



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

Jim Justice , Governor
Austin Caperton , Cabinet Secretary
www.dep.wv.gov

Friday, November 03, 2017
WELL WORK PERMIT
Horizontal 6A / New Drill

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

Re: Permit approval for MEPCO 16H
47-061-01790-00-00

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: MEPCO 16H
Farm Name: MEPCO LLC
U.S. WELL NUMBER: 47-061-01790-00-00
Horizontal 6A / New Drill
Date Issued: 11/3/2017

Promoting a healthy environment.

11/03/2017

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

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

PERMIT CONDITIONS

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

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

1) Well Operator: NORTHEAST NATURAL ENERGY LLC 494498281 MONONGALIA CLAY BLACKSVILLE
Operator ID County District Quadrangle

2) Operator's Well Number: MEPCO 16H Well Pad Name: MEPCO

3) Farm Name/Surface Owner: MEPCO LLC Public Road Access: CR 29/7

4) Elevation, current ground: 1452.74' Elevation, proposed post-construction: 1424.00'

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

(b) If Gas Shallow X Deep NA
Horizontal X

6) Existing Pad: Yes or No NO *MJK 10/5/2017*

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
MARCELLUS; 8,222'; 103'; 3600 PSI

8) Proposed Total Vertical Depth: 8,222'

9) Formation at Total Vertical Depth: MARCELLUS

10) Proposed Total Measured Depth: 16,907.61'

11) Proposed Horizontal Leg Length: 7,210'

12) Approximate Fresh Water Strata Depths: 50', 1,307'

13) Method to Determine Fresh Water Depths: DRILLER'S LOG FROM OFFSET WELLS

14) Approximate Saltwater Depths: 1,947', 2,589'

15) Approximate Coal Seam Depths: 662', 1,305'

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

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

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

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18)

CASING AND TUBING PROGRAM

TYPE	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
Conductor	24"	NEW	NA	52.78	40'	40'	CTS
Fresh Water	13 3/8"	NEW	J-55	54.6	1,423'	1,400'	CTS
Coal							
Intermediate	9 5/8"	NEW	J-55	40	2,680'	2,650'	CTS
Production	5 1/2"	NEW	P-110	20	16,907.61'	16,877.61'	3,927 CU. FT.
Tubing	2 3/8"	NEW	P-110	4.7	NA	8,500'	NA
Liners							

MDK 10/5/2017

TYPE	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Anticipated Max. Internal Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
Conductor	24"	30"	.375"	415		4,500 PSI GROUT	NA
Fresh Water	13 3/8"	17 1/2"	.38"	2,760	2,000	CLASS A	1.23
Coal							
Intermediate	9 5/8"	12 1/4"	.395"	3,950	3,000	CLASS A	1.3
Production	5 1/2"	8 3/4"	.361"	12,530	9,700	50:50 POZ	1.21
Tubing	2 7/8"	NA	.217"	1,570	3,600	NA	NA
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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

Drilling and completion of a horizontal Marcellus well. The well will be drilled on air to an approximate depth of 6,000' TVD/MD. The well will then be horizontally drilled on fluid from KOP to approximately 8,222' TVD / 16,907.61' MD along a 147 degree azimuth.

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

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

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 23.18

22) Area to be disturbed for well pad only, less access road (acres): 7.07

23) Describe centralizer placement for each casing string:

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

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

Surface string cement will be a Class A + 3% bwoc Calcium Chloride Fresh Water blend. Intermediate string cement will be a Class A Cement + 0.3% bwoc Calcium Chloride + Fresh Water. Production string cement will be (50:50) Poz (Fly Ash):Type I Cement with a gas migration additive.

25) Proposed borehole conditioning procedures:

Surface string will use a 35.0 bbls Gel Pill + LCM + 25 lbs Cello Flake + 20 lbs/bbl Bentonite + 80 lbs Fed Seal @ 8.4 ppg & 10 bbls fresh water spacer prior to cement. Intermediate string will use a 35.0 bbls Gel Pill + LCM + 25 lbs Cello Flake + 20 lbs/bbl Bentonite + 80 lbs Fed Seal @ 8.4 ppg & 10 bbls fresh water spacer prior to cement. Production string will use a 50.0 bbls SealBond 25 + 1 gal/50 US-40 + 275 lbs/bbl Barite, Bulk + 1 gal/bbl SS-2 @ 13.5 ppg spacer prior to cement.

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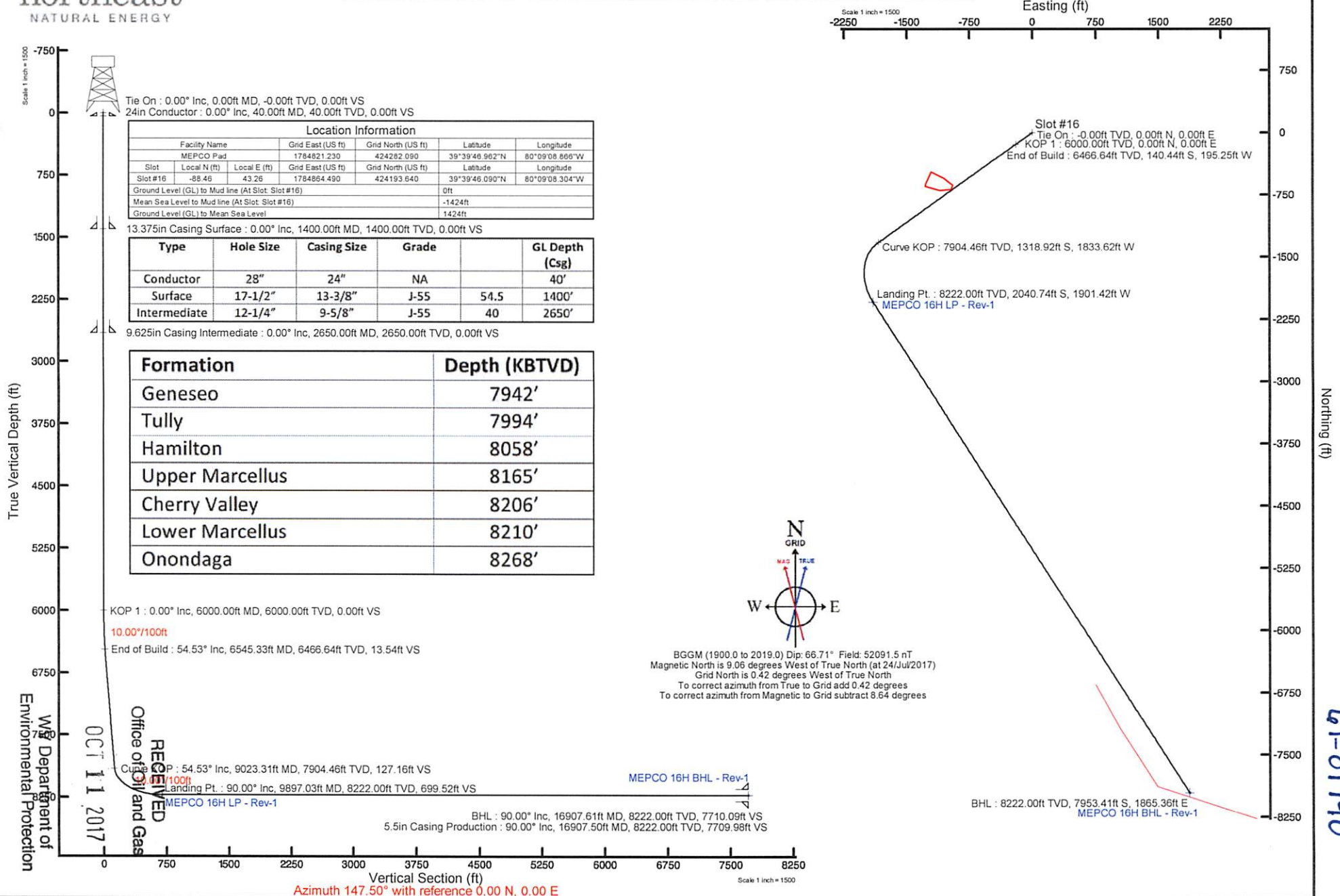
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*Note: Attach additional sheets as needed.

NORTHEAST NATURAL ENERGY, LLC

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

Slot: Slot #16
 Well: MEPCO LLC 16H
 Wellbore: MEPCO LLC 16H PWB



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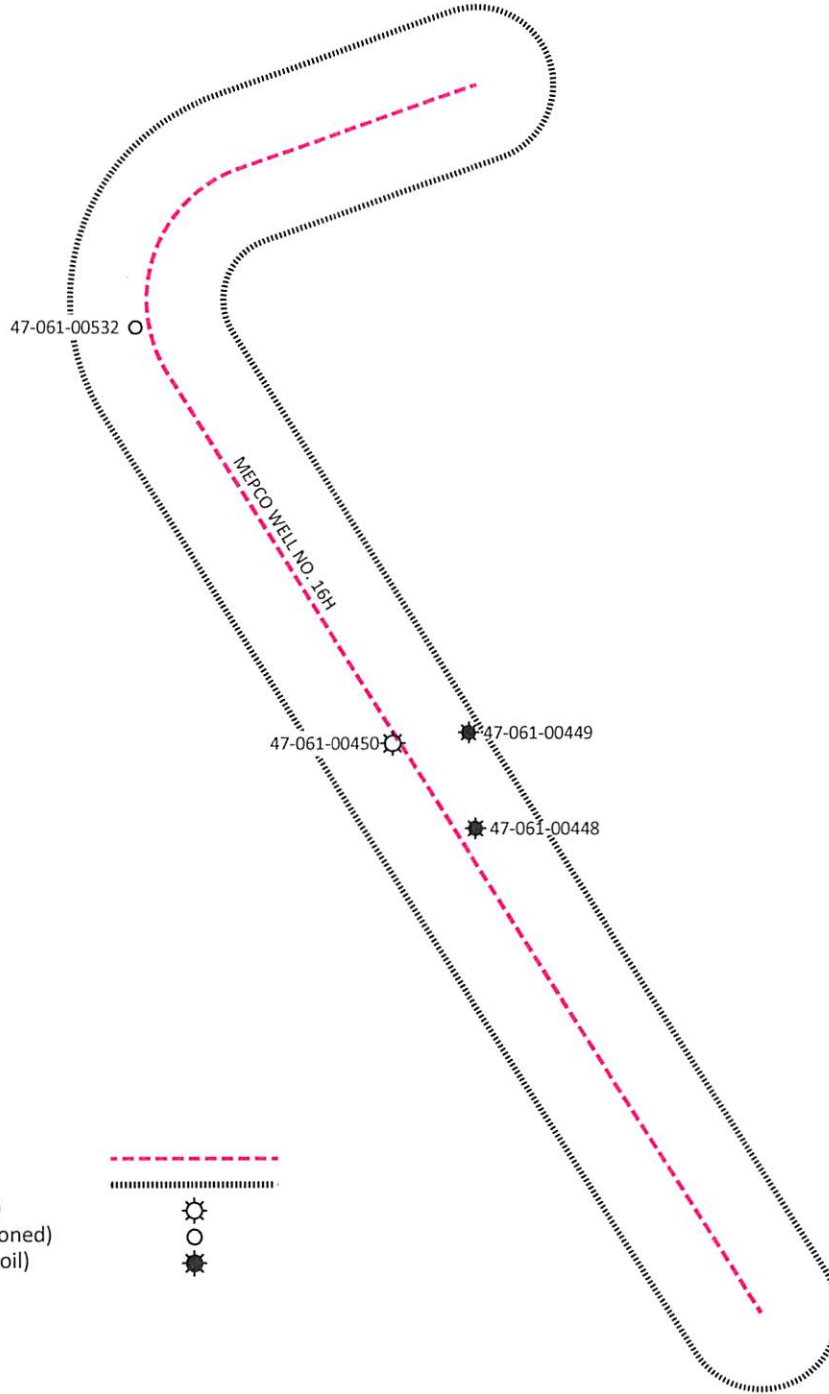
61-01796

