

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, July 9, 2018 WELL WORK PERMIT Horizontal 6A / New Drill

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

Re: Permit approval for YOST 7H 47-061-01800-00-00

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: YOST 7H

Farm Name: YOST HERITAGE INC.

U.S. WELL NUMBER: 47-061-01800-00-00

Horizontal 6A New Drill Date Issued: 7/9/2018

PERMIT CONDITIONS 4706101800

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.

API Number:

PERMIT CONDITIONS

4706101800

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.



west virginia department of environmental protection

Office of Oil and Gas 601 57th Street Charleston, WV 25304 (304) 926-0450 fax (304) 926-0452 Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

ORDER ISSUED UNDER WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 6A

TO: Northeast Natural Energy, LLC 707 Virginia Street East Suite 1200 Charleston, WV 25301 DATE: May 16, 2014 ORDER NO.: 2014-W-3

INTRODUCTION

This Order (hereinafter "Order") is issued by the Office of Oil and Gas (hereinafter "OOG"), by and through its Chief, pursuant to the authority of W. Va. Code §§ 22-1-1, 22-6-1 and 22-6A-1 et seq. to Northeast Natural Energy, LLC (hereinafter "Northeast Natural Energy" or "Operator"), collectively the "Parties."

FINDINGS OF FACT

In support of this Order, the Chief hereby finds the following:

- OOG, an office within the West Virginia Department of Environmental Protection, is the agency
 with the duty and authority to execute and enforce W. Va. Code §22-6-1 and §22-6A-1 et seq., and
 the rules and regulations promulgated thereunder.
- Northeast Natural Energy is a "person" as defined by W. Va. Code §22-6-1(n), with a corporate address as 707 Virginia Street East, Suite 1200, Charleston, WV 25301.
- On March 20, 2014, Northeast Natural Energy submitted permit applications for gas wells identified as API numbers 47-061-01670, 47-061-01671 and 47-061-01673, located on the Yost Pad in Clay District, Monongalia County, West Virginia.
- 4. On March 20, 2014 Northeast Natural Energy requested a waiver for Wetlands #1 and #2, outlined in Exhibit 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for gas well permit applications identified as API numbers: 47-061-01670, 47-061-01671 and 47-061-01673, located on the Yost Pad in Clay District, Monongalia County, West Virginia.

CONCLUSIONS OF LAW

- 1. West Virginia Code §22-1-6(d) requires, in part, that "[i]n addition to other powers, duties and responsibilities granted and assigned to the secretary by this chapter, the secretary is authorized and empowered to...(3) Enter private lands to make surveys and inspections for environmental protection purposes; to investigate for violations of statutes or rules which the Office of Oil and Gas is charged with enforcing; to serve and execute warrants and processes; to make arrests; issue orders, which for the purposes of this chapter include consent agreements; and to otherwise enforce the statutes or rules which the Office of Oil and Gas is charged with enforcing."
- 2. West Virginia Code §22-6A-2(a)(6) requires, in part, that "Concomitant with the broad powers to condition the issuance of well work permits, the secretary should also have broad authority to waive certain minimum requirements of this article when, in his or her discretion, such waiver is appropriate: *Provided*, That the secretary shall submit a written report of the number of waivers granted to the Legislature commencing January 1, 2013, and each year thereafter."
- 3. West Virginia Code §22-6A-12(b) requires, in part, that "[n]o 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 Office of Oil and Gas 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 Office of Oil and Gas 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."

ORDER

Therefore, the Office of Oil and Gas grants Northeast Natural Energy, LLC a waiver for Wetlands #1 and #2 from well location restriction requirements in W. Va. Code §22-6A-12(b) for gas well permit applications identified as API numbers 47-061-01670, 47-061-01671 and 47-061-01673 located on the Yost Pad in Monongalia County, West Virginia. The Office of Oil and Gas hereby **ORDERS** that Northeast Natural Energy, LLC shall meet the following site construction and operational requirements for the Yost well pad:

- A berm shall be constructed around the perimeter of the pad to contain any potential spills and storm water runoff. Berm is to be at least two feet (2') in height;
- b. Orange fencing shall be installed on the project boundary to ensure no accidental encroachment happens.
- Filter/silt socks and erosion control blankets shall be installed on all slopes and down gradient locations
 of the pad and topsoil pile areas as erosion and sediment controlling BMPs;
- d. Wetland #1 and #2 shall have a triple compost filter sock stack installed adjacent to the wetland;
- As stated by Northeast Natural Energy, a geotechnical inspector will be on site to insure the recommended construction techniques are followed as laid out in the completed geotechnical report.
- f. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual;
- g. Drilling muds shall be disposed of in a permitted landfill;
- h. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- k. Inspections of the storm water and spill prevention measures shall be conducted after any major storm event defined as a half inch (½") rain within any twenty-four (24) hour period;
- Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies;
- M. All records from inspections shall be maintained on site for the life of the project and be available upon request.

Thus ORDERED, the 16th day of May, 2014.

IN THE NAME OF THE STATE OF WEST VIRGINIA:

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

By:

AMES A. MARTIN, CHIEF

WW-6B (04/15)

API NO. 47	
OPERATOR WELL NO.	Yost 7H
Well Pad Name: Yost	

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

1) Well Operator: Northeast Na	tural Energy LLC	494498281	Monongalia	Clay	Blacksville
-/		Operator ID	County	District	Quadrangle
2) Operator's Well Number: You	st 7H	Well Pac	Name: Yost	-17/1	
3) Farm Name/Surface Owner:	Yost Heritage Inc	c. Public Roa	d Access: Day	brook Rd	. 218
4) Elevation, current ground:	1,492' Ele	evation, proposed	post-construction	on: 1,492	
5) Well Type (a) Gas X Other	Oil	Unde	erground Storag	ge	
(-)	llow X	Deep	1010	, ,	
6) Existing Pad: Yes or No Yes			BUK	6/5/2	010
7) Proposed Target Formation(s) Marcellus; 8,300'; 122'; 5,000 F		ipated Thickness a	and Expected Pr	ressure(s):	
8) Proposed Total Vertical Depth	h: 8,300'				
9) Formation at Total Vertical D	epth: Marcellus				
10) Proposed Total Measured De	epth: 19,616.69	9'			
11) Proposed Horizontal Leg Le	ngth: 10,229'				
12) Approximate Fresh Water St	trata Depths:	50', 1,378'			
13) Method to Determine Fresh 14) Approximate Saltwater Dept	water popular _	Oriller's Log from	Offset Wells		
15) Approximate Coal Seam De	pths: 320', 712'				
16) Approximate Depth to Possi	ble Void (coal mi	ine, karst, other):	N/A		
17) Does Proposed well location directly overlying or adjacent to		ms Yes	No	, <u>x</u>	
(a) If Yes, provide Mine Info:	Name:				
	Depth:				RECEIVED Office of Oil and Gas
	Seam:				JUN 0 8 2018
	Owner:				WV Department of

Page 1 of 3

WW-6B (04/15)

API NO. 47	W. C. C. (1984)
OPERATOR WELL NO.	Yost 7H
Well Pad Name: Yost	

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	N/A	94.71	40'	40'	GTS
Fresh Water	13-3/8"	New	J-55	54.5	1,480'	1,450'	CTS
Coal					N/A	N/A	
Intermediate	9-5/8"	New	J-55	40	2,630'	2,600'	CTS
Production	5-1/2"	New	P-110	20	19,616.69'	19,586.69'	4,598 Cu. Ft.
Tubing	2-7/8"	New	N-8	6.5	N/A	8,500'	N/A
Liners							

HOR 6/5/2018

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 psi Grout	N/A
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 Proz	1.21
Tubing	2-7/8"	N/A	.217"	10,570	3,600	N/A	N/A
Liners							

PACKERS

TACKERS	RECEIVED Office of Oil and Gas
	JUN 0 8 2018
	WV Department of Environmental Protectio
	TACKERS

WW-6B (10/14)

API NO. 47	_		
OPERATOR	WELL NO). <u>Yost 7H</u>	
Well Pad N	ame: Yos	it .	

19) I	Describe p	roposed	well wor	c. incli	uding th	e drilling	and r	lugging	back of	fanvi	pilot hole
-------	------------	---------	----------	----------	----------	------------	-------	---------	---------	-------	------------

Drilling and completion of a horizontal Marcellus well. The well will be drilled on air to an approximate depth of 6,445,61' TVD/MD. The well will then be horizontally drilled on fluid from KOP to approximately 8,300' TVD / 19,616.69' MD along a 324° 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 100 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): N/A
- 22) Area to be disturbed for well pad only, less access road (acres): N/A
- 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 other joint (~160') from TD to surface.

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

Surface string cement will be Type 1 + Max 3% bwoc Calcium Chloride Fresh Water blend. Intermediate string cement will be 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 and Gas

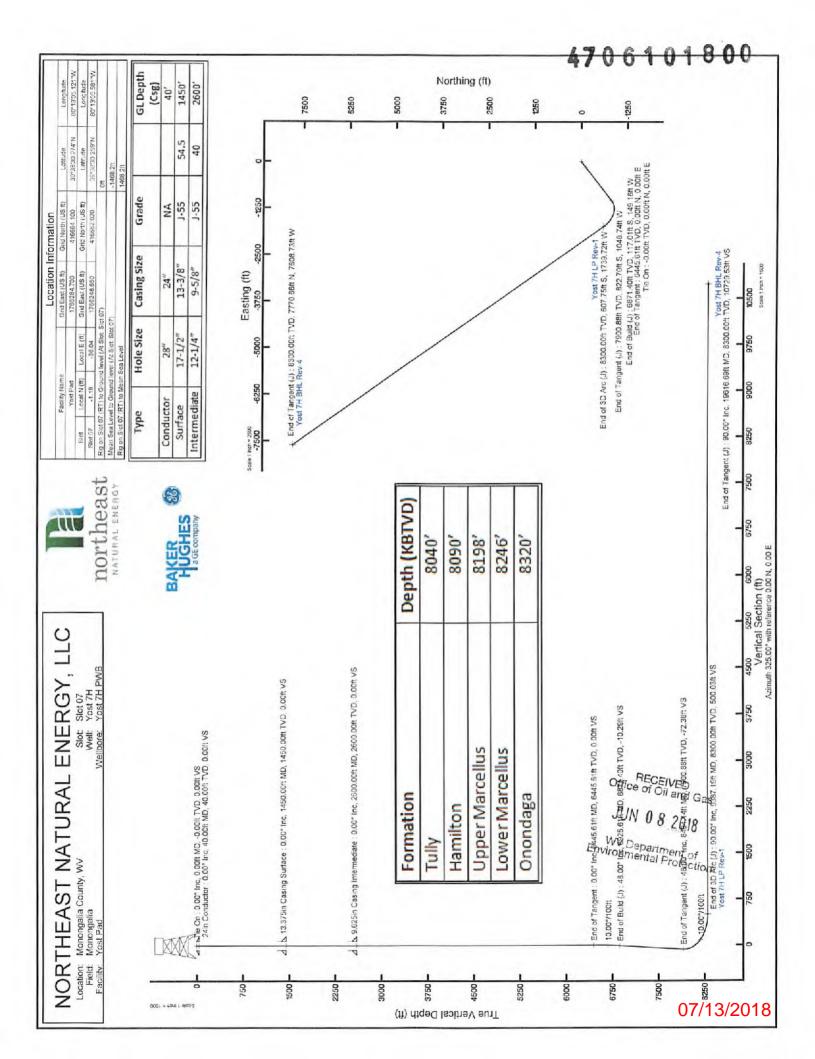
<u>JUN 0 8 2018</u>

WV Department of

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.

*Note: Attach additional sheets as needed.



