

#### west virginia department of environmental protection

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

November 23, 2015

### WELL WORK PERMIT

#### Horizontal 6A Well

This permit, API Well Number: 47-6101732, issued to NORTHEAST NATURAL ENERGY LLC, 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 all 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 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.

James Martin

Chie

Operator's Well No: KASSAY 7H

Farm Name: KASSAY, NEHEMIAH

**API Well Number: 47-6101732** 

Permit Type: Horizontal 6A Well

Date Issued: 11/23/2015

### 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. 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.
- 8. 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.
- 9. 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.

API NO. 47			
OPERATOR WE	LL NO.	Kassay 7H	
Well Pad Nam	۰ Kassa	v	

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

	2	WELL WORK PE	ERMIT APPLICA	HON	3	256
1) Well Operato	or: Northeast Na	tural Energy LLC	494498281	Monongalia	Clay	Blacksville
, ,			Operator ID	County	District	Quadrangle
2) Operator's W	ell Number: Ka	ssay 7H	Well Pac	Name: Kassa	ау	
3) Farm Name/S	Surface Owner:	Nehemiah and Patty A.	Kassay Public Roa	d Access: Cou	nty Route 25	/3 (Yank Hollow Road)
4) Elevation, cu	rrent ground:	1,560' El	evation, proposed	post-constructi	on: 1534'	
, , ,	(a) Gas X Other	Oil	Unde	erground Storag	ge	
	2011 060040 (2 to )	ıllow X	Deep			
	Hor	rizontal X		rapid ai	4 7.7.5	
6) Existing Pad:	Yes or No No		4/	MAK WI	Loplaid	
	get Formation(s 289' , 103' , 3,600		ipated Thickness a	nd Expected Pi	ressure(s):	
8) Proposed Tot	tal Vertical Dept	h: 8,289'				
9) Formation at	Total Vertical D	epth: Marcellus	5			
10) Proposed To	otal Measured D	epth: 19,519.58	3'			
11) Proposed H	orizontal Leg Le	ength: 10,315'				
12) Approximat	e Fresh Water S	trata Depths:	50' , 1,248'			
13) Method to I	Determine Fresh	Water Depths:	Oriller's Log from	Offset Wells		
14) Approximat	e Saltwater Dep	ths: 1,946', 2,69	96'			
15) Approximat	e Coal Seam De	pths: 316', 1,24	6'			
16) Approximat	te Depth to Possi	ible Void (coal mi	ine, karst, other):	N/A		
		n contain coal sear an active mine?	ns Yes	No	X	
(a) If Yes, pro	vide Mine Info:	Name:				
		Depth:				
		Seam:			REC	EIVED
		Owner:		(	Office of C	Oil and Gas

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WW-6B
(04/15)

API NO. 47	
OPERATOR WELL NO.	Kassay 7H
Well Pad Name: Kassa	V

### 18)

### CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	24"	New	NA	94.71	40'	40'	GTS
Fresh Water	13-3/8"	New	J-55	54.5	1,330'	1,300'	CTS
Coal							
Intermediate	9-5/8"	New	J-55	40	2,780'	2,750'	CTS
Production	5-1/2"	New	P-110	20	19,519'	19,489'	4,497 Cu. Ft.
Tubing	2-7/8"	New	N-80	6.5	NA	8,500'	NA
Liners							

## 4706101732 MAK 10/2015

TYPE	Size (in)	Wellbore Diameter (in)	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	<u>Cement</u> <u>Yield</u> (cu. ft./k)
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"	10,570	3,600	NA	NA
Liners							

### **PACKERS**

Kind:			
Sizes:			
Depths Set:		Offic	REGEIVED e of Oil and Gas

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(10/14)

API NO. 47			
OPERATOR	WELL NO.	Kassay 7H	
Well Pad N	ame: Kass	ay	

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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 6,093.61' TVD/MD. The well will then be horizontally drilled on synthetic based mud from the KOP to approximately 8,289' TVD / 19,519.58' MD along a 323 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.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 15.85
- 22) Area to be disturbed for well pad only, less access road (acres): 13.00
- 23) Describe centralizer placement for each casing string:

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

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

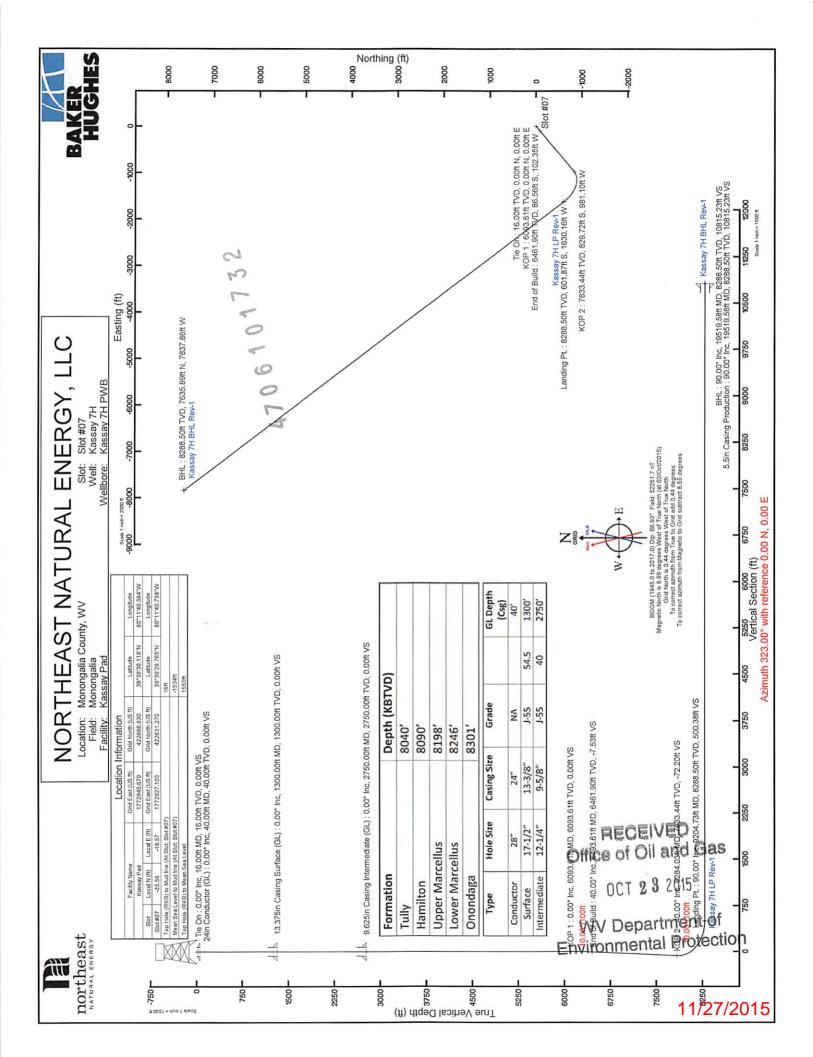
Surface string cement will be a Class A + Max 3% bwoc Calcium Chloride Fresh Water blend. Intermediate string cement will be a Class A Cement + Max 3% bwoc Calcium Chloride + Fresh Water. Production string cement will be (50:50) Poz (Fly Ash):Type I Cement with a gas migration additive.

25) Proposed borehole conditioning procedures:

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

OCT 28 2015

\*Note: Attach additional sheets as needed.



API Number 47	-	-
Operato	r's Well No	Kassay 7H

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

#### FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Northeast Natural Energy LLC	OP Code 494498281
Watershed (HUC 10) Dunkard Creek	Quadrangle Blacksville, WV
Do you anticipate using more than 5,000 bbls of water to complete	
Will a pit be used? Yes No _✓	no and proposed well month. The
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:	4706
Land Application	No If so, what ml.? NA
Underground Injection ( UIC Permit	Number
Reuse (at API Number_unknown at this ti Off Site Disposal (Supply form WW-	)
Off Site Disposal (Supply form www.	22 Process Communication Commu
Will closed loop system be used? If so, describe: Yes, Please S	ee 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. Syn	thetic 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 of	ffsite, etc. Removed Offsite - Please See Attachment "A"
-If left in pit and plan to solidify what medium will be u	sed? (cement, lime, sawdust)
-Landfill or offsite name/permit number? Please See Att	achment "A"
Permittee shall provide written notice to the Office of Oil and Ga	as of any load of drill cuttings or associated waste rejected at any
West Virginia solid waste facility. The notice shall be provided v	
where it was properly disposed.	
	onditions of the GENERAL WATER POLLUTION PERMIT issued
	ginia Department of Environmental Protection. I understand that the any term or condition of the general permit and/or other applicable
law or regulation can lead to enforcement action.	
	examined and am familiar with the information submitted on this on my inquiry of those individuals immediately responsible for
obtaining the information, I believe that the information is tru	ue, accurate, and complete. I am aware that there are significant
penalties for submitting false information, including the possibili	ty of fine or imprisonment.
Company Official Signature	RECEIVED
Company Official (Typed Name) Hollie Medley	Office of Oil and Gas
Company Official Title Regulatory Coordinator	007.93.2015
	UC1 Z 3 2013
Subscribedjand sworn before me this and day of	) choler , 20 WE Department of
d. Ma	Environmental Protection Seal Notary Public Notary Public State OF MEST MODERN
Tuso 700 1	STATE OF WEST VIRGIDAL Mistan M. Vernor

roposed revegetation freatment. Acres D	isturbed 15.8	Prevegetation pH 5-7	
Lime 2 Tons/acre	or to correct	to pH <u>7</u>	
Fertilizer type 19-19-19			
Fertilizer amount 300		lbs/acre	
Mulch_2		Tons/acre  Seed Mixtures 4706101	732
Temporary		Permanent	
Seed Type lbs/acre		Seed Type lbs/a	icre
Orchard Grass	46	Orchard Grass	46
Red Clover	8	Red Clover	8
Tetraploid Perennial Rye	16	Tetraploid Perennial Rye	16
Timothy 15 Annual Rye	15	Timothy 15 Annual Rye	15
provided) Photocopied section of involved 7.5' topogra		nd application (unless engineered plans including this in	nio nave be
Photocopied section of involved 7.5' topogra		approved (whose original real praise in charge	nio nave be
Photocopied section of involved 7.5' topogra			nio nave be
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			nio nave be
Photocopied section of involved 7.5' topogra			
Photocopied section of involved 7.5' topogra	phic sheet.		

