

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: 47-6101731, 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

Operator's Well No: KASSAY 1H

Farm Name: KASSAY, NEHEMIAH

API Well Number: 47-6101731

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.

WW-6B
(04/15)

API	NO. 47				
	OPERATOR	WELL	NO.	Kassay 1H	
	Well Pad N	ame:	Kassay	y	

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

	WELL WORK F	ERWIII AFFLICA	HON	3	256
1) Well Operator: Northea	ast Natural Energy LLC	494498281	Monongalia	Clay	Blacksville
		Operator ID	County	District	Quadrangle
2) Operator's Well Number	r: Kassay 1H	Well Pa	d Name: Kassa	ау	
3) Farm Name/Surface Ow	/ner: Nehemiah and Patty A.	. Kassay Public Roa	ad Access: Cour	nty Route 25	/3 (Yank Hollow Road)
4) Elevation, current groun	nd: <u>1,560'</u> E	levation, proposed	post-construction	on: 1534'	
5) Well Type (a) Gas	X Oil	Und	erground Storag	ge	
Other					
(b)If Gas	Shallow X	Deep			
0511 5111 11	Horizontal X		Mak 10/	2 dans	
6) Existing Pad: Yes or No			_		
7) Proposed Target Format Marcellus, 8,289', 103',		cipated Thickness a	and Expected Pr	ressure(s):	
8) Proposed Total Vertical	Depth: 8,289'				
9) Formation at Total Vert	ical Depth: Marcellus	S			
10) Proposed Total Measur	red Depth: 19,469.5	7'		7	31
11) Proposed Horizontal L	eg Length: 10,480'		4706	1011	y
12) Approximate Fresh Wa	ater Strata Depths:	50' , 1,248'	4700		
13) Method to Determine I	Fresh Water Depths:	Driller's Log from	Offset Wells		
14) Approximate Saltwater	r Depths: 1,946', 2,69	96'			
15) Approximate Coal Sea	m Depths: 316', 1,24	16'			
16) Approximate Depth to	Possible Void (coal m	ine, karst, other):	N/A		
17) Does Proposed well lo		ms Yes	No	X	
(a) If Yes, provide Mine	Info: Name:				
	Depth:				
	Seam:			R	ECEIVED
	Owner:			Omce	of Oil and Gas
				00	CT 23 2015

WV Department of Environmental Protection Page 101/27/2015

WW-6B	
(04/15)	

API NO. 47	
OPERATOR WELL NO.	Kassay 1H
Well Pad Name: Kassa	у

18)

CASING AND TUBING PROGRAM

ТҮРЕ	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	19,469'	19,439'	4,484 Cu. Ft.
Tubing	2-7/8"	New	N-80	6.5	NA	8,500'	NA
Liners							

4706101731

MgK 10/20/2015

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	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:			RECEIVED
Depths Set:		O	RECEIVED fice of Oil and Gas

OCT 23 2015

WW-6B	
(10/14)	

API NO. 47		
OPERATOR WEI	L NO.	Kassay 1H
Well Pad Name	: Kassa	v

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 7,047.99' TVD/MD. The well will then be horizontally drilled on synthetic based mud from the KOP to approximately 8,289' TVD / 19,469.57' MD along a 323 degree azimuth.

4706101731

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 gunstraß 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 BSP. 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/bbls Gel Pill + LCM + 25 lbs Cello Flake + 20 lbs/bbls Gel Pill + LCM + 25 lbs Cello Flake + 20 lbs/bbl Bentonite @ 8.4 ppg & 10 bbls fresh water spacer prior to cement. Production string will use a 50.0 bbls SealBond 25 + 1 gal/bbl US-40 + 275 lbs/bbl Barite + 15 gal/bbl SS-2 Spacer @ 13.5 ppg prior to cement.

WV Department of Environmental Protection

*Note: Attach additional sheets as needed.