Azimuth 147.50° with reference 0.00 N, 0.00 E

61-01790

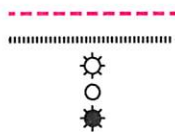


NORTH

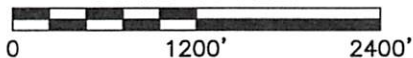


LEGEND

- PROPOSED LATERAL
- 500' LATERAL OFFSET
- EXISTING WELL (active)
- EXISTING WELL (abandoned)
- EXISTING WELL (active oil)



SCALE IN FEET



Civil & Environmental Consultants, Inc.

600 Marketplace Ave · Suite 200 · Bridgeport, WV 26330
 Ph: 304.933.3119 · Fax: 304.933.3327
 www.cecinc.com

NORTHEAST NATURAL ENERGY LLC
 MEPCO LLC
 CLAY DISTRICT, MONONGALIA COUNTY
 WEST VIRGINIA

MEPCO WELL 16H
 AREA OF REVIEW

DRAWN BY: LDM	CHECKED BY: DMY	APPROVED BY: DEM	FIGURE NO.:
DATE: SEPTEMBER 27, 2017	DWG SCALE: 1" = 1,200'	PROJECT NO: 150-445	11/03/2017

P:\2015\150-445\Survey\Draw\Well Plats\FINAL PLATS\AREA OF REVIEW\South\150445-SRV-MEPCO WELL 16H AOR - LONG.dwg\MEPCO 16H AOR} LS:(9/27/2017 -- Imoody) -- LP: 9/27/2017 2:57 PM

61-01790

AREA OF REVIEW
MEPCO 16H

UNIT (API NUMBER)	WELL NAME	WELL NUMBER	OPERATOR	WV DEP STATUS	TD	GROUND ELEVATION	Comments
4706100532	NANCY TENNANT	4	CONSOLIDATION COAL COMPANY	ABANDONED	2134'	1179'	Permit to Plug 8/24/2014
4706100450	J.S.WRIGHT	4	NNE RESOURCES LLC	ACTIVE	2347'	UNKNOWN	
4706100449	J.S.WRIGHT	3	NNE RESOURCES LLC	ACTIVE OIL	2262'	1379'	
4706100448	J.S.WRIGHT	2	NNE RESOURCES LLC	ACTIVE OIL	2220'	1333'	



61-01790 HGA

Received
8/16

October 5, 2017

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

Re: MEPCO 12H and 16H Application Revisions

Dear Permit Reviewer,

Northeast Natural Energy LLC ("NNE") would like to request revisions to its proposed MEPCO 12H and 16H applications currently being reviewed. NNE has lengthened the horizontal well bore of each well to allow for more efficient development of the permitted MEPCO Pad.

Please find enclosed with this request revised WW-6B Forms, WW-6A1 Forms and Attachments, Site Safety Plans, Well Bore Schematics, Area of Review Maps and Spreadsheets, and Mylar Plats.

Should you have any questions please contact me at 304.212.0422 or by email at hmedley@nne-llc.com.

Sincerely,

A handwritten signature in blue ink that reads 'Hollie M. Medley'.

Hollie M. Medley
Regulatory Manager

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WW-9
(2/15)

API Number 47 - _____ - _____
Operator's Well No. MEPCO 16H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name NORTHEAST NATURAL ENERGY LLC OP Code 494498281

Watershed (HUC 10) JAKES RUN OF DUNKARD CREEK Quadrangle BLACKSVILLE 670779

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No

Will a pit be used? Yes No

If so, please describe anticipated pit waste: NA

Will a synthetic liner be used in the pit? Yes No If so, what ml.? NA

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number UNKNOWN AT THIS TIME, TBD)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Will closed loop system be used? If so, describe: YES, PLEASE SEE ATTACHMENT "A"

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. AIR-VERTICAL; OIL BASED-CURVE & HORIZONTAL

-If oil based, what type? Synthetic, petroleum, etc. SYNTHETIC OIL BASED MUD

Additives to be used in drilling medium? ORGANOPHILIC CLAY VISCOSIFIERS, LIME, UNSATURATED FATTY ACIDS, CaCl, BARITE, EMULSIFIERS, MICA LCM, WATER LOSS AGENTS

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. REMOVED OFFSITE - PLEASE SEE ATTACHMENT "A"

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) _____

-Landfill or offsite name/permit number? PLEASE SEE ATTACHMENT "A"

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

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

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

Company Official Signature Hollie M Medley
Company Official (Typed Name) HOLLIE M MEDLEY
Company Official Title REGULATORY MANAGER



Subscribed and sworn before me this 10th day of August

Shana Kennedy
Notary Public

My commission expires 12/29/21

61-01790

Form WW-9

Operator's Well No. MEPCO 16H

NORTHEAST NATURAL ENERGY LLC

Proposed Revegetation Treatment: Acres Disturbed 12.80 Prevegetation pH 5-7

Lime 2 Tons/acre or to correct to pH 7

Fertilizer type 19-19-19

Fertilizer amount 300 lbs/acre

Mulch 2 Tons/acre

4706101790

Seed Mixtures

Temporary

Permanent

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

Seed Type	lbs/acre
Orchard Grass	46
Red Clover	8
Tetraploid Perennial Rye	16
Timothy 15 Annual Rye 1	

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: _____

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Title: Inspector

Date: 8/10/2017

Field Reviewed? () Yes () No

11/03/2017

Attachment A to WW-9

Northeast Natural Energy LLC (“NNE”) plans to utilize a closed loop process for its drilling of the MEPCO 16H 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.

MEPCO 16H Drill Cuttings will be taken to disposal at one or more of the following disposal/approved waste facilities, unless listed facilities are no longer approved to accept waste at time of disposal:

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

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

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

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northeast
NATURAL ENERGY

61-01790

**MEPCO 16H
SITE SAFETY PLAN**

JULY 27, 2017

MSK
8/10/2017

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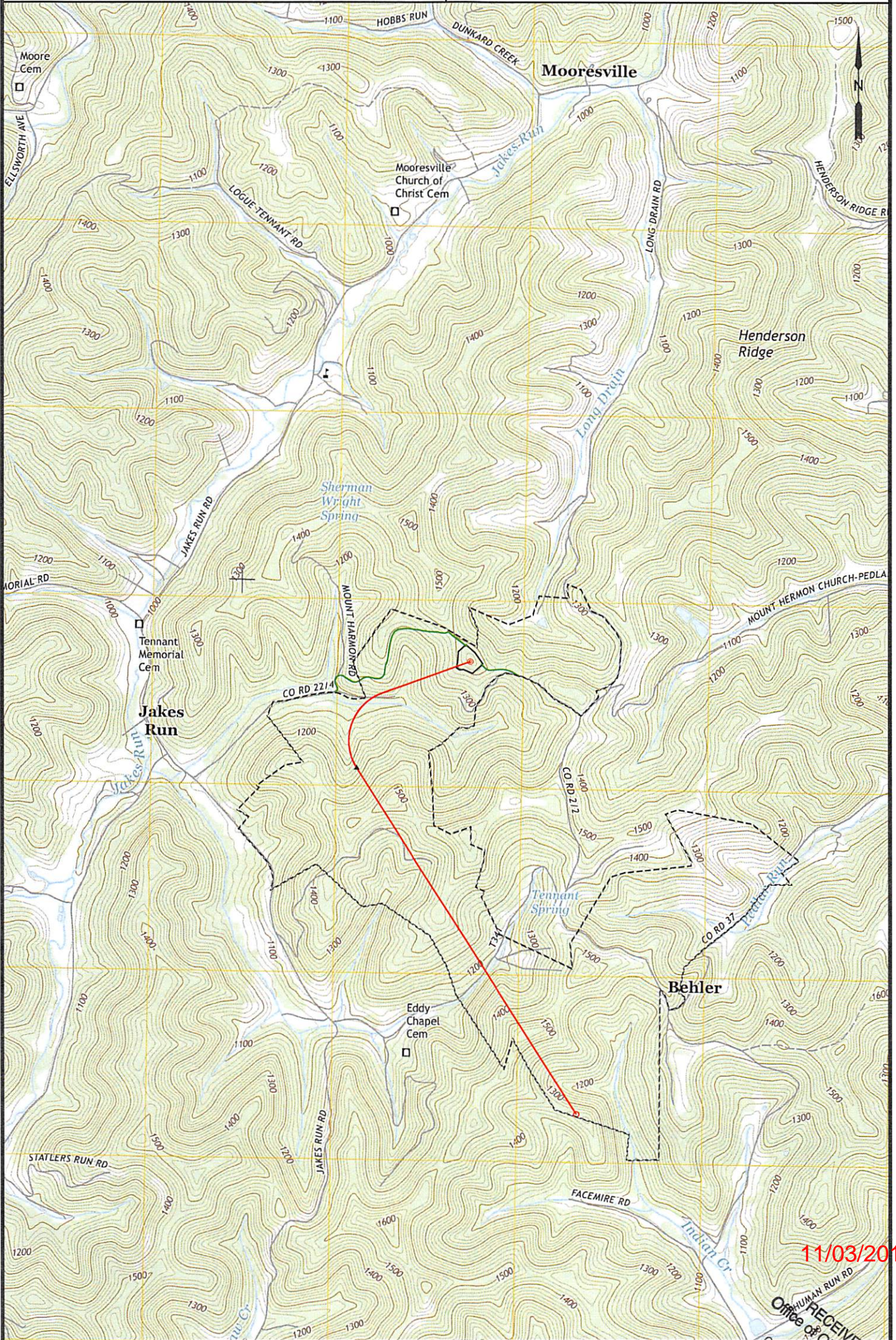
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NORTHEAST NATURAL ENERGY LLC
MEPCO WELL NO. 16H
LEASE NO. WV-061-003478-001