#### Attachment A to WW-9

Northeast Natural Energy LLC ("NNE") plans to utilize a closed loop process for its drilling of the Kassay 7H well. Return flow from the well will be separated into its liquid and solid form. Liquids will be held in steel tanks and reused in the drilling and completion process or disposed of at an approved facility listed below. Solids removed from the stream will be diverted to steel half-round tanks where they will be solidified on site and taken to disposal as they are accumulated.

Kassay 7H Drill Cuttings will be taken to disposal at one or more of the following disposal/approved waste facilities, unless listed facilities are no longer approved to accept waste at time of disposal:

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

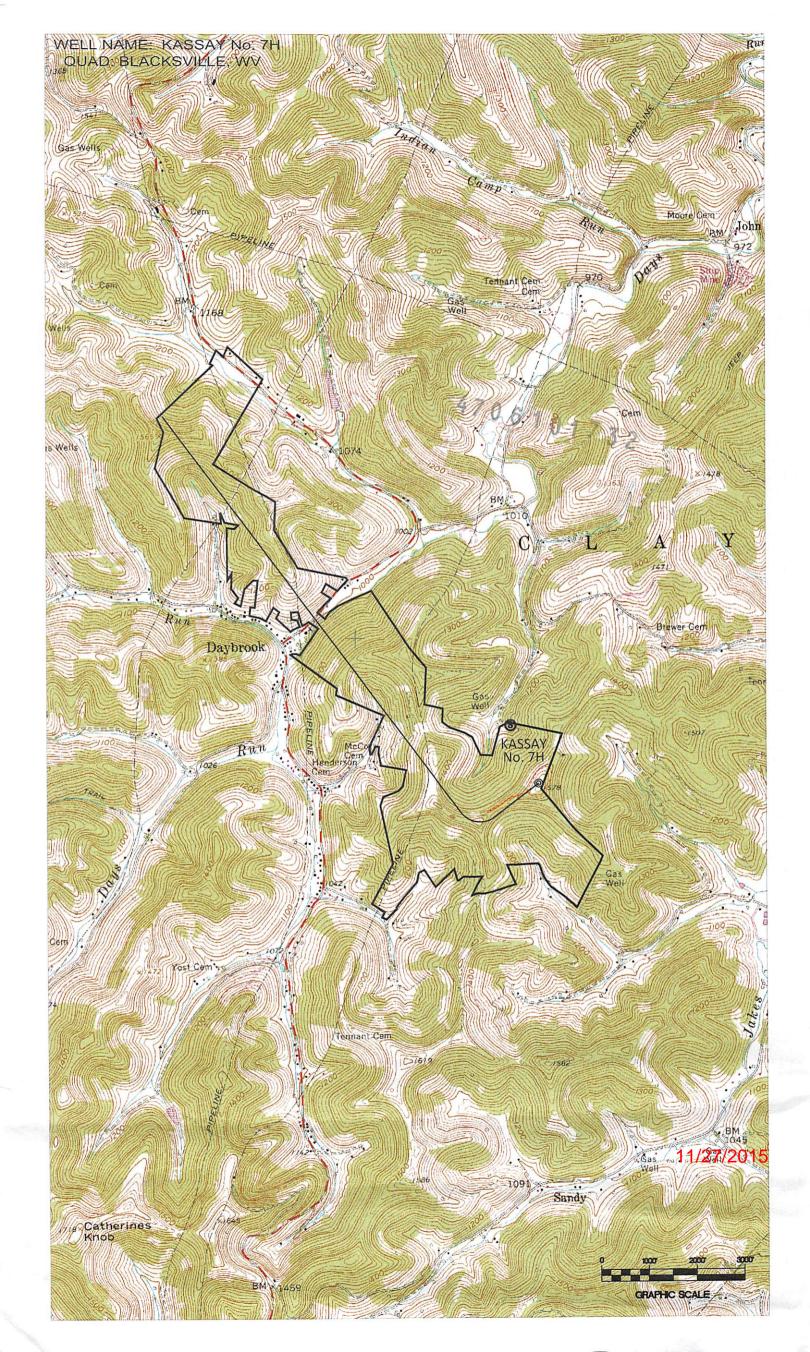
NNE plans to reuse and recycle all flowback fluid and/or reach out to other operators in the area who may be able to reuse and recycle such fluid. However, in the event that reuse is not obtainable the fluid will be disposed of at one, or multiple, of the following disposal/approved waste facilities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

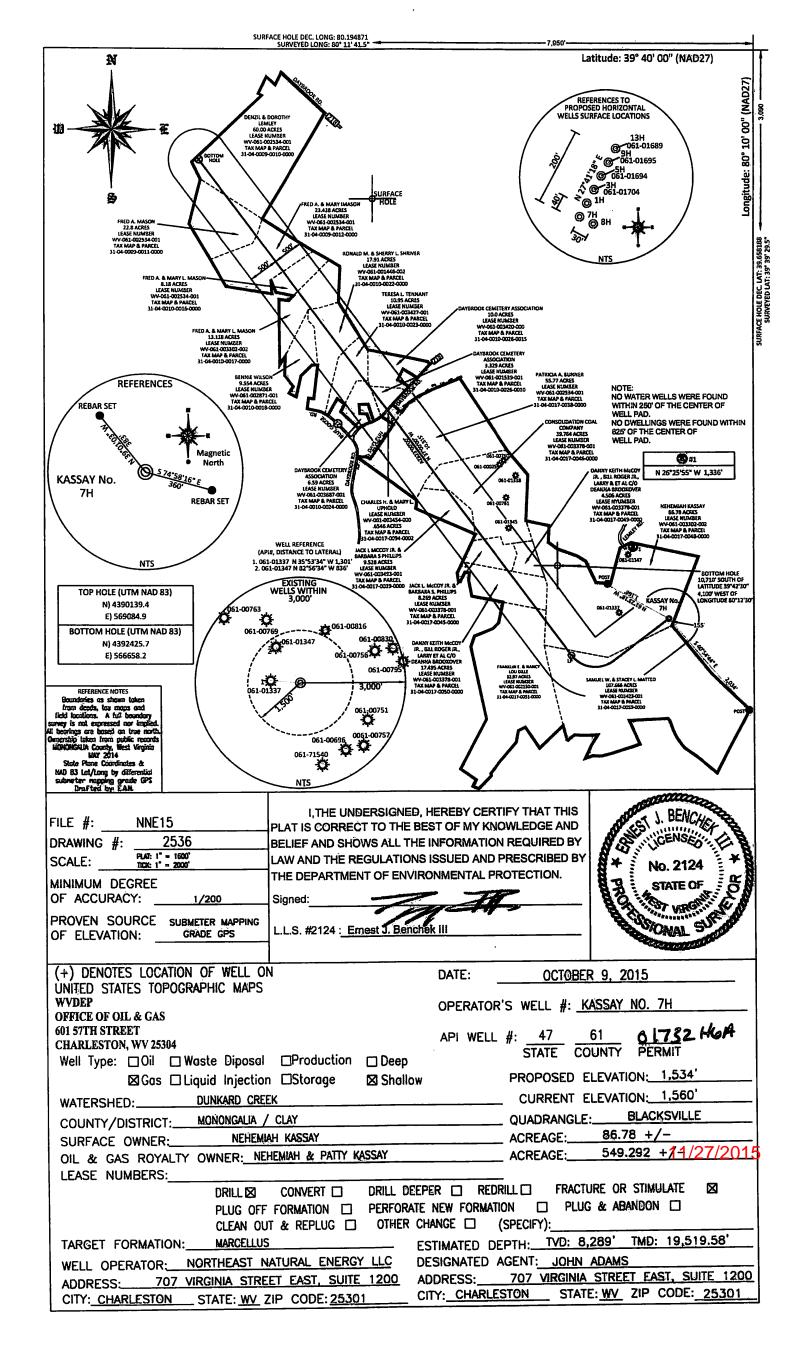
- Fairmont Brine Processing (WV NPDES #0116408)
- Green Hunter M. E. Elder 1 Disposal Well (Permit # 47-085-05151)
- Green Hunter Mason 1 Disposal Well (Permit #47-085-09721)
- Green Hunter Warren Disposal Well (Permit #34-121-2-3995)
- Green Hunter Travis Unit Disposal Well (Permit #34-121-2-4086)
- Viking Energy Corporation 20320 Disposal Well (Permit#47-039-02210)
- Ohio Oil Gathering Killbuck Disposal Well (Permit #34-075-24527)
- Ohio Oil Gathering Moran Disposal Well (Permit #34-089-24792)
- Ohio Oil Gathering Bells Run Disposal Well (Permit #34-167-29395) **同国的图VED**
- Ohio Oil Gathering Long Run Disposal Well (Permit #34-167-29658fflce of Oil and Gas)
- Ohio Oil Gathering Newell Run Disposal Well (Permit #34-167-29685) nc. 7 2 3 2015
- Appalachian Oil Purchaser Greens Run Disposal Well (Permit #2D0732540)
- Appalachian Oil Purchaser BW#4 Disposal Well (Permit # 2D073252AV Department of Environmental Protection

## **Kassay Water Well Location**

	Surface Owner/Water Purveyor	Supply Type	Tax Map and Parcel	Latitude/Longitude
1	Nehemiah Kassay	Spring Fed Pond	Tax Map 17, Parcel 48	39.661540, -80.196811
2	Bernice Tennant	Well	Tax Map 17, Parcel 64	39.660746, -80.188790
3	Bernice Tennant	Well	Tax Map 17, Parcel 64	39.660598, -80.188415
4	Nancy Carpenter, et al	Well	Tax Map 17, Parcel 73	39.655795, -80.184712
5	Nancy Carpenter, et al	Well	Tax Map 17, Parcel 73	39.655544, -80.185504
6	Angela M. Martin	Well	Tax Map 17, Parcel 59.1	39.652950, -80.194444

4706101732





WW-6A1 (5/13)

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

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

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

Lease Name or				
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
See Attachment	See Attachment	See Attachment	See Attachment	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

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Office of Oil and Gas

OCT 2 3 2015

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 affine and the permits/approvals should be acquired from the appropriate authority before the affected articles in the interprotection