Northeast Natural Energy LLC Mine Contingency Plan



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

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

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

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

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

Casing Schematic w/ Mine String

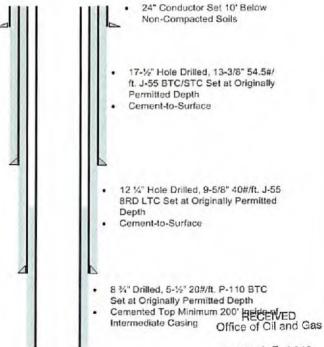
24" Conductor Set 10' Below Non-Compacted Soils 22" Hole Drilled to 50' Below Void 18-5/8" 87.5#/ft, J-55 BTC Set 30'-50' Below 17-½" Hole Drilled, 13-3/8" 54.5#/ft, J-55 BTC/STC Set at Originally Permitted Depth Cement-to-Surface 12 ½" Hole Drilled, 9-5/8" 40#/ft, J-55 BRD LTC Set at Originally Permitted Depth Cement-to-Surface 8 ½" Drilled, 5-½" 20#/ft, P-110 BTC

Set at Originally Permitted Depth

Intermediate Casing

Cemented Top Minimum 200' Inside of

Casing Schematic w/o Mine String



FEB 1 5 2018

Universal Pressure Pumping, Inc. Cement Data

Type I, 1% CaCl₂

Typical Use: Conductor, Surface Casing Typical Area of Application: All Locations

Slurry Properties:

Density: 15.6 #/gal Yield: 1.18 ft³/sk Water Requirement: 5.2 gal/sk

Component	Percentage	Amount per Sack
Type I	100%	94 lb
CaCl ₂	1%	0.94 lb

Temp (F)	50 psi (hr:min)	500 psi (hr:min)	8 hr (psi)	12 hr (psi)	1 Day (psi)	3 Day (psi)	7 Day (psi)
60	6:48	13:43	112	367	1574		
65	4:38	10:05	300	732	2646		
70	4:15	9:00	384	953	2808		7
80	3:15	6:33	803	1887	3509	5805	

Temp (F)	4 hr (psi)	6 hr (psi)	8 hr (psi)	10 hr (psi)	12 hr (psi)	1 Day (psi)	3 Day (psi)
60	Wet	< 50	200	425	650	2600	5175
70	< 50	75	525	1000	1300	3825	5700
80	< 50	300	1275	1775	2450	4925	7125

Test	Result	Conditions
Fluid Loss		
Free Water	0.3%	70F, Vertical

Thickening Time to 70 Bc @ 70F & 1500 psi: 2 hr 36 min Thickening Time to 70 Bc @ 80F & 1000 psi: 1 hr 53 min Thickening Time to 70 Bc @ 80F & 1500 psi: 1 hr 55 min MJK Office of Oil and Gas

FEB 1 5 2018

WV Dapartment of Environmental Protection

The cement data presented above represents the most up-to-date average cement properties for the given blend as of October 2017, under lab conditions. This data should be used as a reference and should not be considered to be absolute. The actual properties of the cement blend used on a job may differ somewhat based on variations in cement, fly ash and water sources.

Note: <u>For internal use only.</u> Technical information contained in this document is property of Universal Pressure Pumping, Inc., and is not to be distributed or copied. Customer information requests must be handled through the Chemical Technology Group.

07/13/2018

Universal Pressure Pumping, Inc. Cement Data

Type I, 2% CaCl₂

Typical Use: Conductor, Surface Casing Typical Area of Application: All Locations

Slurry Properties:

Density: 15.6 #/gal Yield: 1.19 ft³/sk Water Requirement: 5.2 gal/sk

Component	Percentage	Amount per Sack
Type I	100%	94 lb
CaCl ₂	2%	1.88 lb

Temp	50 psi	500 psi	8 hr	12 hr	1 Day	3 Day	7 Day
(F)	(hr:min)	(hr:min)	(psi)	(psi)	(psi)	(psi)	(psi)
60	5:50	13:22	155	406	1276		
70	2:54	7:55	508	887	1914	3395	
75	1:30	5:33	799	1264	2288		

Temp	8 hr	10 hr	12 hr	1 Day	3 Day
(F)	(psi)	(psi)	(psi)	(psi)	(psi)
60	275	425	625	2300	4175
70	600	900	1175	3150	4775
80	1325	1725	2325	4300	6425

Test	Result	Conditions
Fluid Loss		100F, 1000 psi
Free Water	0.0%	80F, Vertical

Thickening Time to 70 Bc @ 60F & 1000 psi: 3 hr 14 min Thickening Time to 70 Bc @ 70F & 1000 psi: 2 hr 26 min Thickening Time to 70 Bc @ 70F & 1500 psi: 2 hr 10 min Thickening Time to 70 Bc @ 80F & 1000 psi: 1 hr 33 min Thickening Time to 70 Bc @ 80F & 1500 psi: 1 hr 45 min

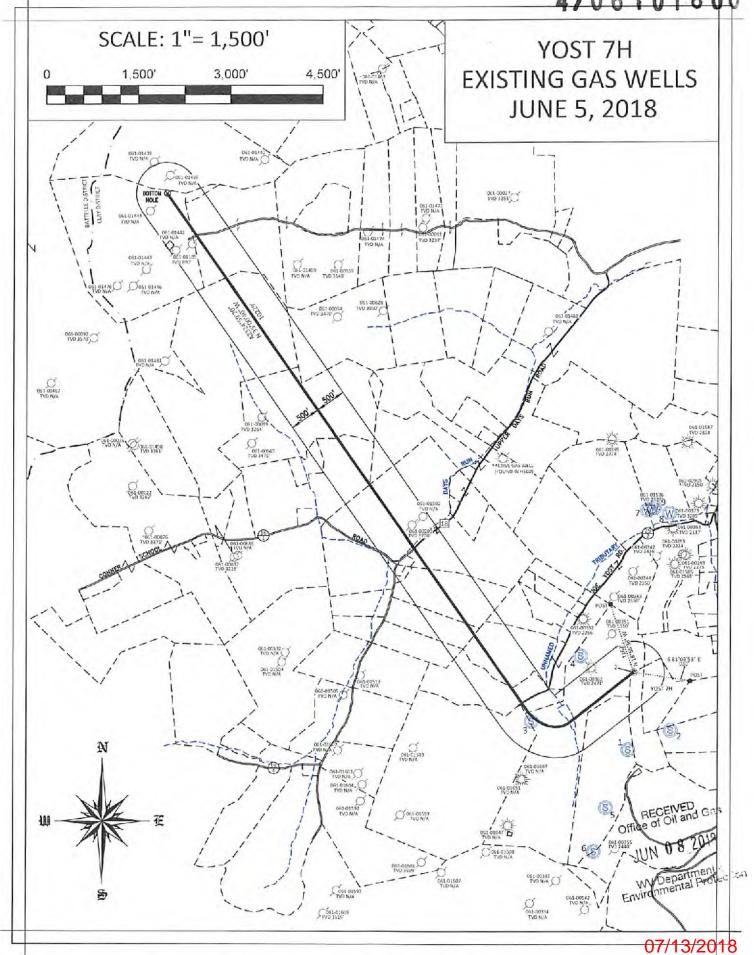
RECEIVED
Office of Oil and Gas

FEB 1 5 2018

WV Department of Environmental Protection

The cement data presented above represents the most up-to-date average cement properties for the given blend as of October 2017, under lab conditions. This data should be used as a reference and should not be considered to be absolute. The actual properties of the cement blend used on a job may differ somewhat based on variations in cement, fly ash and water sources.

Note: <u>For internal use only.</u> Technical information contained in this document is property of Universal Pressure Pumping, Inc., and is not to be distributed or copied. Customer information requests must be handled through the Chemical Technology Group.



Yost 7H Area of Review

API Number	Well Name	Well Number	Operator	Latitude (NAD 83)	Longitude (NAD 83)	TMP	TVD	Producing Formation
			Eastern Associated / Peabody Coal				3,350'	
47-061-01502	Tracy Chisler Hrs	F2-525	Company	39.648621	-80.230452	4-18-41	Bayard Sand	Plugged on 4-6-2006
47-061-00209	Tracy Chisler	1	Chisler, F. M.	39.648232	-80.231106	4-18-41	3200'	Drilled 01-04-1954
								Methane - Existing Mine
47-061-01185	Eastern Assoc Coal Co	4559	CNG Producing Co.	39.660366	-80.244901	4-18-04	890'	Vent
			Eastern Associated / Peabody Coal	···			3,190'	
47-061-01442	Norman Brookover	F2-320	Company	39.660651	-80.243977	4-18-04	Bayard Sand	Plugged on 4-30-2003
			Eastern Associated / Peabody Coal				3,450'	Plugging Permit Cancelled
47-061-00362	Daybrook Dev	F2-533	Company	39.641081	-80.220134	4-19-43.1	Bayard Sand	on 3-18-2016
			Eastern Associated / Peabody Coal				3,230'	
47-061-01444	Norman Brookover	F2-322	Company	39.662102	-80.246417	4-18-04	Bayard Sand	Plugged on 10-25-2002
	Blendine Eddy, et al						3.200'	
47-061-01459	(aka David Haught #6)	F2-319	Eastern Associated Coal Corp.	39.663699	-80.245296	4-18-01	Bayard Sand	Plugged on 10-14-2002
							3,500'	
47-061-01438	Blendine Eddy, et al	F2-318	Eastern Associated Coal Corp.	39.66428	-80.246229	4-18-01	Bayard Sand	Plugged on 07-1-2002

WW-9 (4/16)

API	Num	her	47 -	
ULI	LAMIN	UCI	4/-	

Operator's Well No. Yost 7H

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

FLUIDS/ CUTTINGS DISPO	OSAL & RECLAMATION PLAN	
Operator Name Northeast Natural Energy LLC	OP Code 494498281	
Watershed (HUC 10) Dunkard Creek	Quadrangle Blacksville, WV	
Do you anticipate using more than 5,000 bbls of water to comple Will a pit be used? Yes No V	te the proposed well work? 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)		
Reuse (at API Number unknown at this tir		
Off Site Disposal (Supply form WW- Other (Explain	9 for disposal location)	
Will closed loop system be used? If so, describe: Yes - See Atta	chment "A"	
Drilling medium anticipated for this well (vertical and horizontal))? Air, freshwater, oil based, etc. Air-Vertica//Oi	Based-Curve & Horizontal
-If oil based, what type? Synthetic, petroleum, etc. Syn	thetic Oil Based Mud	
Additives to be used in drilling medium? Organophilic Clay Viscosifiers.	Lime, Unsaturated Fatty Acids, CaCl, Barite, Emulsifiers, Mica L	CM, Water Loss Agents
Drill cuttings disposal method? Leave in pit, landfill, removed of	ffsite, etc. Removed Offsite - See Attachment "A"	
-If left in pit and plan to solidify what medium will be us	sed? (cement, lime, sawdust)	
-Landfill or offsite name/permit number? See Attachmen	it "A"	
Permittee shall provide written notice to the Office of Oil and Gar West Virginia solid waste facility. The notice shall be provided we where it was properly disposed.	s of any load of drill cuttings or associated watthin 24 hours of rejection and the permittee	aste rejected at any shall also disclose
I certify that I understand and agree to the terms and comon August 1, 2005, by the Office of Oil and Gas of the West Virg provisions of the permit are enforceable by law. Violations of a law or regulation can lead to enforcement action. I certify under penalty of law that I have personally explication form and all attachments thereto and that, based obtaining the information, I believe that the information is true penalties for submitting false information, including the possibility Company Official Signature Company Official Title, Regulatory Manager	examined and am familiar with the information on my inquiry of those individuals immediate, accurate, and complete. I am aware the ty of fine or imprisonment. STATE OF W. Justine Northeast Nati	n. I understand that the and/or other applicable ation submitted on this diately responsible for
Company Official Title Regulatory Manager	My Commission E	xpires Dec. 1, 2022, 20 Office of Oil and Gas
Subscribed and sworn before me this day of	January, 20 18	FEB 1 5 2018
- Justine 1950	Notary Public	
My commission expires 12 \ \ 2022		Environmen
		07/13/2018

Operator's Well No. Yost 7H

Proposed Revegetation Treatm	ent: Acres Disturbed 14.5	Prevegetation pl	unknown
Lime 3	Tons/acre or to correct to	pH	
Fertilizer type 10-20)-20		
Fertilizer amount_50	0	_lbs/acre	
Mulch_3	Tc	ons/acre	
		Seed Mixtures	
Tem	porary	Perma	nent
Seed Type	lbs/acre	Seed Type	lbs/acre
Orchard Grass	46	Orchard Grass	46
Red Clover	8	Red Clover	8
Tetraploid Perrenr	nial Rye 16	Tetraploid Perrennia	I Rye 16
	1777		
provided). If water from the pi acreage, of the land application	and proposed area for land ap t will be land applied, include n area.	Timothy - 15 and Ana optication (unless engineered plans include dimensions (L x W x D) of the pit, and	ling this info have been
Attach: Maps(s) of road, location, pit a provided). If water from the pi	and proposed area for land ap t will be land applied, include n area.	oplication (unless engineered plans inclu	ling this info have been
Attach: Maps(s) of road, location, pit a provided). If water from the pit acreage, of the land application Photocopied section of involve Plan Approved by:	and proposed area for land ap t will be land applied, include n area.	oplication (unless engineered plans inclu	ling this info have been
Attach: Maps(s) of road, location, pit a provided). If water from the pit acreage, of the land application Photocopied section of involve Plan Approved by:	and proposed area for land ap t will be land applied, include n area.	oplication (unless engineered plans inclu	ting this info have been dimensions (L x W), an
Attach: Maps(s) of road, location, pit a provided). If water from the pit acreage, of the land application Photocopied section of involve Plan Approved by:	and proposed area for land ap t will be land applied, include n area.	oplication (unless engineered plans inclu	ling this info have been dimensions (L x W), an

Attachment A to WW-9

Northeast Natural Energy LLC ("NNE") plans to utilize a closed loop process for its drilling of the Yost 7H 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.

