

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

Monday, August 12, 2019 WELL WORK PERMIT Horizontal 6A / New Drill

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

Permit approval for LEMLEY 10H Re:

47-061-01860-00-00

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: LEMLEY 10H

Farm Name: CLARENCE W. LEMLEY JR.

U.S. WELL NUMBER: 47-061-01860-00-00

Horizontal 6A New Drill Date Issued: 8/12/2019

Promoting a healthy environment.

API	Number:	

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.

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

API Number:	

PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

WW-6B (04/15)

API NO. 47	
OPERATOR WELL NO	O. 10H
Well Pad Name: Len	nley

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

1) Well Operator: N	ortheast Nat	ural Energy 📙	494498281	Monongalia	Clay	Blacksville, WV
			Operator ID	County	District	Quadrangle
2) Operator's Well N	umber: 10H		Well Pa	d Name: Lemle	y	
3) Farm Name/Surfac	ce Owner: Clare	ence W Jr & Charlotte E	ELemley Public Ro	ad Access: Stat	e Route 2	2
4) Elevation, current	ground: 1,5	660' Ele	evation, proposed	post-construction	on: 1540'	
5) Well Type (a) G Other		Oil	Und	lerground Storag	ge	
(b)If	Gas Shallo	w X	Deep			
	Horizo	ntal X		MOK	4/26/	2019
6) Existing Pad: Yes	or No No				<i>(1 /</i>	•
7) Proposed Target Formula Marcellus; 8,206';	• • •	epth(s), Antici	pated Thickness	and Expected Pr	ressure(s):	
8) Proposed Total Ve	rtical Depth:	8,206'				
9) Formation at Total	Vertical Dept	h: Marcellus				
10) Proposed Total M	leasured Dept	n: 20,338'				
l 1) Proposed Horizon	ntal Leg Lengt	h: 11,393'				
12) Approximate Fre	sh Water Strat	a Depths:	50', 1,471'			
13) Method to Determ	nine Fresh Wa	ter Depths:	rillers Log from	Offset Wells		
14) Approximate Salt	twater Depths:	2,361'; 2,51	1'			
15) Approximate Coa	al Seam Depth	s: <u>501', 1,469</u>)'			
16) Approximate Dep	oth to Possible	Void (coal mi	ne, karst, other):	N/A		
17) Does Proposed w directly overlying or			ns Yes	No	X	
(a) If Yes, provide N	Mine Info: N	ame:				
(,		epth:		<u> </u>		
		eam:	· · · ·			RECEIVED
		wner:			Offic	ce of Oil and Gas
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JUL 08 2019

WW-6B
(04/15)

API NO. 47	
OPERATOR WELL NO.	10H
Well Pad Name: Lemie	1

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	<u>Grade</u>	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	1,551'	1,521' 🗸	CTS
Coal							
Intermediate	9-5/8"	New	J-55	40	2,591'	2,561' /	CTS
Production	5-1/2"	New	P-110	20	20,338'	20,308'	4,762 cu ft.
Tubing							
Liners							

MgK 4/26/2019

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"	38"	.375"	415		4,500 psi grout	NA
Fresh Water	13-3/8"	17-1/2"	.38"	2,760	2,000	Class A	1.23
Coal							
Intermediate	9-5/8"	12-1/4"	.395"	3,950	3,000	Class A	1.3
Production	5-1/2"	8-3/4"	.361"	12,530	9,700	50:50 poz	1.21
Tubing	2-7/8"	NA	.217"	10,570	3,600	NA	NA
Liners							

PACKERS

Kind:		
Sizes:		
Depths Set:		RECEIVED

Office of Oil and Gas

JUL 08 2019

47 06 9 0 1 8 6 0

WW-6B (10/14)

API NO. 47	
OPERATOR WELL	NO. 10H
Well Pad Name:	Lemley

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 6,000 TVD/MD. The well will then be horizontally drilled on synthetic based mud from the KOP to approximately 8,206 TVD/20,338' MD along a 147.50° 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): 23.73
- 22) Area to be disturbed for well pad only, less access road (acres): 8.39

23) Describe centralizer placement for each casing string:

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

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

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

25) Proposed borehole conditioning procedures:

Surface string will use a 25.0 bbls Gel Pill + LCM + 25 lbs Cello Flake + 20 lbs/bbl Bentonite @ 8.4 ppg & 10 bbls fresh water spacer prior to cement. Intermediate string will use a 25.0 bbls Gel Pill + LCM + 25 lbs Cello Flake + 20 lbs/bbl Bentonite @ 8.4 ppg & 10 bbls fresh water spacer prior to cement. Production string will use a 50.0 bbls SealBond 25 + 1 gal/bbl US-40 + 275 lbs/bbl Barite + of Gal/bbl SS-2 Spacer @ 13.5 ppg prior to cement.

JUL 08 2019

*Note: Attach additional sheets as needed.

Stansberry, Wade A

From: Kristen Brooks <kbrooks@nne-llc.com>

Sent: Wednesday, July 31, 2019 2:30 PM **To:** Stansberry, Wade A; Hollie Medley

Subject: RE: Lemley 10H & 14H

Hi Wade.

Will the table below work?

	Lemley 10H	Lemley 14H
Offset Well	Mepco 14H (47-061-01791)	Mepco 14H (47-061-01791)
Water Depth	906′	906′

Thanks, Kristen

----Original Message-----

From: Stansberry, Wade A < Wade. A. Stansberry@wv.gov>

Sent: Wednesday, July 31, 2019 8:33 AM To: Hollie Medley hmedley@nne-llc.com Cc: Kristen Brooks kbrooks@nne-llc.com

Subject: Lemley 10H & 14H

If you could on the WW-6B of these two applications, for question #13, could you send in the APIs of the offset wells that are going to be used to find the estimated freshwater depth prior to drilling?

You can submit a single list that includes the API and water depth(s). I can place them with each of the applications.

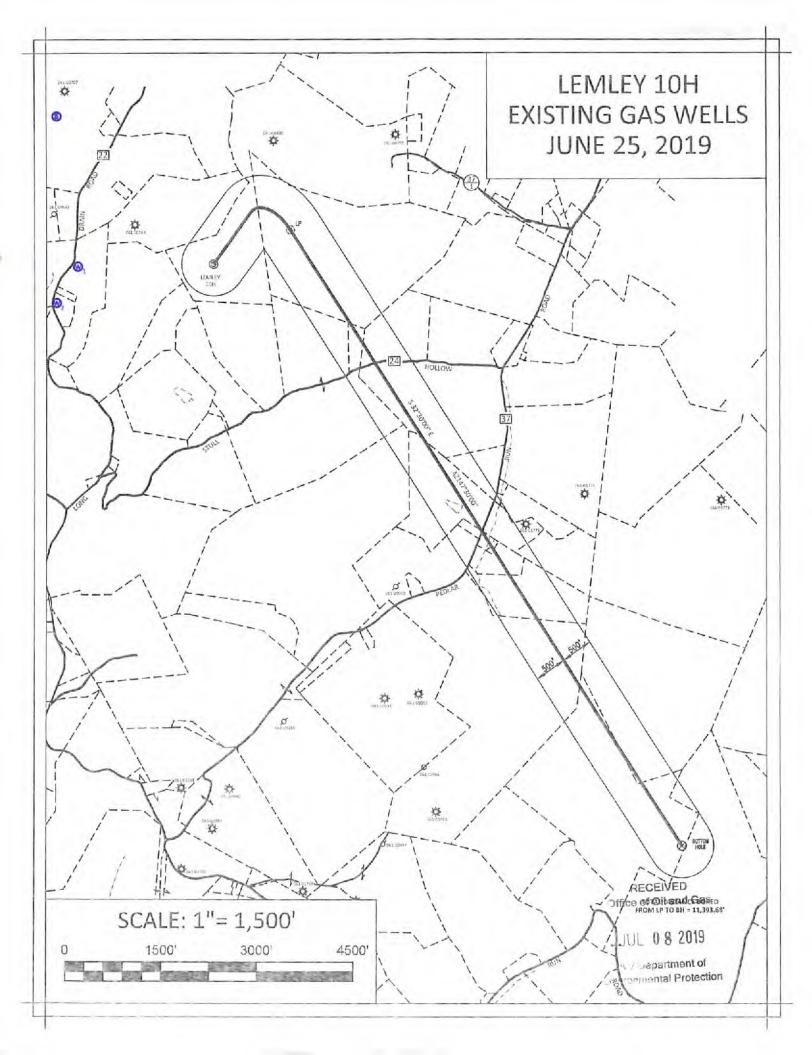
If you have any questions, please let us know.