Northeast Natural Energy LLC Mine Contingency Plan



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

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

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

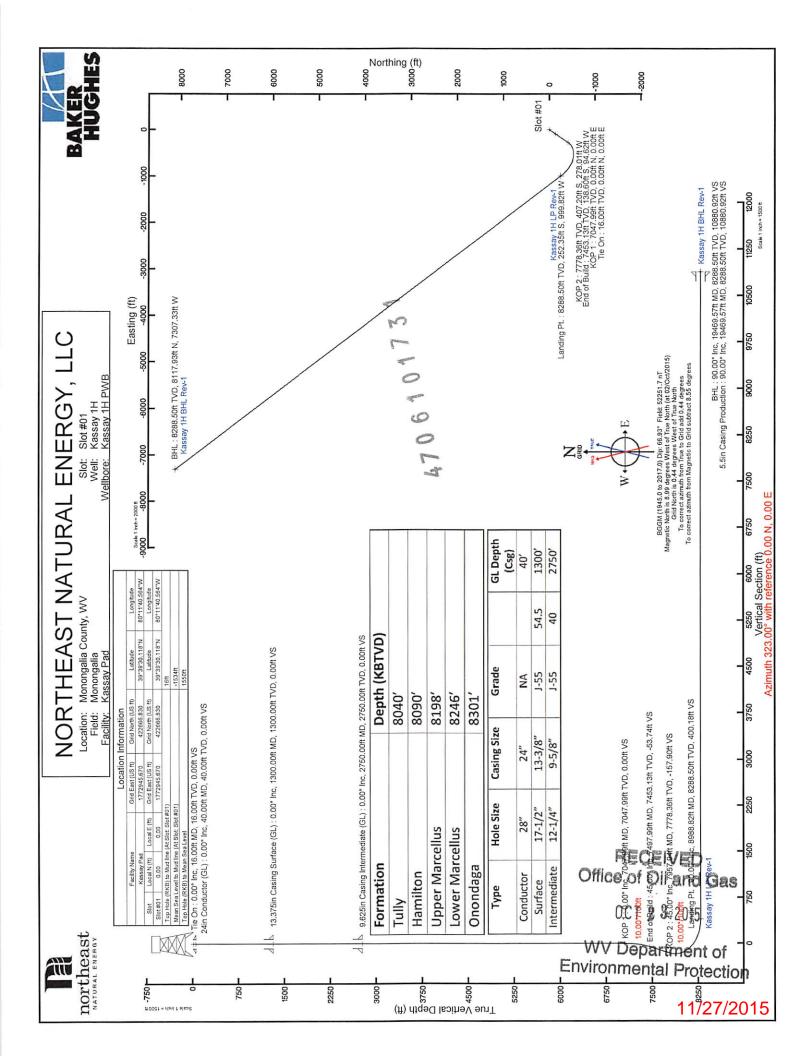
With the use of these string sizes and techniques, the surface and intermediate strings do not need to be altered. After a proper WOC time, the surface section of the well would continue to be drilled with a 17-1/2" bit and the 13-3/8" 54.50#/ft freshwater casing would be set at the originally permitted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

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

Casing Schematic w/ Mine String 24" Conductor Set 10' Below 24" Conductor Set 10' Below Non-Compacted Solls 22" Hole Drilled to 50' Below Vold 18-5/8" 87.5#/ft, J-55 BTC Sol 30'-50' Bolow 17-1/2" Hole Drilled, 13-3/8" 54.5// ft, J-55 BTC/STC Set at Originally Permilled Depth Cement-to-Surface 12 1/4" Hole Drilled, 9-5/8" 40#/ft. J-55 **8RD LTC Set at Originally Permitted** Deoth Coment-to-Surface Depth 8 3/4" Drilled, 5-1/4" 20/1/IL P-110 BTC Set at Originally Permitted Depth Comented Top Minimum 200' Inside of Intermediate Casing