Yost 7H 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)

RECEIVED
Office of Oil and Gas

FEB 1 5 2018



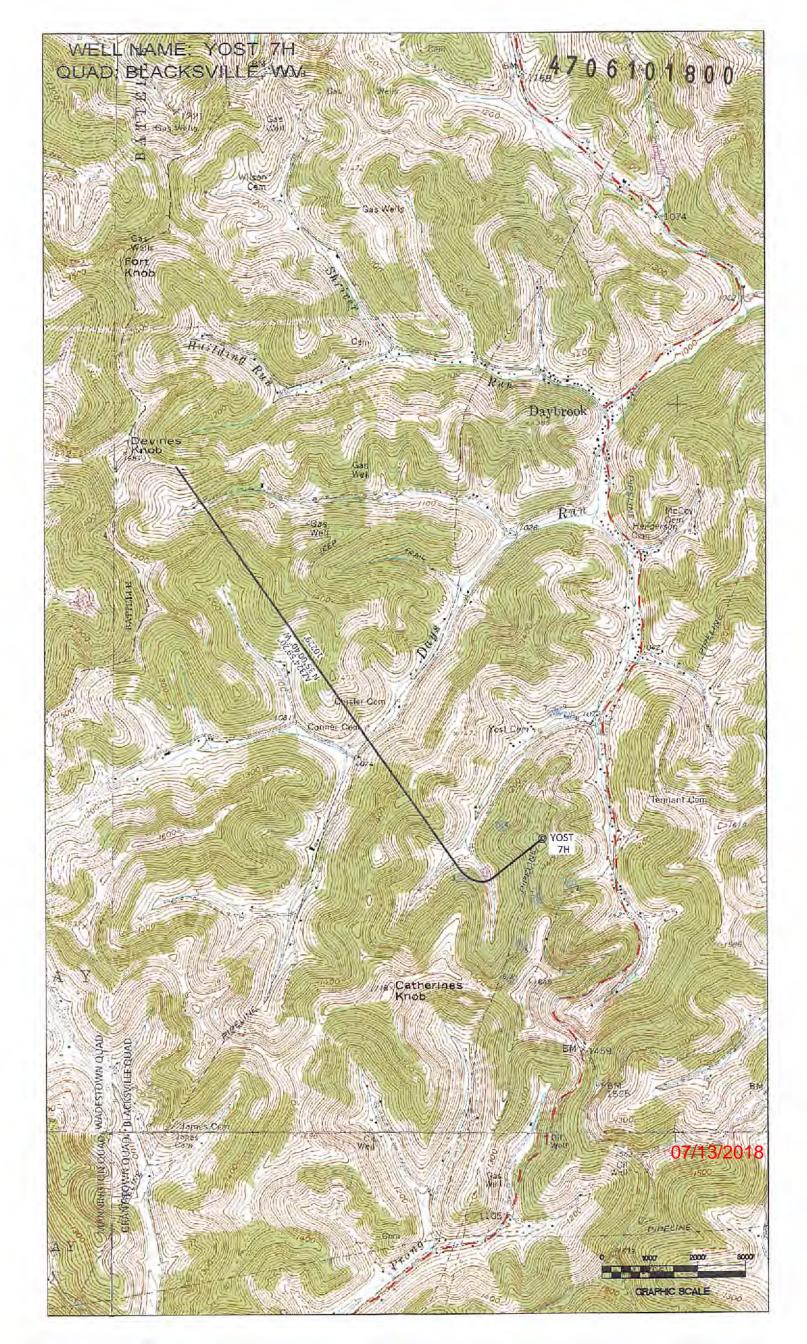
Yost 7H SITE SAFETY PLAN

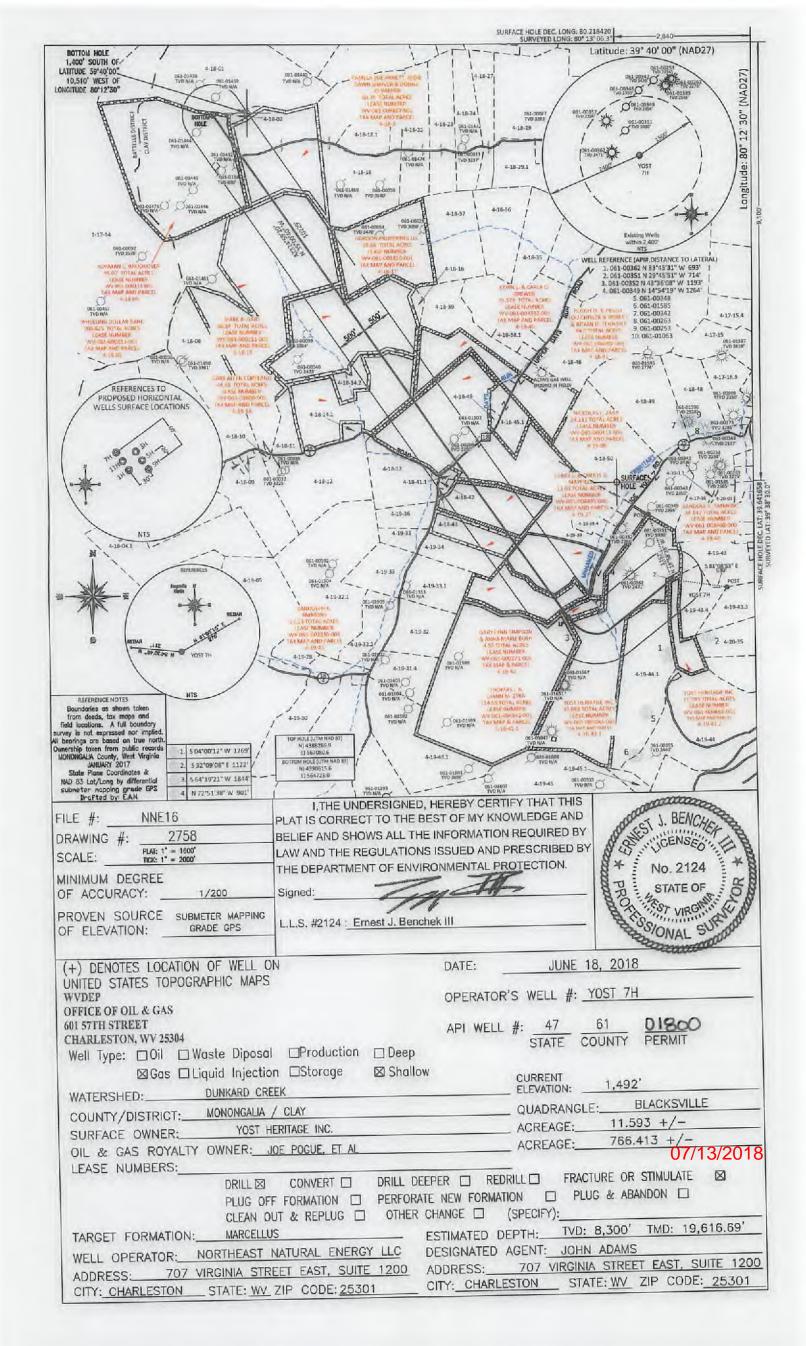
June 5, 2018

Mayord Konto

RECEIVED Office of Oil and Gas

WV Department of Protection Environmental Protection 07/13/2018





WW-6A1 (5/13) Operator's Well No. Yost 7H

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 Attachments

Office of

JUN 21

WV Depa'. Environmental Protection

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

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

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

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

Well Operator: Northeast Natural Energy LLC

By: Hollie M. Medley

Its: Regulatory Manager

Page 1 of 12

Office of Oil and Gas
JUN 2 1 2018

OPERATOR'S WELL NUMBER

YOST NORTH 7H

			_ W	V.Don
NNE LEASE NUMBER	LESSOR NAME	LESSEE NAME	ROYALTY LIVING	V Department WILE Protect
WV-061-000682-001	Joe Pogue	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-000682-002	Nancy K. Pogue Saurborn	Northeast Natural Energy LLC	0.125 or Greater	1447/835
VV-061-000682-003	Bryan D. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1449/310
VV-061-000682-004	Donald L. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1449/308
VV-061-000682-005	Clarence L. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1449/306
VV-061-000682-006	Donald Spencer Tennant	Northeast Natural Energy LLC	0.125 or Greater	1449/304
VV-061-000682-007	Julia Katheryn McKita	Northeast Natural Energy LLC	0.125 or Greater	1449/300
WV-061-000682-009	Thomas A. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1450/455
	Jean Unverdorben, attorney-in-fact for			
WV-061-000682-010	Esther L. Morris	Northeast Natural Energy LLC	0.125 or Greater	1450/457
WV-061-000682-011	Dorothy L. and Phillip Kollar	Northeast Natural Energy LLC	0.125 or Greater	1450/465
WV-061-000682-012	Robert Leon Pyles	Northeast Natural Energy LLC	0.125 or Greater	1450/463
WV-061-000682-013	John Robert and Victoria Ann Pyles	Northeast Natural Energy LLC	0.125 or Greater	
		N. d	0.135 Creater	1452/221
WV-061-000682-014	Charles H. Morris and Doris Murphy-Morris		0.125 or Greater	
WV-061-000682-015	James Morgan and Avie E. Pyles	Northeast Natural Energy LLC	0.125 or Greater	1453/228
	Wilma Gem, Donald Lee, Deborah Ann,			
NV-061-000682-016	Roger Keith Williams	Northeast Natural Energy LLC	0.125 or Greater	
VV-061-000682-018	Brian K. Taub	Northeast Natural Energy LLC	Deed	1458/684
VV-061-000682-019	Robert A. Morris	Northeast Natural Energy LLC	0.125 or Greater	
NV-061-000682-020	David Wayne Cassell	Northeast Natural Energy LLC	0.125 or Greater	
NV-061-000682-021	Pamela Ruth Spark Natho	Northeast Natural Energy LLC	0.125 or Greater	
VV-061-000682-022	James Lawrence Taub	Northeast Natural Energy LLC	Deed	1458/689
VV-061-000682-025	Karen Markle	Northeast Natural Energy LLC	0.125 or Greater	
VV-061-000682-030	Julia Katheryn McKita	Northeast Natural Energy LLC	Deed	1508/003
VV-061-000682-031	James E. Martin	Northeast Natural Energy LLC	0.125 or Greater	1503/659
VV-061-000682-032	Robert R. Martin	Northeast Natural Energy LLC	0.125 or Greater	1503/124
VV-061-000682-033	Donna Morris	Northeast Natural Energy LLC	Deed	1515/587
VV-061-000682-034	Charles M. and Deborah Spark	Northeast Natural Energy LLC	0.125 or Greater	1510/710
WV-061-000682-035	Gordon J. Goldthwaite	Northeast Natural Energy LLC	0.125 or Greater	1503/661
VV-061-000682-036	Janet Spark	Northeast Natural Energy LLC	0.125 or Greater	1503/540
WV-061-000682-037	Mildred Williams	Northeast Natural Energy LLC	0.125 or Greater	1503/792
WV-061-000682-038	Carol and Dwayne Broadhurst	Northeast Natural Energy LLC	0.125 or Greater	1503/794
VV-061-000682-039	Chad D. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1503/809
VV-061-000682-040	Lawrence and Sharon Morris	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-000682-041	Thomas Andrew and Rosemary Morris	Northeast Natural Energy LLC	0.125 or Greater	1506/431
WV-061-000682-042	Daniel J. Taub, Sr.	Northeast Natural Energy LLC	0.125 or Greater	1505/147
WV-061-000682-043	John F. Gensko	Northeast Natural Energy LLC	0.125 or Greater	
NV-061-000682-044	Sandra J. and Joseph Swartz	Northeast Natural Energy LLC	0.125 or Greater	
NV-061-000682-045	Mary Morris, f/k/a Mary E. Pisano	Northeast Natural Energy LLC	0.125 or Greater	
NV-061-000682-046	Tonya Billingsley	Northeast Natural Energy LLC	0.125 or Greater	
	Peter Eves	Northeast Natural Energy LLC	0.125 or Greater	
NV-061-000682-047		Northeast Natural Energy LLC	0.125 or Greater	
NV-061-000682-048	Gary Eves, Jr. Clarence Joseph Womer, Jr.	Northeast Natural Energy LLC	0.125 or Greater	1510/76
NV-061-000682-049			Deed	1515/583
NV-061-000682-050	Sandra Lou Mason	Northeast Natural Energy LLC	Deed	1517/135
NV-061-000682-051	Lloyd A. and Connie Taub	Northeast Natural Energy LLC	0.125 or Greater	1517/133
NV-061-000682-052	Paul H. and Barbra Gensko	Northeast Natural Energy LLC		
WV-061-000682-053	Roger E.and Marjie Goldthwaite	Northeast Natural Energy LLC	0.125 or Greater	1511/769
WV-061-000682-055	Rosemary Pogue Nancy K. Pogue Saurborn or James Ervin	Northeast Natural Energy LLC	Deed	1521/87
WV-061-000682-056	Saurborn	Northeast Natural Energy LLC	Deed	1516/0520
	David Wayne Cassell	Northeast Natural Energy LLC	Deed	1521/79
WV-061-000682-057	The Clarence Llyod Tennant Estate, by Betty		Deed	
WV-061-000682-058	Jo Tennant	Northeast Natural Energy LLC	Deed	1521/83
WV-061-000682-059	Twila Morris Novince	Northeast Natural Energy LLC	Deed	1532/380

