:	<u>Dunkard Creek</u>			

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

<p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 40px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p>OOG OFFICE USE ONLY</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
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Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A.

Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

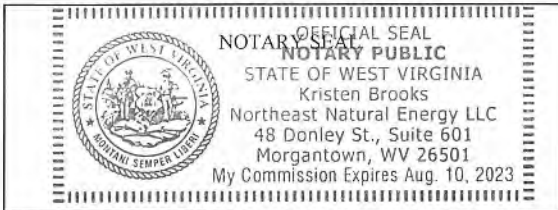
Office of Oil and Gas
MAR 19 2019
WV Department of
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Certification of Notice is hereby given:

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:	<u>Northeast Natural Energy LLC</u>	Address:	<u>707 Virginia St. E., Suite 1200</u>
By:	<u>Hollie Medley</u>		<u>Charleston, WV 25301</u>
Its:	<u>Regulatory Manager</u>	Facsimile:	<u>304-241-5972</u>
Telephone:	<u>304-212-0422</u>	Email:	<u>hmedley@nne-llc.com</u>

Hollie Medley
 Subscribed and sworn before me this 13th day of March, 2019
Kristen Brooks Notary Public
 My Commission Expires Aug 10, 2023



Oil and Gas Privacy Notice:

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

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WW-6A
(9-13)

4706101836
API NO. 47- - 05/17/2019
OPERATOR WELL NO. 4H
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: 3/1/2019 **Date Permit Application Filed:** 3/15/2019

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice WSSP Notice E&S Plan Notice Well Plat Notice is hereby provided to:

SURFACE OWNER(s)
Name: Jerry L Yost et al
Address: 74 Staller Run Road
Fairview, WV 26570

Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)
Name: see attached
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)
Name: _____
Address: _____

COAL OWNER OR LESSEE
Name: see attached
Address: _____

COAL OPERATOR
Name: see attached
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: see attached
Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name: _____
Address: _____

*Please attach additional forms if necessary

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Cummins 4HSurface 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

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

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

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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Environmental Protection

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within one 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

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WV Dept of Environmental Protection

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

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.**

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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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WW-6A
(8-13)

API NO. 47- _____ - _____ **05/17/2019**
OPERATOR WELL NO. 4H
Well Pad Name: Cummins

Notice is hereby given by:

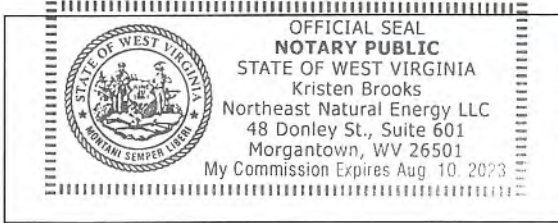
Well Operator: Northeast Natural Energy LLC
Telephone: 304-212-0422
Email: hmedley@nne-llc.com

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.