Casing Schematic w/o Mine String

Non-Compacted Solls 17-1/2" Hole Drilled, 13-3/8" 54.5#/ ft. J-55 BTC/STC Set at Originally Permilled Depth Comont-to-Surfaço 12 1/2" Hole Drilled, 9-5/8" 40#/R. J-55 8RD LTC Set at Originally Permitted Comont-to-Surface 8 %" Drilled, 5-%" 20#/ IL. P-110 BTC Set at Originally Permitted Depth Comented Top Minimum 200' Inside of Comented top Intermediate Casing RECEIVED Office of Oil and Gas



API Number 47 -	-
Operator's	Well No Kassay 1H

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 the proposed well work? Yes No
Will a pit be used? Yes No V
If so, please describe anticipated pit waste: NA 470
If so, please describe anticipated pit waste: NA Will a synthetic liner be used in the pit? Yes No If so, what ml.? NA
Proposed Disposal Method For Treated Pit Wastes:
Land Application Underground Injection (UIC Permit Number) Reuse (at API Number unknown at this time, TBD) Off Site Disposal (Supply form WW-9 for disposal location) Other (Explain)
Will closed loop system be used? If so, describe: Yes, Please See Attachment "A"
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air-Vertical; Oil Based - Curve & Horizontal
-If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Based Mud
Additives to be used in drilling medium? Organophilic Clay Viscosifiers, Lime, Unsaturated Fatty Acids, CaCl, Barite, Emulsifiers, Mica LCM, Water Loss Agents
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Removed Offsite - Please See Attachment "A"
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)
-Landfill or offsite name/permit number? Please See Attachment "A"
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.
Company Official Signature Holling RECEIVED
Company Official (Typed Name) Hollie Medley Office of Oil and Gas
Company Official Title Regulatory Coordinator
20th 1 Talanta
Subscribed and sworn before me this
Notary Public Notary Public State of West Vingin
My commission expires 28, 2020

		15.85	D	v. 5.7
Proposed Revegetation Trea			Prevegetation p	H <u>5-7</u>
Lime 2		or to correct to pH	<u>/</u>	
Fertilizer type 19-				
Fertilizer amount	300	lb	os/acre	
Mulch 2		Tons/a	acre	
		Seed	d Mixtures	
T	emporary		Perm	anent
Seed Type	lbs/acre		Seed Type	lbs/acre
Orchard Grass		46	Orchard Grass	46
Red Clover		8	Red Clover	8
Tetraploid Peren	nial Rye	16	Tetraploid Perennial	Rye 16
Timothy 15 Ar	nnual Rye	15	Timothy 15 Annu	ual Rye 15
provided)			plication (unless engineered plans in	() 10
Drawing(s) of road, location provided) Photocopied section of involution of the provided by:	lved 7.5' topogra		plication (unless engineered plans in	701731
Orawing(s) of road, location provided) Photocopied section of involution of the provided by:	lved 7.5' topogra			701731
Drawing(s) of road, location	lved 7.5' topogra			701731
Drawing(s) of road, location provided) Photocopied section of involution of the provided by:	lved 7.5' topogra			701731
Orawing(s) of road, location provided) Photocopied section of involution of the provided by:	lved 7.5' topogra			701731
Orawing(s) of road, location provided) Photocopied section of involution of the provided by:	lved 7.5' topogra			701731

4706101731

Attachment A to WW-9

Northeast Natural Energy LLC ("NNE") plans to utilize a closed loop process for its drilling of the Kassay 1H 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 1H Drill Cuttings will be taken to disposal at one or more of the following disposal/approved waste facilities, unless listed facilities are no longer approved to accept waste at time of disposal:

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

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

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

 Ohio Oil Gathering Long Run Disposal Well (Permit #34-167-29658)

 Office of Oil and Gas
- Ohio Oil Gathering Long Run Disposal Well (Permit #34-167-29658)
 Ohio Oil Gathering Newell Run Disposal Well (Permit #34-167-29685)