Thank you,

Wade A. Stansberry
Environmental Resources Specialist 3
West Virginia Department of Environmental Protection Office of Oil & Gas 601 57th St. SE
Charleston, WV 25304
(304) 926-0499 ext. 1653
(304) 926-0452 fax
Wade.A.Stansberry@wv.gov

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JUL 31 2019





NORTHEAST NATURAL ENERGY, LLC Location: Monongalia County, WV Slot: Slot 10H Field: Monongalia Well: Lemley 10H Facility: Lemley Pad Wellbore: Lemley 10H PWB

-1500

racility. Lettiley rad	Wellbore. Leffley for PVVB
Plot reference wellpath is Lemley 10H PWP Ex-00	Grid System: NAD83 / Lambert West Virginia SP, Northern Zone (4701), US feet
True vertical depths are referenced to Rig on Slot 10H (RKB)	North Reference: Grid north
Measured depths are referenced to Rig on Slot 10H (RKB)	Scale: True distance
Rig on Slot 10H (RKB) to Mean Sea Level: 1550 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: Slot 10H): -1534 feet	Created by: atenjen on 2019-03-29
Coordinates are in feet referenced to Slot	Database: WA_MPL_EASTERNUS_Defn



6000

7500

9000

10500 1500

0

-1500

-3000

4500

-6000

-7500

-9000

Northing (ft)

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	1521'
Intermediate	12-1/4"	9-5/8"	J-55	40	2561'

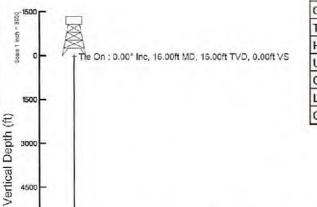


3000

1500

Easting (ft)

4500



3000

4500

6000

870

20

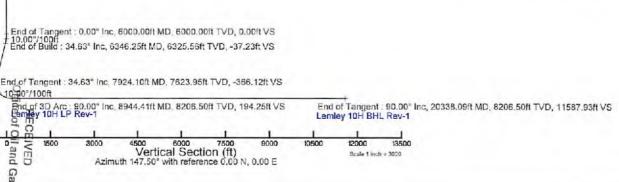
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True

75 WV Department of Environmental Protection

Formation	Depth (KBTVD)		
Geneseo	7890'		
Tully	7937'		
Hamilton	8019'		
Upper Marcellus	8111.5'		
Cherry Valley	8151.5'		
Lower Marcellus	8156'		
Onondaga	8221'		

End of Tangent: 8206.50ft TVD, 9073.23ft S, 7324.85ft E Lemley 10H BHL Rev-1



WW-9 (4/16)

API Number 47 -	
Operator's Well No.	Lemley 10H

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 No No V
If so, please describe anticipated pit waste: NA
Will a synthetic liner be used in the pit? Yes No If so, what ml.? NA
Proposed Disposal Method For Treated Pit Wastes:
Land Application
Underground Injection (UIC Permit Number) 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 # Olimed Gas
Company Official (Typed Name) Hollie Medley
Company Official Title Regulatory Manager
Subscribed and sworn before me this 23rd day of April, 2019, 20 Notary Public State of WEST VIRGINIA Kristen Brooks Northeast Natural Energy LLC 48 Donley St., Suite 601 Morganton, WV 26501 My Commission Expires Aug. 10, 2023
My commission expires Aug 10, 2023

Form WW-9

Northeast Natural Ener	gy LLC		
Proposed Revegetation Treatment:	: Acres Disturbed 8.36	Prevegetation pH 5-7	
Lime 2	Tons/acre or to correct to pl	7	
Fertilizer type 19-19-19)		
Fertilizer amount 300	11	os/acre	
Mulch 2	Tons/:	acre	
	<u>See</u>	d Mixtures	
Tempor	ary	Permanent	
Seed Type Orchard Grass	lbs/acre 46	Seed Type Orchard Grass	lbs/acre 46
Red Clover	8	Red Clover	8
Tetraploi Perennial F	Rye 16	Tetraploid Perennial Rye	16
Timothy 15 Annual F	Rye 15	Timothy 15 Annual Rye	15
Photocopied section of involved 7.	11/4)		
Plan Approved by:			
_	Ly K MICHS!		
Comments:	Ly K MICH		
Comments:	L J K MICH		
Comments:	L J K MICH		
Comments:	L J. K. MICH.		
Comments:	J. K. MICH.		
Comments:	L J. K. MICONI		
	L J. K. MICH.	Date: 4/26/2015	RECEIVED Office of Oil and Gas
Title: In proce	Yes (Date: 4/26/2015	RECEIVED Office of Oil and Gas JUL 0 8 2019

Attachment A to WW-9

Northeast Natural Energy LLC ("NNE") plans to utilize a closed loop process for its drilling of the Lemley 10H 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.

Lemley 10H 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)
- RECEIVED Office of Oil and Gas 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)