600 Marketplace Avenue, Suite 200
Bridgeport, WV 26330
Toll Free 855-488-9539
Fax 304-933-3327

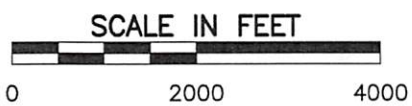


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PROPOSED BOTTLING PLANT
PROPOSED LANDING

SURFACE HOLE SURVEYED LONGITUDE -80°09'08.30"
 BOTTOM HOLE SURVEYED LONGITUDE -80°08'43.72"

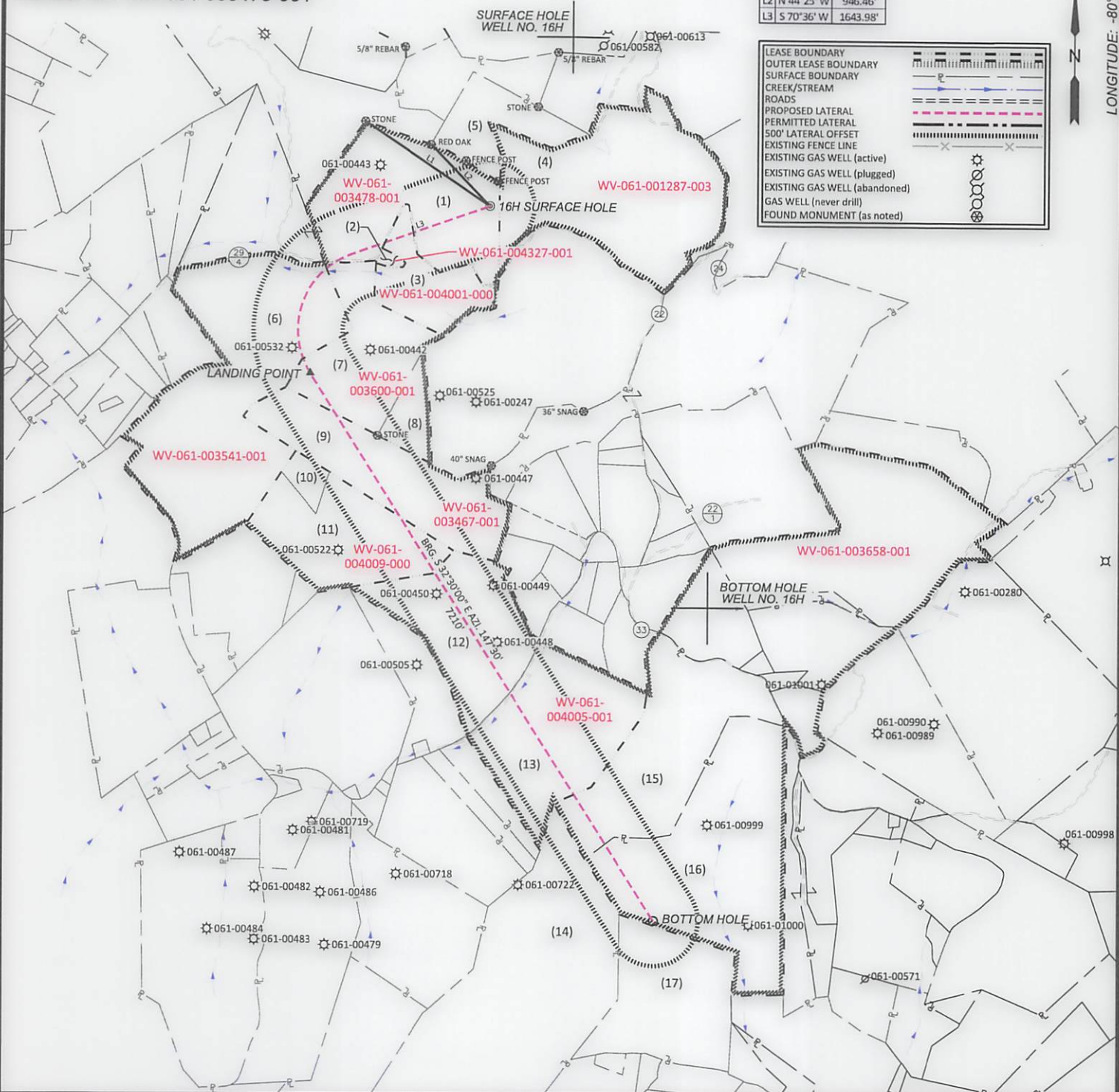
7,687'
 5,767'

LATITUDE: 39°40'00"

NORTHEAST NATURAL ENERGY LLC
 MEPCO WELL NO. 16H
 LEASE NO. WV-061-003478-001

ID	BEARING	DISTANCE
L1	N 56°29' W	1681.86'
L2	N 44°25' W	946.46'
L3	S 70°36' W	1643.98'

SYMBOL	DESCRIPTION
	LEASE BOUNDARY
	OUTER LEASE BOUNDARY
	SURFACE BOUNDARY
	CREEK/STREAM
	ROADS
	PROPOSED LATERAL
	PERMITTED LATERAL
	500' LATERAL OFFSET
	EXISTING FENCE LINE
	EXISTING GAS WELL (active)
	EXISTING GAS WELL (plugged)
	EXISTING GAS WELL (abandoned)
	GAS WELL (never drill)
	FOUND MONUMENT (as noted)



LONGITUDE: -80°07'30"
 9,347'
 SURFACE HOLE SURVEYED LATITUDE 39°39'46.09"
 BOTTOM HOLE SURVEYED LATITUDE 39°38'27.62"

600 Marketplace Avenue, Suite 200
 Bridgeport, WV 26330
 Toll Free 855-488-9539
 Fax 304-933-3327



Civil & Environmental Consultants, Inc.

DATE SEPTEMBER 27, 2017

SCALE 1" = 1600' ACCURACY 1:2500

OPERATORS 16H
 WELL No. 47 - 061 - 01790 H6A

API No.
 TYPE OF WELL:

GAS:
 Production Storage *Deep *Shallow

PROPOSED WORK ON LOCATION:

Drill Drill Deeper Redrill Convert
 Fracture/ Stimulate *Plug off to Formation
 Perforate New Formation Plug and Abandon
 Clean/ Replug Other Than Above
 If "Other" Please see Details below
 DETAILS OF PROPOSED WORK

*TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH TVD: 8,222' TMD: 16,907.61'



I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Division of Environmental Protection.

[Signature]

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



WELL AREA & LOCATION INFORMATION:

ELEVATION SOURCE DGPS (OPUS)
 ELEVATION 1452.74' (EXISTING), 1424.00' (PROPOSED)
 WATERSHED JAKES RUN OF DUNKARD CREEK DISTRICT 11/03/2017
 COUNTY MONONGALIA TOPO QUAD BLACKSVILLE
 SURFACE OWNER MEPCO LLC
 ACREAGE 103.49 ±
 ROYALTY OWNER NORTH NATURAL ENERGY LLC, ET AL (LEASE NO. WV-061-003478-001)
 LEASE ACREAGE 601.71 ±

WELL OPERATOR NORTHEAST NATURAL ENERGY LLC
 ADDRESS 707 VIRGINIA STREET EAST, SUITE 1200
CHARLESTON, WV 25301

DESIGNATED AGENT JOHN ADAMS
 ADDRESS 707 VIRGINIA STREET EAST, SUITE 1200
CHARLESTON, WV 25301

SURFACE HOLE SURVEYED LONGITUDE -80°09'08.30"
 BOTTOM HOLE SURVEYED LONGITUDE -80°08'43.72"

7,687'
 5,767'

NORTHEAST NATURAL ENERGY LLC
MEPCO WELL NO. 16H
LEASE NO. WV-061-003478-001

39°40'00"

-80°07'30"

9,347'
 SURFACE HOLE SURVEYED LATITUDE 39°39'46.09"

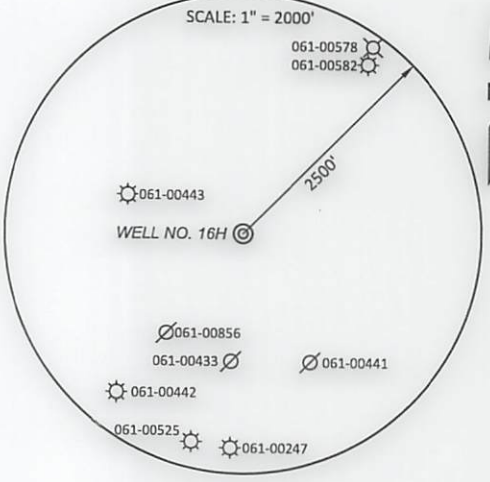
BOTTOM HOLE SURVEYED LATITUDE 39°38'27.62"

SURFACE HOLE WELL NO. 16H

TOP HOLE (UTM NAD 83)
 N) 4390676.07
 E) 572714.00

LANDING POINT (UTM NAD 83)
 N) 4390095.38
 E) 572111.60

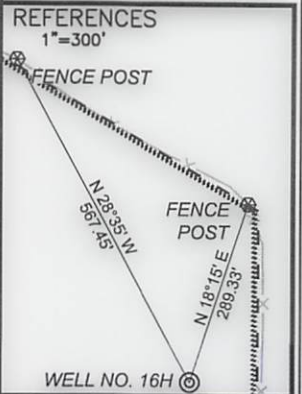
BOTTOM HOLE (UTM NAD 83)
 N) 4388262.52
 E) 573322.76



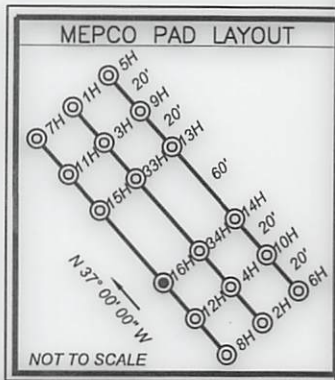
TOP HOLE (NAD 83)	LP HOLE (NAD 83)	BOTTOM HOLE (NAD 83)
N) 424193.64 E) 1784864.49 LAT.) 39°39'46.09" LONG.) 80°09'08.30" DEC. LAT.) 39.662803 DEC. LONG.) -80.152307	N) 422321.26 E) 1782856.01 LAT.) 39°39'27.44" LONG.) 80°09'33.81" DEC. LAT.) 39.657622 DEC. LONG.) -80.159392	N) 416240.72 E) 1786729.74 LAT.) 39°38'27.62" LONG.) 80°08'43.72" DEC. LAT.) 39.641006 DEC. LONG.) -80.145478
N) 424156.57 E) 1816301.32 LAT.) 39°39'45.80" LONG.) 80°09'09.05" DEC. LAT.) 39.662723 DEC. LONG.) -80.152513	N) 422284.19 E) 1814292.93 LAT.) 39°39'27.15" LONG.) 80°09'34.55" DEC. LAT.) 39.657542 DEC. LONG.) -80.159598	N) 416203.59 E) 1818168.78 LAT.) 39°38'27.33" LONG.) 80°08'44.46" DEC. LAT.) 39.640926 DEC. LONG.) -80.145684