JUN 2 1 2018

WV-061-003576-001	DWG Oil & Gas Acquisitions, LLC	NNE Properties LLC	Deed Env	YSODERS IMENTO
WV-061-000173-002	Walter Kevin and Maureen L. Huffman	Northeast Natural Energy LLC	0.125 or Greater	1431/204/ Protect
WV-061-000173-004	Judith Ann and Alan Munkittrick	Northeast Natural Energy LLC	0.125 or Greater	1431/206
	Lavere Josephine Mason a/k/a Lavere Jo			
WV-061-000173-007	Mason	Northeast Natural Energy LLC	0.125 or Greater	1431/184
WV-061-000173-011	Peggy A. Mason	Northeast Natural Energy LLC	0.125 or Greater	1437/836
WV-061-000173-019	Billie C. and Marjorie G. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1437/826
WV-061-000173-020	Byron J. and Phyllis Robsion	Northeast Natural Energy LLC	0.125 or Greater	1437/455
WV-061-000173-022	Margaret Anne Stiles	Northeast Natural Energy LLC	Deed	1516/0840
WV-061-000173-023	William M. Mason	Northeast Natural Energy LLC	Deed	1514/640
WV-061-000173-024	Betty Lou Tennant Straight	Northeast Natural Energy LLC	Deed	1514/644
WV-061-000173-025	Joyce Ann and Gene Hebb	Northeast Natural Energy LLC	Deed	1514/648
WV-061-000173-026	Clark D. Stiles	Northeast Natural Energy LLC	Deed	1514/636
WV-061-000173-027	Josephine S. and Zane L. Rush	Northeast Natural Energy LLC	Deed	1514/601
WV-061-000173-028	Frank D. and Dorothy M. Vassalo	Northeast Natural Energy LLC	Deed	1523/371
WV-061-000173-029	Pamela S. and Richard A. Poling	Northeast Natural Energy LLC	Deed	1517/0026
WV-061-000173-030	John D. and Frances B. Stiles	Northeast Natural Energy LLC	Deed	1514/616
WV-061-000173-031	Anita K. and Nicholas P. Furfari	Northeast Natural Energy LLC	Deed	1523/367
WV-061-000173-032	James Jay Vassalo	Northeast Natural Energy LLC	Deed	1523/363
WV-061-000173-033	Melanie Myers Key	Northeast Natural Energy LLC	Deed	1514/122
WV-061-000173-034	Carol J. and James E. Parsons	Northeast Natural Energy LLC	Deed	1516/0836
WV-061-000173-035	Mary Louise and Raymond Stiles	Northeast Natural Energy LLC	Deed	1517/0001
WV-061-000173-036	Dolores Jean Hockenberry	Northeast Natural Energy LLC	Deed	1510/657
VV 001 0001/3 030	Diane Marie Myers, f/k/a Diane Marie	Troitingst Hatara. Ellery ===		
WV-061-000173-037	Sypolt	Northeast Natural Energy LLC	Deed	1510/661
WV-061-000173-037	Thomas David Stiles	Northeast Natural Energy LLC	Deed	1515/569
WV-061-000173-039	Beth Ann and James A. Rouse	Northeast Natural Energy LLC	Deed	1515/0536
WV-061-000173-040	Gina L. and Ralph O. Smith	Northeast Natural Energy LLC	Deed	1520/298
WV-061-000173-041	Zachary L. Mason	Northeast Natural Energy LLC	0.125 or Greater	1566/283
WV-061-000173-042	Gregory C. Mason	Northeast Natural Energy LLC	0.125 or Greater	1566/202
WV-061-000173-042	Paulette Park	Northeast Natural Energy LLC	Deed	1574/538
WV-061-000173-044	Gordon E. Park	Northeast Natural Energy LLC	Deed	1574/545
WV-061-000173-045	Donna C. Miller	Northeast Natural Energy LLC	0.125 or Greater	1586/514
WV-061-000173-045	Connie C. Sutton	Northeast Natural Energy LLC		1589/245
WV-061-000173-046 WV-061-001059-001		Northeast Natural Energy LLC		1486/626
	Terrance W. and Joy L. Mason			1486/628
WV-061-001059-002	Gina Lou and Republic S. Frencier	Northeast Natural Energy LLC	0.125 or Greater 0.125 or Greater	
WV-061-001059-003	Debra L. and Bradley S. Frazier Beth Ann and James A. Rouse	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-001059-004		Northeast Natural Energy LLC		
WV-061-001059-006	Beverly Howard	Northeast Natural Energy LLC	Deed	1570/119
WV-061-001059-007	Sandra Lee Woods	Northeast Natural Energy LLC	Deed	1570/119
WV-061-003517-001	Quentin Dale Knight	Northeast Natural Energy LLC	Deed	1524/746
WV-061-003576-001	DWG Oil & Gas Acquisitions, LLC	NNE Properties LLC	Deed	1501/788
WV-061-003926-001	Reed Energy Services, LLC	Northeast Natural Energy LLC	Deed	1578/96
WV-61-001043-001	Reed Energy Services, LLC	Northeast Natural Energy LLC	Deed	1578/96
WV-61-001043-002	L.S. and Benitha Youst	South Penn Oil Company	0.125 or Greater	39/69
WV-061-004342-001	Randolph K. and Tamara S. Ammons	Northeast Natural Energy LLC		1575/542
WV-061-000171-005	Noah Charles and Ruby A. Ammons	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-000171-006	Lois Jean McCoy	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-000171-007	Amanda L. Wilson	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-000171-008	Freddie and Barbara L. McCoy	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-000171-010	Sandy L. Moore	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-000171-011	Timothy C. and Peggy Cale	Northeast Natural Energy LLC	Deed	1570/119
WV-061-004328-001	Stone Hill Minerals Holdings, LLC	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003460-000	Randolph K. and Tamara S. Ammons	West Augusta Resources, LLC	0.125 or Greater	
WV-061-004495-000	Gerry L. and Cheryl G. Mayfield	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003330-001	Sandra L. Moore	Northeast Natural Energy LLC	0.125 or Greater	-
WV-061-003330-002	Fred McCoy	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003330-004	Lois Jean McCoy	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003330-005	Sandra L. Moore	Northeast Natural Energy LLC	0.125 or Greater	1531/15

				Office of Oil and
		4706101	800	JIIN .
		4700101	1.	2 1 2018
WV-061-003330-006	Timothy C. and Peggy Cale	Northeast Natural Energy LLC	Deed Enviro	1570/119 1617/978 rote lin
WV-061-000111-001	EQT Production Company	Northeast Natural Energy LLC	Agreement	1617/9/78rot of
WV-061-004607-001	Robert Chisler	EQT Production Company	0.125 or Greater	1511/683
VV V-001 00+007 001	The Chisler Family Irrevocable Trust, Linda	Eq. (Todadan company		
WV-061-004607-002	Jo and Scott L. Chisler, Trustees	EQT Production Company	0.125 or Greater	1514/135
WV-061-003278-001	Chesapeake Appalachia LLC	Chesapeake Appalachia LLC	0.125 or Greater	
WV-061-003278-001	Statoil USA Onshore Porperties Inc.	*Statoil USA Onshore Properties	0.125 or Greater	
WV-061-003278-003	Chesapeake Appalachia LLC	Chesapeake Appalachia LLC	0.125 or Greater	
WV-061-003278-004	Statoil USA Onshore Porperties Inc.	*Statoil USA Onshore Properties	0.125 or Greater	
	Chesapeake Appalachia LLC	Chesapeake Appalachia LLC	0.125 or Greater	
WV-061-003278-005			0.125 or Greater	
WV-061-003278-006	Statoil USA Onshore Porperties Inc.	*Statoil USA Onshore Properties	0.125 or Greater	
WV-061-003332-001	Robin L. Libert	Northeast Natural Energy LLC		
WV-061-003332-002	Christina Stitchick	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-003	Jessica D. McAninch	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-004	David D. Yost	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-005	George Edward and Lanelle C. Stiles	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-006	Jody Lynn and Robert D. Smith	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-007	Diana L. and Gerald W. Fulps	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-008	Dennis L. Yost	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-009	Phillip D. and Melissa Yost	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-010	Richard Kyle Yost Jr.	Northeast Natural Energy LLC	0.125 or Greater	1505/393
WV-061-003332-011	Molly E. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1509/767
WV-061-003332-012	Randy D. Yost	Northeast Natural Energy LLC	0.125 or Greater	1505/499
WV-061-003332-013	Larry Lynn and Regina C. Yost	Northeast Natural Energy LLC	0.125 or Greater	1505/385
WV-061-003332-014	Ida M. Osecky f/k/a Ida M. Yost	Northeast Natural Energy LLC	0.125 or Greater	1505/489
WV-061-003332-015	Barry D. and Elizabeth M. Yost	Northeast Natural Energy LLC	0.125 or Greater	1503/546
WV-061-003332-016	Danny J. Yost	Northeast Natural Energy LLC	0.125 or Greater	1505/389
WV-061-003332-017	Peggy L. Phillips	Northeast Natural Energy LLC	0.125 or Greater	1505/177
WV-061-003332-018	Jill Renee and Alan K. Heldreth	Northeast Natural Energy LLC	0.125 or Greater	1503/538
WV-061-003332-019	Jim Fae and Robin R. Yost	Northeast Natural Energy LLC	0.125 or Greater	1532/388
WV-061-003332-020	Norma Jean and Gerald Wayne Stiles	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-021	Jack Lee and Margaret Jo Yost	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-022	Nancy A. and Ronnie E. Maggard	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-023	Scott Mcaninch	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-026	Connie Sharon and Daniel M. Copeland	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-027	Waynetta Jean Parker	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-027 WV-061-003332-028	Ellen R. Yost	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-028 WV-061-003332-029	Carrie M. Tennant	Northeast Natural Energy LLC	0.125 or Greater	
		Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-030	Betty Gail Sutphin	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-032	Charlotte Ann Cayavec	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-033	Michael Stitchick	<u> </u>		
WV-061-003332-034	Shirley L. Moore	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-035	Rhonda Tennant	Northeast Natural Energy LLC	0.125 or Greater	1532/590
	MC Mineral Company LLC, an Oklahoma			
WV-061-003311-001	Limited Liability Company	Chesapeake Appalachia LLC	0.125 or Greater	
WV-061-003332-024	Margaret Ann Berdine	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003332-025	William Robert Tennant	Northeast Natural Energy LLC	0.125 or Greater	
VV-061-003332-031	Robert M. Smith	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-001	Robert C. Filbey	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-002	Wilma Gem Williams	Northeast Natural Energy LLC	0.125 or Greater	
VV-061-003310-003	Ronald L. Filbey	Northeast Natural Energy LLC	0.125 or Greater	1498/604
	Barry Wayne and Shirley Marlene			
WV-061-003310-004	Hollandsworth	Northeast Natural Energy LLC	0.125 or Greater	1498/598
WV-061-003310-005	Gary R. Filbey	Northeast Natural Energy LLC	0.125 or Greater	1492/354
WV-061-003310-006	Judy and John Rose	Northeast Natural Energy LLC	0.125 or Greater	1500/466
WV-061-003310-007	Jane and Jon Evans	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-008	Cliff Wilson	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-009	Bennie Wilson	Northeast Natural Energy LLC	0.125 or Greater	1500/462
WV-061-003310-010	Julie A. and Larry Warshaw	Northeast Natural Energy LLC	0 125 or Greater	