OCT 2 3 2015

- Appalachian Oil Purchaser Greens Run Disposal Well (Permit #2D0732540)
- Appalachian Oil Purchaser BW#4 Disposal Well (Permit # 200732523) WV Department of Environmental Protection



Kassay 1H SITE SAFETY PLAN

October 9, 2015

Hayne & KAD 10/20/2015

RECEIVED
Office of Oil and Gas

OCT 2 3 2015

WV Department of Environmental Protection

11/27/2015

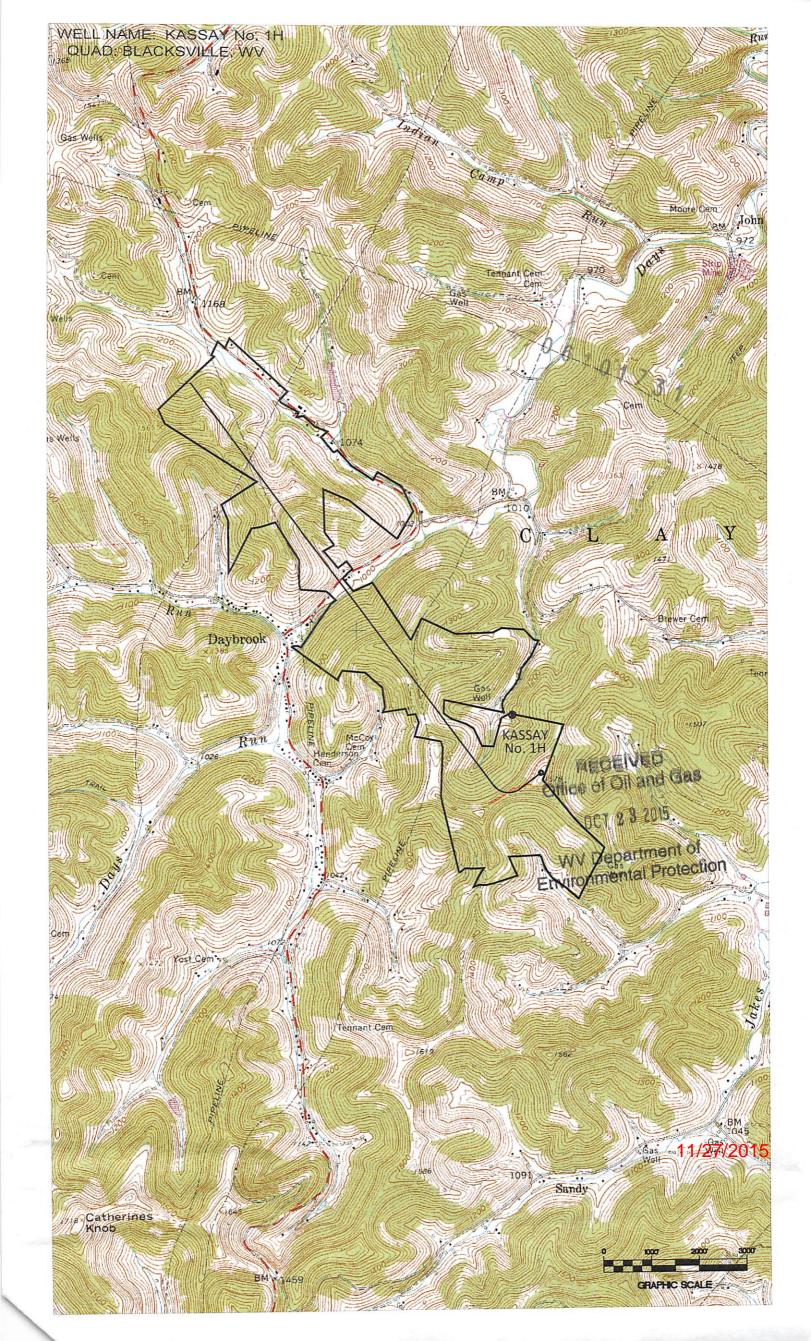