Well Operator: Northeast Natural Energy LLC

By: Hollie M. Medley

Its: Regulatory Coordinator

Page 1 of 5

NNE Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	Tax Map & Parcel
WV-061-003302-002	KASSAY, NEHEMIAH AND PATTY A.	Northeast Natural Energy LLC	.125 or greater	1506/143	17-48;10-17,18
WV-061-001109-000	SHUMAN, INC.	*Chesapeake Appalachia, LLC	.125 or greater	1439/243	17-48
WV-061-003378-001	STRICKLER, PAUL T. AND SHARON	Northeast Natural Energy LLC	.125 or greater	1530/128	17-49,46,45,50
WV-061-003378-003	BUTLER, MARY ROSE	Northeast Natural Energy LLC	.125 or greater	1530/132	17-49,46,45,50
WV-061-003378-004	STRICKLER, WILBUR RANDOLPH AND DEBORAH	Northeast Natural Energy LLC	.125 or greater	1530/140	17-49,46,45,50
WV-061-003378-005	STRICKLER, DORSEY NEIL AND NANCY E.	Northeast Natural Energy LLC	.125 or greater	1530/136	17-49,46,45,50
WV-061-003222-001	JOHN, LOIS M. AND ERNEST	*Chesapeake Appalachia, LLC	.125 or greater	1449/448	17-49,39,45
WV-061-003222-002	STRICKLER, WILBUR R. AND DEBORAH	*Chesapeake Appalachia, LLC	.125 or greater	1450/547	17-49,39,45
WV-061-003222-003	STRICKLER, DORSEY N. AND NANCY	*Chesapeake Appalachia, LL	128 pr greater	1450/543	17-49,39,45
WV-061-003222-004	HIXENBAUGH, SHIRREL R. AND SHARON	*Chesapeake Appalachia, LLC	.125 or greater	0 9451/19 7	17-49,39,45
WV-061-003222-005	HIXENBAUGH, EARL LEE	*Chesapeake Appalachia, LLC	.125 or greater	1451/15	17-49,39,45
WV-061-003222-006	HIXENBAUGH, GREGORY J. AND DOROTHY	*Chesapeake Appalachia, LLC	.125 or greater	1451/11	17-49,39,45
WV-061-003222-007	HIXENBAUGH, ALLEN C.	*Chesapeake Appalachia, LLC	.125 or greater	1451/7	17-49,39,45
WV-061-003222-008	PIDO, VIOLET RAE	*Chesapeake Appalachia, LLC	.125 or greater	1451/23	17-49,39,45
WV-061-003222-009	STRICKLER, PAUL T. AND SHARON	*Chesapeake Appalachia, LLC	.125 or greater	1453/588	17-49,39,45
WV-061-003222-010	BUTLER, MARY ROSE	*Chesapeake Appalachia, LLC	.125 or greater	1453/584	17-49,39,45
WV-061-003222-011	HALL, CAROLYN AND AMOS RICHARD	*Chesapeake Appalachia, LLC	.125 or greater	1454/775	17-49,39,45
WV-061-003222-012	HENDERSON, GEORGE AND LINDA	*Chesapeake Appalachia, LLC	.125 or greater	1454/686	17-49,39,45
WV-061-003222-013	THE CHARLES LEE THOMAS TRUST	*Chesapeake Appalachia, LLC	.125 or greater	1454/865	17-49,39,45
WV-061-003474-001	MOORE, LORETTA GAYLE	Northeast Natural Energy LLC	.125 or greater	1521/137	17-49
WV-061-003248-001	STRICKLER, DORSEY N. AND NANCY	*Chesapeake Appalachia, LLC	.125 or greater	1453/645	17-46
NV-061-003248-002	BUTLER, MARY ROSE	*Chesapeake Appalachia, LLC	.125 or greater	1453/641	17-46
NV-061-003248-003	STRICKLER, PAUL T. AND SHARON	*Chesapeake Appalachia, LLC	.125 or greater	1453/746	17-46
WV-061-003248-004	STRICKLER, WILBUR R. AND DEBORAH	*Chesapeake Appalachia, LLC	.125 or greater	1453/727	17-46
NV-061-003248-005	JOHN, LOIS M. AND ERNEST	*Chesapeake Appalachia, LLC	.125 or greater	1454/383	17-46
NV-061-003248-006	MOORE, LORETTA AND GAYLE	Northeast Natural Energy LLC	.125 or greater	1521/135	17-46
WV-061-003248-007	HIXENBAUGH, SHIRREL R. AND SHARON	Northeast Natural Energy LLC	.125 or greater	1521/698	17-46
WV-061-003248-008	HIXENBAUGH, EARL LEE	Northeast Natural Energy LLC	.125 or greater	1518/27	17-46
NV-061-003248-009	HIXENBAUGH, GREGORY J. AND DOROTHY	Northeast Natural Energy LLC	.125 or greater	1520/318	17-46
WV-061-003248-010	HIXENBAUGH, ALLEN C. AND BETH A.	Northeast Natural Energy LLC	.125 or greater	1518/15	17-46
WV-061-002534-001	SHUMAN, INC.	*Chesapeake Appalachia, LLC	.125 or greater	1429/366	17-38; 9-12,11,10; 10-16
WV-061-002583-001	JOHN, LOIS MARIE	*Chesapeake Appalachia, LLC	.125 or greater	1431/264	17-38
WV-061-002583-002	HIXENBAUGH, EARL LEE	*Chesapeake Appalachia, LLC	.125 or greater	1433/561	CEIVED
WV-061-002583-003	HIXENBAUGH, GREGORY J. AND DOROTHY	*Chesapeake Appalachia, LLC	.125 or greater	Office of	
WV-061-002583-004	HIXENBAUGH, ALLEN C.	*Chesapeake Appalachia, LLC	.125 or greater	1431/797	17-38
WV-061-002583-005	HALL, CAROLYN AND AMOS RICHARD	*Chesapeake Appalachia, LLC	.125 or greater	1436/427 <b>() ( )</b>	2 3172415
WV-061-002583-006	HENDERSON, GEORGE R. AND LINDA	*Chesapeake Appalachia, LLC	.125 or greater	1436/450	17-38
WV-061-002583-007	STRICKLER, WILBUR R. AND DEBORAH	*Chesapeake Appalachia, LLC	.125 or greater	14WW1De	bartment
WV-061-002583-008	STRICKLER, DORSEY N. AND NANCY	*Chesapeake Appalachia, LLC	.125 or greater	Environme	ntal-Prote
WV-061-002583-009	STRICKLER, PAUL T. AND SHARON	*Chesapeake Appalachia, LLC	.125 or greater	1454/353	17-38
WV-061-002583-010	BUTLER, MARY ROSE	*Chesapeake Appalachia, LLC	.125 or greater	1454/714	17-38
WV-061-002583-011	HIXENBAUGH, SHIRREL R. AND SHARON	*Chesapeake Appalachia, LLC	.125 or greater	1438/607	17-38
WV-061-002583-012	WELCH, MARY MAXINE	*Chesapeake Appalachia, LLC	.125 or greater	1444/272	17-38

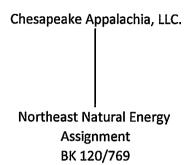
NNE Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	Tax Map & Parcel
WV-061-002583-013	PIDO, VIOLET RAE	*Chesapeake Appalachia, LLC	.125 or greater	1449/422	17-38
WV-061-003278-001	CHESAPEAKE APPALACHIA LLC	*Chesapeake Appalachia, LLC	.125 or greater	1424/744	17-38
WV-061-001539-001	UPHOLD, CHARLES H. & MARY L.	*Chesapeake Appalachia, LLC	.125 or greater	1491/254	10-26.10
WV-061-003420-000	THE DAYBROOK CEMETERY ASSOCIATION	Northeast Natural Energy LLC	.125 or greater	1506/565	10-26.15
WV-061-003427-001	TENNANT, TERESA LEIGH	Northeast Natural Energy LLC	.125 or greater	1511/618	10-23
WV-061-001446-002	SHRIVER, RONALD M. AND SHERRY L.	Northeast Natural Energy LLC	.125 or greater	1533/215	10-22
WV-061-002574-001	ASHLEY, JOHN	*Chesapeake Appalachia, LLC	.125 or greater	1427/690	9-12,11; 10-16
WV-061-002574-002	SELDERS, EVERETT A. AND DIANNA	*Chesapeake Appalachia, LLC	.125 or greater	1427/695	9-12,11; 10-16
WV-061-002574-003	DAWSON, MARY ANN	*Chesapeake Appalachia, LLC	.125 or greater	1435/175	9-12,11; 10-16
WV-061-002621-001	DEVOCABLE TRUST OF POREDT AA SDRAGG	*Chesapeake Appalachia, LLC	13E or groater	1441/411	9-12,11; 10-16;
WV-061-002821-001 WV-061-003309-001	REVOCABLE TRUST OF ROBERT M. SPRAGG		.125 or greater	•	17-50
	CHESAPEAKE APPALACHIA LLC	*Chesapeake Appalachia, LLC	.125 or greater	1487/228	9-12,11; 10-16
WV-061-000256-001	PALMER, BARBARA P.	*Chesapeake Appalachia, LLC	.125 or greater	1428/518	9-10
WV-061-003271-001	CHESAPEAKE APPALACHIA LLC	*Chesapeake Appalachia, LLC	.125 or greater	1487/244	10-17,18
WV-061-002871-001	WILSON, BENNIE	*Chesapeake Appalachia, LLC	.125 or greater	1449/440	10-18
WV-061-003687-001	MOORE, LORETTA GAYLE	Northeast Natural Energy LLC	.125 or greater	1531/498	10-24
WV-061-003454-000	UPHOLD, CHARLES H.	Northeast Natural Energy LLC	.125 or greater	1513/308	17-94.2
WV-061-003493-001	MOORE, LORETTA GAYLE	Northeast Natural Energy LLC	.125 or greater	1530/166	17-39
WV-061-002642-001	LEMLEY, LUANNE AND ROBERT E.	*Chesapeake Appalachia, LLC	.125 or greater	7 (945/189	17-50
WV-061-002642-002	MATHENY, REBECCA SUE	*Chesapeake Appalachia, LLC	.125 or greater	1445/182	1 17,20 3
WV-061-002642-003	TENNANT, BILLIE JEAN	*Chesapeake Appalachia, LLC	.125 or greater	1445/178	17-50
WV-061-002673-001	STRICKLER, WILBUR RANDOLPH AND DEBORAH	*Chesapeake Appalachia, LLC	.125 or greater	1530/140	17-50
WV-061-002673-002	JOHN, LOIS MARIE AND ERNEST	*Chesapeake Appalachia, LLC	.125 or greater	1454/793	17-50
WV-061-002673-003	HENDERSON, GEORGE AND LINDA	*Chesapeake Appalachia, LLC	.125 or greater	1454/698	17-50
WV-061-002673-004	THE CHALRES LEE THOMAS	*Chesapeake Appalachia, LLC	.125 or greater	1454/861	17-50
WV-061-002673-005	MASON, LUE	*Chesapeake Appalachia, LLC	.125 or greater	1447/503	17-50
WV-061-002673-006	PIDO, VIOLET RAE	*Chesapeake Appalachia, LLC	.125 or greater	1450/790	17-50
WV-061-002673-007	HIXENBAUGH, GREGORY J. AND DOROTHY	*Chesapeake Appalachia, LLC	.125 or greater	1449/146	17-50
WV-061-002673-008	HIXENBAUGH, SHIRREL R. AND SHARON	*Chesapeake Appalachia, LLC	.125 or greater	1451/34	17-50
WV-061-002673-009	HIXENBAUGH, EARL LEE	*Chesapeake Appalachia, LLC	.125 or greater	1449/375	17-50
WV-061-002673-010	HIXENBAUGH, ALLEN C.	*Chesapeake Appalachia, LLC	.125 or greater	1450/787	17-50
WV-061-002673-011	HALL, CAROLYN AND AMOS RICHARD	*Chesapeake Appalachia, LLC	.125 or greater	1453/572	17-50
WV-061-002673-012	STRICKLER, DORSEY N. AND NANCY	*Chesapeake Appalachia, LLC	.125 or greater	1530/136	17-50
WV-061-002673-013	BUTLER, MARY ROSE	*Chesapeake Appalachia, LLC	.125 or greater	1530/132	17-50
WV-061-002673-014	STRICKLER, PAUL AND SHARON	*Chesapeake Appalachia, LLC	.125 or greater	1530/128	17-50
WV-061-002673-015	MOORE, LORETTA GAYLE	Northeast Natural Energy LLC	.125 or greater	1521/133	17-50
WV-061-003557-001	PENRY, ROBERT WAYNE	Northeast Natural Energy LLC	.125 or greater	1528/99	17-50
WV-061-003557-002	JENKINS, RUTH ELLEN AND CARLTON	Northeast Natural Energy LLC	.125 or greater	1528/64	17,50
wv-061-003557-003	HUSSEY, CARLA RAE AND NORBERT FAY	Northeast Natural Energy LLC	.125 or greater	1528/95 C	FIVE D
WV-061-003557-004	THOMAS, WILLIS AND GWENDOLYN	Northeast Natural Energy LLC	.125 or greater	Office of	III and G
WV-061-003557-005	GOLDEN, CARMA JEAN	Northeast Natural Energy LLC	.125 or greater	1528/101	0 247-69
WV-061-003557-006	THOMAS, PAMELA SUE	Northeast Natural Energy LLC	.125 or greater	1528/84	17-50
WV-061-003557-007	LANE, CAROL P.	Northeast Natural Energy LLC	.125 or greater		- 4.17 <u>-50</u> 4
WV-061-003557-009	THOMAS, STANLEY DALE	Northeast Natural Energy LLC	.125 or greater		artment c
WV-061-003357-001	WELLS, WILDA V.	Northeast Natural Energy LLC	.125 or greater	Environmen	tal Protec