TAG	OWNER	DIST-TM-PAR	AC. ±
1	MEPCO LLC	4-16-48.3	103.49
2	DOWNEY HAROLD FOX EST	4-16-47	0.86
3	DOWNEY HAROLD FOX EST	4-16-46	21.9
4	CONSOL MINING COMPANY LLC	4-16-54	84.14
5	CONSOL MINING COMPANY LLC	4-16-52	19.97
6	A. KEITH MICHAEL, ET AL	4-16-48	206.00
7	A. KEITH MICHAEL, ET AL	4-16-45	35.53
8	A. KEITH MICHAEL, ET AL	4-16-44	8.20
9	A. KEITH MICHAEL, ET AL	4-16-43	45.00
10	DAVID W. FRAZIER	4-16-42	4.50
11	DAVID W. FRAZIER	4-16-41	40.23
12	DAVID P. WALKER ET AL	4-16-39	48.00
13	GEORGE H. RUCKLE	4-21-19	48.00
14	MICHAEL MCMASTER	4-21-40	136.50
15	MARK & BETTY EDDY, ET AL	4-21-20	58.91
16	MARK & BETTY EDDY, ET AL	4-21-21	83.46
17	KEVIN A. & CARRIE L. SMITH	4-21-39	49.00

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS



- NOTES ON SURVEY
- NO OCCUPIED DWELLINGS OR BUILDINGS 2500 SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY WITHIN 625' OF THE CENTER OF THE WELL PAD WERE OBSERVED.
 - NO WATER WELLS OR DEVELOPED SPRINGS USED FOR HUMAN OR DOMESTIC ANIMAL CONSUMPTION WERE FOUND WITHIN 250'.
 - SURFACE OWNERSHIP TAKEN FROM THE MONONGALIA COUNTY TAX ASSESSOR AND COUNTY CLERK OFFICES IN OCTOBER, 2015.
 - WELL LATITUDE AND LONGITUDE FROM SURVEY GRADE VRS SOLUTIONS.
 - BEARINGS SHOWN ARE BASED UPON THE WV STATE PLANE COORDINATE SYSTEM, NAD 83 GRID NORTH ZONE.
 - LEASE INFORMATION PROVIDED BY NORTHEAST NATURAL ENERGY LLC.
 - PARCEL AND LEASE BOUNDARY LOCATIONS ARE APPROXIMATE AND BASED UPON RELEVANT GIS INFORMATION, FIELD LOCATION BOUNDARY EVIDENCE AND DEED DESCRIPTIONS.



600 Marketplace Avenue, Suite 200
 Bridgeport, WV 26330
 Toll Free 855-488-9539
 Fax 304-933-3327
Civil & Environmental Consultants, Inc.



DATE SEPTEMBER 27, 2017
 SCALE 1" = 1600' ACCURACY 1:2500
 OPERATORS 16H
 WELL No. 47 - 061 - 0179D H6A
 API No.

I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Division of Environmental Protection.

DENNIS E. MILLER
 LICENSED
 No. 991
 STATE OF WEST VIRGINIA
 PROFESSIONAL SURVEYOR

TYPE OF WELL:

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

GAS:
 Production Storage *Deep *Shallow

PROPOSED WORK ON LOCATION:

WELL AREA & LOCATION INFORMATION:

Drill Drill Deeper Redrill Convert
 Fracture/ Stimulate *Plug off to Formation
 Perforate New Formation Plug and Abandon
 Clean/ Replug Other Than Above
 If "Other" Please see Details below—
 DETAILS OF PROPOSED WORK _____
 *TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH TVD: 8,222' TMD: 16,907.61'

ELEVATION SOURCE DGPS (OPUS)
 ELEVATION 1452.74' (EXISTING), 1424.00' (PROPOSED)
 WATERSHED JAKES RUN OF DUNKARD CREEK DISTRICT 11/03/2017
 COUNTY MONONGALIA TOPO QUAD BLACKSVILLE
 SURFACE OWNER MEPCO LLC
 ACREAGE 103.49 ±
 ROYALTY OWNER NORTH NATURAL ENERGY LLC, ET AL (LEASE NO. WV-061-003478-001)
 LEASE ACREAGE 601.71 ±

WELL OPERATOR NORTHEAST NATURAL ENERGY LLC
 ADDRESS 707 VIRGINIA STREET EAST, SUITE 1200
CHARLESTON, WV 25301

DESIGNATED AGENT JOHN ADAMS
 ADDRESS 707 VIRGINIA STREET EAST, SUITE 1200
CHARLESTON, WV 25301

**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 Attachment

**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 *Hollie M Medley*
 Its: Regulatory Manager

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Page 1 of 7 OCT 11 2017

11/03/2017
WV Department of
Environmental Protection

61-0190

WW-6A1

Operator's Well No.

MEPCO 16H

NNE Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
WV-061-003478-001	GARY G LORING	NORTHEAST NATURAL ENERGY LLC	DEED	1521/99
WV-061-003600-001	GARY G LORING	NORTHEAST NATURAL ENERGY LLC	DEED	1550/343
WV-061-004327-001	REED ENERGY SERVICES LLC	NORTHEAST NATURAL ENERGY LLC	DEED	1577/831
WV-061-004001-000	JOHN W WRIGHT	*SOUTH PENN OIL CO	0.125 OR GREATER	39/202
WV-061-004002-000	NIMROD TENNANT AND NANCY TENNANT	*SOUTH PENN OIL CO	0.125 OR GREATER	39/361
WV-061-003541-001	GARY G LORING	NORTHEAST NATURAL ENERGY LLC	DEED	1548/750
WV-061-004001-000	JOHN W AND AMANDA WRIGHT	*SOUTH PENN OIL CO	0.125 OR GREATER	39/202
WV-061-003553-001	GARY G LORING	NORTHEAST NATURAL ENERGY LLC	DEED	1529/705
WV-061-004327-001	REED ENERGY SERVICES LLC	NORTHEAST NATURAL ENERGY LLC	DEED	1577/831
WV-061-004001-000	JOHN W AND AMANDA WRIGHT	*SOUTH PENN OIL CO	0.125 OR GREATER	39/202
WV-061-004001-000	JOHN W WRIGHT AND AMANDA WRIGHT	*SOUTH PENN OIL CO	0.125 OR GREATER	39/202
WV-061-004327-001	REED ENERGY SERVICES LLC	NORTHEAST NATURAL ENERGY LLC	DEED	1577/831
WV-061-001287-003	ASHCRAFT, RICKY LYNN	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1370/313
WV-061-001287-004	ASHCRAFT, CHARLES FRANCIS	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1371/437
WV-061-001291-001	CRANE, SHIRLEY MARIE ASHCRAFT	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1370/316
WV-061-001291-002	ASHCRAFT, JAMES PATRICK	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1370/319
WV-061-001291-003	STATLER, DORIS PAULINE	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1485/760
WV-061-001291-004	ASHCRAFT, JOHN RICHARD	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1488/417
WV-061-001291-005	THE HENRIETTA HANULA TRUST	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1510/387
WV-061-001291-014	VARNER, JOY	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1485/771
WV-061-001291-015	KETCHUM, JOYCE	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1487/371
WV-061-001291-016	KING, CHRISTINA J.	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1487/372
WV-061-001291-018	BANE, JANET S.	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1510/244
WV-061-001291-019	TENNANT, HARRY R.	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1485/175
WV-061-004001-000	WRIGHT, JOHN W.	*SOUTH PENN OIL CO	0.125 OR GREATER	39/202
WV-061-003600-001	GARY G LORING	NORTHEAST NATURAL ENERGY LLC	DEED	1550/343
WV-061-004001-000	JOHN W AND AMANDA WRIGHT	*SOUTH PENN OIL CO	0.125 OR GREATER	39/202
WV-061-003467-001	MARILYN DARLENE JOSHI AND TULASI R JOSHI	NORTHEAST NATURAL ENERGY LLC	DEED	1516/564
WV-061-004003-000	NOAH WRIGHT	*JW SCOTT	0.125 OR GREATER	25/443
WV-061-004327-001	REED ENERGY SERVICES LLC	NORTHEAST NATURAL ENERGY LLC	DEED	1577/831
WV-061-002837-001	NANCY ARLENE PRICE	*CHESAPEAKE APPALACHIA LLC	0.125 OR GREATER	1424/777
WV-061-004009-000	EZRA TENNANT AND CASANDRA TENNANT	*SOUTH PENN OIL CO	0.125 OR GREATER	
WV-061-003618-001	SHUMAN, INC	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1539/411
WV-061-003554-001	JUNE C MYERS	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1523/795
WV-061-003554-002	RUTH J MONTILOR	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1535/39
WV-061-003554-003	ALEXANDRA D DIERINGER	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	5133/82
WV-061-003554-004	HAPPY ENDINGS LLC	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1534/116
WV-061-003554-005	JANET D SHIPLEY	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1591/641
WV-061-003483-001	HERV OIL LLC	*EM1 ENERGY INC	0.125 OR GREATER	1501/278
WV-061-003483-002	ANDREW SOLOMON	*EM1 ENERGY INC	0.125 OR GREATER	1501/740
WV-061-003554-001	JUNE C MYERS	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1535/39
WV-061-003554-002	RUTH J MONTILOR	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	5133/82
WV-061-003554-003	ALEXANDRA D DIERINGER	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1534/116
WV-061-003554-004	HAPPY ENDINGS LLC	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1534/116

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WV-061-003554-005	JANET D SHIPLEY	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1591/641
WV-061-004005-000	JAMES S WALKER AND NANCY WALKER	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	26/273
WV-061-004005-001	KEVIN K CHUMNEY AND JANET L CHUMNEY	NORTHEAST NATURAL ENERGY LLC	DEED	1581/250
WV-061-004005-002	DONNA JEAN SHELTON AND THOMAS C SHELTON	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1591/700
WV-061-004005-003	JANET DUNN AND LAWRENCE DUNN	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1598/595
WV-061-004314-001	REED ENERGY SERVICES LLC	NORTHEAST NATURAL ENERGY LLC	DEED	1580/200
WV-061-004005-000	JAMES S WALKER AND NANCY WALKER	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	26/273
WV-061-004005-001	KEVIN K CHUMNEY AND JANET L CHUMNEY	NORTHEAST NATURAL ENERGY LLC	DEED	1581/250
WV-061-004005-002	DONNA JEAN SHELTON AND THOMAS C SHELTON	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1591/700
WV-061-004005-003	JANET DUNN AND LAWRENCE DUNN	NORTHEAST NATURAL ENERGY LLC	0.125 OR GREATER	1598/595
WV-061-004314-001	REED ENERGY SERVICES LLC	NORTHEAST NATURAL ENERGY LLC	DEED	1580/200
WV-061-004017-000	JARRETT WILDMAN, ET AL	*JW SCOTT	0.125 OR GREATER	27/145
WV-061-003658-001	MICHAEL L AND TERRY STRAIGHT	NORTHEAST NATURAL ENERGY LLC	DEED	1542/110
WV-061-003658-002	SHARON L BEST	NORTHEAST NATURAL ENERGY LLC	DEED	1541/421
WV-061-003658-003	DOUGLAS J KENNETT	NORTHEAST NATURAL ENERGY LLC	DEED	1547/797
WV-061-003658-004	DAVID L AND ELIZABETH CAROL STRAIGHT	NORTHEAST NATURAL ENERGY LLC	DEED	1556/552
WV-061-004020-000	MARK V AND BETTY A EDDY	NORTHEAST NATURAL ENERGY LLC	DEED	1505/572

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Chesapeake Appalachia, LLC.