Kassay Water Well Location

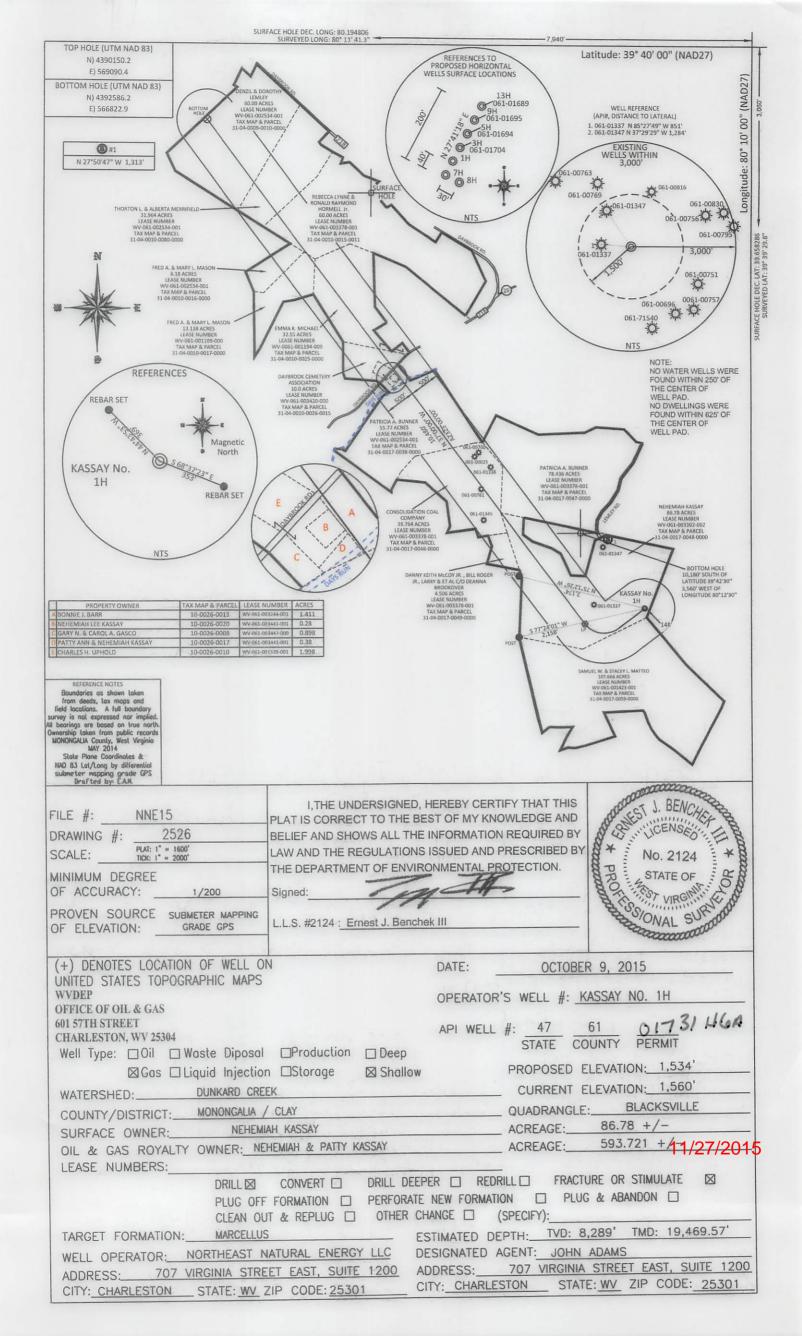
	Surface Owner/Water Purveyor	Supply Type	Tax Map and Parcel	Latitude/Longitude
1	Nehemiah Kassay	Spring Fed Pond	Tax Map 17, Parcel 48	39.661540, -80.196811
2	Bernice Tennant	Well	Tax Map 17, Parcel 64	39.660746, -80.188790
3	Bernice Tennant	Well	Tax Map 17, Parcel 64	39.660598, -80.188415
4	Nancy Carpenter, 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