NNE Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	Tax Map & Parcel
WV-061-003357-002	WELLS, ALDA KATE	Northeast Natural Energy LLC	.125 or greater	1516/0572	17-51
WV-061-003357-003	HALL, REITA	Northeast Natural Energy LLC	.125 or greater	1520/294	17-51
WV-061-003562-001	WILLIAMS, GREGORY D. AND KYLE L.	Northeast Natural Energy LLC	.125 or greater	1532/734	17-51
WV-061-002124-001	WELLS, HUBERT W. AND RITA J.	*Chesapeake Appalachia, LLC	.125 or greater	1505/595	17-51
WV-061-002124-002	MOORE, L. GAYLE	*Chesapeake Appalachia, LLC	.125 or greater	1506/423	17-51
WV-061-002124-003	WILLIAMS, ROXIE	*Chesapeake Appalachia, LLC	.125 or greater	1505/591	17-51
WV-061-002124-004	DILLE, FRANKLIN ERNEST AND NANCY LOU	*Chesapeake Appalachia, LLC	.125 or greater	1505/590	17-51
WV-061-002124-006	WILSON, CLIFF EVAN	*Chesapeake Appalachia, LLC	.125 or greater	1507/094	17-51
WV-061-002124-008	PRICE, JACK E. AND MARTHA LEE	*Chesapeake Appalachia, LLC	.125 or greater	1507/460	17-51
WV-061-002124-009	TENNANT, R., WAYNE	*Chesapeake Appalachia, LLC	.125 or greater	1510/160	17-51
WV-061-002354-001	WILSON, BENNIE	*Chesapeake Appalachia, LLC	.125 or greater	1516/0754	17-51
WV-061-002354-002	YOST, RUSSELL D.	*Chesapeake Appalachia, LLC	.125 or greater	1451/069	17-51
WV-061-002354-003	YOST, JACK L. AND JOYCE GAIL	*Chesapeake Appalachia, LLC	.125 or greater	1451/073	17-51
WV-061-002354-004	FILBEY, RONALD L.	*Chesapeake Appalachia, LLC	.125 or greater	1454/348	17-51
WV-061-002354-005	FILBEY, GARY R.	*Chesapeake Appalachia, LLC	.125 or greater	1454/448	17-51
WV-061-002354-006	FILBEY, ROBERT C.	*Chesapeake Appalachia, LLC	.125 or greater	1454/443	17-51
WV-061-002354-007	HOLLANDSWORTH, SHIRLEY MARLENE	*Chesapeake Appalachia, LLC	.125 or greater	1455/477	17-51
WAY 054 002254 000	DAVIS, CHARLES BRADLEY AND DENISE	#Character Appeloship 11.C	135 or seedor	1454/877	17-51
WV-061-002354-008	ELIZABETH CENTRUS IS	*Chesapeake Appalachia, LLC	.125 or greater	-,•-	
WV-061-002354-009	SAUNDERS, VIVIAN GENEVIEVE	*Chesapeake Appalachia, LLC	.125 or greater	1455/485	17-51
WV-061-002354-010	BUTLER, TANA D. AND ROBERT S.	*Chesapeake Appalachia, LLC	.125 or greater	1455/481	17-51
WV-061-002354-011	CUMMINS, CORREL W.	*Chesapeake Appalachia, LLC	.125 or greater	1455/771	17-51
WV-061-002354-012	DAVIS, BRIAN E. AND JULIE B.	*Chesapeake Appalachia LLC	125 or greater	1455/767	17-51
WV-061-002354-013	RUSH, LARRY L. AND LANA D.	*Chesapeake Appalachia, LCC	125 or greater	1457/627	17-51
WV-061-002150-001	DILLE, FRANKLIN EARNEST AND NANCY LOU	*Chesapeake Appalachia, LLC	.125 or greater	4 1505/541	17-51
WV-061-001423-001	COLLINS, CATHY ANN	*Chesapeake Appalachia, LLC	.125 or greater	1488/400	17-59
WV-061-001423-002	JONES, LULA HAZE TENNANT	*Chesapeake Appalachia, LLC	.125 or greater	1488/414	17-59
WV-061-001423-004	GLOVER, BETTY	*Chesapeake Appalachia, LLC	.125 or greater	1488/402	17-59
WV-061-001423-005	TENNANT, SHIRLEY A.	*Chesapeake Appalachia, LLC	.125 or greater	1488/401	17-59
WV-061-001423-006	MAYLE, PATRICIA ELLEN TENNANT	*Chesapeake Appalachia, LLC	.125 or greater	1488/404	17-59
WV-061-001423-007	TENNANT, JACOB W. AND ELIZABETH B.	Northeast Natural Energy LLC	.125 or greater	1524/196	17-59
WV-061-003308-001	CHESAPEAKE APPALACHIA LLC	*Chesapeake Appalachia, LLC	.125 or greater	1488/801	17-59

<sup>\*</sup>See Attachment

## RECEIVED Office of Oil and Gas

OCT 2 3 2015



4706101132

RECEIVED
Office of Oil and Gas

OCT 2 3 2015



October 5, 2015

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

RE: Kassay 1H, 3H, & 7H

Dear Permit Reviewer:

Please be advised that Northeast Natural Energy LLC has the right to drill, extract and produce the minerals beneath the road identified as Daybrook Road (State Route 218) on the enclosed survey plat.

Sincerely,

Jeannie Morgan Johnson, CPL Vice President – Land Operations

Enclosure

4706101732

RECEIVED
Office of Oil and Gas

OCT 2 3 2015

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

Date of Notic	ce Certification: 10/22/2015		API No. 4	/	
			Operator's	Well No. Kass	say 7H
			Well Pad I	Name: Kassay	
Notice has	been given:			<del></del>	
	ne provisions in West Virginia Code	§ 22-6A, the Operator has p	rovided the red	quired parties v	with the Notice Forms lister
	tract of land as follows:				
State:	West Virginia	LITTA A NI A IN OR	Easting:	569084.9	
County:	Monongalia	UTM NAD 83	Northing:	4390193.4	
District:	Clay	Public Road A	ccess:	County Route 25	i/3 (Yank Hollow Road)
Quadrangle:	Blacksville	Generally used	l farm name:	Kassay	
Watershed:	Dunkard Creek				
prescribed by it has provid information r of giving the requirements Virginia Code	West Virginia Code § 22-6A-7(b) the secretary, shall be verified and ed the owners of the surface descrequired by subsections (b) and (c), surface owner notice of entry to sof subsection (b), section sixteen e § 22-6A-11(b), the applicant shall have been completed by the applica	shall contain the following in ibed in subdivisions (1), (2) section sixteen of this article; urvey pursuant to subsection of this article were waived tender proof of and certify to	nformation: (14) and (4), substitute (ii) that the rent (a), section in the first (b) whith (b)	4) A certificating the certion (b), see the current was ten of this artification of the correct the co	on from the operator that (ction ten of this article, the deemed satisfied as a resucce six-a; or (iii) the notice was and Pursuant to We
that the Ope	West Virginia Code § 22-6A, the Cerator has properly served the requireCK ALL THAT APPLY			ertification	OOG OFFICE USE ONLY
☐ 1. NO	TICE OF SEISMIC ACTIVITY o	NOTICE NOT REQU SEISMIC ACTIVITY WA			☐ RECEIVED/ NOT REQUIRED
■ 2. NO	TICE OF ENTRY FOR PLAT SUR	VEY or 🔲 NO PLAT SUR	VEY WAS CO	ONDUCTED	☐ RECEIVED
■ 3. NO	TICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUESTED NOTICE OF ENTRY FO WAS CONDUCTED or			RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER (PLEASE ATTAC		CE OWNER	
■ 4. NO	TICE OF PLANNED OPERATION				RECEIVED
■ 5. PUI	BLIC NOTICE				☐ RECEIVED
■ 6. NO	TICE OF APPLICATION				
					RECEIVED