Northeast Natural Energy
Assignment
BK 120/769

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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

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
 DR 754/606
 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
 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

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61-01790

EM1 Energy Inc.

AS 125/638

D: 12/18/2014

R: 6/9/2015

Northeast Natural
Energy LLC

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11/03/2017

J. W. Scott
 Lease
 DR 27/145
 J. W. Scott
 |
 William Munhall and George P. Hukill
 Assignment
 DR 28/447
 William Munhall and George P. Hukill and J. W. Scott, doing business as Mountain State Oil Company
 |
 South Penn Oil Company
 Assignment
 DR 32/240
 South Penn Oil Company
 |
 South Penn Natural Gas Company
 Assignment
 DR 304/547
 South Penn Natural Gas Company
 |
 South Penn Oil Company
 Assignment
 DR 580/311
 South Penn Oil Company merged with Pennzoil Company on July 31, 1963
 Pennzoil Company and United Gas Corporation
 |
 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

Edwin Associates, Inc.
 Assignment
 DR 754/594
 Union Trust National Bank, as successor by conversion of Union Trust & Deposit Company
 |
 Edwin Associates, Inc.
 Assignment
 DR 754/598
 Edwin Associates, Inc.
 |
 J. T. Carson
 Assignment
 DR 754/600
 J. T. Carson
 |
 Thompson/Texas Associates Partnership
 Assignment
 DR 754/606
 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 Partnership
 |
 Mark Eddy
 Assignment
 AR 21/22
 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 Partnership
 |
 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

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 11/08/2017

WW-60
(7-01)

DATE: August 14th, 20 17
OPERATOR'S
WELL NO. MEPCO 2H, 4H, 6H, 8H, 10H 12H, 14H

API NO: 47-
State County Permit No.

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

A F F I D A V I T

State of West Virginia
County of Monongalia

4706101790

I, Jeannie Morgan Johnson (the designated owner or operator, or authorized representative thereof), after being duly sworn, do declare that the undersigned is authorized by the owner of the working interest in the well permit application to which this affidavit is attached to state that (he, she, or it) shall tender to the owner of the oil and gas in place not less than one-eighth of the total amount paid to or received by or allowed to the owner of the working interest at the wellhead for the oil or gas so extracted, produced, or marketed before deducting the amount to be paid or set aside for the owner of the oil or gas in place, or all such oil or gas to be extracted, produced, or marketed from the well. West Virginia Code 22-6-8(e).

Signed: Jeannie Morgan Johnson

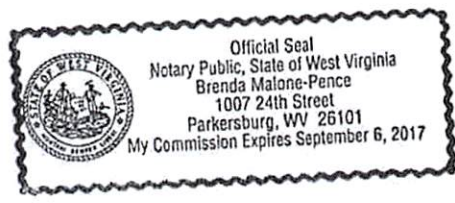
Taken, subscribed and sworn to before me this 14th day of August, 20 17.

Brenda Malone-Pence
Notary Public

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Office of Oil and Gas
AUG 16 2017

My Commission expires: _____

WV Department of Environmental Protection



61-01790



July 14, 2017


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

RE: MEPCO 2H, 4H, 6H, 8H, 10H, 12H, 14H and 16H

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 Horace Thorn Road (State Route 33), Noah Wright Road (State Route 22/1), Long Drain Road (State Route 22), Mt. Hermon Road (State Route 29/4) and Pedlar Run (State Route 37) on the enclosed survey plat.

Sincerely,


Jeannie Morgan Johnson, CPL
Vice President – Land Operations

4706101790

Enclosure

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

Date of Notice Certification: 08/14/2017

API No. 47- 061 - 01790
Operator's Well No. MEPCO 16H
Well Pad Name: MEPCO

Notice has been given:

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

State:	<u>West Virginia</u>	UTM NAD 83 Easting:	<u>572714.00</u>
County:	<u>Monongalia</u>	UTM NAD 83 Northing:	<u>4390676.07</u>
District:	<u>Clay</u>	Public Road Access:	<u>State Route 29/4</u>
Quadrangle:	<u>Blacksville</u>	Generally used farm name:	<u>MEPCO LLC</u>
Watershed:	<u>Jakes Run of Dunkard Creek</u>		

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

<p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 100px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p>OOG OFFICE USE ONLY</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
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Required Attachments:

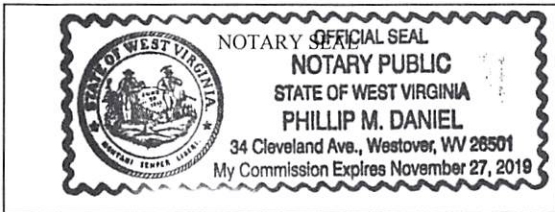
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication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

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WV Department of
Environmental Protection
11/03/2017

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:	<u>Northeast Natural Energy LLC</u>	Address:	<u>707 Virginia Street East, Suite 1200</u>
By:	<u>Hollie M. Medley</u>		<u>Charleston, WV 25301</u>
Its:	<u>Regulatory Manager</u>	Facsimile:	<u>304.241.5972</u>
Telephone:	<u>304.212.0422</u>	Email:	<u>hmedley@nne-llc.com</u>



Hollie M Medley

Subscribed and sworn before me this 14th day of August, 2017

Phillip M Daniel Notary Public

My Commission Expires 11/27/2019

Oil and Gas Privacy Notice:

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

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Environmental Protection

11/03/2017

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

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

Date of Notice: 8/4/2017 **Date Permit Application Filed:** 8/14/2017

Notice of:

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

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

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

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

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

SURFACE OWNER(s)

Name: Please See Attached
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: Please See Attached
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)

Name: _____
Address: _____

COAL OWNER OR LESSEE

Name: Please See Attached
Address: 4708401790

COAL OPERATOR

Name: _____
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: Please See Attached
Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: _____
Address: _____

*Please attach additional forms if necessary

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Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

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Environmental Protection

Well Location Restrictions

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

11/03/2017

WW-6A
(8-13)

API NO. 47-61 - 01790
OPERATOR WELL NO. MEPCO 16H
Well Pad Name: MEPCO

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.

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Written Comment:

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

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

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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.**

11/03/2017

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.

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

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

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WW-6A
(8-13)

API NO. 47- 61-01790
OPERATOR WELL NO. MEPCO 16H
Well Pad Name: MEPCO

Notice is hereby given by:

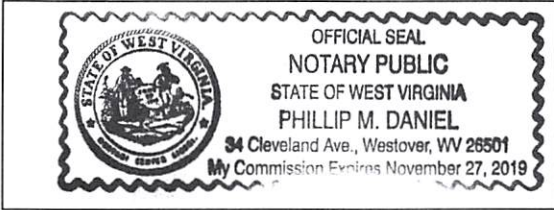
Well Operator: Northeast Natural Energy LLC
Telephone: 304-212-0422
Email: hmedley@nne-llc.com

Address: 707 Virginia Street E., Suite 1200
Charleston, WV 25301
Facsimile: 304-241-5972

Oil and Gas Privacy Notice:

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Holl: m medy



Subscribed and sworn before me this 14th day of August, 2017.

Phillip M. Daniel Notary Public

My Commission Expires 11 / 27 / 2019

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Environmental Protection

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WW-6A

MEPCO 16H

Surface Owner(s)

Consolidation Coal Company
Attn: Melissa Wilson
Land Agent Depositions – Rentals
CNX Center
1000 Consol Energy Drive
Canonsburg, PA 15317

MEPCO, LLC
Attn: Will Oliver
308 Dents Run
Morgantown, WV 26501

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

Consolidation Coal Company
Attn: Melissa Wilson
Land Agent Depositions – Rentals
CNX Center
1000 Consol Energy Drive
Canonsburg, PA 15317

Coal Owner or Lessee

Consol Mining Company, LLC
Attn: Analyst, Engineering and Operations Support – Coal
CNX Center
1000 Consol Energy Drive
Canonsburg, PA 15317

Murray Energy Corp.
Attn: Alex P. O'Neill
Coal – Oil and Gas Relations Manager
46226 National Road
St. Clairsville, OH 43950

Gary G. Loring
139 Thistledown Lane
Morgantown, WV 26508

A. Keith Michael
241 Jefferson St.
Bridgeport, WV 26330

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

Jane Ann Reynolds /
2 West Hill Drive
Fairmont, WV 26554

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

Diane K. Braun, co-executrix of James E. Fletcher Estate /
44 Luther Park Road
Fairview, WV 26570