WV Department of **Environmental Protection**

JUL 08 2019



Lemley 10H
SITE SAFETY PLAN

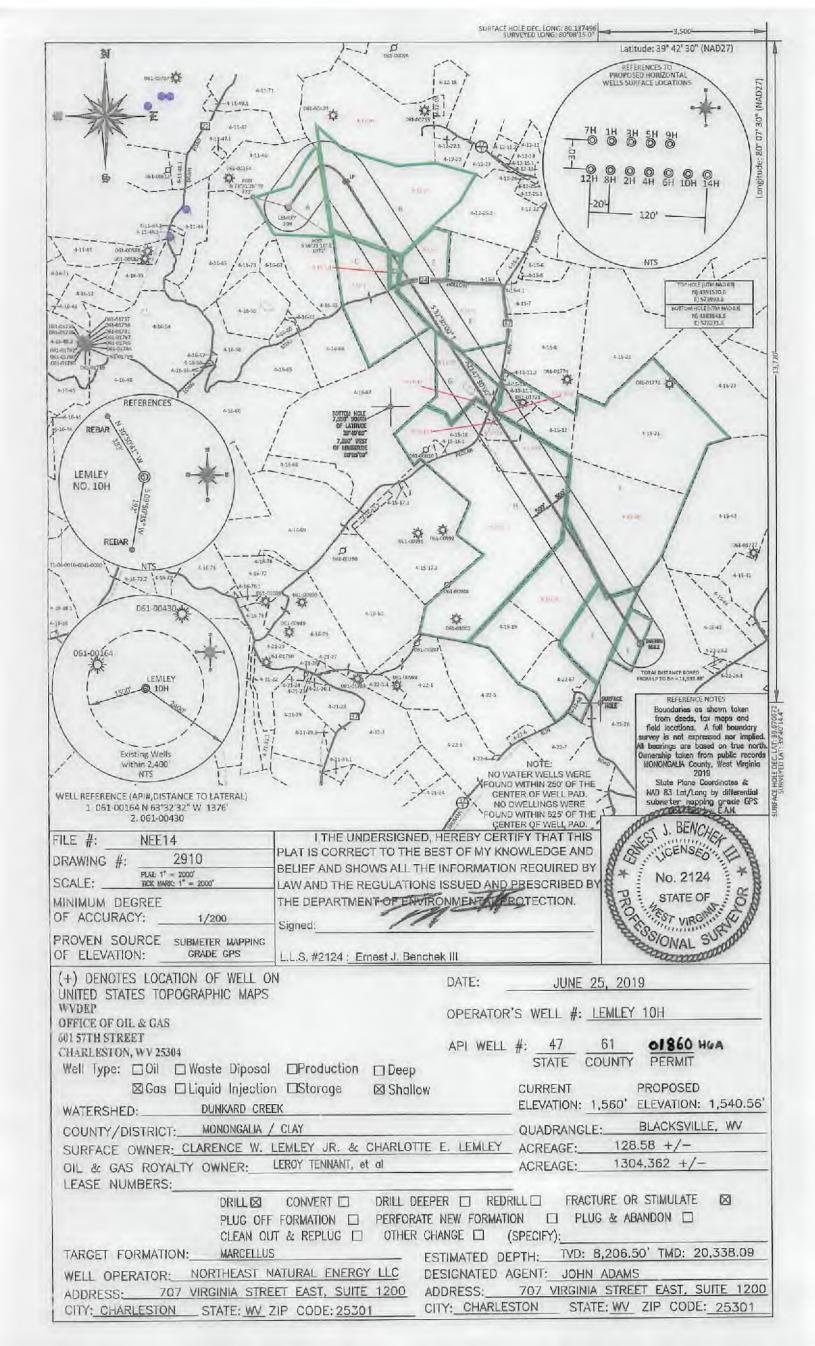
April 2019

April 2019

April 2019

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JUL 0 8 2019



	PROPERTY OWNER INDEX
4-12-20	CLARENCE W. LEMLEY JR. & CHARLOTTE E. LEMLEY
4-12-21	VINCENT KOLANKO, MARK SELLARO, & CRA PROPERTIES LLC
4-15-2	DONALD L. STULL
4-15-9	MARK V., BETTY, & CHRISTOPHER PAUL EDDY
4-15-14.2	JAMES P. & TRUDY G. HARVEY
4-15-13	MARVIN G. COPELAND
4-15-20	STATE OF WV BUREAU OF COMMERCE
4-15-19.1	GERARD W. MUNRETT & NADINE J. HEGGLIN
4-15-18	HOWARD S EDDY & CHERYL GAY DEAN & BRANSON RAITH MATHENY
4-15-14	MARGARET R. PINGS
4-15-14.1	MARGARET R. PINGS
4-15-15	GEORGE H. & PAMELA S. MCCLAIN
4-15-10	MARK & BETTY EDDY
4-15-1	MARK & BETTY EDDY
4-15-1.1	DAVID L. & SANDY K. STULL

		LEASE INDEX		
1	A	WV-061-003525-001	F	WV-061-005562-001
	В	WV-061-000126-003-WP	G	WV-061-005481-001
	C	WV-061-002293-012	H	WV-061-004017-000
	D	WV-061-004899-001	1	WV-061-001365-013
	E	WV-061-003686-001	J	WV-061-004240-001

FILE #: NEE14	DATE: JUNE 25, 2019
DRAWING #:2910	OPERATOR'S WELL #: LEMLEY 10H
SCALE:N/A	API WELL #: 47 61 ONE COUNTY PERMIT

WW-6A1
(5/13)

Operator's Well No	Lemley 10H
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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
Please 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

By: Hollie Medley Hollie Medley Gas

Regulatory Manager Office of Oil and Gas

Page 1 of WV Department of Environmental Protection

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
Α	WV-061-003525-001	TENNANT, LEROY	Northeast Natural Energy LLC	12.5% or Greater	1524	44
Α	WV-061-003525-002	LOHR, LLOYD M	Northeast Natural Energy LLC	12.5% or Greater	1526	7
Α	WV-061-003525-003	HICKMAN, LINDA	Northeast Natural Energy LLC	12.5% or Greater	1525	24
Α	WV-061-003525-004	MALOTT, ROSE M.	Northeast Natural Energy LLC	12.5% or Greater	1525	25
Α	WV-061-003525-007	TENNANT, SHIRLE	Northeast Natural Energy LLC	12.5% or Greater	1534	8
Α	WV-061-003525-008	COSNER, SHEILA	Northeast Natural Energy LLC	12.5% or Greater	1534	8
Α	WV-061-003525-009	EDDY, RONALD &	Northeast Natural Energy LLC	12.5% or Greater	1535	10
Α	WV-061-003525-010	HENDERSON, WILL	Northeast Natural Energy LLC	12.5% or Greater	1536	62
Α	WV-061-003525-011	HENDERSON, LARR	Northeast Natural Energy LLC	12.5% or Greater	1536	59
Α	WV-061-003525-012	HENDERSON, ALPH	Northeast Natural Energy LLC	12.5% or Greater	1536	53
Α	WV-061-003525-013	HENDERSON, JENN	Northeast Natural Energy LLC	12.5% or Greater	1566	28
Α	WV-061-003525-014	HENDERSON, JESS	Northeast Natural Energy LLC	12.5% or Greater	1568	43
Α	WV-061-003525-015	MCCARVER, STEPH	Northeast Natural Energy LLC	12.5% or Greater	1568	27
Α	WV-061-003525-016	CHARVAT, SHAWNA	Northeast Natural Energy LLC	12.5% or Greater	1568	33
Α	WV-061-003525-017	STOUT, MARGARET	Northeast Natural Energy LLC	12.5% or Greater	1569	26
Α	WV-061-003525-018	TENNANT, DENZIL	Northeast Natural Energy LLC	12.5% or Greater	1569	24
A	WV-061-003525-019	VESELENAK, RONA	Northeast Natural Energy LLC	12.5% or Greater	1617	74
A	WV-061-003525-020	MCJESSY, JUDITH	Northeast Natural Energy LLC	12.5% or Greater	1617	7
A	WV-061-003525-021	CORE, CHARLES L	Northeast Natural Energy LLC	12.5% or Greater	1630	19
Α	WV-061-003715-002	TYNER, CHRISTOP	Northeast Natural Energy LLC	12.5% or Greater	1554	83
A	WV-061-003715-003	DODD, NORA LOU	Northeast Natural Energy LLC	12.5% or Greater	1564	40
А	WV-051-004263-001	JENKINS, PAULA	Northeast Natural Energy LLC	12.5% or Greater	1645	34
Α	WV-051-004264-001	MYERS, JUNE C.	Northeast Natural Energy LLC	12.5% or Greater	1571	54
Α	WV-061-004267-001	CORE, BEVERLY J	Northeast Natural Energy LLC	12.5% or Greater	1571	5
А	WV-051-004308-001	CORE, WILLIAM B	Northeast Natural Energy LLC	12.5% or Greater	1644	
В	WV-061-00126-003-WP	Television Constitution of the Constitution of	Northeast Natural Energy LLC	12.5% or Greater	1659	4
С	WV-061-002293-012	SWIGER, JOSEPH	Reed Energy Services LLC	12.5% or Greater	1630	4
С	WV-061-002293-012	Reed Energy Services LLC	Northeast Natural Energy LLC	12,5% or Greater	139	6
С	WV-061-002293-013	STULL, DAVID	Northeast Natural Energy LLC	12.5% or Greater	1615	7:
D	WV-061-004899-001	SWIGER, JOSEPH	Reed Energy Services LLC	12.5% or Greater	1618	4.
D	WV-061-004899-001	Reed Energy Services LLC	Northeast Natural Energy LLC	12.5% or Greater	136	1
D	WV-061-002283-011	STULL, DONALD	Northeast Natural Energy LLC	12.5% or Greater	1615	7.
E	WV-061-003686-001	STULL, DAVID	Northeast Natural Energy LLC	12.5% or Greater	1538	3
E	WV-061-005544-001	AMP Fund III, LP	Northeast Natural Energy LLC	12,5% or Greater	1662	7.
F	WV-061-005562-001	EDDY, MARK et al	Northeast Natural Energy LLC	12.5% or Greater	1674	-
G	WV-061-005481-001	CNX GAS COMPANY	Northeast Natural Energy LLC	12.5% or Greater	1645	1
Н	WV-061-004017-000	WILDMAN, JARRET	J.W. Scott	12.5% or Greater	See Lease C	
1	WV-061-001365-013	YOST, CLARK	Northeast Natural Energy LLC	12.5% or Greater	RECHAN	
	WV-061-001365-014	YOST, JON	Northeast Natural Energy LLC	12.5% or Greater		
T	WV-061-001365-015	YOST, LINDA	Northeast Natural Energy LLC	12.5% or Greater	1647	4
+	WV-061-004240-001	MEYERS, DAVID	E.M. HUKILL	12.5% or Greater	See Lease C	2019