WV-061-003310-010

Julie A. and Larry Warshaw

0.125 or Greater | 1501/502

Northeast Natural Energy LLC

WV-061-003310-011	Beulah and Edward H. Farley	Nouth cost Natural Engine 116	0 135 or Creator	nuna//department
WV-061-003310-011	Mary Virginia and Joseph L. Cole	Northeast Natural Energy LLC Northeast Natural Energy LLC	0.125 or Greater	1501/500 rote
WV-061-003310-013	Joseph Anthony Haught	Northeast Natural Energy LLC	0.125 or Greater	1502/603
WV-061-003310-016	W. Richard and Peggy Williams	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-018	Larry L. and Lana D. Rush	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-019	Tana D. and Robert S. Butler	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-019	Sue Ann Strickland	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-020	Charles Bradley and Denise Elizabeth Davis	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-021 WV-061-003310-022	Joyce Ann and Ronald Berga	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-022	Rebecca L. and Rodney R. Strahler	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-023	James Everett and Lisa W. Williams II	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-025	Robert Ora and Paula K. Wheeler	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-027	Karen Jean and Kenneth Taylor	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-027	Robin K. Walls, Scott T. and Tod A. Tuttle	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-028	Mary Jane Pemberton	Northeast Natural Energy LLC	0.125 or Greater	
W V-001-003310-023	Celeste M. Williams a/k/a Celeste M.	Northeast Natural Ellergy LCC	0.123 Of Greater	1302/730
WAY 061 002210 020	Frickleton	Northeast Natural Energy LLC	0.125 or Greater	1510/712
WV-061-003310-030	Ellen J. Smith Woodruff			
WV-061-003310-031		Northeast Natural Energy LLC Northeast Natural Energy LLC	0.125 or Greater 0.125 or Greater	
WV-061-003310-032	Jack L. and Joyce Gail Yost Charles R. and Donna Marie Miller		0.125 or Greater	
WV-061-003310-033		Northeast Natural Energy LLC		
WV-061-003310-034	Cheryl Lisabeth and Nelson Dale Gallagher	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-035	Donald L. and Nancy L. Miller Dennis Keith and Sherry L. Williams	Northeast Natural Energy LLC	0.125 or Greater 0.125 or Greater	
WV-061-003310-036		Northeast Natural Energy LLC		
WV-061-003310-038	Russell D. and Loretta Jo Yost	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-039	Sue W. and John Meade	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-041	Susan Lynette and Chester L. Michael	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-042	Mabel L. McAfee	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-043	Bruce M. and Shirley N. Tenannt	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-045	Wayne Tennant Jr.	Northeast Natural Energy LLC	0.125 or Greater	1310/80
MAT 004 002240 040	Mark B. Tennant a/k/a Basil Mark and	Nowth cost National Engine 11 C	0 13E or Crostor	1505/502
WV-061-003310-046	Cynthia M. Tennant	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-048	Daniel Gordon and Kristine A. Dinius	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-049	Donald Rex and Valerie R. Williams	Northeast Natural Energy LLC	0.125 or Greater	1509/548
	Martha T. Price a/k/a Martha Lee and Jack		0.435 6	1505/075
WV-061-003310-050	Edward Price	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-051	Betty C. Lyons	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-052	Kimberly Sue and Daniel Scott Brummage	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-053	James E. and Nancy Kallas	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-054	Roxana D. and Michael B. Chail	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-055	Nola M. Williams	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-056	Susan Lynn and Todd H. James	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-063	Charles Allan Filbey	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-064	Loretta Gayle Moore	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-065	James F. Williams	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-066	Kathleen A. Williams	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-067	Jean Williams	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-068	Bonnie Jo and Benjamin M. Statler	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-069	Glen A. Stiegemeier	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-070	John W. Stiegemeier	Northeast Natural Energy LLC	0.125 or Greater	1607/52
	Shirley Marlene and Barry Wayne			
WV-061-003312-001	Hollandsworth	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003312-002	Correll W. Cummins	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003324-001	Brian E. and Julie B. Davis	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003325-001	Leila Kimberly Wells Fournet	Northeast Natural Energy LLC	0.125 or Greater	1503/102
WV-061-003325-003	Donald Dean and Kathy Wheeler, Jr.	Northeast Natural Energy LLC	0.125 or Greater	1503/92
WV-061-003325-004	Dorothy A. Moore	Northeast Natural Energy LLC	0.125 or Greater	1503/104
WV-061-003325-005	David Lee and Laura Wells	Northeast Natural Energy LLC	0.125 or Greater	1502/756
WV-061-003325-006	Marilyn Jane Moore	Northeast Natural Energy LLC	0.125 or Greater	1504/768

		4/061013	5 0 0	II II.
WV-061-003325-008	Joyce Walls	Northeast Natural Energy LLC	0.125 or Greater	1502/748 1 2018
WV-061-003325-009	Susan R. Edwards	Northeast Natural Energy LLC	0.125 or Greater	1/30/8/94
WV-061-003325-010	Linda L. Barker	Northeast Natural Energy LLC	0.125 or Greater	1502/748 1 20/8 1502/94 1503/09/14 Pent of 1502/752
WV-061-003325-011	Adrian Kyle and Beverly T. Wells	Northeast Natural Energy LLC	0.125 or Greater	1502/752 Diectio
WV-061-003325-012	Rhonda E. and Richard K. Taylor		0.125 or Greater	
WV-061-003325-013	Charles J. and Karen Altamore	Northeast Natural Energy LLC	0.125 or Greater	1503/866
WV-061-003325-014	Carole C. and Guy S. Graziano, Jr.	Northeast Natural Energy LLC	0.125 or Greater	1503/858
WV-061-003325-015	Robert D. Gump, Jr. and Kelley S. Gump	Northeast Natural Energy LLC	0.125 or Greater	1503/819
WV-061-003325-016	Fred J. and Barbara Altamore	Northeast Natural Energy LLC	0.125 or Greater	1505/369
WV-061-003325-017	Joyce Walls	Northeast Natural Energy LLC	0.125 or Greater	1610/245
WV-061-003331-001	Jo and Benjamin M. Statler	Northeast Natural Energy LLC	0.125 or Greater	1502/599
WV-061-003342-001	Patricia and Richard E. Van Tassell	Northeast Natural Energy LLC	0.125 or Greater	1506/043
WV-061-003357-001	Wilda V. Wells	Northeast Natural Energy LLC	Deed	1516/0576
WV-061-003357-002	Alda Kate Wells	Northeast Natural Energy LLC	Deed	1516/0572
WV-061-003357-003	Reita Hall, c/o Hubert W. Wells	Northeast Natural Energy LLC	Deed	1520/294
	Bob Williams, a/k/a Robert Williams and			
WV-061-003481-001	Phyllis E. Williams	Northeast Natural Energy LLC	Deed	1521/31
WV-061-003481-002	Jane Eldred, a/k/a M. Jane and Loren Eldred	Northeast Natural Energy LLC	Deed	1524/750
WV-061-003561-001	Julie Anne and Larry A. Warshaw	Northeast Natural Energy LLC	Deed	1532/730
WV-061-003562-001	Gregory David and Kyle L. Williams	Northeast Natural Energy LLC	Deed	1532/734
WV-061-003709-001	Vance Williams	Northeast Natural Energy LLC	Deed	1541/387
WV-061-004620-001	Diana S. Walsh	Northeast Natural Energy LLC	0.125 or Greater	1597/166
WV-061-004620-002	Jeffrey L. Nicholson	Northeast Natural Energy LLC	0.125 or Greater	1597/168
WV-061-004620-003	Conrad K. Tenannt, Jr.	Northeast Natural Energy LLC	0.125 or Greater	1597/170
WV-061-004620-004	David Nicholson	Northeast Natural Energy LLC	0.125 or Greater	1597/172
WV-061-004620-005	Deborah A. and Ronald A. Haught	Northeast Natural Energy LLC	0.125 or Greater	1597/174
WV-061-004620-006	Linda Lee Brown	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-004620-007	Charlotta M. and John A. Simpson	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-004620-008	Joseph Nicholson	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-004620-009	James Nicholson	Northeast Natural Energy LLC		1602/83
WV-061-004693-001	Bernard L. Tennant, Sr.	Northeast Natural Energy LLC	0.125 or Greater	1613/535
WV-061-004693-002	Beulah G. and Edward H. Farley	Northeast Natural Energy LLC	Deed	1613/570
WV-061-004702-001	Robert C. Filbey	Northeast Natural Energy LLC	Deed	1605/317
WV-061-003310-037	Freddie W. and Norma J. Williams	Northeast Natural Energy LLC		1503/872
WV-061-003310-040	Jimmy Randall Tennant	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-044	Billy Ray and Brenda K. Tennant	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-047	Rodney Wayne and Pamela K. Tennant	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-051	Betty C. Lyons	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-054	Roxana D. and Michael B. Chail	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-057	Trisha Jones	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-058	Stephen A. and Sharon C. Jones	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-059	John C. and Sara Pauline Jones	Northeast Natural Energy LLC		1513/619
WV-061-003310-060	Thomas D. Jones	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-061	Janet D. Crabtree	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-003310-062	Loruma B. and David L. Brokaw	Northeast Natural Energy LLC	0.125 or Greater	1513/291
WV-061-003325-002	Patricia S. Phillips	Northeast Natural Energy LLC	0.125 or Greater	1502/701
WV-061-000111-001	EQT Production Company	Northeast Natural Energy LLC	Agreement	1617/378
WV-061-03660-005	Patricia JoAnn Wagner	Northeast Natural Energy LLC	0.125 or Greater	1539/518 1542/83
WV-061-03660-006	Mary Dawson	Northeast Natural Energy LLC	0.125 or Greater	1342/83
	The Revocable Trust Agreemenet of Randal M. Spragg, by Randall M. and Lisa M.			
WAY OCT 02660 007	,	Northeast Natural Energy LLC	0.125 or Greater	1551/93
WV-061-03660-007	Spragg, Trustees Leo Keith Tennant and Laurie M. Tennant	Northeast Natural Energy LLC	0.125 or Greater	
WV-061-03660-008	Gary A. Spragg	Northeast Natural Energy LLC		1564/364
WV-061-03660-009 WV-061-03660-010	Marion Emrod Tennant	Northeast Natural Energy LLC	0.125 or Greater	1559/260
WV-061-03660-010	Kim David Fritz and Nancy Fritz	Northeast Natural Energy LLC	0.125 or Greater	1551/131
WV-061-03660-012	Lisa Cortes	Northeast Natural Energy LLC	0.125 or Greater	1552/460
WV-061-03660-013	Jerry E. and Joyce Sims	Northeast Natural Energy LLC	0.125 or Greater	1559/262
WV-061-03660-014	Michael J. and Natalie Ann Eddy	Northeast Natural Energy LLC	0.125 or Greater	1559/266
		1		