William D. Statler /
578 Long Drain Road, Core, WV 26541 /

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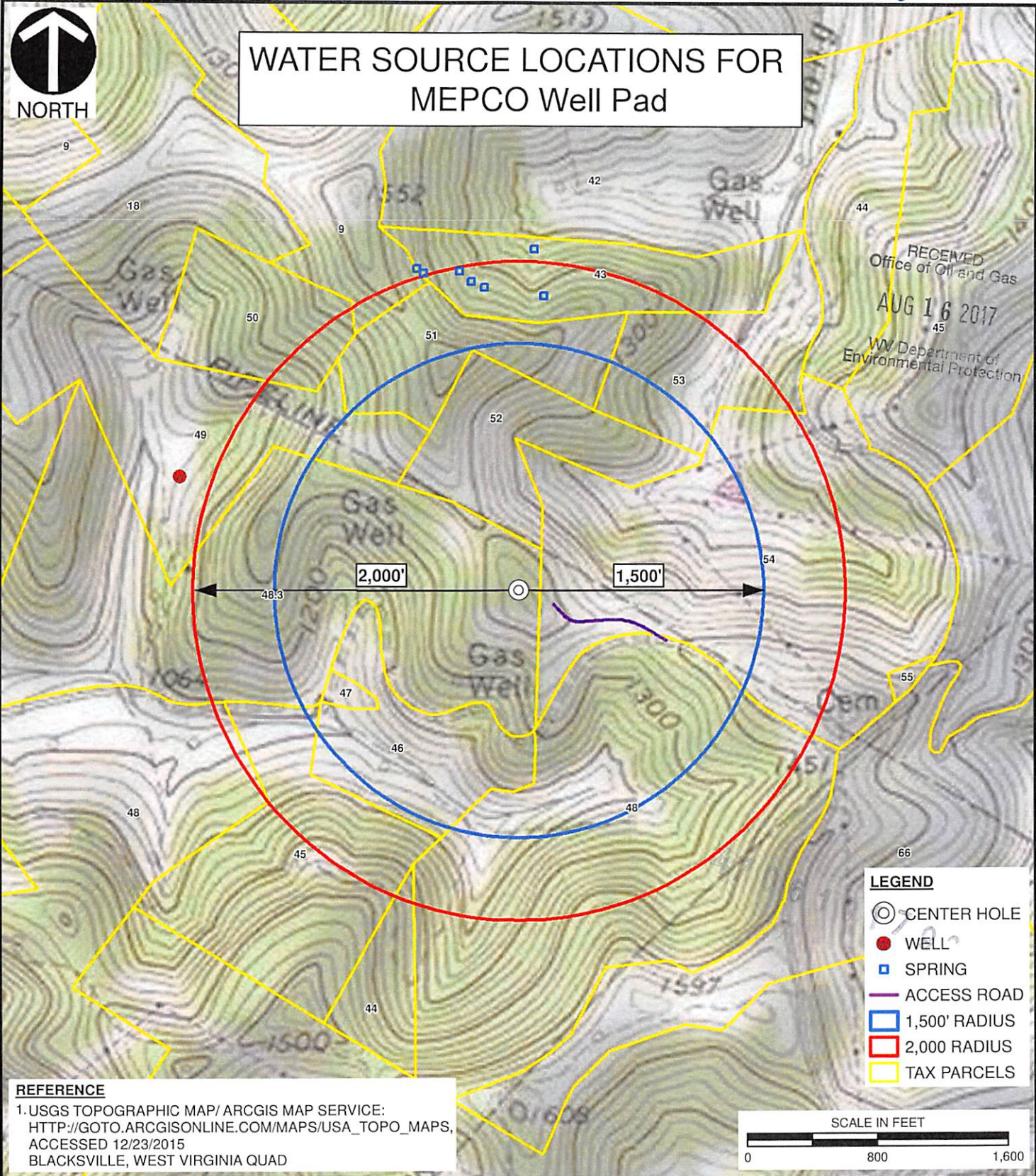
WV Department of
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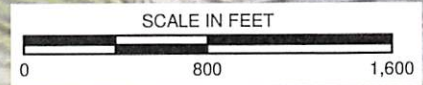
WATER SOURCE LOCATIONS FOR MEPCO Well Pad



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- LEGEND**
- CENTER HOLE
 - WELL
 - SPRING
 - ACCESS ROAD
 - 1,500' RADIUS
 - 2,000 RADIUS
 - TAX PARCELS

REFERENCE
 1. USGS TOPOGRAPHIC MAP/ ARCGIS MAP SERVICE:
[HTTP://GOTO.ARCGISONLINE.COM/MAPS/USA_TOPO_MAPS](http://gto.arcgis.com/maps/usa_topo_maps),
 ACCESSED 12/23/2015
 BLACKSVILLE, WEST VIRGINIA QUAD



Civil & Environmental Consultants, Inc.
 600 Marketplace Suite 200 - Bridgeport, WV 26330-2820
 Ph: 304-933-3119 Toll: 855-488-9539 Fax: 304-933-3327
www.cecinc.com

NORTHEAST NATURAL ENERGY LLC
 MEPCO PAD
 MONONGALIA COUNTY, WEST VIRGINIA

WATER SOURCES FOR MEPCO PAD

DRAWN BY: MAF	CHECKED BY: JDR	APPROVED BY: [*] Hand signature on file SAC*	FIGURE NO: WT/03/2017
DATE: 12/21/2015	SCALE: 1" = 800'	PROJECT NO: 150-445.0021	

I:\Svr-bridgeport\150-445-GIS\Maps\Task_0021\150445_0021_WATER_WELL_TOPO.mxd 12/21/2015 (mfrank)

61-01790

MEPCO

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

TMP 16-49

Diane K. Braun, co-executrix of James E. Fletcher Estate
44 Luther Park Road
Fairview, WV 26570

TMP 16-43

William D. Statler
578 Long Drain Road, Core, WV 26541

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

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

Date of Notice: 10/5/2015 **Date of Planned Entry:** 10/13/2015

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

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

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

Notice is hereby provided to:

SURFACE OWNER(s)

Name: SEE ATTACHMENT
Address: _____

Name: _____
Address: _____

Name: _____
Address: _____

COAL OWNER OR LESSEE

Name: SEE ATTACHMENT
Address: _____

MINERAL OWNER(s)

Name: SEE ATTACHMENT
Address: _____

*please attach additional forms if necessary

Notice is hereby given:

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

State: <u>West Virginia</u>	Approx. Latitude & Longitude: <u>4390688.4; 572705 (UTM NAD 83)</u>
County: <u>Monongalia</u>	Public Road Access: <u>State Route 29/4</u>
District: <u>Clay</u>	Watershed: <u>Dunkard Creek</u>
Quadrangle: <u>Blacksville</u>	Generally used farm name: <u>MEPCO</u>

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

Notice is hereby given by:

Well Operator: 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

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

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WW-6A3 ATTACHMENT

MEPCO

Surface Owner(s)

Consolidation Coal Company
Attn: Melissa Wilson
Land Agent Depositions – Rentals
CNX Center
1000 Consol Energy Drive
Canonsburg, PA 15317

MEPCO, LLC
Attn: Will Oliver
103 Corporate Drive, Suite 102
Morgantown, WV 26501

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

Consolidation Coal Company
Attn: Melissa Wilson
Land Agent Depositions – Rentals
CNX Center
1000 Consol Energy Drive
Canonsburg, PA 15317

MEPCO, LLC
Attn: Will Oliver
103 Corporate Drive, Suite 102
Morgantown, WV 26501

Coal Owner or Lessee

Consol Mining Company, LLC
Attn: Analyst, Engineering and Operations Support – Coal
CNX Center
1000 Consol Energy Drive
Canonsburg, PA 15317

Murray Energy Corp.
Attn: Alex P. O'Neill
Coal – Oil and Gas Relations Manager
46226 National Road
St. Clairsville, OH 43950

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11/03/2017

61-01790

Mineral Owner

Telluric Company
Attn: Joseph Swiger
143 Distributor Drive
Morgantown, WV 26508

A. Keith Michael
241 Jefferson St.
Bridgeport, WV 26330

Gregory G. Michael
1176 Sands Drive
Fairmont, WV 26554

Jane Ann Reynolds
2 West Hill Drive
Fairmont, WV 26554

670670173

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Office of Oil and Gas
AUG 16 2017
WV Department of
Environmental Protection

11/03/2017

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

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

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

Date of Notice: 08/04/2017 **Date Permit Application Filed:** 08/14/2017

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

HAND DELIVERY CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

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

Name: CONSOLIDATION COAL COMPANY
Address: CNX CENTER, 1000 CONSOL ENERGY DRIVE
CANONSBURG, PA 15317

Name: MEPCO LLC
Address: 103 CORPORATE DRIVE, SUITE 102
MORGANTOWN, WV 26501

Notice is hereby given:

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

State: WEST VIRGINIA UTM NAD 83 Easting: 572714.00
County: MONONGALIA Northing: 4390676.07
District: CLAY Public Road Access: CR 29/4
Quadrangle: BLACKSVILLE Generally used farm name: MEPCO
Watershed: JAKES RUN OF DUNKARD CREEK

This Notice Shall Include:

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

Notice is hereby given by:

Well Operator: NORTHEAST NATURAL ENERGY LLC
Address: 707 Virginia Street East, Suite 1200
Charleston, WV 25301
Telephone: 304-414-7060
Email: hmedley@nne-llc.com
Facsimile: 304-414-7061

Authorized Representative: Hollie Medley, Regulatory Manager
Address: 48 Donley Street, Suite 601
Morgantown, WV 26501
Telephone: 304-212-0422
Email: hmedley@nne-llc.com
Facsimile: 304-241-5972

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AUG 16 2017

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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**
Date of Notice: 08/04/2017 **Date Permit Application Filed:** 08/14/2017

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

- CERTIFIED MAIL HAND
- RETURN RECEIPT REQUESTED DELIVERY

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

Notice is hereby provided to the SURFACE OWNER(s)
(at the address listed in the records of the sheriff at the time of notice):

Name: Consolidation Coal Company Name: MEPCO LLC
Address: CNX Center, 1000 Consol Energy Drive Address: 103 CORPORATE DRIVE, SUITE 102
Canonsburg, PA 15317 MORGANTOWN, WV 26501

Notice is hereby given:

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

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>572714.00</u>
County:	<u>Monongalia</u>		Northing:	<u>4390676.07</u>
District:	<u>Clay</u>	Public Road Access:	<u>County Route 29/4</u>	
Quadrangle:	<u>Blacksville</u>	Generally used farm name:	<u>MEPCO</u>	
Watershed:	<u>Jakes Run of Dunkard Creek</u>			

This Notice Shall Include:

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

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

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our Office of Oil and Gas 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.

470610

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AUG 16 2017
WV Department of Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Earl Ray Tomblin
Governor

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

July 18, 2017

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 Mepco Pad, Monongalia County
Mepco 16H

47-061-01790

Dear Mr. Martin,

This well site will be accessed from a permit #04-2015-1144 issued to Northeast Natural Energy Corporation for access to the State Road for a well site located off of Monongalia County Route 29/4 SLS.