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Book Type	Book No.	Page No.
David Myers	E. M. Hukill	Deed	22	17
E. M. Hukill	South Penn Oil Co.	Deed	34	176
South Penn Oil Co.	Marion Oil Co.	Deed	38	64
Myers Heirs and South Penn Oil Co.	Marion Oil Co.	Deed	92	114
Marion Oil Co.	Washington Oil Co.	Deed	219	115
Washington Oil Co.	Northern United Petroleum Co.	Assignment	9	148
Northern United Petroleum Co.	United Petroleum Co.	Assignment	9	282
United Petroleum Co.	Chill Can International, Ltd.	Assignment	9	329
Chill Can International, Ltd.	Jerome Klubeck	Assignment	9	677
Jerome Klubeck	N-K LLC	Assignment	65	373
N-K LLC	Northeast Natural Energy, LLC	Assignment	130	840~

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Grantor, Lessor, etc.	Grantee, Lessee, etc.	Book Type	Book No.	Page No.
Jarrett Wildman	J. W. Scott	Deed	27	145
J. W. Scott	William Munhall/George P. Hukill	Deed	28	447
William Munhall/George P.	South Penn Oil Co.	Deed	32	240
South Penn Oil Co.	South Penn Nat. Gas Co.	Deed	304	457
South Penn Nat. Gas Co.	South Penn Oil Co.	Deed	580	311
South Penn Oil Co.	Pennzoil Co.	Corp Record	50	573
Pennzoil Co.	Pennzoil United, Inc.	Deed	672	665
Pennzoil United, Inc.	W. H. Allen	Deed	695	557
W. H. Allen	Edwin Associates, Inc.	Deed	754	594
Edwin Associates, Inc.	J. T. Carson	Deed	754	600
J. T. Carson	Thompson/Texas Assoc.	Deed	754	606
Thompson/Texas Assoc.	Mark Eddy	Assignment	21	22
Mark Eddy	Northeast Natural Energy, LLC	Assignment	123	363

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JUL 08 2019



April 17, 2019

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

Re: Lemley South (2H, 4H, 6H, 10H, 12H, 14H)

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 Stull Hollow Road (Route 24), Pedlar Run Road (Route 37), and Shuman Run Rd (Route 37/3) on the enclosed survey plats.

Sincerely,

Christa A. Dotson

Supervisor - Land Operations Development

Enclosure

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

		_			
			erator's	Well No. 10H	
NT (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		We	ell Pad N	ame: Lemley	
Notice has b					
Pursuant to th	e provisions in West Virginia Code §	22-6A, the Operator has provide	d the req	uired parties w	ith the Notice Forms listed
	tract of land as follows:	ъ.		G=0000	
State:	West Virginia		sting:	573993.8	
County: District:	Monongalia		orthing:	4391570.6	
Quadrangle:	Clay Blacksville, WV	Public Road Access: Generally used farm		State Route 22	
Watershed:	Dunkard Creek	Generally used farm	name:	Lemley	
watersned.	Dulikald Cleek				
it has provide information re of giving the requirements Virginia Code	the secretary, shall be verified and side the owners of the surface described equired by subsections (b) and (c), se surface owner notice of entry to su of subsection (b), section sixteen of \$22-6A-11(b), the applicant shall thave been completed by the applicant	need in subdivisions (1), (2) and ction sixteen of this article; (ii) the rvey pursuant to subsection (a), f this article were waived in writender proof of and certify to the section.	(4), subs at the rec section t iting by t	ection (b), sec quirement was en of this artic the surface ow	tion ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice vner; and Pursuant to West
that the Ope	West Virginia Code § 22-6A, the Oprator has properly served the require ECK ALL THAT APPLY		Notice Co	ertification	OOG OFFICE USE ONLY
☐ 1. NO	TICE OF SEISMIC ACTIVITY or	NOTICE NOT REQUIRED SEISMIC ACTIVITY WAS CO			RECEIVED/ NOT REQUIRED/
■ 2. NO	TICE OF ENTRY FOR PLAT SURV	'EY or □ NO PLAT SURVEY	WAS CO	ONDUCTED	RECEIVED
■ 3. NO	FICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED NOTICE OF ENTRY FOR PLAWAS CONDUCTED or			RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY (PLEASE ATTACH)	SURFA	CE OWNER	
■ 4. NO	TICE OF PLANNED OPERATION				RECEIVED
■ 5. PUI	BLIC NOTICE				□ RECEIVED
■ 6. NO	TICE OF APPLICATION				☐ RECEIVED

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under Western and Certifications of Notice shall serve as proof that the required parties have been noticed as required under Western and Certifications of Notice shall serve as proof that the required parties have been noticed as required under Western and Certifications of Notice shall serve as proof that the required parties have been noticed as required under Western and Certifications of Notice shall serve as proof that the required parties have been noticed as required under Western and Certifications of Notice shall serve as proof that the required parties have been noticed as required under Western and Certifications of Notice shall serve as proof that the required parties have been noticed as required under Western and Certifications of Notice shall serve as proof that the required parties have been noticed as required under Western and Certifications of Notice shall serve as proof that the required parties have been noticed as required under Western and Certification and Cert Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, JUL 08 2019 the return receipt card or other postal receipt for certified mailing.