**Required Attachments:** 

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice Certification Form all Notice Forms and Certifications of Notice Certification Form all Notice Forms and Certifications of Notice Certification Form all Notice Forms and Certifications of Notice Certification Form all Notice Forms and Certifications of Notice Certification Form all Notice Forms and Certifications of Notice Certification Form all Notice Forms and Certifications of Notice Certification Form all Notice Forms and Certifications of Notice Certification Form all Notice Forms and Certifications of Notice Certification Form all Notice Forms and Certifications of Notice Certification Form all Notice Forms and Certifications of Notice Certification Form all Notice Forms and Certifications of Notice Certification Forms all Notice Forms and Certification Forms and Certific 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 National Advertisement with publication date verification or the associated Affidavit of Publication. The attached National Advertisement with publication date verification or the associated Affidavit of Publication. 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. **Environmental Protection** 

#### Certification of Notice is hereby given:

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

Well Operator: Northeast Natural Energy LLC Address: 707 Virginia Street East, Suite 1200 By: Hollie M. Medley Charleston, WV 25301 Facsimile: Its: Regulatory Coordinator 304-241-5972 Telephone: 304-241-5752, ext. 7108 Email: hmedley@nne-llc.com Holl: W TARY SEACFICIAL SEAL NOTARY PUBLIC Subscribed and sworn before me this and ay of October 2015. STATE OF WEST VIRGIN Notary Public My Commission Expires (

#### Oil and Gas Privacy Notice:

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

4706101732

RECEIVED
Office of Oil and Gas

OCT 23 2015

WW-6A (9-13)

API NO. 47		
OPERATOR WE	ELL NO.	Kassay 7H
Well Pad Name:	Kassay	

## 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: 10/9/2015 Date Permit Application Filed: 10/2 Notice of:	3/2015
PERMIT FOR ANY WELL WORK  CONSTRUCTION OF A	PROVAL FOR THE AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6A-10	<b>O(b)</b>
	OD OF DELIVERY THAT REQUIRES A IPT OR SIGNATURE CONFIRMATION
certificate of approval for the construction of an impoundment or piregistered mail or by any method of delivery that requires a receipt of sediment control plan required by section seven of this article, and to the surface of the tract on which the well is or is proposed to be located and gas leasehold being developed by the proposed well work, if described in the erosion and sediment control plan submitted pursual operator or lessee, in the event the tract of land on which the well promore coal seams; (4) The owners of record of the surface tract or trace well work, if the surface tract is to be used for the placement, construction of the surface tract or trace a water well, spring or water supply source located within one provide water for consumption by humans or domestic animals; and proposed well work activity is to take place. (c)(1) If more than three subsection (b) of this section hold interests in the lands, the applicant records of the sheriff required to be maintained pursuant to section oppovision of this article to the contrary, notice to a lien holder is not	or signature confirmation, copies of the application, the erosion and the well plat to each of the following persons: (1) The owners of record of ated; (2) The owners of record of the surface tract or tracts overlying the of the surface tract is to be used for roads or other land disturbance as and to subsection (c), section seven of this article; (3) The coal owner, roposed to be drilled is located [sic] is known to be underlain by one or acts overlying the oil and gas leasehold being developed by the proposed ruction, enlargement, alteration, repair, removal or abandonment of any Any surface owner or water purveyor who is known to the applicant to thousand five hundred feet of the center of the well pad which is used to defend the operator of any natural gas storage field within which the retenants in common or other co-owners of interests described in the many serve the documents required upon the person described in the eight, article one, chapter eleven-a of this code. (2) Notwithstanding any anotice to a landowner, unless the lien holder is the landowner. W. Va. provide the Well Site Safety Plan ("WSSP") to the surface owner and any as provided in section 15 of this rule.
☑ SURFACE OWNER(s) Name: See Attachment	COAL OWNER OR LESSEE 0 6 1 0 1 7 3 2  Name: See Attachment Address:
Address:	
Name:Address:	COAL OPERATOR Name: Address:
SURFACE OWNER(s) (Road and/or Other Disturbance)  Name: See Attachment Address:	SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name:	Name: See Attachment Address: FECEIVED
Address:	Office of Oil and Gas
SURFACE OWNER(s) (Impoundments or Pits) Name:	Name: Address: Address:
Address:	*Please attach additional forms if necessary Department of Environmental Protection

WW-6A
(8-13)

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

#### 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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting <a href="www.dep.wv.gov/oil-and-gas/pages/default.aspx">www.dep.wv.gov/oil-and-gas/pages/default.aspx</a>.

#### **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 hall in the construction is a superior of the state. permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of the feeting nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit of 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 padd f 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 Veldente to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding if only by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the fiction

WW-6A	
(8-13)	

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

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 aggricated 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 appear on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

#### Written Comment:

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

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

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

Environmental Protection

WW-6A	
(8-13)	

API NO. 47-	-		
OPERATOR WE	ELL NO.	Kassay 7H	
Well Pad Name:	Kassay		

#### 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 <a href="http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx">http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx</a> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

#### Permit Denial or Condition

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

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

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

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

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WW-6A
(8-13)

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

#### Notice is hereby given by:

Well Operator: Northeast Natural Energy LLCAddress: 707 Virginia Street E., Suite 1200Telephone: 304-241-5752, ext. 7108Charleston, WV 25301Email: hmedley@nne-llc.comFacsimile: 304-241-5972

#### Oil and Gas Privacy Notice:

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

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Kristen M. Vernor
22 Points Orling
Management MAN 1988 P.

Subscribed and sworn before me this and day of Otto 205.

Notary Public

My Commission Expires January 28, 2020

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<b>Surface</b>	Owner	s	<b>)</b> :

Nehemiah and Patty Kassay 1991 Daybrook Road Fairview, WV 26570

Precision Oil and Gas, Inc. P.O. Box 884 Bridgeport, WV 26330

Samuel W. and Stacy L. Matteo, c/o Ileen Morton Matteo (life estate) 404 Country Road Fairview, WV 26570

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

Nehemiah and Patty Kassay 1991 Daybrook Road Fairview, WV 26570

Samuel W. and Stacy L. Matteo, c/o Ileen Morton Matteo (life estate) 404 Country Road Fairview, WV 26570

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

Nehemiah and Patty Kassay 1991 Daybrook Road Fairview, WV 26570

Bernice Tennant 299 Ellis Tennant Hollow Fairview, WV 26570

Nancy Carpenter, et al 1343 Bunner Ridge Road Fairmont, WV 26554

Angela Marie Martin 477 Country Road Fairview, WV 26570 4706101732

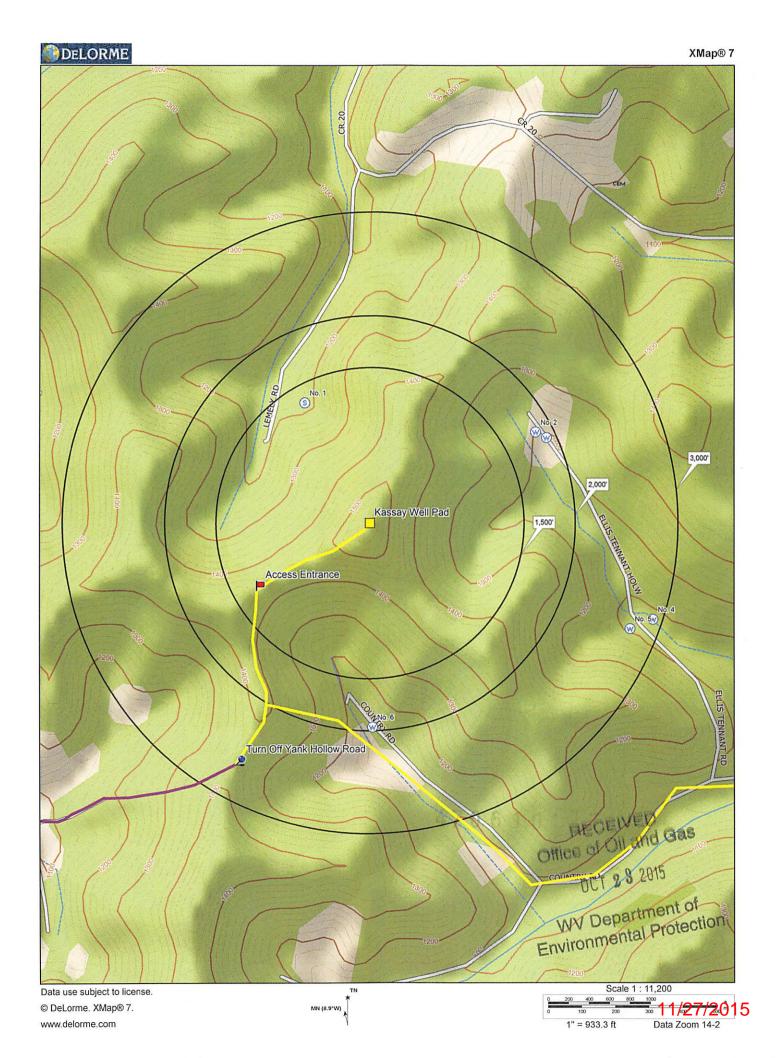
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#### **Coal Owner or Lessee:**

Consolidated Coal Company Attn: Analyst CNX Center 1000 Consol Energy Drive Canonsburg, PA 15317

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### **Kassay Water Well Location**

	Surface Owner/Water Purveyor	Supply Type	Tax Map and Parcel	Latitude/Longitude
1	Nehemiah Kassay	Spring Fed Pond	Tax Map 17, Parcel 48	39.661540, -80.196811
2	Bernice Tennant	Well	Tax Map 17, Parcel 64	39.660746, -80.188790
3	Bernice Tennant	Well	Tax Map 17, Parcel 64	39.660598, -80.188415
4	Nancy Carpenter, et al	Well	Tax Map 17, Parcel 73	39.655795, -80.184712
5	Nancy Carpenter, et al	Well	Tax Map 17, Parcel 73	39.655544, -80.185504
6	Angela M. Martin	Well	Tax Map 17, Parcel 59.1	39.652950, -80.194444