The operator has signed a DISTRICT WIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

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

Cc: Hollie Medley
Northeast Natural Energy Corporation
CH, OM, D-4
File

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AUG 16 2017

WV Department of
Environmental Protection

11/03/2017

Planned Additives to be used in Fracturing Stimulations

Trade Name	Purpose	Ingredients	Cemical Abstract Service Numner (CAS#)
Water	Carrier	Water	7732-18-5
HCl, 10.1-15%	Acidizing	Hydrochloric Acid Water	7647-01-0 7732-18-5
Alpha 1427	Biocide	Alkyl Dimethyl Benzyl Ammonium Chloride (C12-16) Ethanol Glutaraldehyde Quaternary Ammonium Chloride Water	68424-85-1 64-17-5 111-30-8 7173-51-5 7732-18-5
Enzyme G-NE	Breaker	Hemicellulase Enzyme Concentrate Water	9025-56-3 7732-18-5
Cl-14	Corrosion Inhibitor	Fatty Acids Methanol Olefin Polyozyalkylenes Propargyl Alcohol	NA 67-56-1 NA NA 107-19-7
FRW-18	Friction Reducer	Hydrotreated Light Distillate	64742-47-8
Ferrotrol 300L	Iron Cnontrol	Citric Acid	77-92-9
Sand, White, 40/70	Proppant	Cystalline Silica (Quartz)	14808-50-7
Sand, White, 100 mesh	Proppant	Cystalline Silica (Quartz)	14808-50-7
Scaletrol 720	Scale Inhibitor	Siethylene Glycol	111-46-6

706102

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61-0179b

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AUG 16 2017
WV Department of Environmental Protection

MEPCO PAD FINAL SITE DESIGN, CONSTRUCTION PLANS, & EROSION & SEDIMENT CONTROL PLANS NORTHEAST NATURAL ENERGY LLC

LAT./LONG: N 39.662886° W -80.152471°
(APPROXIMATE CENTER OF PROJECT)

APPROVED
WVDEP OOG
Modification
12-1-2016

Added alternative access road

PROJECT OWNER/APPPLICANT
NORTHEAST NATURAL ENERGY LLC
737 VIRGINIA STREET SUITE 1200
CHARLESTON, WV 25301
PH: (304) 241-5750
CONTACT: DAVE MCDONALD

WCDC
DISTRICT FOUR
PH: (204) 842-1550
CONTACT: DISTRICT MANAGER
RAY KASSE

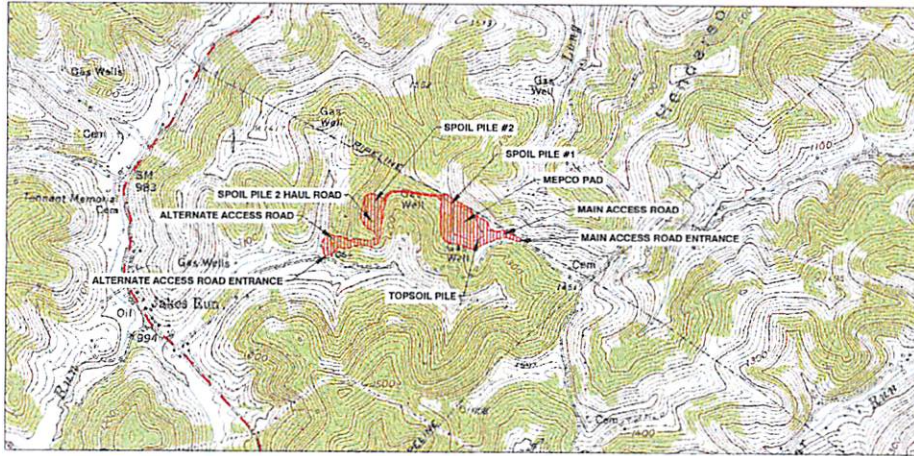
CIVIL ENGINEER
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WVDEP)
PH: (803) 842-3074

SPILL HOTLINE
NATIONAL RESPONSE CENTER
PH: (800) 474-6802

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
900 MARKETPLACE AVENUE SUITE 200
BRIDGEPORT, WV 26330
PH: (304) 933-3119
CONTACT: JOSEPH D. ROBINSON, P.E.

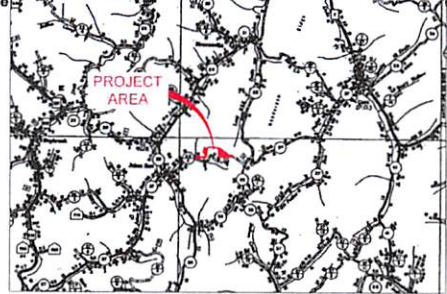
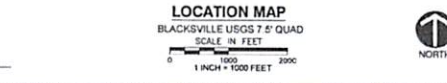
LOCAL EMERGENCY SERVICES		
NAME	TELEPHONE NO	
AMBULANCE	911	
HOSPITAL EMERGENCY ROOM	RUJAY MEMORIAL HOSPITAL	(804) 506-4171
FIRE DEPARTMENT	N/A	
POLICE DEPARTMENT	911	
POISON CONTROL CENTER	WEST VIRGINIA POISON CENTER	(800) 222-1222

FLOOD PLAIN CONDITIONS	
DO SITE CONSTRUCTION ACTIVITIES TAKE PLACE IN FLOODPLAIN	NO
PERMIT NEEDED FROM COUNTY FLOODPLAIN COORDINATOR	NO
REC HAS STUDY CONPLETED	N/A
FLOODPLAIN SHOWN ON DRAWINGS	NO
FIRM MAP NUMBERS FOR SITE	54061 C0373C
ACREAGE OF CONSTRUCTION IN FLOODPLAIN	N/A



Limits of Disturbance Parcel Break Up - Mepeco Pad Monongalia County, West Virginia					
Owner	Trk Parcel	Dist Pkgs	Total Acres	Type of Disturbance	Acres
MEPCO LLC	14-48.3	1102-73	323.89	WELL PAD	3.87
				SPOIL PILE #1	2.81
				SPOIL PILE #2	2.51
				TOPSOIL PILE	0.11
				ALTERNATE ACCESS ROAD	6.17
				SPOIL PILE 2 HAUL ROAD	1.78
			TOTAL		18.27
CONSOLIDATION LOCAL COMPANY	15-54	656-178	84.14	MAIN ACCESS ROAD	1.75
				WELL PAD	1.40
				TOPSOIL PILE	4.27
			TOTAL		6.09
WEST VIRGINIA DEPARTMENT OF HIGHWAYS	---	---	---	MAIN ACCESS ROAD	0.06
				ALTERNATE ACCESS ROAD	6.89
				TOTAL	6.95

L.O.D. AREAS		WELL RESTRICTIONS CHECKLIST (HORIZONTAL GA WELL)	
DESCRIPTION	ACRES		YES
MAIN ACCESS ROAD	1.81	AT LEAST 100 FEET FROM PAD AND 100 FEET FROM ANY EAS CONTROL FEATURE TO ANY PERENNIAL STREAM LAKE, POND, RESERVOIR OR WETLAND	YES
WELL PAD	7.07	AT LEAST 300 FEET FROM PAD AND 100 FEET FROM ANY EAS CONTROL FEATURE TO ANY NATURALLY OCCURRING THOUGH STREAM	YES
SPOIL PILE 1	2.65	AT LEAST 1000 FEET FROM PAD AND 100 FEET FROM ANY EAS CONTROL FEATURE TO ANY GROUNDWATER POND OR PUBLIC WATER SUPPLY	YES
SPOIL PILE 2	2.51	AT LEAST 250 FEET FROM AN EXISTING WATER WELL OR DEVELOPED SPRING TO WELL BEING DRILLED	YES
TOPSOIL PILE	1.23	AT LEAST 100 FEET FROM AN OCCUPIED DWELLING STRUCTURE TO CENTER OF PAD	YES
ALTERNATE ACCESS ROAD	6.15	AT LEAST 800 FEET FROM AGRICULTURE BUILDING LARGER THAN 2500 SQUARE FEET TO THE CENTER OF THE PAD	YES
SPOIL PILE 2 HAUL ROAD	1.76		YES
TOTAL	23.18		YES
WOODED	17.82		



SITE LOCATIONS WB83-NF (WEST VIRGINIA NORTH ZONE)	
	LATITUDE / LONGITUDE
CENTROID OF PAD	39 862015 / -80 152471
CENTER OF A51 (40,000 BBL/S)	39 862068 / -80 152791
MAIN ACCESS ROAD ENTRANCE	39 862110 / -80 142160
ALT. ACCESS ROAD ENTRANCE	39 861900 / -80 160870

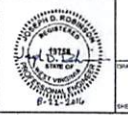
SITE LOCATIONS UTM83-17 (WEST VIRGINIA NORTH ZONE)	
	NORTHING / EASTING
CENTROID OF PAD	4369888 4822 / 172708 0272
CENTER OF A51 (40,000 BBL/S)	4369695 4827 / 172702 8022
MAIN ACCESS ROAD ENTRANCE	4369691 7292 / 172703 8027
ALT. ACCESS ROAD ENTRANCE	4369502 4051 / 171969 1200

PLAN REPRODUCTION WARNING
THE PLANS HAVE BEEN CREATED ON ANSI D (22" X 34") SHEETS FOR REDUCTIONS. REFER TO GRAPHIC SCALE.
THE PLANS HAVE BEEN CREATED FOR FULL COLOR PLOTTING. ANY SET OF THE PLANS THAT IS NOT PLOTTED IN FULL COLOR SHALL NOT BE CONSIDERED ADEQUATE FOR CONSTRUCTION PURPOSES.
WARNING INFORMATION MAY BE LOST IN COPYING AND/OR GRAY SCALE PLOTTING.

- SHEET INDEX**
- COVER SHEET/LOCATION MAP
 - WELL SAFETY PLAN MAP
 - WELL SAFETY PLAN MAP
 - MATERIAL QUANTITIES
 - BORING LOGS
 - GENERAL NOTES
 - PRE-CONSTRUCTION SITE CONDITIONS
 - ISOPACH MAP
 - EROSION AND SEDIMENT CONTROL PLAN
 - EROSION AND SEDIMENT CONTROL PLAN
 - EROSION AND SEDIMENT CONTROL PLAN
 - EROSION AND SEDIMENT CONTROL PLAN
 - EROSION AND SEDIMENT CONTROL PLAN
 - SITE DESIGN PLAN
 - SITE DESIGN PLAN
 - WELL PAD PROFILE & CROSS SECTIONS
 - WELL PAD CROSS SECTIONS
 - WELL PAD CROSS SECTIONS
 - WELL PAD CROSS SECTIONS
 - WELL PAD CROSS SECTIONS
 - WELL PAD CROSS SECTIONS
 - ALTERNATE ACCESS ROAD 1 PROFILE
 - ALTERNATE ACCESS ROAD 1 CROSS SECTIONS
 - ALTERNATE ACCESS ROAD PROFILE
 - ALTERNATE ACCESS ROAD 2 PROFILE & CROSS SECTIONS
 - CLEVERT PROFILES
 - GEOTECHNICAL CROSS SECTIONS
 - GEOTECHNICAL CROSS SECTIONS
 - DETAILS
 - DETAILS
 - DETAILS
 - DETAILS
 - RECLAMATION PLAN
 - RECLAMATION PLAN
 - RECLAMATION PLAN

Received
Office of Oil and Gas
OCT 27 2015

HOK 8/24/2016



REVISION	NO.	DATE	DESCRIPTION
	1		
	2		
	3		
	4		
	5		

Civil & Environmental Consultants, Inc.
600 Marketplace Avenue, Suite 200 - Bridgeport, WV 26330
Ph: 304.933.3119 - 855.488.9339 - Fax: 304.933.3337
www.cecinc.com