Certification of Notice is hereby given:

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

 Well Operator:
 Northeast Natural Energy LLC
 Address:
 707 Virginia St. E, Suite 1200

 By:
 Hollie Medley
 Charleston, WV 25301

 Its:
 Regulatory Manager
 Facsimile:
 304-241-5972

 Telephone:
 304-212-0422
 Email:
 hmedley@nne-llc.com

OFFICIAL SEAL
NOT MOT ARX PUBLIC
STATE OF WEST VIRGINIA
Kristen Brooks
Northeast Natural Energy LLC
48 Donley St., Suite 601
Morgantown, WV 26501
My Commission Expires Aug 10, 2023

Subscribed and sworn before me this 1st day of July, 2019.

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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JUL 08 2019

WW-6A (9-13)

API NO. 47-	A
OPERATOR WEL	L NO. 10H
Well Pad Name: L	emley

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

Noti	ice Time Require	ment: notice shall be prov	ided no later that	n the filing	date of permit application	•
	e of Notice: 6/25/19 ice of:	Date Permit Applica	ntion Filed: 7/5/19	1		
V	PERMIT FOR A WELL WORK		ICATE OF APPI RUCTION OF A		OR THE NDMENT OR PIT	
Deli	very method pur	suant to West Virginia C	ode § 22-6A-10	(b)		
	PERSONAL	REGISTERED	☑ METHO	DD OF DE	LIVERY THAT REQUIRES	S A
	SERVICE	MAIL	RECEI	PT OR SIC	NATURE CONFIRMATIO	N
regis sedin the social adescoper more well important provides the provides record provides and the provides record water than the provides record water that the provides record water than the provides record water tha	attered mail or by an ment control plan repursace of the tract of the described in the erosion ator or lessee, in the ecoal seams; (4) The work, if the surface pundment or pit as a water well, spring ide water for consumption (b) of this section (b) of this section of this article e. R. § 35-8-5.7.a. In the purveyor or surface the control of the same are purveyor	y method of delivery that re- equired by section seven of on which the well is or is pre- sing developed by the propo- n and sediment control plan- te event the tract of land on the owners of record of the si- te tract is to be used for the pi- described in section nine of the grown water supply source lo- terior by humans or dome initiative to take place. (c)(1) exterior hold interests in the la- equired to be maintained pur- to the contrary, notice to a equires, in part, that the ope- ace owner subject to notice a	equires a receipt of this article, and the oposed to be locally seed well work, if submitted pursual which the well proposed tract or travolacement, constructed within one to estimate animals; and affect that three ands, the applicant to section elien holder is not trator shall also prend water testing a section of the control of the	r signature of the well plat ted; (2) The the surface opposed to be cts overlying uction, enlar my surface thousand for (6) The ope tenants in triangular	cowners of record of the surfatract is to be used for roads of the tion (c), section seven of this e drilled is located [sic] is known as the oil and gas leasehold be regement, alteration, repair, rerowner or water purveyor who we hundred feet of the center of the center of any natural gas storage common or other co-owners of the documents required upon one, chapter eleven-a of this landowner, unless the lien hold vell Site Safety Plan ("WSSP"	pplication, the erosion and ons: (1) The owners of record once tract or tracts overlying the rother land disturbance as article; (3) The coal owner, own to be underlain by one or ing developed by the proposed moval or abandonment of any is known to the applicant to of the well pad which is used to ge field within which the of interests described in the person described in the code. (2) Notwithstanding any der is the landowner. W. Va. ") to the surface owner and any
			x3 Fian Notice		OWNER OR LESSEE	ded (o.
Man	URFACE OWNER	& Charlotte E. Lemley		Name:	Consol Mining Company LLC	
	ress: 239 Lemley Holl		_	Address:		
7100	Core, WV 26529		=	, , , , , , , , , , , , , , , , , , , ,	Canonsburg, PA 15317	
Nan	- CONTRACTOR		_	ПCOAL	OPERATOR	
					A. 50.63.00	
				Address:		
		R(s) (Road and/or Other D	isturbance)			
	ne: Donald Stull et a				CE OWNER OF WATER V	WELL
Add	iress: 162 Stull Hollow		_		WATER PURVEYOR(s)	
	Core, WV 2654*		-		William D. Statler	
Nan	ne:		_	Address	578 Long Drain Rd. Core, WV 26529	
Add	iress:		-	DOPER /	TOR OF ANY NATURAL	GAS STORAGE FIELD
ПС	URFACE OWNER	R(s) (Impoundments or Pit	<u>s)</u>	Name:	TOROT MIT INTORAL	RECEIVED
		K(s) (Impoundments of Th		Address:		Office of Oil and Gas
			2)			
				*Please a	ttach additional forms if nece	essary JUL 0 8 2019
						a congressment of

WW-6A (8-13) API NO. 47-47 0 6 7 0 1 8 6 0
OPERATOR WELL NO. 1DH
Well Pad Name: Lemiley

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

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

WW-6A (8-13)

API NO. 47	
OPERATOR WELL NO.	10H
Well Pad Name: Lemley	

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

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

WW-6A (8-13) 47 06 10 18 60

API NO. 47-OPERATOR WELL NO. 10H

Well Pad Name: Lemley

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

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Office of Oil and Gas

JUL 08 2019

WW-6A (8-13)

API NO. 47-OPERATOR WELL NO. 10H Well Pad Name: Lemley

Notice is hereby given by:

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 will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

.......

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

Subscribed and sworn before me this 1st day of July, 2019

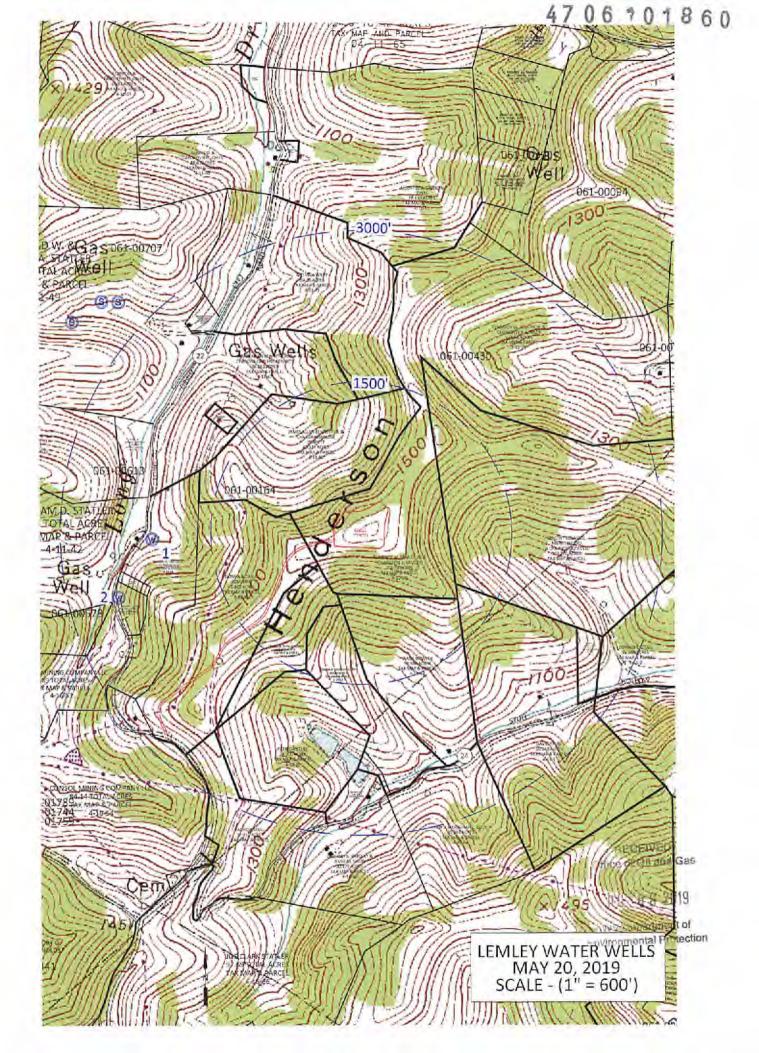
Kuttu Brown

Notary Public

My Commission Expires Aug. 10, 2023

RECEIVED Office of Oil and Gas

JUL 0 8 2019



WW-6A3 (1/12)