Hall: mmealy



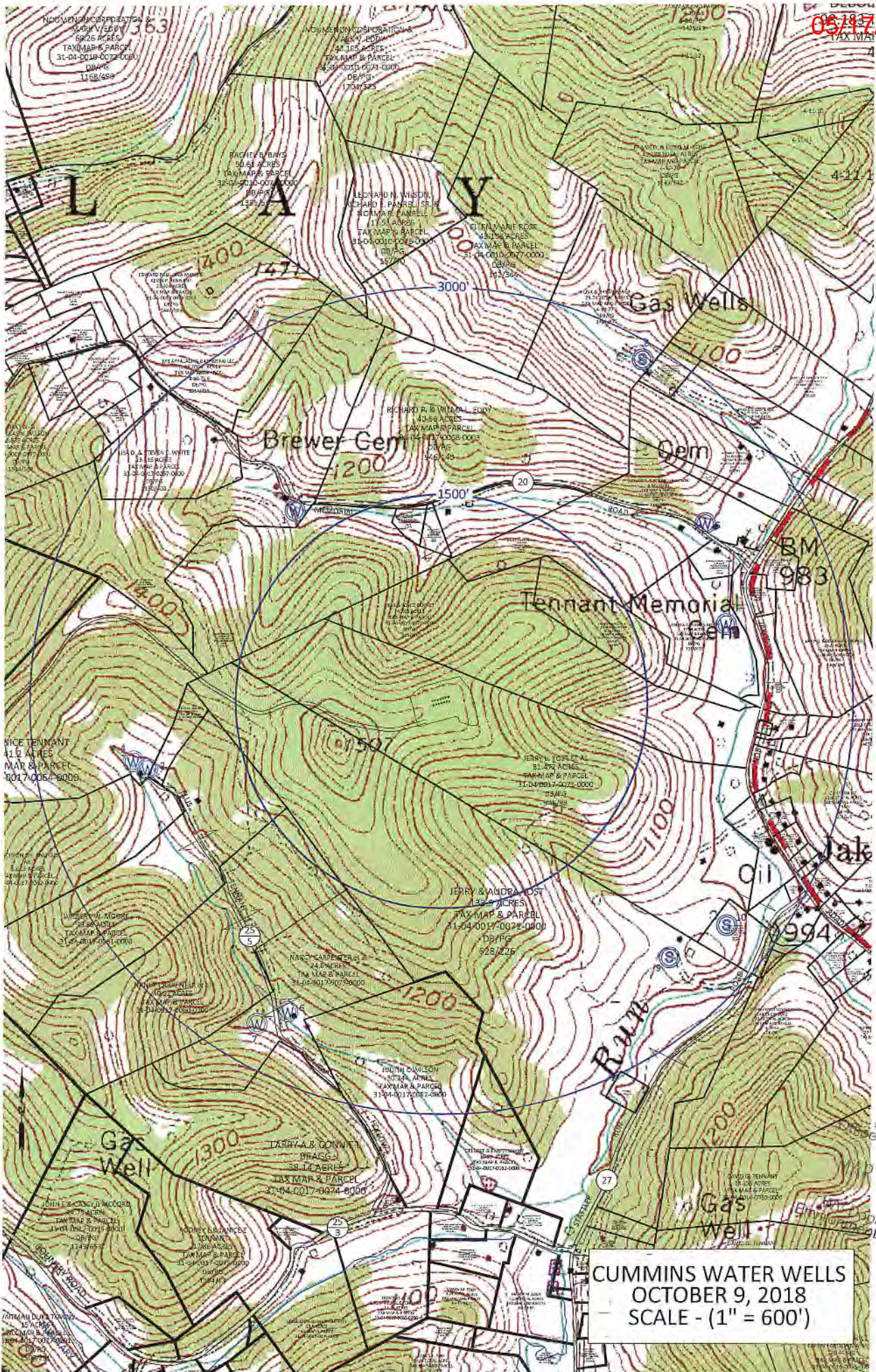
Subscribed and sworn before me this 12th day of March, 2019.

Kristen Brooks Notary Public

My Commission Expires Aug. 10, 2023

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05/17/2019



CUMMINS WATER WELLS
OCTOBER 9, 2018
SCALE - (1" = 600')

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 19 2019
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 Environmental Protection

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

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

Notice Time Requirement: Notice shall be provided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to entry

Date of Notice: 10/25/2017 **Date of Planned Entry:** 11/1/2017

Delivery method pursuant to West Virginia Code § 22-6A-10a

PERSONAL SERVICE REGISTERED MAIL METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

Notice is hereby provided to:

SURFACE OWNER(s)

Name: Bernice Tennant
Address: 299 Ells Tennant Hollow
Fairview, WV 26570
Name: Jerry L. & Audra Errol Yost
Address: 74 Statler Run Road
Fairview, WV 26570
Name: Precision Oil & Gas, Inc.
Address: P.O. Box 884
Bridgeport, WV 26330

COAL OWNER OR LESSEE

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

MINERAL OWNER(s)

Name: see attached
Address: _____

*please attach additional forms if necessary

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State: <u>West Virginia</u>	Approx. Latitude & Longitude: <u>570274.51,4390561.22</u>
County: <u>Monongalia</u>	Public Road Access: <u>CR 25/3 (Yank Hollow Road)</u>
District: <u>Clay</u>	Watershed: <u>Dunkard Creek</u>
Quadrangle: <u>Blacksville</u>	Generally used farm name: <u>Cummins</u>

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: <u>Northeast Natural Energy LLC</u>	Address: <u>707 Virginia St. E, Suite 1200</u>
Telephone: <u>304-212-0422</u>	<u>Charleston, WV 25301</u>
Email: <u>hmedley@nne-llc.com</u>	Facsimile: <u>304-241-5972</u>

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.