4706101731

RECEIVED
Office of Oil and Gas

OCT 2 3 2015





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

RECEIVED
Office of Oil and Gas

OCT 2 3 2015

WV Department of

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

Well Operator: Northeast Natural Energy LLC

By: Hollie Medley

Its: Regulatory Coordinator

Page 1 of 4

WW-6A1

Operator's Well No. Kassay 1H

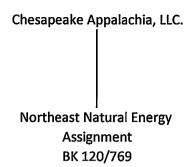
NNE Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	Tax Map & Parcel	
WV-061-003302-002	KASSAY, NEHEMIAH AND PATTY A.	Northeast Natural Energy LLC	.125 or greater	1506/143	17-48	
WV-061-001109-000	SHUMAN, INC.	*Chesapeake Appalachia, LLC	.125 or greater	1439/243	17-48]
WV-061-001403-006	MICHAEL, EMMA REGINA	*Chesapeake Appalachia, LLC	.125 or greater	1485/769	17-47	
WV-061-001403-008	MOORE, L. GAYLE	*Chesapeake Appalachia, LLC	.125 or greater	1487/391	17-47]
WV-061-002873-002	BAILES, SEYMOUR S.	Northeast Natural Energy LLC	.125 or greater	1529/833	17-47	
WV-061-003378-001	STRICKLER, PAUL T. AND SHARON	Northeast Natural Energy LLC	.125 or greater	1530/128	17-47,46,49; 10-15.11	
WV-061-003378-003	BUTLER, MARY ROSE	Northeast Natural Energy LLC	.125 or greater	1530/132	17-47,46,49; 10-15.11	
WV-061-003378-004	STRICKLER, WILBUR RANDOLPH AND DEBORAH	Northeast Natural Energy LLC	.125 or greater	1530/140	17-47,46,49; 10-15.11	
WV-061-003378-005	STRICKLER, DORSEY NEIL AND NANCY E.	Northeast Natural Energy LLC	.125 or greater	1530/136	17-47,46,49; 10-15.11	
WV-061-001234-001	MOORE, L. GAYLE	*Chesapeake Appalachia, LLC	.125 or greater	1370/508	10-15.11	
WV-061-001334-005	HORMELL, RONALD RAYMOND & LYNNE	Northeast Natural Energy LLC	.125 or greater	1492/425	10-15.11	
WV-061-001334-001	THOMAS, CHARLES L.	*Chesapeake Appalachia, LLC	.125 or greater	1378/404	10-15.11	
WV-061-003507-001	THE CHARLES LEE THOMAS TRUST	Northeast Natural Energy LLC	.125 or greater	1521/734	10-15.11	
WV-061-001372-001	JOHN, LOIS MARIE	*Chesapeake Appalachia, LLC	.125 or greater	1487/186	10-15.11	
WV-061-000256-001	PALMER, BARBARA P.	*Chesapeake Appalachia, LLC	.125 or greater	1428/518	10-80,9-10]
WV-061-002534-001	SHUMAN, INC.	*Chesapeake Appalachia, LLC	.125 or greater	1429/366	10-80,16; 9-10; 17-38	
WV-061-002577-001	SHUMAN, JAMES W. AND JANE H.	*Chesapeake Appalachia, LLC	.125 or greater	1428/519	10-80,9-10	
WV-061-002577-002	SHUMAN, DAVID AND REBECCA L.	*Chesapeake Appalachia, LLC	.125 or greater	1428/519	10-80,9-10	
WV-061-002577-003	SHUMAN, JR., CHESTER A. AND EVELYN H.	*Chesapeake Appalachia, LLC	.125 or greater	1428/5144	10,80,900 4 7	3 1