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

Date - Chieft					in FORTY-FIVE (45) days prior to	
Date of Notice:	July 2, 2018	Date of Plan	nned Entry: July 13, 2018			
Delivery metho	od pursuant i	to West Virginia Co	ode § 22-6A-10a			
☐ PERSONA	AL III	REGISTERED	☐ METHOD OF DE	IVERY THAT RE	FOLURES A	
SERVICE	200	MAIL	RECEIPT OR SIGN			
on to the surface but no more that beneath such tra owner of minera and Sediment C Secretary, which enable the surfa	e tract to cond in forty-five di act that has fil als underlying control Manua h statement sh ce owner to o	luct any plat surveys ays prior to such ent ed a declaration pur- such tract in the co- il and the statutes an hall include contact i btain copies from th	s required pursuant to this a ry to: (1) The surface owner suant to section thirty-six, a unty tax records. The notice of rules related to oil and ga information, including the a	rticle. Such notice s or of such tract; (2) rticle six, chapter t e shall include a sta s exploration and p	r shall provide notice of planned entry shall be provided at least seven days to any owner or lessee of coal seams wenty-two of this code; and (3) any atement that copies of the state Erosion roduction may be obtained from the age on the Secretary's web site, to	
Notice is hereb);		- Sant Marie de La la		
■ SURFACE	The second secon			L OWNER OR LE		
Name: see attache				Name: see attached		
Address:	_		_ Address:			
Name:						
Address:			LEI MIN	ERAL OWNER(s)		
			Name: see	Name: see attached		
Name:			Address:			
Address:			7.7			
Address:			*please attac	h additional forms if ne	cessary	
Notice is here Pursuant to Wes a plat survey on State: v	by given: st Virginia Co the tract of la	de § 22-6A-10(a), n and as follows:	otice is hereby given that the	ne undersigned well	operator is planning entry to conduct 39.670947, -80.137361 Long Drain Road (CR 22)	
Notice is here Pursuant to Wes a plat survey on State: County:	by given: st Virginia Co the tract of la Vest Virginia donongalia	de § 22-6A-10(a), n and as follows:	otice is hereby given that the	ne undersigned well	operator is planning entry to conduct	
Notice is here Pursuant to Wes a plat survey on State: County: District:	by given: st Virginia Co the tract of la Vest Virginia donongalia	de § 22-6A-10(a), n and as follows:	otice is hereby given that the Approx. Latit	ne undersigned well	operator is planning entry to conduct 39.870947, -80.137381 Long Drain Road (CR 22)	
Notice is here Pursuant to Wes a plat survey on State: County: District: Quadrangle: Copies of the stamay be obtained Charleston, WV obtained from th Notice is here Well Operator:	by given: st Virginia Co the tract of la Vest Virginia Anonongalia May lacksville ate Erosion and from the Sec 25304 (304- ne Secretary b by given by Northeast Natura	de § 22-6A-10(a), n and as follows: and Sediment Control cretary, at the WV D 926-0450). Copies y visiting www.dep	*please attace otice is hereby given that the Approx. Latite Public Road Awatershed: Generally use Manual and the statutes and repartment of Environments	ne undersigned well ude & Longitude: Access: ed farm name: d rules related to of al Protection headquional information r default.aspx.	Joperator is planning entry to conduct 39.870947, -80.137381 Leng Drain Road (CR 22) Dunkerd Creek Lemley il and gas exploration and production uarters, located at 601 57th Street, SE, elated to horizontal drilling may be	
Notice is here Pursuant to Wes a plat survey on State: County: District: Quadrangle: Copies of the sta may be obtained Charleston, WV obtained from th	by given: st Virginia Co the tract of la Vest Virginia Monongalia Monongalia May iacksville ate Erosion an from the Sec 25304 (304- ne Secretary b	de § 22-6A-10(a), n and as follows: and Sediment Control cretary, at the WV D 926-0450). Copies y visiting www.dep	*please attace otice is hereby given that the Approx. Latit Public Road Watershed: Generally use Manual and the statutes and repartment of Environments of such documents or addit wv.gov/oil-and-gas/pages/	ne undersigned well ude & Longitude: Access: ed farm name: d rules related to oi al Protection headquional information r default.aspx.	Joperator is planning entry to conduct 39.870947, -80.137361 Leng Drain Road (CR 22) Dunkerd Creek Lemley il and gas exploration and production uarters, located at 601 57th Street, SE, elated to horizontal drilling may be	

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4
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-49
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Acres
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0
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Ownership Type	Name	Address				
Surface Owner	Clarence W. Lemley Jr. and Charlotte E. Lemley	239 Lemley Hollow	Core	WV	26543	
Coal Owner	CNX RCPC LLC	CNX Center, 1000 Consol Energy Drive	Canonsburg	PA	1531	
Coal Owner /	Murray American Energy Inc.	46226 National Road	St. Clairsville	ОН	4395	
Mineral Owner	William Henderson	P.O. Box 73	Pursglove	WV	2654	
Mineral Owner	William B. Core	626 Lakes Drive	Tahlequah	ОК	7446	
Mineral Owner	Stéphanie Ann McCarver	915 West Broad Street	Griffin	GA	3022	
Mineral Owner	Sheila Cosner	19 Terrace View Drive	Morgantown	WV	2650	
Mineral Owner	Shawna Charvat	67 West 14th Street	Ashland	ОН	4480	
Mineral Owner	Rose Marie Stewart Malott	2942 Little Indian Creek Road	Core	WV	2657	
Mineral Owner	Ronald Lee Veselenak	61642 Patton Hollow Road	Cambridge	ОН	4372	
Mineral Owner	Ronald L. Eddy	447 NE Canoe Park Circle	Port St. Lucie	FL	3498	
Mineral Owner	Paula Kay Jenkins	3890 Mason Dixon Highway	Core	wv	2654	
Mineral Owner	Pachira Energy, LLC	5150 North Tamiami Trail; Newgate Tower, Suite 205	Naples	FL	3410	
Mineral Owner	Lloyd M. Lohr	243 Haines Ridge Road	Mount Morris	PA	1534	
Mineral Owner	Linda Lou Hinebaugh Hickman	P.O. Box 344	Waynesburg	PA	1537	
Mineral Owner	Leroy Tennant	2960 Little Indian Creek Road	Core	WV	2654	
Mineral Owner	Jarry Henderson	419 Henderson Hollow Road	Core	WV	2654	
Mineral Owner	Larry and Nora Lou Dodd	P.O. Box 186	Colliers	WV	2603	
Mineral Owner	Keith A. Tennant	131 West First Street	Westover	WV	2650	
Mineral Owner	June Core Myers Living Trust	332 Oakland Street	Morgantown	WV	2650	
Mineral Owner	Judith McJessy	P.O. Box 133	Buffalo	ОН	4372	
Mineral Owner	Jesse James Henderson	5583 Treetop Court	Parma	ОН	4413	
Mineral Owner	Jennifer Lee Henderson	67 West 14th Street	Ashland	ОН	4480	
Mineral Owner	Christopher Allen Tyner	1810 Nichols Road	Akron	ОН	4431	
Mineral Owner	Charles Lawrence Core	3450 N. Commerce Street; Apt. 604	Ardmore	ОК	7340	
Mineral Owner	Beverly J. Core	1159 Smokey Drain Road	Core	wv	2654	
Mineral Owner ♀	Alpheus M. Henderson	260 Henderson Hollow Road	Core	wv	2654	