**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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MAR 19 2019
WV Department of
Environmental Protection

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

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

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

Date of Notice: 03/01/2019 **Date Permit Application Filed:** 03/15/2019

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

HAND DELIVERY CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: Jerry L Yost et al
Address: 74 Statler Run Road
Fairview, WV 26570

Name: _____
Address: _____

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia UTM NAD 83 Easting: 570262.9
County: Monongalia Northing: 4390556.8
District: Clay Public Road Access: SR 15/7 (Harvey Run Rd)
Quadrangle: Blacksville, WV Generally used farm name: Cummins
Watershed: Dunkard Creek

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: Northeast Natural Energy LLC
Address: 707 Virginia Street E., Suite 1200
Charleston, WV 25301
Telephone: 304-414-7060
Email: hmedley@nne-llc.com
Facsimile: 304-241-5972

Authorized Representative: Hollie Medley, Regulatory Manager
Address: 48 Donley Street, Suite 601
Morgantown, WV 26501
Telephone: 304-414-7060
Email: hmedley@nne-llc.com
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.

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WW-6A5
(1/12)

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

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**

Date of Notice: 03/01/2019 **Date Permit Application Filed:** 03/15/2019

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

CERTIFIED MAIL HAND
RETURN RECEIPT REQUESTED DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: Jerry L Yost et al
Address: 74 Statler Run Road
Fairview, WV 26570

Name: _____
Address: _____

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>570262.9</u>
County:	<u>Monongalia</u>		Northing:	<u>4390556.8</u>
District:	<u>Clay</u>	Public Road Access:	<u>County Route 25/3 (Yank Hollow Road)</u>	
Quadrangle:	<u>Mannington</u>	Generally used farm name:	<u>Cummins</u>	
Watershed:	<u>Dunkard Creek</u>			

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: Northeast Natural Energy LLC
Telephone: 304-414-7060
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 appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways

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

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

November 13, 2018

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 4H

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,

A handwritten signature in blue ink that reads "Gary K. Clayton".

Gary K. Clayton, P.E.
Regional Maintenance Engineer
Central Office O&G Coordinator

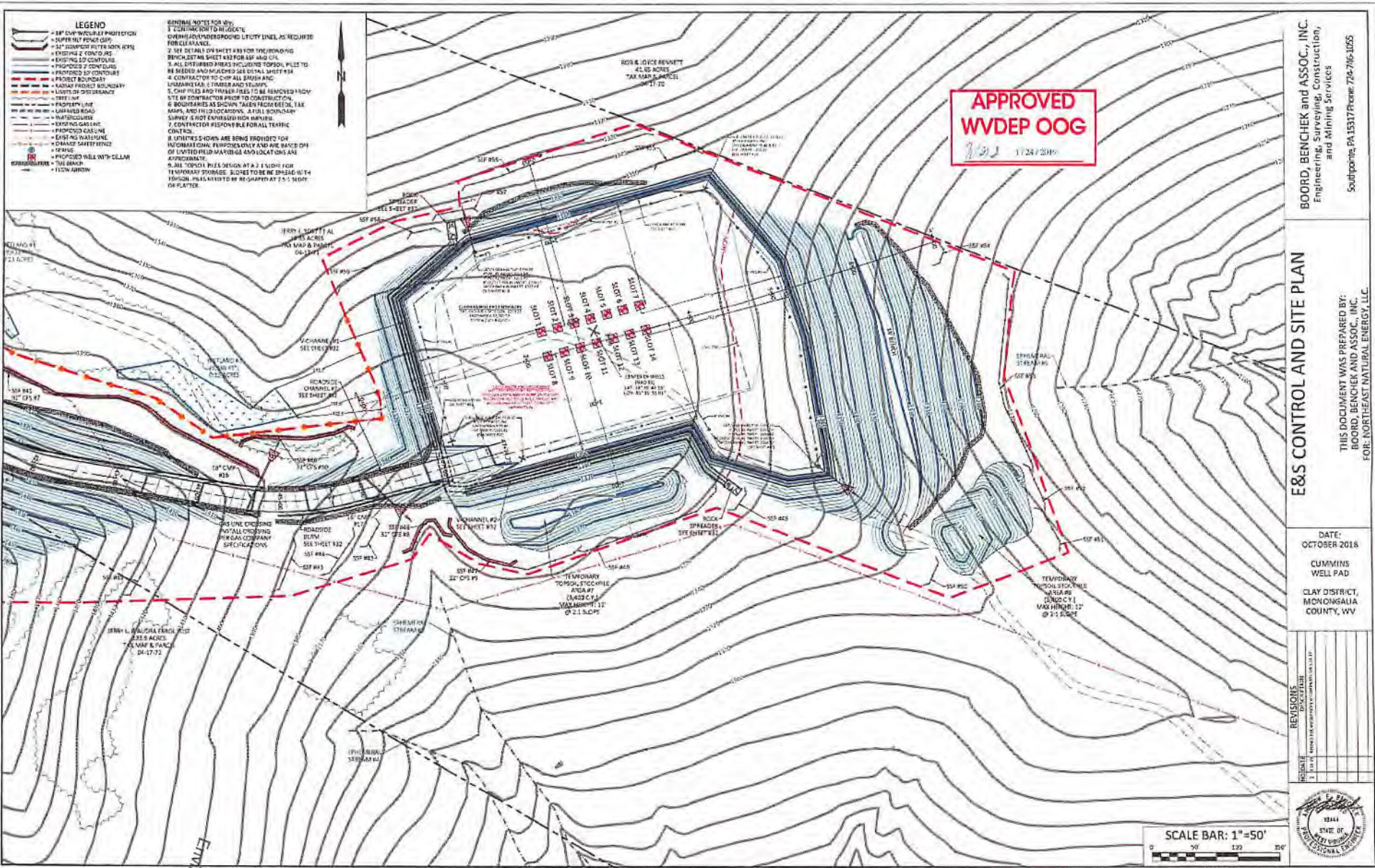
Cc: Kristen Brooks
Northeast Natural Energy Corporation
CH, OM, D-4
File