WV-061-002574-001	ASHLEY, JOHN	*Chesapeake Appalachia, LLC	.125 or greater	14277690	000000000000000000000000000000000000000	
WV-061-002574-002	SELDERS, EVERETT A. AND DIANNA	*Chesapeake Appalachia, LLC	.125 or greater	1427/695	10-16	
WV-061-002574-003	DAWSON, MARY ANN	*Chesapeake Appalachia, LLC	.125 or greater	1435/175	10-16	
WV-061-002621-001	REVOCABLE TRUST OF ROBERT M. SPRAGG	*Chesapeake Appalachia, LLC	.125 or greater	1441/411	10-16	
WV-061-003309-001	CHESAPEAKE APPALACHIA LLC	*Chesapeake Appalachia, LLC	.125 or greater	1487/228	10-16	
WV-061-001109-000	SHUMAN, INC.	*Chesapeake Appalachia, LLC	.125 or greater	1439/243	10-17	
WV-061-003271-001	CHESAPEAKE APPALACHIA LLC	*Chesapeake Appalachia, LLC	.125 or greater	1487/244	10-17	
WV-061-001194-003	MOORE, L. GAYLE	*Chesapeake Appalachia, LLC	.125 or greater	1370/490	10-25	
WV-061-001194-004	STRICKLER, DORSEY NEIL	*Chesapeake Appalachia, LLC	.125 or greater	1375/874	10-25	
WV-061-001194-005	STRICKLER, WILBUR RANDOLPH	*Chesapeake Appalachia, LLC	.125 or greater	1375/832	10-25]
WV-061-001194-006	STRICKLER, PAUL T.	*Chesapeake Appalachia, LLC	.125 or greater	1376/049	10-25]
WV-061-001194-007	BUTLER,MARY ROSE	*Chesapeake Appalachia, LLC	.125 or greater	1376/025	10-25	
WV-061-001194-008	JOHN,LOIS MARIE	*Chesapeake Appalachia, LLC	.125 or greater	1376/001	10-25	
WV-061-001194-009	MICHAEL, EMMA	*Chesapeake Appalachia, LLC	.125 or greater	1485/664	10-25	
WV-061-003420-000	THE DAYBROOK CEMETERY ASSOCIATION	Northeast Natural Energy LLC	.125 or greater	1506/565	10-26.15	
WV-061-002583-001	JOHN, LOIS MARIE	*Chesapeake Appalachia, LLC	.125 or greater	1431/264	RECEIVED	
WV-061-002583-002	HIXENBAUGH, EARL LEE	*Chesapeake Appalachia, LLC	.125 or greater	1433/561	te of Offand G	as
WV-061-002583-003	HIXENBAUGH, GREGORY J. AND DOROTHY	*Chesapeake Appalachia, LLC	.125 or greater	1433/561 Office 1431/794	17-38	
WV-061-002583-004	HIXENBAUGH, ALLEN C.	*Chesapeake Appalachia, LLC	.125 or greater	1431/797	OCT 273 2015	
WV-061-002583-005	HALL, CAROLYN AND AMOS RICHARD	*Chesapeake Appalachia, LLC	.125 or greater	1436/427	17-38	
WV-061-002583-006	HENDERSON, GEORGE R. AND LINDA	*Chesapeake Appalachia, LLC	.125 or greater	1436/45 0/\	V Depastment	of
WV-061-002583-007	STRICKLER, WILBUR R. AND DEBORAH	*Chesapeake Appalachia, LLC	.125 or greater	14 94786V ir	onmental Prote	ection
WV-061-002583-008	STRICKLER, DORSEY N. AND NANCY	*Chesapeake Appalachia, LLC	.125 or greater	1454/357	17-38	
WV-061-002583-009	STRICKLER, PAUL T. AND SHARON	*Chesapeake Appalachia, LLC	.125 or greater	1454/353	17-38	