RECEIVED
Office of Oil and Gas
Owner

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 Date of Notice	Requirement: Notice shall be provided ce: 06/26/2019 Date F	l at least TEN (10) days prior to filing a Permit Application Filed: 07/05/2019	a permit application.
Delivery me	thod pursuant to West Virginia Code	§ 22-6A-16(b)	
☐ HAND DELIVE	CERTIFIED MAIL RETURN RECEIPT R	EQUESTED	
receipt reque drilling a hor of this subsection m	sted or hand delivery, give the surface of izontal well: <i>Provided</i> , That notice give tion as of the date the notice was provide	wher notice of its intent to enter upon the pursuant to subsection (a), section to ded to the surface owner: <i>Provided</i> , however. The notice, if required, shall income.	, an operator shall, by certified mail return the surface owner's land for the purpose of en of this article satisfies the requirements wever, That the notice requirements of this lude the name, address, telephone number, or's authorized representative.
	reby provided to the SURFACE C		
	ence W Jr & Charlotte E Lemley	Name: Donald Stull et al	
Address: 239	Lemiey Hollow	Address: 162 Stull Hallow R	oac
Core	WV 20529	Core WV 20041	
	wner's land for the purpose of drilling a West Virginia Monongalia		well operator has an intent to enter upon follows: 573993.B 4391570.6
District:	Clay	Public Road Access:	County Route 22/Long Drain Road
Quadrangle:	Blacksville	Generally used farm name:	Lemley
Watershed:	Dunkard Creek		
Pursuant to facsimile nur related to ho	mber and electronic mail address of the rizontal drilling may be obtained from	the Secretary, at the WV Department	lress, telephone number, and if available, and representative. Additional information of Environmental Protection headquarters, hep.wv.gov/oil-and-gas/pages/default.aspx.
	ereby given by:	7.710.02	
Well Operato	Northeast Natural Energy LLC	Authorized Representative	\$
Address:	707 Virginia St. E., Suite 1200	Address:	
	Charleston, WV 25301		
Telephone:	304-414-7060	Telephone:	
Email:	hmedley@nne-llc.com	Email:	
Facsimile:	304-241-5972	Facsimile:	
011 - 10	- Dudan an Maddan		

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: Chirled fice will appropriately secure your personal information. If you have any questions about our use or your personal information pleases on the DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

JUL 0 8 2019

WW-6A5 (1/12)

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

	e Requirement: notice shice: 06/25/2019		o later than the filing pplication Filed: 07/0		application.
Delivery me	ethod pursuant to West	Virginia Code §	22-6A-16(c)		
■ CERT	IFIED MAIL	П	HAND		
	JRN RECEIPT REQUES	TED	DELIVERY		
return receip the planned required to be drilling of a damages to (d) The noti- of notice.	or requested or hand delive operation. The notice representation of provided by subsection to horizontal well; and (3) the surface affected by oil	ery, give the surficequired by this so (b), section tendor. A proposed surfice and gas operation shall be given to	ace owner whose land ubsection shall include if this article to a surfa ace use and compens as to the extent the da to the surface owner a	will be used for le: (1) A copy acce owner whose ation agreement mages are com	ication, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the nt containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
	ess listed in the records of				
	rence W Jr & Charlotte E Lemley	1		onald Stull, et al	
Address: 239	Lemley Hollow	1	Address	: 162 Stull Hollow R	Road
Cor	e WV 26541			Care, WV 26541	
State: County:	n the surface owner's land West Virginia Monongalia		UTM NAD 8	Basting: Northing:	573993.8 4391570.6
District:	Clay		Public Road		County Route 22/Long Drain Road
Quadrangle			Generally use	d farm name:	Lemley
Watershed:	Dunkard Creek		_		
Pursuant to to be provided horizontal visurface affer information	ded by W. Va. Code § vell; and (3) A proposed sected by oil and gas opera related to horizontal dri s, located at 601 57th St	22-6A-10(b) to a surface use and co ations to the exte lling may be obta	surface owner whose ompensation agreeme at the damages are com- nined from the Secret	land will be nt containing a empensable und ary, at the WV	code section; (2) The information required used in conjunction with the drilling of a n offer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection) or by visiting

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 are contact

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

JUL 0 8 2019

Office of Oil and Gas

API NO. 47		
OPERATOR WELL NO.	10H	
Well Pad Name: Lemley		

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

VOLUNTARY STATEMENT OF NO OBJECTION

Instructions to Persons Named on Page WW-6A

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

Comment and Waiver Provisions

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

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

VOLUNTARY STATEMENT OF NO OBJECTION

State:	the well plat, all for proposed well work on the tra	Faction	573988.0
County:	Monongalia	UTM NAD 83 Rasting.	4391580.0
District:	Clay	Public Road Access:	County Route 22/Long Drain Road
Quadrangle:	Blacksville	Generally used farm name:	Lemley
Watershed:	Dunkard Creek		
and the second second	the box that applies		ION BY A NATURAL PERSON
SURFA			
	CE OWNER CE OWNER (Road and/or Other Disturbance)	Signature: 2	area W Lember IT & Pareatte Lem lug AREACE W. IT + CHACIOTTE
□ SURFAC	CE OWNER	Signature: 2 Print Name: 2L Date: 5-7-	Pareotte Lem lug Pareotte Lem lug ARENCE W. Sr + CHAPLOTTE 2019 LEMIEY
□ SURFAC	CE OWNER (Road and/or Other Disturbance)	Signature: CL Print Name: CL Date: 5-7- FOR EXECUT Company:	AREACE W. Ir + CHAPIOTTE 2019 LEMIES ION BY A CORPORATION, ETC.
□ SURFAC	CE OWNER CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits) OWNER OR LESSEE	Signature: Company: By:	AREACE W. Jr + CHAPLOTTE 2019 LEMIES ION BY A CORPORATION, ETC.
□ SURFAC □ SURFAC □ COAL C □ COAL C	CE OWNER CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits) OWNER OR LESSEE	Signature: Company: By: Its:	ARENCE W. ST + CHAPLOTTE 2019 LEMIES ION BY A CORPORATION, ETC.

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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

January 30, 2019

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

Jill M. Newman Deputy Commissioner

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

Subject: DOH Permit for the Lemley Pad, Monongalia County

Lemley 10H

Dear Mr. Martin,

This well site will be accessed from a permit #04-2018-1373 issued to Northeast Natural Energy Corporation for access to the State Road for a well site located off of Monongalia Route 22 SLS.