Office of Oil and Gas

		470010		
WV-061-03660-015	James E. and Ronda S. Eddy	Northeast Natural Energy LLC	0.125 or Greater	1559/264
WV-061-03660-016	Eva L. and Robert Ellis	Northeast Natural Energy LLC	0.125 or Greater	1567/693
WV-061-03660-017	Janet Coleman	Northeast Natural Energy LLC	0.125 or Greater	1563/523
WV-061-03660-018	Sharon K. and Carl E. Schuster	Northeast Natural Energy LLC	0.125 or Greater	1563/521
WV-061-03660-019	Kent S. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1563/531
WV-061-03660-020	Mack Watkins	Northeast Natural Energy LLC	0.125 or Greater	1567/703
WV-061-03660-021	Jo Ann Watkins	Northeast Natural Energy LLC	0.125 or Greater	1563/529
WV-061-03660-022	Goldene B. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1563/533
WV-061-03660-023	Daniel T. Sims	Northeast Natural Energy LLC	0.125 or Greater	1563/519
WV-061-03660-024	Jacuelyn M. and Donald R. Halbrook	Northeast Natural Energy LLC	0.125 or Greater	1563/527
WV-061-03660-025	Sherry L. Harrison	Northeast Natural Energy LLC	0.125 or Greater	1563/525
WV-061-03660-026	Carol A. and David M. Luckey	Northeast Natural Energy LLC	0.125 or Greater	1564/473
WV-061-03660-027	Jean-Clare Sims Bohm	Northeast Natural Energy LLC	0.125 or Greater	1568/287
WV-061-03660-028	Philip J. and Vickie Sims	Northeast Natural Energy LLC	0.125 or Greater	1567/701
WV-061-03660-029	David Watkins	Northeast Natural Energy LLC	0.125 or Greater	1567/695
WV-061-03660-030	Connie and Wayne Geissinger	Northeast Natural Energy LLC	0.125 or Greater	1563/515
WV-061-03660-031	Sue Tennant	Northeast Natural Energy LLC	0.125 or Greater	1567/329
WV-061-03660-032	Judy E. and Robert Wilson	Northeast Natural Energy LLC	0.125 or Greater	1574/528
WV-061-03660-033	Joyce Sell	Northeast Natural Energy LLC	0.125 or Greater	1568/289
WV-061-03660-034	Robert D. and Janice Watkins	Northeast Natural Energy LLC	0.125 or Greater	1567/697
WV-061-03660-035	Lori and Gary Kirby	Northeast Natural Energy LLC	0.125 or Greater	1563/537
WV-061-03660-036	Neil P. and Michelle R. Eddy	Northeast Natural Energy LLC	0.125 or Greater	1567/699
WV-061-03660-037	Mark M. and Jean I. Tennant	Northeast Natural Energy LLC	Deed	1570/119
WV-061-03660-038	D. Ray and Barbara Tennant	Northeast Natural Energy LLC	0.125 or Greater	1567/335
WV-061-03660-039	ERP Federal Mining Complex, LLC	Northeast Natural Energy LLC	0.125 or Greater	1567/347
WV-061-03660-040	Donley Carr Main	Northeast Natural Energy LLC	0.125 or Greater	1567/337
WV-061-03660-041	Barbara and Dave Huber	Northeast Natural Energy LLC	0.125 or Greater	1567/333
WV-061-03660-042	Carl E. and Chevelle L. Swartz	Northeast Natural Energy LLC	0.125 or Greater	1567/343
WV-061-03660-043	Doug Watkins	Northeast Natural Energy LLC	0.125 or Greater	1567/341
WV-061-03660-044	Jan L. Tennant and Richard Cooper	Northeast Natural Energy LLC	Deed	1570/119
WV-061-03660-045	Joe S. and Karen Tennant	Northeast Natural Energy LLC	Deed	1570/119
WV-061-03660-046	Tommy D. Watkins	Northeast Natural Energy LLC	0.125 or Greater	1567/331
WV-061-03660-047	Marion Lavern Tennant	Northeast Natural Energy LLC	0.125 or Greater	1572/614
WV-061-03660-048	Stephen A. and Marcia Tennant	Northeast Natural Energy LLC	0.125 or Greater	1563/535
WV-061-03660-049	Sandra K. Krider	Northeast Natural Energy LLC	Deed	1596/445
WV-061-03660-050	Albert R. and Arta S. Fox	Northeast Natural Energy LLC	Deed	1596/522
WV-061-03660-051	Kyle F. and Anna M. Eddy	Northeast Natural Energy LLC	0.125 or Greater	1594/200
WV-061-03660-052	Kenneth R. and Natalie A. Eddy	Northeast Natural Energy LLC	0.125 or Greater	1594/331
WV-061-03660-053	James E. and Christina K. Benson	Northeast Natural Energy LLC	0.125 or Greater	1609/7
WV-061-03660-001	Robert W. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1538/417
WV-061-03660-002	Joseph B. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1538/439
WV-061-03660-003	Teresa Leigh Tennant	Northeast Natural Energy LLC	0.125 or Greater	1538/437
WV-061-03660-004	Nellie G. Tennant	Northeast Natural Energy LLC	0.125 or Greater	1538/286
WV-061-000111-001	EQT Production Company	Northeast Natural Energy LLC	Agreement	1617/378
WV-061-004617-001	Jodie Dawn Shriver	Northeast Natural Energy LLC	0.125 or Greater	1597/136
WV-061-004617-002	Pamela Sue Arnett	Northeast Natural Energy LLC	0.125 or Greater	1597/138
WV-061-004617-003	Donna Jo Varner	Northeast Natural Energy LLC	0.125 or Greater	1597/140
WV-061-000114-001	Shuman Inc.	Northeast Natural Energy LLC	0.125 or Greater	1625/598

RECEIVED
Office of Oil and Cas

JUN 2 1 2018

South Penn Oil Company Assignment DR 32/240 South Penn Oil Company South Penn Natural Gas Company Assingment DR 304/547 South Penn Natural Gas Company South Penn Oil Company Assignment DR 580/311 South Penn Oil Company merged with Pennzoil Company and United Gas Pennzoil United Inc. Assignment DR 672/665 Pennzoil United Inc. W. H. Allen Assignment DR 695/557 W. H. Allen Union Trust & Deposit Company Assignment DR 695/556 W.H. Allen and James A. Allen

4706101800

Edwin Associates, Inc. Assignment DR 754/594

Union Trust National Bank, as successor by conversion of Union Trust & Deposit Company Edwin Associates, Inc. Edwin Associates, Inc. J. T. Carson Assignment DR 754/600 J. T. Carson Thompson/Texas Associates Partnership Assignment

Thompson/Texas Associates Partnership, Thompson Pipe and Supply Company, Jack O. Thompson, Harold J. Arnsteen, Equidyne Investment Associates, Inc., individually and as partners and/or joint venturers in that entity known as Thompson/Texas Associates

DR 754/606

Partnership Mark Eddy Assignment AR 21/22

Beth Eddy, Debbie Eddy and Melissa Eddy

Assignment

AR 21/582

Beth Stewart, Debbie Morris and Melissa Matheny

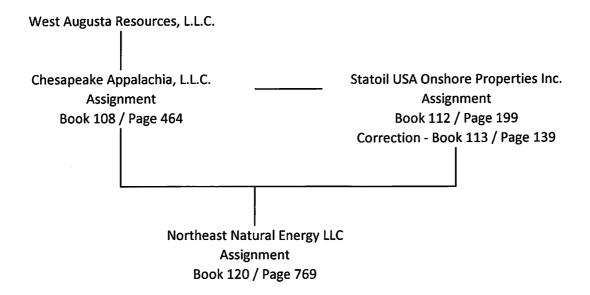
Mark V. Eddy Assignment AR 102/275

Mark V. Eddy & Betty Eddy (h&w) & Eddy Brothers

Northeast Natural Energy LLC Assignment AB 123/363

> RECEIVED Office of Oil and Gas

JUN 2 1 2018



RECEIVED
Office of Oil and Gas

JUN 2 1 2018

Chesapeake Appalachia, LLC.
And
Statoil USA Onshore Properties Inc.

Northeast Natural Energy LLC
Assignment
BK 120/769

RECEIVED Office of Oil and Gas

JUN 2 1 2018

WV Department of Environm 07/13/2018

EQT Production Company Agreement Book 1617/ Page 381

Northeast Natural Energy LLC

RECEIVED Office of Oil and Gas

JUN 2 1 2018



June 18, 2018

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

RE: Yost 1H, 7H, and 11H

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 Conner School Road (County Route 16/1), Upper Days Run Road (County Route 18), County Route 18/3 and Joe Yost Road (County Route 25/2) on the enclosed survey plats.

Sincerely,

Anthony Romeo

Manager - Land Operations

Enclosure

Date of Notice Certification: 02/13/2018

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

API No. 47-

	Operator's Well No. Yost 7H				
			Well Pad Na	ame: Yost	
	been given: ne provisions in West Virginia Code tract of land as follows:	§ 22-6A, the Operator has provi	ided the requ	ired parties w	vith the Notice Forms liste
State:	West Virginia		Easting:	567080.6	
County:	Monongalia	IIIM NAINX:		4388286.9	
District:	Clay	Public Road Acce		Daybrook Rd. 21	8
Quadrangle:	Blacksville	Generally used far	CONTRACTOR OF THE PARTY OF THE	Yost	*
Vatershed:	Dunkard	Generally used has	ar mame.	1031	
t has provide nformation re of giving the requirements Virginia Code	the secretary, shall be verified and sed the owners of the surface descriequired by subsections (b) and (c), so surface owner notice of entry to su of subsection (b), section sixteen of e § 22-6A-11(b), the applicant shall thave been completed by the applicant	bed in subdivisions (1), (2) an ection sixteen of this article; (ii) irvey pursuant to subsection (a of this article were waived in vi-	id (4), subset that the require, section to writing by the	ction (b), sec uirement was n of this arti- ne surface ow	ction ten of this article, t deemed satisfied as a resi cle six-a; or (iii) the noti wher; and Pursuant to Wo
that the Ope	West Virginia Code § 22-6A, the Operator has properly served the require ECK ALL THAT APPLY		is Notice Ce	rtification	OOG OFFICE USE ONLY
☐ 1. NO	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRE SEISMIC ACTIVITY WAS			☐ RECEIVED/
		SEISVIIC ACTIVITI WAS	CONDUCT	ED	NOT REQUIRED
■ 2. NO	TICE OF ENTRY FOR PLAT SURV				NOT REQUIRED RECEIVED
	TICE OF ENTRY FOR PLAT SURV		Y WAS CO	NDUCTED SE	1
		VEY of ☐ NO PLAT SURVE☐ NOTICE NOT REQUIRED NOTICE OF ENTRY FOR P	Y WAS CO ED BECAU LAT SURV	NDUCTED SE EY	RECEIVED/
■ 3. NO		VEY or NO PLAT SURVE NOTICE NOT REQUIRE NOTICE OF ENTRY FOR P WAS CONDUCTED or WRITTEN WAIVER B	Y WAS CO ED BECAU LAT SURV	NDUCTED SE EY	RECEIVED/
■ 3. NO	TICE OF INTENT TO DRILL or	VEY or NO PLAT SURVE NOTICE NOT REQUIRE NOTICE OF ENTRY FOR P WAS CONDUCTED or WRITTEN WAIVER B	Y WAS CO ED BECAU LAT SURV	NDUCTED SE EY	RECEIVED/ RECEIVED/ NOT REQUIRED

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-64-D Pursuant to West Virginia Code § 22-64-II(b), the Certification of Notice to the person may be made by affidavit of personal Service of Code of Code of Service of Code of Service of Code of Code

FEB 1 5 2018

WV Department of OFV 13/2018

WW-6AC (1/12)

Certification of Notice is hereby given:

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

Well Operator: Northeast Natural Energy LLC Address: 707 Virginia Street East, Suite 1200 By: Charleston, WV 25301 Hollie M. Medley Its: Facsimile: 304-241-5972 Regulatory Manager Email: hmedley@nne-llc.com Telephone: 304-212-0422

NOTARY SOFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Justine Bohon
Northeast Natural Energy LLC
48 Donley Street, Suite 601
Morgantown, WV 26501
My Commission Expires Dec. 1, 2022 Subscribed and sworn before me this

Notary Public

My Commission Expires

Oil and Gas Privacy Notice:

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

RECEIVED
Office of Oil and Gas

FEB 1 5 2018

WW-6A (9-13)