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OCT 2 3 2015

Operator Well No. K	Kassay
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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 entry	Requiremen	t: Notice shall be pro-	vided at least	SEVEN (7) da	ys but no more tha	nn FORTY-FIVE (45)	days prior to
Date of Notic	e: 12/18/2013	Date of Pla	nned Entry:	12/26/2013			
Delivery met	hod pursuar	nt to West Virginia C	ode § 22-6A	-10a			
☐ PERSON	NAL [	REGISTERED	☐ ME	THOD OF DEI	LIVERY THAT RI	EQUIRES A	
SERVIC	E	MAIL			NATURE CONFIR	A STATE OF THE PARTY OF T	
on to the surfa but no more the beneath such to owner of mine and Sediment Secretary, whi	nce tract to con nan forty-five tract that has erals underly Control Man ich statement	enduct any plat survey days prior to such en filed a declaration pur ing such tract in the co ual and the statutes an	s required putry to: (1) The suant to section to sectio	rsuant to this are surface owner on thirty-six, a ords. The noticed to oil and gas	rticle. Such notice r of such tract; (2) rticle six, chapter t e shall include a sta s exploration and p	r shall provide notice of shall be provided at lea- to any owner or lessee owenty-two of this code, atement that copies of to production may be obtain age on the Secretary's v	st seven days of coal seams and (3) any he state Erosion ned from the
Notice is here	by provided	to:					
■ SURFAC	E OWNER(s	s)		■ COA	L OWNER OR LE	SSEE	
Name: See Attac		*		Name: See	Attachment		
Address:			-	Address:			
Name:						(	
Address:			_0		ERAL OWNER(s)		
				Name: See	Attachment	67061A	1732
Address:			-	Address.		120010	
9			-	*please attacl	additional forms if ne	cessary	
a plat survey o State: County: District:	est Virginia ( on the tract of West Virginia Monongalia Clay	land as follows:		Approx. Latite Public Road A Watershed:	ude & Longitude:	l operator is planning er 569112.37, 4390193.76 (UTM State Rt. 20 (Memorial Road) Dunkard	
Quadrangle:	Blacksville, WV			Generally use	d farm name:	Kassay	
may be obtained Charleston, Wobtained from	ed from the S V 25304 (30 the Secretary	ecretary, at the WV D 4-926-0450). Copies by visiting <u>www.dep</u>	epartment of of such docu	Environmenta ments or additi	l Protection headquonal information re	il and gas exploration a uarters, located at 601 5 elated to horizontal dril	7th Street, SE,
Notice is her Well Operator:				Address:	70714-1-1	0.44-4000	
Telephone:	-	iral Energy LLC		Address.	707 Virginia Street East, Charleston, WV 25301	, Suite 1200	
	304.241.5752	-lle com		Facsimile:			"IED
	miledicy@inic	10.0011				RECE	WED Gas
duties. Your p	ersonal infor	mation may be discle	sed to other	State agencies	s or third parties in	phone number, as part on the normal course of mation Act requests. Our personal information  WV Description	pusiness or as

## **Kassay - Entry for Plat Survey**

TMP	Surface Owner	Address	
7-48	Nehemiah Kassay Patty Kassay	✓ 1991 Daybrook Road, Fairview, WV 26570	
17-62	Precision Oil and Gas Inc.	P.O. Box 884, Bridgeport, WV 26330	
TMP	Surface Owner - Access Road	Address	
7-48	Nehemiah Kassay Patty Kassay	1991 Daybrook Road, Fairview, WV 26570	
TMP	Mineral Owner	Address	
.7-62	Alice Wise, A Widow	8615 Tiber Hollow Court Louisville, KY 40219	
.7-62	Alma M. Joseph, A Widower	510 Brewer Street Akron, OH 44305	
7-62	Almeada J. Barber, A Widow	22 Kurtz Street Apt 206 Athens, OH 45701	
7-62	Ardella J. Clevenger	3 Karen Court Fairmont, WV 26554	
7-62	Betty C. Lyons	316 North Main Street Bishop, CA 93514	
7-62	Betty Lee Sine, Widow	Rt 1 Box 450 Riversville WV 26588	
7-62	Billy Ray Tennant	658 Mooresville Road Core, WV 26541	
7-62	C.W. Sine, A Single Man	4014 Trent Avenue Cleveland, OH 44109	
7-62	Carol I Wise, Married	159 Pine Drive Poca, WV 26559	
7-62	Celeste M Frickleton	/ 11724 Dry River Ct. Reston, VA 20191	
7-62	Cheryl Lisabeth Gallagher	2094 Croosroads Road Fairview, WV 26570	
7-62	Connie Varner, A Single Woman	✓ 16005 Fleming Road Amesville, OH 45711	
7-62	Darlene Eddy, A/K/A Darlene S.	910 Harlem Fairmont, WV 26554	
7-62	Deborah Sudduth And Samuel	8480 Rural Dale Road Blue Rock, OH 43760	
7-62	Dennis Keith Williams	Rt 1 Box 174 Fairmont, WV 26554	
7-62	Diana Beth Thomas, A/K/A Diane	404 Brown Run Rd. Burton, WV 26590	
7-62	Diane Beth Thomas And Curtis	404 Brown Run Rd. Burton, WV 26590	
7-62	Donald R Sine, Married	5097 W. 148th Street Brook Park, OH 44142	
7-62	Donald R. Sine And Irma Sine,	5097 W. 148th Street Brook Park, OH 44142	
7-62	Donald Rex Williams	153 South Heritage Drive Jenkins, KY 41537	
7-62	Donna Lynn Chase, Married	✓ 2833 West Roy E. Furman Highway Rogersville, PA 15359	
7-62	Doris L Sine, Widow	4430 Fairmon Road Morgantown J W 26501	
7-62	Ellen J Woodruff, Widow	7529 Praire Road, NE, Albuquerque, NM 87109-1801	
7-62	Emza M. Parsons, A Widow	607 Bryan Avenue Barrackville, WV 26559	
7-62	Everett A Sine, Jr, Married	101 Mount Harmon Road Fairview, WV 26570	
7-62	Freddy W Williams, Married		
7-62	Gail Church, Married	127 Dewey Ave. Spraggs, PA 15362	
7-62	Ginger K. Estle	46 Breezy Drive Morgantown, WV 26501	
7-62	Helen Cummings, A Widow	P.O. Box 277 Grand W 2657	
7-62	James Everett Williams II	21200 State Rt 676 Manuette, OH 45750	
7-62	James Varner, A Single Man	16170 Fleming Road Amesville, OH 45VI)	
7-62	Janet Varner, A Widow	16005 Fleming Road Amesville, OH 45711	
	Jarrod Williams	P.O. Box 311 Pentress WY266A WV Debaras Pr Environmental Pr	
7-62		- A THE PARTY	

17-62	Jimmy Randall Tennant	15 Clint Moore Road Fairview, WV 26570
17-62	Jody L. Varner, A Single Man	P.O. Box 102 181 Water Street Duncan Falls, OH 43734
17-62	Joyce Ann Berga, A/K/A Joyce	619 Ruby Street Belmont, WV 26134
17-62	Karen J. Taylor, F/K/A Karen	> 50711 State Rt 7 New Matamoras, OH 45767
17-62	Karen M. Cain, A/K/A Karen	✓ 645 Hillwood Drive Morgantown, WV 26508
17-62	Kimberly Sue Brummage	2596 Daybrook Road Fairview, WV 26570
17-62	Kristie Virgie Vedis	/ 631 Daybrook Road Fairview, WV 26579
17-62	Larry K Sine, Married	1101 Buffalo Road Mannington, WV 26582
17-62	Larry Tennant, A Married Man	✓ 1110 Plum Road Mannington, WV 26582
17-62	Leonard D Moore, Married	/ 10754 Mason Dixion HWY Burton, WV 26562
17-62	Leonard L Tennant, Married	206 Putney Road Cumberland, V A 23040
17-62	Lisa And William Mccammon	✓ 6549 South Blackburn Road Athens, OH 45701
17-62	Loretta Fluharty	✓ Rt 3 Box 155A Mannington, WV
17-62	Louise Varner, A Widow	y 99 Bean Road Lot 4 The Plains, OH 45780
17-62	Lyall A Sine, Aka Lyal A Sine	✓ 355 Statler Run Road Fairview, WV 26570
17-62	Lydia L. Troutman	✓ 46 Breezy Drive Morgantown , WV 26501
17-62	Mabel L Mcafee, Married	5208 Secretariat Run Spring Hill, FL 34609
17-62	Mabel L. Mcafee, A Widow	5208 Secretariat Run Spring Hill, FL 34609
17-62	Mark Varner, A Single Man	480 High Street Nelsonville, OH 45764
17-62	Mary J. Pemberton, A/K/A Mary	149 Honeysuckle Lane Huntington, WV 25701
17-62	Mary Liming, A Married Woman	4341 Mason Dixon Highway Core, WV
17-62	Mary R. Mccullough, A Widow	/ 1646 Morris Stret Washington, PA 15301
17-62	Michelle Dawn Johnson And Eric	/ 3306 Mason Dixon HWY Core, WV 26541
17-62	Myrtie L. Sine	8044 Smokey Drain Road Core, WV 26529
17-48	Nehemiah Kassay and Patty A. Kassay	/ 1991 Daybrook Road, Fairview, WV 26570
17-62	Nehemiah Kassay And Patty A. Kassay	✓ 1991 Daybrook Road, Fairview, NV 26570
17-62	Nola M Williams, Widow	61 Vermillion Drive Pentress, WV 26544
 17-62	Pamela Brown And Carl Brown	/ 1327 Irish Road Philo, OH 43771
17-62	Pamela J. Yurisko	RR 3 Box 197B Shinnston, WV26431
17-62	Pamela Rena Hall, Married	/ 290 Oak Street Waynesburg, PA 15370
17-62	Patricia Ann Hostutler, Single	1460 Jakes Run Road Fairview, WV 26570
17-62	Patricia Van Tassell, Married	7024 Pam Drive Millington, TN 38053
17-62	Paul Varner, A Single Man	472 Scott Street Nelsonville, OH 45764
17-62	Peggy A Morris, Married	37534 Landis Ave. Zephyrhills, FL 33541
17-62	Raymer Tennant	154 Behler Road Fairview, WV 26570
17-62	Rebecca Gail Foley	1175 Range Road Wadestown, WV 26590
17-62	Rebecca Lynne Strahler	307 Marion Street Marietta, OH 45750
17-62	Richard Tennant	Rt 2 Box 335 C Fayetteville, ,WV 25840
17-62	Rickey Jane Buchanan, A	/ ACO2 Red Tell Heads Long Manhaus TANED
17-62	Robert Ora Wheeler And Paula	5210 Cass Street Oak Layer Olb 4531
17-62	Robert Varner, A Single Man	16005 Fleming Road Amesville, OH 45711
17-62	Rodney Wayne Tennant	1733 Jakes Run Road Fairvi (W. 26570)