The operator has signed a DISTRICT WIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY revised October 1, 2018.

Very Truly Yours,

Gary K. Clayton, P.E.

Day K. Clayton

Regional Maintenance Engineer Central Office O&G Coordinator

Kristen Brooks Cc:

Northeast Natural Energy Corporation

CH, OM, D-4

File

RECEIVED Office of Oil and Gas

JUL 0 8 2019

Planned Additives to be used in Fracturing Stimulations

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

RECEIVED
Office of Oil and Gas

JUL 0 8 2019

WV Department of Environmental Protection



LEMLEY WELL PAD SITE PLAN NORTHEAST NATURAL ENERGY

LAT./LONG: N 39.669956" W-80.139113" (APPROXIMATE CENTER OF PROJECT)

LOCAL	EMERGENCY SERVICES	
	NAME	TELEPHONE NO
RMFLX ANCE		D11
HOSPITAL EMERGENCY ROOM	CHO VALLEY MEDICAL CENTER	D04 2340123
FIRE DEPARTMENT		911
POLICE DEPARTMENT		Dix
POSON CONTROL CENTER	WEST VIRGINIA POSSON CENTER	09001 223-1232

	LAIN CONDITIONS	
DO SITE CONSTITUCTION AGRICULT	ES TAKE PLACE IN FLOOCIFLAIN	NO
PERMIT NEEDED FROM GOUNTY F	LOCOPLAIN COGRONATOR	NO
HEGRAS STUDY COMPLETED.		
FLOODP, AIN SHOWN ON DRAWINGS:		
FIRM MAP ACAMBERIS) FOR SITE \$4061000788		
ADREAGE OF CONSTRUCTION IN I	LCCCPLNN: 3.00 AC	

PROJECT CONTACTS

CPERATOR:
NORTHEAST NATURAL ENERGY LLC
49 DOUGH STREET, ST. SEMORGANTOWN WY 2003

YOU DIG!

ENGINEER/SURVEYOR

CIVE & ENVIRONMENTAL CONSULTANTS, INC.
ACSEPHIC ROOMSON, PE. PRINCIPALENCISEE?

OFFICE (INC. 835211) FAX. (201833-141) CELL (ACI)

ENVIRONMENTAL
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

PENNSYLVANIA

Eastern

GROTECHNICAL
CAVE & FINITENBRIGHTAL CONSULTANTS, INC.
KOW BEHAN - PROJECT MANAGER
OFFICE COM (05) 14 FAC 20(1)(1)(07) FALSE

Henderson Ridge LEMLEY WELL PAD Pedlar

SHEET INDEX				
1. COVERSHEE!	10. SITE PLA		19. CETALS	
2. GENERAL NOTES	11 SITE PLA		20. DETAILS	
S. MATERIAL CUANTITIES		SACITATES	21. DETALS	Th. 100
MASTER LEIGEND DOSTING CONCITIONS		S AND SECTIONS S AND SECTIONS	22. PECLAMATION 23. PECLAMATION	
E. BOPACH MAP		S AND SECTIONS	24. PECLAMATICA	
7. SITE FLAN		S AND SECTIONS	25 RECLAMATION	
E SITE PLAN	17. PROFILE	S AND SECTIONS	26. FECLAMATION	PLANE
S. SITE PLAN	ME DETAILS			
	CONTINUE	MUNISTER		
		DORDINATES	_	
		OGRO NATES	UTM	13-17
SITE LOCATIONS			_	83-17 EAST NG
	MARS MIT	HORTH JONE I	UTM	EAST NO
SITE LOCATIONS	WVES NELF	LONGITUDE	NORTHING	EAST NG 573368 S4
SITE LOCATIONS AMAIN ACCESS ROAD ENTRANCE	WV85 NF17 LATITUDE 59,665146	LONGITUDE -80,144298	VITMS NGRTHING 4390642,597	
SITE LOCATIONS MAIN ACCESS ROAD ENTRANCE CENTROID OF WELL PAD	WV83 NELY LATITUDE 39.665146 39.67040	LONGITUDE -80,144298 -40,137433	NORTHING 4390642,597 4391594,317	EAST NG \$23368 S4 \$73963 76

CENTER OF CONTAINMENT TANK 1 39.671201

DRADNG VO	LUMES		
DESCRIPTION	CLTICY	FILLION	NET ICY
MAIN ACCESS FICAC	16,085	21,662	43,539
WELLPAD	60,990	41,510	5,103
SPOLIT	0	1,918	-1,915
SPOL-2		553	-850
TOTAL	67,543	67,543	2
"CPSO!. / STRIPPING 120% SWELL - 17,014 C Y)		14,578 C.Y	

-80.136749 4291670.848 574019.566

LO.D. ARZAS		
DESCRIPTION	ACRES	
MAN ACCES ROAD	9.94 ·	
WELL PAO	8.71	
TOPSOIL/STRIPPING PLE 1	1.71	
SPOIL FILE I	0.45	
SHOU BILE 1	0.75	
CLEANING AND GRUTTEING AREA	5.18	
TOTAL	23.73	

LOCATION MAP BLACKSVILLE USGS 7.5' QUAD



	MONONG	ALIA COUNTY U	MENT VIRGINIA		
DWNEE	TM-PARCEL	DEED-FAGE	TOTAL ACRES	TYPE OF DISTURBANCE	ACCRAG
STURE DONALD ET AL	11.45	1018-490	45.85	MAIN ACCESS®GAD	5.71
				PARCE, TOTAL	9.71
LEMILEY CLARENCE WIR & CHUR, OTTE E	11-72	/10-311	77.99	MAIN ACCESSINGAD	0.71
				WILLPAD	8.20
				TOP SOLVETRIPPING PHY 3	1.72
				SPOR PHE 1	1145
				SPOK PUFT	971
				CLEARING AND DRUBBING AREA	1119
				PARCEL TOTAL	14.01

0000

	_
WELL RESTRICTIONS CHECKLIST (HORIZONTAL SA WELL)	
AT LIBST 100 FIET FROM PAD AND LOD (INCLUDING MAY ELS CONTROL FEATLING 10 ANT PERENNIAL STIERN, LAME, POND, RESERVOIR OR WETLING	YES
AT LEAST 500 PEET FROM PAD AND LGD (INCLUDING MAYEA'S CONTROL FEATURE) TO ANY MATURALLY PRODUCING TRICKY STREAM	ves
AT LEAST 1996 FROM PAZ JAID LOC BAZ LIDRIG ANY EAS CONTROL FEATURE; TO ANY OFICIADNIA TENENT ARE OR FUREIX, WATER SUPPLY:	YES
AT LEAST 20) PERT EROM AN ININTRAS WATER WILL DRIPERSONE DAPANES TO WILL.	YES
AT LEAST 605 PRET FROM AN DECLIFIED DWG.LING STRUCTURE TO CENTER OF PAD	YES
AT LEAST 615 PERT FROM AGRICULTURAL BLILDINGS LARGER THAN 2000 SQLAME FEET TO THE CENTER OF THE PALC.	YES





COVER SHEET

Civil & I spomer

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

C000 CD

VICINITY MAP MONONGALIA COUNTY ROAD MAP SCALE IN THE PLAN REPRODUCTION WARNING THE PLANS HAVE BEEN CREATED ON ANSI IS 100° X BY SHEETS, FOR RESIDIORS, REFER TO CHARLES NOW F.