API NO. 47	
OPERATOR WELL NO.	Yost 7H
Well Pad Name: Yost	

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

Noti	ce Time Requirement: notice shall be provided no later that	an the filing date of permit application.	
	e of Notice: 1/29/2018 Date Permit Application Filed: 2/13 ce of:	/2018	
Ø	PERMIT FOR ANY WELL WORK CONSTRUCTION OF	PROVAL FOR THE AN IMPOUNDMENT OR PIT	
Deli	very method pursuant to West Virginia Code § 22-6A-10	O(b)	
		OD OF DELIVERY THAT REQUIRES A IPT OR SIGNATURE CONFIRMATION	
sedinates sedina	tered mail or by any method of delivery that requires a receipt of ment control plan required by section seven of this article, and the surface of the tract on which the well is or is proposed to be located gas leasehold being developed by the proposed well work, in the distribution of lessee, in the event the tract of land on which the well proposed seams; (4) The owners of record of the surface tract or track work, if the surface tract is to be used for the placement, constitution on the placement or pit as described in section nine of this article; (5) As a water well, spring or water supply source located within one ide water for consumption by humans or domestic animals; and used well work activity is to take place. (c)(1) If more than three ection (b) of this section hold interests in the lands, the applicant of the sheriff required to be maintained pursuant to section as ision of this article to the contrary, notice to a lien holder is not a purveyor or surface owner subject to notice and water testing	the well plat to each of the following persons: (1) The lated; (2) The owners of record of the surface tract or to find the surface tract is to be used for roads or other land and to subsection (c), section seven of this article; (3) The roposed to be drilled is located [sic] is known to be unacts overlying the oil and gas leasehold being developed ruction, enlargement, alteration, repair, removal or about thousand five hundred feet of the center of the well provided in the tenants in common or other co-owners of interests of the may serve the documents required upon the person decight, article one, chapter eleven-a of this code. (2) No notice to a landowner, unless the lien holder is the large rovide the Well Site Safety Plan ("WSSP") to the surface of the sur	owners of record of racts overlying the disturbance as The coal owner, aderlain by one or ed by the proposed andonment of any the applicant to ad which is used to in which the described in described in the otwithstanding any andowner. W. Va.
	pplication Notice		
	JRFACE OWNER(s) e: See Attachment	☑ COAL OWNER OR LESSEE Name: See Attachment	
	e: See Attachment	Address:	- -
Nam Addi	e:	☐ COAL OPERATOR Name:	
- Nam	URFACE OWNER(s) (Road and/or Other Disturbance) e: See Attachment ress:	☑ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s) Name: See Attachment	-
Nam	e:	Address:	-
Addı	ress:	OPERATOR OF ANY NATURAL GAS STOR	AGE RECEIVED
Nam	JRFACE OWNER(s) (Impoundments or Pits) e:	Name:Address:	FEB 1 5 2018
Addı	ress:		WV Department of Environmental Protection

WW-6A (8-13)

API NO. 47	
OPERATOR WELL NO). Yost 7H
Well Pad Name: Yost	

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.

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

WW-6A (8-13)

API NO. 47	_
OPERATOR WELL NO. Yost 7H	
Well Pad Name: Yost	

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

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

FEB 1 5 2018

WV Department of Environmental Protection

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

WW-6A (8-13) API NO. 47-___ OPERATOR WELL NO. Yost 7H
Well Pad Name: Yost

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

RECEIVED Office of Oil and Gas

FEB 1 5 2018

WV Department of Environmental Protection

WW-6A (8-13) 4706 101800

API NO. 47-___OPERATOR WELL NO. Yost 7H
Well Pad Name: Yost

Notice is hereby given by:

Well Operator: Northeast Natural Energy LLC

Telephone: 304-212-0422 Email: hmedley@nne-llc.com Address: 707 Virginia Street 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
MOTARY PUBLIC
STATE OF WEST VIRGINIA
Justine Bohon
Northeast Natural Energy LLC
48 Donley Street, Suite 601
Morgantown, WV 26501
My Commission Expires Dec. 1, 2022

Subscribed and sworn before me this 14 day of 2, 2018

My Commission Expires 12

Notary Pub

RECEIVED Office of Oil and Gas

FEB 1 5 2018

WV Department of Environmental Protection

Yost 7H

Surface Owner(s):

Yost Heritage Inc. 2656 Daybrook Rd. Fairview, WV 26570

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

Yost Heritage Inc. 2656 Daybrook Rd. Fairview, WV 26570

Rocky and Cathy J. Barr 167 Wilson Run Rd. Fairview, WV 26570

Gary D. Yost 2520 Daybrook Rd. Fairview, WV 26570

Freddie C. McCoy, Lois Jean, Amanda Wilson & Maudie Ruth Estate 6 2677 Mason Dixon HWY Core, WV 26541

4 Brothers LLC 153 Blue Goose Rd. Fairview, WV 26570

Coal Owner or Lessee:

ERP Federal Mining Complex, LLC 1044 Miracle Run Road Fairview, WV 26570

Surface Owner of Water Well and/or Water Purveyor:

Yost Heritage Inc. 2656 Daybrook Rd. Fairview, WV 26570

RECEIVED
Office of Oil and Gas

FEB 1 5 2018

WV Department of Environmental Protection

Pre-Drill Water Sample - Yost Well Pad

Source	Туре	Landowner	Easting (UTM NAD 83)	Northing (UTM NAD 83)	Latitude (NAD 83)	Longitude (NAD 83)
#1	Water Well	Yost Heritage Inc.	567169.27	4389101.22	39.6490681	-80.2171009
#2	Water Well	Yost Heritage Inc.	567134.7	4389089.01	39.6489608	-80.217505
#3	Spring	Yost Heritage Inc.	566817.03	4388363.41	39.6424484	-80.2212807
#4	Spring	Yost Heritage Inc.	567059.5	4387900.69	39.6382605	-80.2185019
#5	Spring	Yost Heritage Inc.	566578.37	4388035.06	39.6395087	-80.2240949
#6	Spring	Yost Heritage Inc.	567267.34	438800.55	39.6391439	-80.2160699

RECEIVED Office of Oil and Gas

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

	Requirement: N	otice shall be prov	rided at least SEVEN (7) days but no more	than FORTY-FIV	E (45) days prior to
entry Date of Notic	e: 7/22/2013	Date of Plan	ined Entry: 7/30/2013			
		West Virginia C	ode § 22-6A-10a			
□ PERSO	NAI 🔳 I	REGISTERED	☐ METHOD OF	DELIVERY THAT	Γ REOUIRES A	
SERVIC		MAIL		SIGNATURE CON		
on to the surfi but no more t beneath such owner of min and Sediment Secretary, wh	ace tract to condu- han forty-five day tract that has file- erals underlying s Control Manual ich statement sha	oct any plat surveys ys prior to such ent d a declaration pur such tract in the co and the statutes an	Prior to filing a permit appropriate to the surface of suant to section thirty-significant tax records. The nod rules related to oil and information, including the secretary.	is article. Such not wner of such tract; ix, article six, chap otice shall include I gas exploration a	tice shall be provided (2) to any owner or ter twenty-two of the a statement that cope and production may be	d at least seven days lessee of coal seams is code; and (3) any ies of the state Erosion be obtained from the
Notice is her	eby provided to:					
■ SURFAC	CE OWNER(s)		■ C	OAL OWNER OF	RLESSEE	
Name: See Alta	chment		Name	See Attachment		
			Addre			
Name:				CANAL ANNUA		
Address:			L N	IINERAL OWNER		
			_ Name:	See Attachment		
Name:			_ Addre	ss:		
Address			*please	attach additional forms	if necessary	
	est Virginia Cod on the tract of lan West Virginia Monorgalia		Public Ro	atitude & Longitu ad Access:		9 (UTM NAD 83)
Quadrangle:	Blacksville		Generally	used farm name:	Yost	
may be obtain Charleston, Wobtained from Notice is he	ned from the Secret V 25304 (304-9) the Secretary by reby given by:	etary, at the WV L 26-0450). Copics visiting <u>www.dep</u>	Manual and the statute Department of Environm of such documents or a .wv.gov/oil-and-gas/pag	ental Protection he dditional informati ges/default.aspx.	adquarters, located a non related to horizon	at 601 57 th Street, SE, ntal drilling may be RECEIVED Office of Oil and Gas
Well Operato	The Control of the Co	nergy LLC	Addres		t East, Suite 1200	FEB 1 5 2018
Telephone:	304.212.0422			Charleston, WV 2	501	
Email:	hmedley@nne-llc.c	om	Facsim	ile: 304.241.5972		WV Department of Environmental Protect
	Privacy Notic		al information, such as i	name, address and	telephone number, a	

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.

Surface Owner(s):

Yost Heritage Inc. 2656 Daybrook Rd. Fairview, WV 26570

Mineral Owner(s):

Yost Heritage Inc. 2656 Daybrook Rd. Fairview, WV 26570

Mabel Cummins 3737 Sawgrass Drive Titusville, FL 32780

Coal Owner(s):

Consolidated Coal Company 1000 CONSOL Energy Drive Canonsburg, PA 15317

Office of Oil and Gas
FEB 1 5 2018

WV Department of Environmental Protection

WW-6A4 (1/12)

Operator Well No. Yost 7H

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 Noti	Requirement: Notice shall be provided ce: 01/29/2018 Date P	at least TEN (10) days prior to filing a ermit Application Filed: 02/13/2018	permit application.	
Delivery me	thod pursuant to West Virginia Code §	§ 22-6A-16(b)		
☐ HAND	■ CERTIFIED MAIL			
DELIVI		EQUESTED		
receipt reque drilling a hor of this subsection mand if availab	V. Va. Code § 22-6A-16(b), at least ten of sted or hand delivery, give the surface of izontal well: <i>Provided</i> . That notice give tion as of the date the notice was provided by the surface of the waived in writing by the surface of the second in the surface of t	wher notice of its intent to enter upon the pursuant to subsection (a), section te ed to the surface owner: <i>Provided, how</i> wher. The notice, if required, shall included address of the operator and the operator	e surface owner's lar n of this article satisf ever, That the notice ude the name, address	nd for the purpose of fies the requirements requirements of this s, telephone number,
Name: Yost He		Name:		
Address: 265		Address:		
Fairview, WV 26	570			
State: County: District: Quadrangle:	West Virginia Monongalia Clay Blacksville, WV		567080.6 4388286.9 State Route 218 (Daybrook Yost	(Road)
Watershed:	Dunkard			
Pursuant to Pacsimile nur related to horocated at 60	Shall Include: West Virginia Code § 22-6A-16(b), thinber and electronic mail address of the rizontal drilling may be obtained from the 157th Street, SE, Charleston, WV 25304	operator and the operator's authorize he Secretary, at the WV Department of	d representative. Ad Environmental Prot	ditional information ection headquarters,
	reby given by: r: Northeast Natural Energy LLC	Authorized Representative:	Unilla Madiau Dagulata	n. Macanas
Address:	707 Virginia Street East, Suite 1200	Address:	Hallie Medley, Regulator 48 Donley Street, Suite	7.11
Charleston, WV		Morgantown, WV 26501	To Dollay Oliser, Odite	
Telephone:	304-212-0422	Telephone:	304-212-0422	
Email:	hmedley@nne-llc.com	Email:	hmedley@nne-llc.com	RECEIVED Office of Oil and Gas
acsimile:	304-241-5972	Facsimile:	304-241-5972	Office of On and
Oil and Ga	s Privacy Notice:			FEB 1 5 2018

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

WW-6A5 (1/12)