NORTHEAST NATURAL ENERGY LLC
MEPCO PAD
CLAY DISTRICT
MONONGALIA COUNTY
WEST VIRGINIA

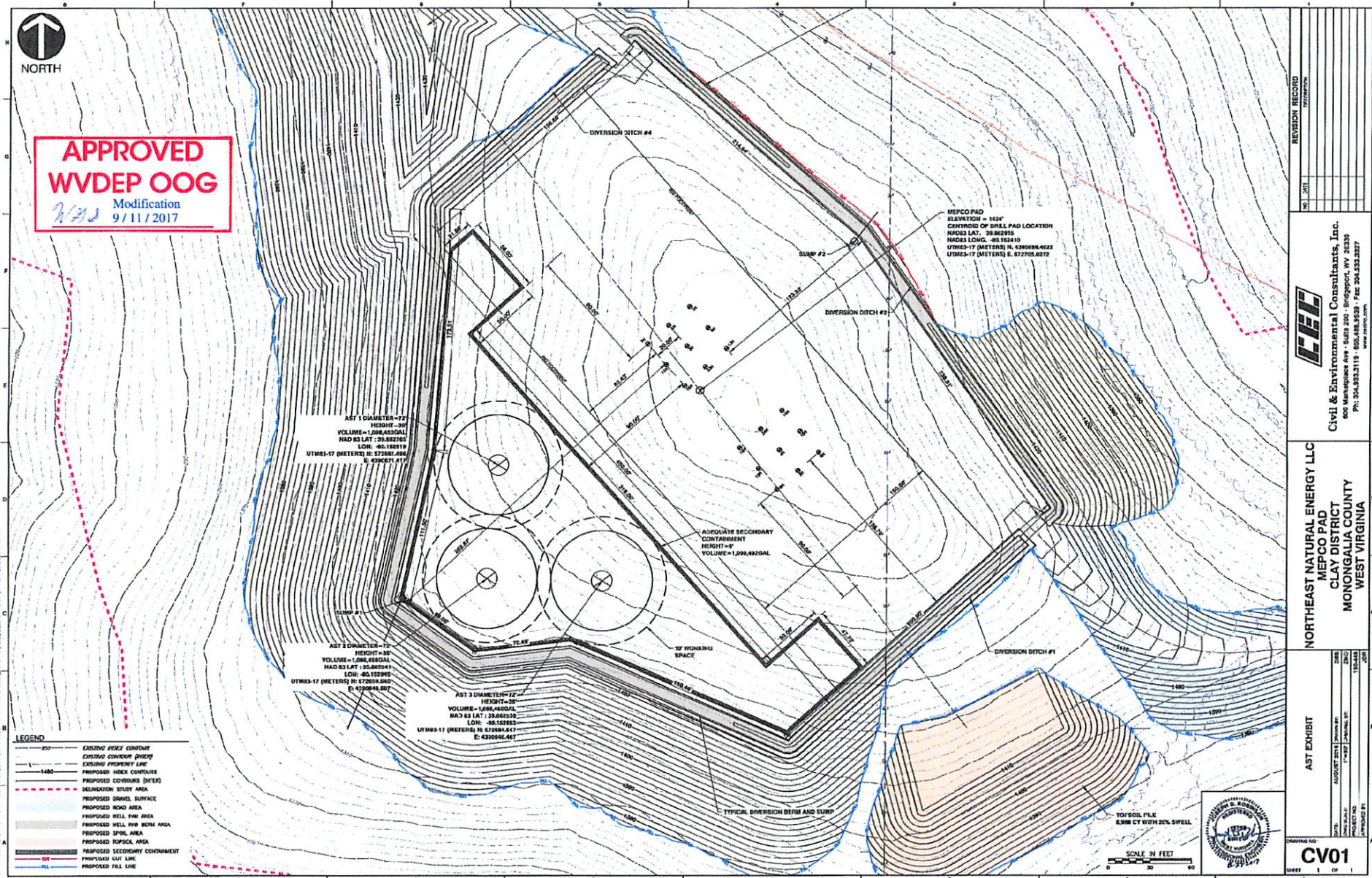
COVER SHEET/LOCATION MAP

DATE:	AUGUST 2016 (REVISED BY)	JDR	DATE:	
DESIGNED BY:	AS SHOWN	CHECKED BY:	DATE:	
PROJECT NO.:		SCALE:	DATE:	

DRAWING NO: **C000**
SHEET 1 OF 26



APPROVED
WVDEP OOG
Modification
9/11/2017



CEC
Civil & Environmental Consultants, Inc.
600 Marketplace Ave - Suite 200 - Bridgeport, WV 26330
PH: 304.933.3119 - FAX: 304.933.3327
www.cecinc.com

NORTHEAST NATURAL ENERGY LLC
MEPCO PAD
CLAY DISTRICT
MONONGALIA COUNTY
WEST VIRGINIA

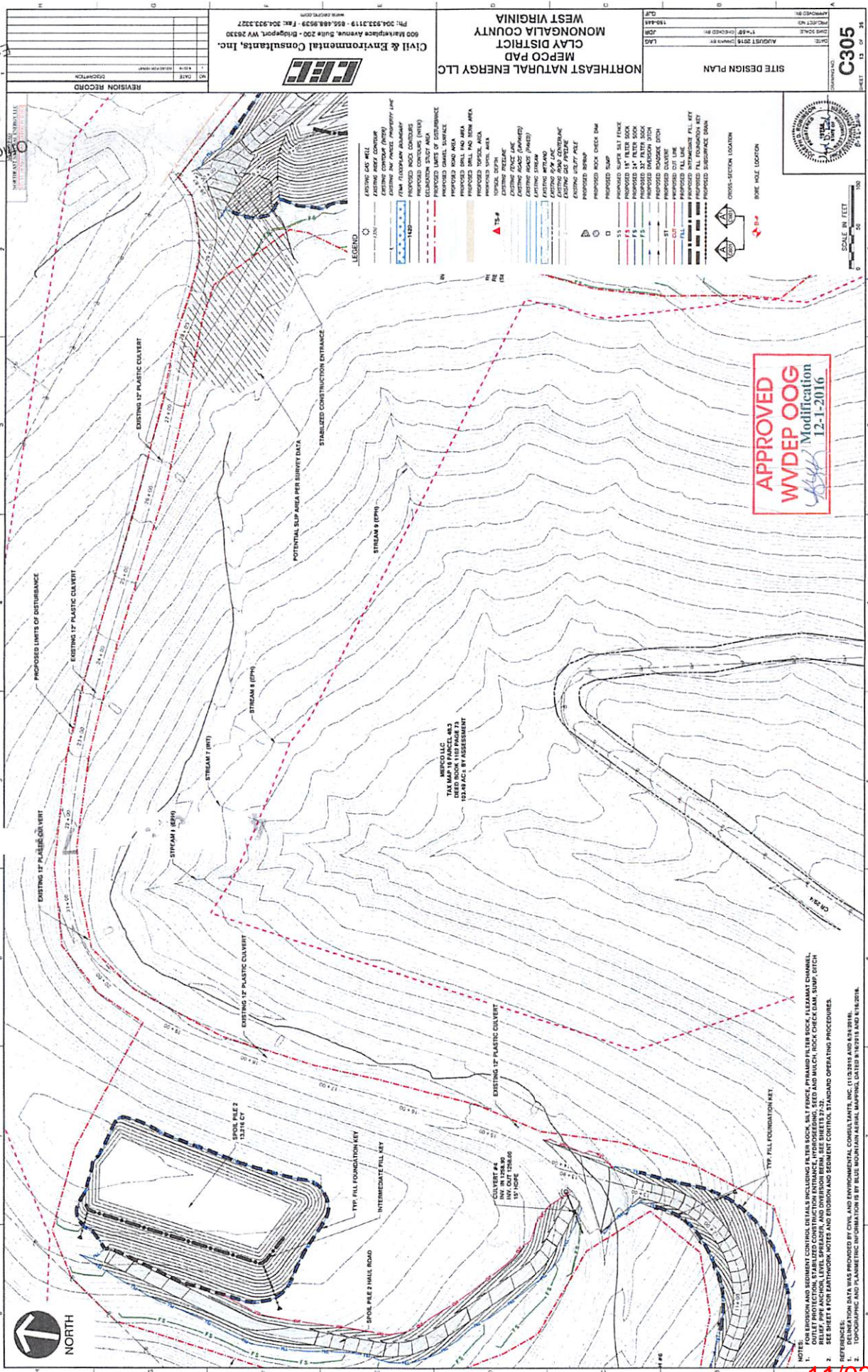
AST EXHIBIT

DATE	BY	PROJECT NO.	FIGURE NO.
09/11/17	JANUARY	17-00000000	17-00000000

CV01

MDK 9/6/2017

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AUG 16 2017
WV Department of
Environmental Protection



NO.	DATE	BY	DESCRIPTION

CEC
Civil & Environmental Consultants, Inc.
600 Marketplace Avenue, Suite 200 - Bridgeport, WV 26330
Ph: 304.933.3119 - 855.688.9939 Fax: 304.933.2327
www.cecinc.com

NORTHEAST NATURAL ENERGY LLC
MEPCO PAD
CLAY DISTRICT
MONONGALIA COUNTY
WEST VIRGINIA

SITE DESIGN PLAN
DATE: AUGUST 2016
DRAWN BY: [Name]
CHECKED BY: [Name]
SCALE: AS SHOWN
APPROVED BY: [Signature]



C305
SHEET 01 OF 25

LEGEND

Symbol	Description
--- (dashed)	PROPOSED LIMITS OF DISTURBANCE
--- (dotted)	EXISTING LIMITS OF DISTURBANCE
--- (dash-dot)	PROPOSED 12\"/>

APPROVED
WVDEP OOG
Modification
12-1-2016
[Signature]

MDK 8/24/2017



NOTES:
1. FOR EROSION AND SEDIMENT CONTROL DETAILS INCLUDING FILTER SOCK, SILT FENCE, PINNACLED FILTER SOCK, SLOTTED CHANNEL, OUTLET PROTECTION, STABILIZED CONSTRUCTION ENTRANCE, HYDROSEEDING, SEED AND MULCH, ROCK CHECK DAM, SWAMP DITCH, SEE SHEET # FOR EARTHWORK NOTES AND EROSION AND SEDIMENT CONTROL STANDARD OPERATING PROCEDURES.
2. DESIGNATION DATA WAS PROVIDED BY CIVIL AND ENVIRONMENTAL CONSULTANTS, INC. (11/3/2015 AND 6/24/2016).
3. TOPOGRAPHIC AND PLANNING INFORMATION IS BY BELLE MONTAGNA AERIAL MAPPING, DATED 9/19/18 AND 5/16/2018.

11/03/2017