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Planned Additives to be used in Fracturing Stimulations

Trade Name	Purpose	Ingredients	Chemical Abstract Service Nummer (CAS#)
Water	Carrier	Water	7732-18-5
HCl, 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 Polyoxyalkylenes 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 Control	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

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- LEGEND**
- 36" CONCRETE PIPE
 - 36" CONCRETE PIPE WITH ROCK RINGS
 - EXISTING 2" CONDUIT
 - PROPOSED 2" CONDUIT
 - PROPOSED 10" CONDUIT
 - PROJECT BOUNDARY
 - KANSAS PROJECT BOUNDARY
 - UTILITY CROSSING
 - TREE LINE
 - PROPERTY LINE
 - UNPAVED ROAD
 - PAVED ROAD
 - PROPOSED CASUALTY
 - EXISTING WATERLINE
 - PROPOSED WATERLINE
 - PROPOSED WELL WITH CELLAR
 - TEMPORARY
 - PERMANENT
 - TRUCK PARKING
- GENERAL NOTES FOR OOG:**
1. CONTAINMENT TO BE LOCATED OVERHEAD AND UNDERGROUND. LIGHTY LINE AS REQUIRED FOR CLEARANCE.
 2. SEE DETAILS ON SHEET #18 FOR THE BOARDING BENCH SET IN SHEET #19 FOR 8" AND 12" CONDUIT.
 3. ALL DISTURBED AREAS INCLUDING TOPSOIL, FILL TO BE REDEEMED AND MATCHED SEE DETAIL SHEET #14.
 4. CONTRACTOR TO COORDINATE WITH ALL ENERGY AND UTILITIES (EAS & UTILITY) AND STAFFS.
 5. OPEN FIELDS AND TRAILER PADS TO BE REMOVED PRIOR TO CONSTRUCTION.
 6. BOUNDARIES AS SHOWN TAKEN FROM RECENT TAX MAPS AND FIELD LOCATIONS. A FULL BOUNDARY SURVEY IS NOT EXPEDITED BOUNDARY SURVEY.
 7. CONTRACTOR RESPONSIBLE FOR ALL TRAFFIC CONTROL.
 8. UTILITIES SHOWN ARE BEING PROVIDED FOR INFORMATION. PARTICIPANTS AND ARE MADE OFF OF LIMITED FIELD MARKINGS AND LOCATIONS ARE APPROXIMATE.
 9. ALL TOPSOIL IN FILL DESIGN AT A 3:1 SLOPE FOR TEMPORARY STORAGE. SLOPES TO BE IN RANGE 4:1 TO 6:1 SLOPE AS REQUIRED BY REGULATIONS AT 2.5:1 SLOPE ON FLAT.

APPROVED
WVDEP OOG
 11/24/2018

BOORD, BENCHEK and ASSOC., INC.
 Engineering, Surveying, Construction,
 and Mining Services
 Southpoint, PA 15317 Phone: 724-746-1055

E&S CONTROL AND SITE PLAN

THIS DOCUMENT WAS PREPARED BY:
 BOORD, BENCHEK AND ASSOC., INC.
 FOR: NORTHEAST NATURAL ENERGY, LLC.

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

REVISIONS	DATE	BY	DESCRIPTION



SCALE BAR: 1"=50'
 0 20 40 60 80 100 120 140 160 180

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