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

Date of Noti	ce: 01/29/2018 Date Perm		
Delivery me	thod pursuant to West Virginia Coo	de § 22-6A-16(c)	
CERTI	FIED MAIL	☐ HAND	
RETU.	RN RECEIPT REQUESTED	DELIVERY	
return receipt the planned of required to be drilling of a damages to tl (d) The notic of notice. Notice is her	requested or hand delivery, give the operation. The notice required by the provided by subsection (b), section horizontal well; and (3) A proposed he surface affected by oil and gas operes required by this section shall be given by provided to the SURFACE OW	surface owner whose land will be used this subsection shall include: (1) A copy ten of this article to a surface owner who surface use and compensation agreementations to the extent the damages are convento the surface owner at the address I VNER(s)	lication, an operator shall, by certified mail for the drilling of a horizontal well notice of of this code section; (2) The information see land will be used in conjunction with the ent containing an offer of compensation for appensable under article six-b of this chapter, isted in the records of the sheriff at the time
(at the addres	s listed in the records of the sheriff at	the time of notice):	
		None or	
	Gee Attachment	Name:	
Address: Notice is her	eby given:	Address:	well operator has developed a planned
Address: Notice is her Pursuant to V operation on State: County:	eby given: Vest Virginia Code § 22-6A-16(c), no	Address: tice is hereby given that the undersigned ose of drilling a horizontal well on the tr UTM NAD 83 Easting: Northing:	act of land as follows: 567087.8
Notice is her Pursuant to V operation on State: County: District:	eby given: Vest Virginia Code § 22-6A-16(c), no the surface owner's land for the purp West Virignia Monangalia	Address: tice is hereby given that the undersigned ose of drilling a horizontal well on the tr UTM NAD 83 Easting: Northing: Public Road Access:	act of land as follows: 567087.8 4388277.1
	eby given: Vest Virginia Code § 22-6A-16(c), no the surface owner's land for the purp West Virignia Monangalia Clay	Address: tice is hereby given that the undersigned ose of drilling a horizontal well on the tr UTM NAD 83 Easting: Northing:	act of land as follows: 567087.8 4388277.1 State Route 218 (Daybrook Road)
Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to V to be provide horizontal we surface affect information r	eby given: Vest Virginia Code § 22-6A-16(c), no the surface owner's land for the purp West Virignia Monongalia Clay Blacksville, WV Dunkard Shall Include: Vest Virginia Code § 22-6A-16(c), the d by W. Va. Code § 22-6A-10(b) to ell; and (3) A proposed surface use an ted by oil and gas operations to the eleted to horizontal drilling may be located at 601 57th Street, SE,	Address: tice is hereby given that the undersigned ose of drilling a horizontal well on the tr UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: is notice shall include: (1)A copy of this o a surface owner whose land will be ad compensation agreement containing a extent the damages are compensable unobtained from the Secretary, at the WV	act of land as follows: 567087.8 4388277.1 State Route 218 (Daybrook Road)
Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to V to be provide horizontal we surface affect information r headquarters, gas/pages/def	eby given: Vest Virginia Code § 22-6A-16(c), no the surface owner's land for the purp West Virignia Monongalia Clay Blacksville, WV Dunkerd Shall Include: Vest Virginia Code § 22-6A-16(c), the ed by W. Va. Code § 22-6A-10(b) to ell; and (3) A proposed surface use an ted by oil and gas operations to the eleted to horizontal drilling may be located at 601 57th Street, SE, Cault.aspx.	Address: tice is hereby given that the undersigned ose of drilling a horizontal well on the tr UTM NAD 83 Public Road Access: Generally used farm name: is notice shall include: (1)A copy of this o a surface owner whose land will be ad compensation agreement containing a extent the damages are compensable unobtained from the Secretary, at the WY Charleston, WV 25304 (304-926-0450)	act of land as follows: 567087.8 4388277.1 State Route 218 (Daybrook Road) Yost 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 V Department of Environmental Protection) or by visiting www.dep.wv.gov/oil-and-
Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to V to be provide horizontal we surface affect information rheadquarters,	eby given: Vest Virginia Code § 22-6A-16(c), no the surface owner's land for the purp West Virignia Monongalia Clay Blacksville, WV Dunkerd Shall Include: Vest Virginia Code § 22-6A-16(c), the ed by W. Va. Code § 22-6A-10(b) to ell; and (3) A proposed surface use an ted by oil and gas operations to the eleted to horizontal drilling may be located at 601 57th Street, SE, Cault.aspx.	Address: tice is hereby given that the undersigned ose of drilling a horizontal well on the tr UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: is notice shall include: (1)A copy of this o a surface owner whose land will be ad compensation agreement containing a extent the damages are compensable unobtained from the Secretary, at the WV	act of land as follows: 567087.8 4388277.1 State Route 218 (Daybrock Road) Yost 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 V Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-

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.

FEB 1 5 2018

WV Department of Environmental Protection

Yost 7H

Surface Owner(s):

Yost Heritage Inc. 2656 Daybrook Rd. Fairview, WV 26570

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

Yost Heritage Inc. 2656 Daybrook Rd. Fairview, WV 26570

Rocky and Cathy J. Barr 167 Wilson Run Rd. Fairview, WV 26570

Gary D. Yost 2520 Daybrook Rd. Fairview, WV 26570

Freddie C. McCoy, Lois Jean,
Amanda Wilson & Maudie Ruth Estate
2677 Mason Dixon HWY
Core, WV 26541

4 Brothers LLC 153 Blue Goose Rd. Fairview, WV 26570

Office of Oil and Gas
FEB 1 5 2018

WV Department of Environmental Protection

4706 401800

API NO. 47OPERATOR WELL NO. Yost 7H
Well Pad Name: Yost

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS OLUNTARY 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 trac West Virginia		llows: Easting:	557080.6	
County:	Wollongalia	JTM NAD 83	Northing:	4388285.9	
District:		ublic Road Ac		State Route 218 (Daybrook Road)	
Quadrangle: Watershed:	Blacksville, WV Dunkard	Generally used farm name:		Yost	
I lease theck	the box that applies				
ent					
. Todase officen	the ook that applies				
		FO	R EXECUT	ON BY A NATURAL PERSON	
□ SURFAC	CE OWNER	Sign	nature: M	Vol By Wast	
		Sigr Prin	nature: Ma t Name: Ga	Vist By infast	
■ SURFAC	CE OWNER	Sign Prin Date	nature: M t Name: Ga e:	Very 67 11 fast - 18	
■ SURFAC	CE OWNER CE OWNER (Road and/or Other Disturbance)	Sign Prin Date FOI Con	nature: Ga t Name: Ga e: 2-1 R EXECUTI	ON BY A CORPORATION, ETC.	
■ SURFAC □ SURFAC □ COAL C	CE OWNER CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits) WNER OR LESSEE	Sign Prin Date FOI Con By:	nature: Ga t Name: Ga e: 2-7 R EXECUTI	ON BY A CORPORATION, ETC.	
■ SURFAC □ SURFAC □ COAL C □ COAL C	CE OWNER CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits) WNER OR LESSEE	Sign Prin Date FOI Con By: Its:	nature: Ga t Name: Ga e: 2-7 R EXECUTI	ON BY A CORPORATION, ETC. RECEIVED Office of Oil and	

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

WW-6AW (1-12)

API NO 47-	
OPERATOR WELL NO.	Yost 7H
Well Pad Name: Yost	

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.

WW-6A and	ted above, and that I have received copies of a Ne attachments consisting of pages one (1) through	ouice of Application, an Ap	Named on Page WW-6A and the associated oplication for a Well Work Permit on Form the erosion and sediment control plan, if
State:	the well plat, all for proposed well work on the tra	Pastina	567087.8
County:	Monongalia	JTM NAD 83 Easting: Northing:	
District:	Clay	ublic Road Access:	State Route 218 (Daybrook Road)
Quadrangle:	Blacksville, WV	Generally used farm name:	Yost
Watershed:	Dunkard		
issued on thos	se materials.		I have no objection to a permit being
	the box that applies		TION BY A NATURAL PERSON
*Please check		FOR EXECUT	Ó
*Please check	the box that applies		Ó
*Please check SURFAC	the box that applies CE OWNER	Signature: Print Name: Date:	TION BY A NATURAL PERSON
*Please check SURFAC SURFAC SURFAC	the box that applies CE OWNER CE OWNER (Road and/or Other Disturbance)	FOR EXECUTE Signature: Print Name: Date: FOR EXECUTE Company:	TION BY A NATURAL PERSON TION BY A CORPORATION, ETC.
*Please check SURFAC SURFAC SURFAC	the box that applies CE OWNER CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits) OWNER OR LESSEE	FOR EXECUTE Signature: Print Name: Date: FOR EXECUTE	TION BY A NATURAL PERSON TION BY A CORPORATION, ETC. Bederal Mining Complex, LLC
*Please check SURFAC SURFAC SURFAC COAL C	the box that applies CE OWNER CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits) OWNER OR LESSEE	FOR EXECUTE Signature: Print Name: Date: FOR EXECUTE Company: FRR F6 By:	TION BY A NATURAL PERSON TION BY A CORPORATION, ETC. Bederal Mining Complex, LLC The Complex of the Complex

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory needed to comply with statutory or medical processes and telephone number, as part of our regulatory needed to comply with statutory or medical processes. needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Paul A. Mattox, Jr., P. E. Secretary of Transportation/ Commissioner of Highways

January 25, 2018

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 Yost Pad, Monongalia County Yost 7H

Dear Mr. Martin,

Earl Ray Tomblin

Governor

Northeast Natural Energy LLC will access this well site from an existing permit #04-2012-0876 issued to Yost Heritage Inc. for access to the State Road for a well site located off of West Virginia Route 218.

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 dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.

Dary K Clayton

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Hollie Medley

Northeast Natural Energy Corporation

CH, OM, D-4

File

RECEIVED Office of Oil and Gas

FEB 1 5 2018

WV Department of Environmental Protecti

Planned Additives to be used in Fracturing Stimulations

Trade Name	Purpose	Ingredients	Chemical Abstract Service Number (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
CI-14	Corrosion Inhibitor	Fatty Acids Methanol Olefin Polyoxyalkylenes Propargyl Alcohol	N.A. 67-56-1 N.A. N.A. 107-19-7
FRW-18	Friction Reducer	Hydrotreated Light Distillate	64742-47-8
GW-3LDF	Gelling Agent	Guar Gum Petroleum Distillate Blend	9000-30-0 CBI
Ferrotrol 300L	iron Control	Citric Acid	77-92-9
Sand, White, 40/70	Proppant	Crystalline Silica (Quartz)	14808-60-7
Sand, White, 100 mesh	Proppant	Crystalline Silica (Quartz)	14808-60-7
Scaletrol 720	Scale Inhibitor	Diethylene Glycol	111-46-6

YOST ALTERNATE ACCESS ROAD, AST PAD AND AS-BUILT CLAY DISTRICT, MONONGALIA COUNTY, WV OCTOBER 2014

TWO WORKING DAYS PRIOR TO EXCAVATION, THE CONTRACTOR MUST CONTACT THE WV ONE CALL SYSTEM, INC., 1-800-245-4848 SERIAL # 1210029702

OWNER



707 VIRGINIA STREET SUITE 1200

CHARLESTON, WV 25301

APPROVED WVDEP OOG 10/27/2014

PROJECT

MARION

TUCKER

SHUR BANDDIRH

POCAHONTAS

DODD-

BRAKTON

WEBSTER

RITCHIE

CLAY

MERCER

KANAWHA

MCDOWELL

CAL GILMER

LOCATION

HAMPSHIR

SHEET INDEX

1. TITLE SHEET 2-3. EVACUATION ROUTE/PREVAILING WINDS 4. E&S CONTROL LAYOUT OVERVIEW 5-9. E&S CONTROL LAYOUT 10. E&S CONTROL AND SITE PLAN OVERVIEW 11-15. E&S CONTROL AND SITE PLAN 16. AST PAD CROSS-SECTIONS AND EXISTING ACCESS ROAD PROFILE

17. PROPOSED ACCESS ROAD PROFILE 18-21. EXISTING ACCESS ROAD AND PROPOSED ACCESS ROAD CROSS-SECTIONS

22. STREAM CROSSINGS #1,#2 AND #3 CROSS-SECTIONS AND PROFILES 23-25, DETAIL SHEET 26. SITE RECLAMATION OVERVIEW 27-31. SITE RECLAMATION PLAN

PLANS PREPARED BY:

BOORD BENCHEK & ASSOCIATES, INC.

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



ANDREW BENCHEK

DATE

ORIGINAL PROJECT BOUNDARY: 14.5 ACRES PROPOSED PROJECT BOUNDARY ADDED: 15.1 ACRES TOTAL: 29.6 ACRES PROJECT BOUNDARY DELETED: 1.1 ACRES

TOTAL: 28.5 ACRES

API NUMBERS Yost 3H - 47-06101673 Yost 5H - 47-05101670

Yost 9H - 47-05101671

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

TITLE SHEET

YOST ALTERNATE ACCESS ROAD, AST PAD AND AS-BUILT CLAY DISTRICT, MONONGALIA COUNTY, WV

SHEET

COORDINATES

CENTER OF WELLS

(NAD 83) LAT: 39" 38' 29.9"

LONG: 80° 13' 05.0"

(NAD 27)

LAT: 39" 38" 29.6"

LONG: 80° 13' 05.7"

SITE ENTRANCE

(NAD 83) LAT: 39" 37' 46.5"

LONG: 80" 12" 53.8"

(NAD 27)

LAT: 39° 37' 46.2"

LONG: 80° 12' 54.6"

OF 31 Catherines Knop