WV Department of Protection Environmental 1/27/2015

17-62	Roxana Cahili	609 South Pine Grove Road Virginia Beach, VA 23452
17-62	Ruby E. Van Fossen	1390 West jackson Hill Court Laecanto, FL 34461
17-62	Sandra Faye Wilson And Wayne	7725 Mason Dixon Highway Wana, WV 26590
17-62	Steven Varner Sr. And Tina	21 Robbins Road Nelsonville, OH 45764
17-62	Sue Ann Strickland, Married	6412 Colleen Ave., NE Albuquerque, NM 87109
17-62	Susan L. Michael, A/K/A Susan	4256 Crossroads Road Fairview, WV 26570
17-62	Tamela R. Simeral And Jerry	2207 Armco Avenue Zanesville, OH 43701
17-62	Tina L. Fluharty And Richard	41 Finch Lane Mannington, WV 26582
17-62	Tommy J. Eddy, Sr., A/K/A	3027 Daybrook Road Fairview, WV 26570
17-62	Troy L. Tennant And Anna L.	Rt. 1 Box 169 B Fairmont, WV 26554
17-62	Twyla Hinds Snopps	Rt 2 Box 367 Lost Creek, WV 26385
17-62	Varner L Moore, Married	7368 Mason Dixion HWY Wana, WV 26590
17-62	W Richard Williams, Married	/ 10809 US Highway 27 South Sebring, FL 33876
17-62	Walden J. Cook, Jr.	/ 340 1171st Street Middleton, IL 62666
TMP	Coal Owner	Address
17-62, 48	Consolidated Coal Company	1000 Consol Energy Drive, Canonsburg, PA

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Office of Oil and Gas

OCT 23 2015

WV Department of
Environmental Protection
1/27/2015

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

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

Notice Time Date of Noti			least TEN (10) days prior to filing a nit Application Filed: 10/23/2015	a permit application.
Delivery me	thod pursuant t	to West Virginia Code § 2.	2-6A-16(b)	
☐ HAND		CERTIFIED MAIL		
DELIV		RETURN RECEIPT REQ	UESTED	
receipt reque drilling a hor of this subse subsection m and if availal	ested or hand del rizontal well: Proceedings of the da and be waived in the ble, facsimile numbereby provided	ivery, give the surface own rovided, That notice given pare the notice was provided writing by the surface own	er notice of its intent to enter upon to pursuant to subsection (a), section to the surface owner: <i>Provided, hower.</i> The notice, if required, shall incidress of the operator and the operator NER(s):	, an operator shall, by certified mail return he surface owner's land for the purpose of en of this article satisfies the requirements wever, That the notice requirements of this lude the name, address, telephone number, or's authorized representative.
Name: See Att Address:	achment		Name: Address:	
the surface o State:	wner's land for t West Virginia		izontal well on the tract of land as for Easting:	569084.9
County:	Monongalia		Northing:	4390139.4
District:	Clay		Public Road Access:	County Route 25/3 (Yank Hollow Road)
Quadrangle: Watershed:	Blacksville  Dunkard Creek		Generally used farm name:	Kassay
Pursuant to facsimile nur related to ho	mber and electro	Code § 22-6A-16(b), this report of the omay be obtained from the	perator and the operator's authoriz Secretary, at the WV Department of	ress, telephone number, and if available, ted representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.
Notice is he	ereby given by	:		
	or: Northeast Natur		Authorized Representative	: Hollie Medley, Regulatory Coordinator
Address:	707 Virginia Str	eet East, Suite 1200	Address:	48 Donley Street, Suite 601
Charleston, WV	25301		Morgantown, WV 26501	
Telephone:	304-414-7060		Telephone:	304-241-5752
Email:	hmedley@nne-	llc.com	Email:	hmedley@nne.ll.com
Facsimile:	304-414-7061		Facsimile:	304-241-5972

Oil and Gas Privacy Notice:

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

OCT 2 3 2015

Surface Owner(s)
------------------

Nehemiah and Patty Kassay 1991 Daybrook Road Fairview, WV 26570

Precision Oil and Gas, Inc.
P.O. Box 884
Bridgenort WV 26330

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

Nehemiah and Patty Kassay 1991 Daybrook Road Fairview, WV 26570

Samuel W. and Stacy L. Matteo, c/ø lleen Morton Matteo (life estate) 404 Country Road Fairview, WV 26570

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

	ne Requirement: notice shall be provided no otice: 10/09/2015 Date Permit Ap	o later than the filing dapplication Filed: 10/23/2		application.
Delivery n	nethod pursuant to West Virginia Code § 2	22-6A-16(c)		
	TIFIED MAIL URN RECEIPT REQUESTED	HAND DELIVERY		
return rece the planned required to drilling of damages to	o W. Va. Code § 22-6A-16(c), no later than ipt requested or hand delivery, give the surfad operation. The notice required by this subserved by subsection (b), section ten or a horizontal well; and (3) A proposed surfact the surface affected by oil and gas operation tices required by this section shall be given to	ace owner whose land value of this article to a surfaction shall include the first this article to a surfaction of the compensations to the extent the dame	vill be used for : (1) A copy e owner whos ion agreemen ages are comp	or the drilling of a horizontal well notice of of this code section; (2) The information e land will be used in conjunction with the t containing an offer of compensation for pensable under article six-b of this chapter.
	ress listed in the records of the sheriff at the t		670	6101732
Pursuant to operation of	ereby given:  West Virginia Code § 22-6A-16(c), notice if the surface owner's land for the purpose of the purpose of the surface owner's land for the purpose of the surface owner's land for the purpose of the surface owner's land for the purpose of the surface		vell on the tra	
State: County:	West Virginia  Monongalia	UTM NAD 83	Easting: Northing:	4390139.4
District:	Clay	Public Road Ac	0	County Route 25/3 (Yank Hollow Road)
Quadrangle	e: Blacksville	Generally used	farm name:	Kassay
Watershed:	Dunkard Creek			
Pursuant to to be prov horizontal surface affi information headquarte	e Shall Include:  o West Virginia Code § 22-6A-16(c), this not ided by W. Va. Code § 22-6A-10(b) to a swell; and (3) A proposed surface use and codected by oil and gas operations to the extended related to horizontal drilling may be obtained by the control of t	surface owner whose I mpensation agreement at the damages are com- ined from the Secretar	and will be used containing an appensable und y, at the WV	ased in conjunction with the drilling of a offer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection
Well Opera	ator: Northeast Natural Energy LLC	Address: 7	07 Virginia Street E	est Suite 1200
Telephone:			charleston, WV 253	
Email:	hmedley@nne-llc.com		04-414-7061	-
	as Privacy Natica:			

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.

Office of Oil and Gas

#### **Surface Owner(s):**

Nehemiah and Patty Kassay 1991 Daybrook Road Fairview, WV 26570

Precision Oil and Gas, Inc. P.O. Box 884 Bridgeport, WV 26330

Samuel W. and Stacy L. Matteo, c/o Ileen Morton Matteo (life estate) 404 Country Road

Fairview, WV 26570

470610777

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

Nehemiah and Patty Kassay 1991 Daybrook Road Fairview, WV 26570

Samuel W. and Stacy L. Matteo, c/o Ileen Morton Matteo (life estate) 404 Country Road Fairview, WV 26570

RECEIVED
Office of Oil and Gas

OCT 23 2015

API NO. 47-	-	
OPERATOR WE	ELL NO.	Kassay 7H
Well Pad Name:	Kassay	

#### STATE OF WEST VIRGINIA

DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

## **VOLUNTARY STATEMENT OF NO OBJECTION**

Instructions to Persons Named on Page WW-6A

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

#### Comment and Waiver Provisions

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

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

	VOLUNTARY STAT	EMENT	OF NO OBJ	ECTION
I, Meliem				amed on Page WW-6A and the associated
	ted above, and that I have received copies of a			
	attachments consisting of pages one (1) thro			he erosion and sediment control plan, if
required, and	the well plat, all for proposed well work on the	tract of land	as follows:	
State:	West Virginia	UTM NAI	Easting:	569084.9
County:	Monongalia	UTWINAL	Northing:	4390139.4
District:	Clay	Public Roa	d Access:	County Route 25/3 (Yank Hollow Road)
Quadrangle:	Blacksville	Generally 1	used farm name:	Kassay
Watershed:	Dunkard Creek			706101732
I further state issued on thos	that I have no objection to the planned work de e materials.	escribed in the	ese materials, and I	have no objection to a permit being
*Please check	the box that applies		FOR EXECUTI	ON BY A NATURAL PERSON
■ SURFAC	CE OWNER		Signature: Me	heman Kassay
■ SURFAC	E OWNER (Road and/or Other Disturband	ce)	Print Name: // Date: /0 -	EHEMIAH KASSAY
□ SURFAC	E OWNER (Impoundments/Pits)		FOR EXECUTI	ON BY A CORPORATION, ETC.
□ COAL O	WNER OR LESSEE		Company:	
□ COAL O	PERATOR		By: Its:	
■ WATER	PURVEYOR			
□ OPERAT	OR OF ANY NATURAL GAS STORAG	E FIELD	Date:	

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 normatic of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information. Act requests 3000 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.

API NO. 47-	_
OPERATOR WELL	NO. Kassay 7H
Well Pad Name: Kass	say

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

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	VOLUNTARY STAT	<b>TEMENT</b>	OF NO OB	JECTION
WW-6A and	o whenter, hereby state that I have re ted above, and that I have received copies of attachments consisting of pages one (1) the well plat, all for proposed well work on the	f a Notice of A rough	pplication, an Ap , including	plication for a Well Work Permit on Form
State:	West Virginia		Pantings	569084.9
County:	Monongalia	UTM NAI	Northing:	4390139.4
District:	Clay	Public Roa		County Route 25/3 (Yank Hollow Road)
Quadrangle:	Blacksville	Generally	used farm name:	Kassay 0 1
Watershed:	Dunkard Creek			01730
issued on thos *Please check	the box that applies			TION BY A NATURAL PERSON
□ SURFAC	CE OWNER		Signature: \( \int \alpha \)	ancy Carpenter
□ SURFAC	CE OWNER (Road and/or Other Disturbate	nce)	Print Name: <u>N</u> Date: 10/15	lauch Carpenter
□ SURFAC	CE OWNER (Impoundments/Pits)		(	TION BY A CORPORATION, ETC.
□ COAL O	WNER OR LESSEE		Company:	
□ COAL O	PERATOR		By: Its:	
■ WATER	PURVEYOR		Signature:	
□ OPERAT	OR OF ANY NATURAL GAS STORA	GE FIELD	Date:	

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

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

## OLUNTARY STATEMENT OF NO OBJECTION

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	VOLUNTARY STA	TEMENT	OF	NO OB	JECTION
I,	necessian, hereby state that I have re	ead the Instruct	ions to	Persons Na	amed on Page WW-6A and the associated
provisions lis	ted above, and that I have received copies of	f a Notice of A	рриса	ition, an App	plication for a well work Permit on Form
WW-6A and	attachments consisting of pages one (1) th	irough		, including	the erosion and sediment control plan, if
required, and	the well plat, all for proposed well work on the	he tract of land	as fol	lows:	
State:	West Virginia	UTM NAI	283	Easting:	569084.9
County:	Monongalia	OTHITAL	05	Northing:	4390139.4
District:	Clay	Public Roa	d Acc	ess:	County Route 25/3 (Yank Hollow Road)
Quadrangle:	Blacksville	Generally 1	used f	arm name:	Kassay
Watershed:	Dunkard Creek				
*Please check	the box that applies		FOI	REXECUTI	ION BY A NATURAL PERSON
□ SURFAC	CE OWNER		Sign	ature:	L
□ SURFAC	CE OWNER (Road and/or Other Disturba	ince)	Print	Name:3e/	18 2015
□ SURFAC	CE OWNER (Impoundments/Pits)		FOF	REXECUTI	ION BY A CORPORATION, ETC.
□ COAL O	WNER OR LESSEE		Com	pany:	
□ COAL O	PERATOR		Its:		
■ WATER	PURVEYOR		Sign	ature:	
	000 00 12 11 11 11 11 0 10 000 1	מת חווות דה	Date	:	1

Oil and Gas Privacy Notice:

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

The Office of Oil and Gas processes your personal information, such as name, address and telephone number Exchant of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of as needed to comply with statutory or regulatory requirements, including Freedom of Information and 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. DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

WV Department of Environmental Protection

if



#### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

**Division of Highways** 

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

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

4706101732

July 30, 2014

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

Subject: DOH Permit for the Kassay Pad, Monongalia County Kassay 7H

Dear Dr. Martin,

Earl Ray Tomblin

Governor

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

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

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Dave McDougal

Northeast Natural Energy Corporation

CH, OM, D-4

File

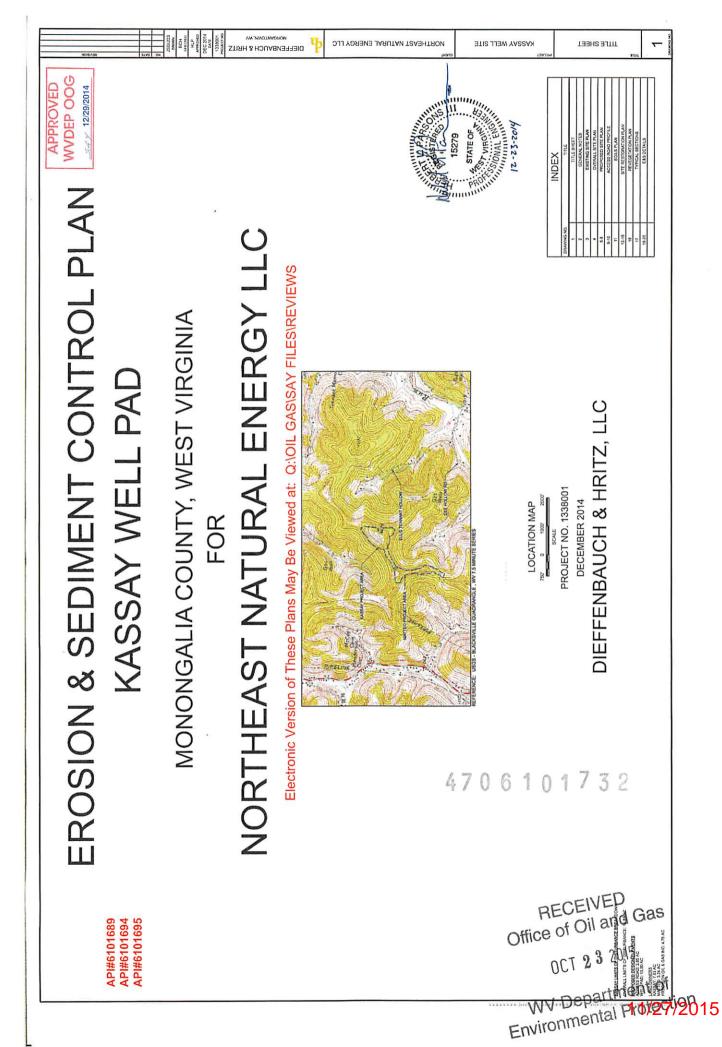
RECEIVED
Office of Oil and Gas

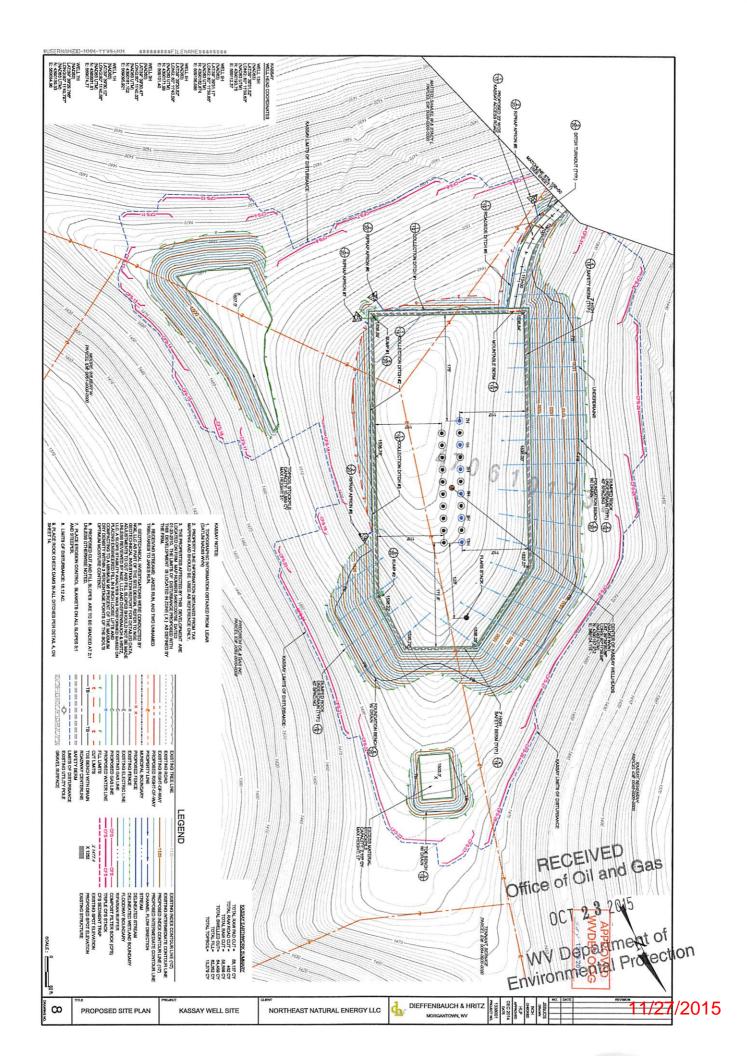
OCT 23 2015

Planned Additives to be used in Fracturing Stimulations

			Chomise   Abstract Commission
Trade Name	Purpose	Ingredients	Vieilital Abstract Service Number (CAS#)
Water	Carrier	Water	7732-18-5
HCI, 10.1-15%	Acidizing	Hydrochloric Acid Water	7647-01-0 7732-18-5
Alpha 1427	Biocide	Alkyl Dimethyl Benzyl Ammonium Chloride (C12-16) Ethanol Glutaraldehyde Quaternary Ammonium Chloride Water	68424-85-1 64-17-5 111-30-8 7173-51-5 7732-18-5
Enzyme G-NE	Breaker	Hemicellulase Enzyme Concentrate Water	9025-56-3 7732-18-5
Cl-14	Corrosion Inhibitor	Fatty Acids Methanol Olefin Polyoxyalkylenes	N.A. 67-56-1 N.A. N.A. 107-19-7
FRW-18	Friction Reducer	Hydrotreated Light Distillate	64742-47-8
GW-3LDF	Gelling Agent	Guar Gum Petroleum Distillate Blend	9000-30-0 CBI
Ferrotrol 300L	Iron Control	Citric Acid	77-92-9
Sand, White, 40/70	Proppant	Crystalline Silica (Quartz)	14808-60-7
Sand, White 100 mesh	Proppant	Crystalline Silica (Quartz)	14808-60-7
Scaletrol 728 1	Scale Inhibitor	Diethylene Glycol	111-46-6
ECEIVED of Oil and Gas OCT 2 3 2015 Department of		7061017	

Department of Department of Environmental Protection





#### Northeast Natural Energy LLC Mine Contingency Plan



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

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

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

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

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

#### Casing Schematic w/ Mine String Casing Schematic w/o Mine String 24" Conductor Set 10' Below 24" Conductor Set 10' Below Non-Compacted Soils Non-Compacted Solls 22" Hole Drilled to 50' Below Void 18-5/8" 87.5#/ft, J-55 BTC Sol 17-1/2" Hole Drilled, 13-3/8" 54.5#/ 30'-50' Balow ft. J-55 BTC/STC Set at Originally Permilled Depth 17-1/2" Hole Drilled, 13-3/8" 54.5#/ Comont-to-Surfaco ft. J-55 BTC/STC Set at Originally Permitted Depth Coment-to-Surface 12 1/2" Hole Drilled, 9-5/8" 40#/ft. J-55 8RD LTC Set at Originally Permitted 12 1/2" Hole Drilled, 9-5/8" 40#/ft. J-55 **BRD LTC Set at Originally Permitted** Depth Coment-to-Surface Coment-to-Surface 8 3/4" Drilled, 5-3/2" 20#/III. P-110 BTC Set at Originally Permitted Depth Comonted Top Minimizer 200 Inside of as Intermediate Gasing Office of Oil and 8 3/4" Drilled, 5-1/2" 20/1/IL P-110 BTC Set at Originally Permitted Depth Cemented Top Minimum 200' Inside of Intermediate Casing OCT 23 2015 MN Departition 19 Environmental Protection