WW-6A1

Operator's Well No. Kassay 1H

NNE Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	Tax Map & Parcel
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
WV-061-002583-013	PIDO, VIOLET RAE	*Chesapeake Appalachia, LLC	.125 or greater	1449/422	17-38
	CHESAPEAKE APPALACHIA LLC	*Chesapeake Appalachia, LLC	.125 or greater	1424/744	17-38
	STRICKLER, DORSEY N. AND NANCY	*Chesapeake Appalachia, LLC	.125 or greater	1453/645	17-46
	BUTLER, MARY ROSE	*Chesapeake Appalachia, LLC	.125 or greater	1453/641	17-46
	STRICKLER, PAUL T. AND SHARON	*Chesapeake Appalachia, LLC	.125 or greater	1453/746	17-46
	STRICKLER, WILBUR R. AND DEBORAH	*Chesapeake Appalachia, LLC	.125 or greater	1453/727	17-46
	JOHN, LOIS M. AND ERNEST	*Chesapeake Appalachia, LLC	.125 or greater	1454/383	17-46
	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
	HIXENBAUGH, EARL LEE	Northeast Natural Energy LLC	.125 or greater	1518/27	17-46
~	HIXENBAUGH, GREGORY J. AND DOROTHY	Northeast Natural Energy LLC	.125 or greater	1520/318	17-46
		Northeast Natural Energy LLC	.125 or greater	1518/15	17-46
	HIXENBAUGH, ALLEN C. AND BETH A.				
	JOHN, LOIS M. AND ERNEST	*Chesapeake Appalachia, LLC	.125 or greater	1449/448	17-49
	STRICKLER, WILBUR R. AND DEBORAH	*Chesapeake Appalachia, LLC	.125 or greater	1450/547	17-49
	STRICKLER, DORSEY N. AND NANCY	*Chesapeake Appalachia, LLC	.125 or greater	1450/543	17-49
	HIXENBAUGH, SHIRREL R. AND SHARON	*Chesapeake Appalachia, LLC	.125 or greater	1451/19	17-49
	HIXENBAUGH, EARL LEE	*Chesapeake Appalachia, LLC	.125 or greater	1451/15	17-49
	HIXENBAUGH, GREGORY J. AND DOROTHY	*Chesapeake Appalachia, LLC	.125 or greater	1451/11	17-49
WV-061-003222-007	HIXENBAUGH, ALLEN C.	*Chesapeake Appalachia, LLC	.125 or greater	1451/7	17-49
WV-061-003222-008	PIDO, VIOLET RAE	*Chesapeake Appalachia, LLC	.125 or greater	1451/23	17-49
WV-061-003222-009	STRICKLER, PAUL T. AND SHARON	*Chesapeake Appalachia, LLC	.125 or greater	1453/588	7 3 17-49
WV-061-003222-010	BUTLER, MARY ROSE	*Chesapeake Appalachia, LLC	.125 or greater	1453/584 A	17-49
WV-061-003222-011	HALL, CAROLYN AND AMOS RICHARD	*Chesapeake Appalachia, LLC	.125 or greater	6 144/145	17-49
WV-061-003222-012	HENDERSON, GEORGE AND UNDA	*Chesapeake Appalachia, LLC_	.125 geater	1454/686	17-49
WV-061-003222-013	THE CHARLES LEE THOMAS TRUST	*Chesapeake Appalachia, LLC	.125 or greater	1454/865	17-49
WV-061-003474-001	MOORE, LORETTA GAYLE	Northeast Natural Energy LLC	.125 or greater	1521/137	17-49
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
WV-061-003244-001	MATTHEWS, BONNIE J. AND DAN	*Chesapeake Appalachia, LLC	.125 or greater	1450/532	10-26.13
WV-061-003441-001	KASSAY, NEHEMIAH & PATTY A.	Northeast Natural Energy LLC	.125 or greater	1517/109	BECEINED
WV-061-001371-003	WV MINERALS, IN	Northeast Natural Energy LLC	.125 or greater	1509/77	ice broil and
WV-061-003447-000	GASCO, GARY N. AND CAROL A.	Northeast Natural Energy LLC	.125 or greater	1517/127	10-26.08 l
WV-061-001539-001	UPHOLD, CHARLES H. AND MARY L.	*Chesapeake Appalachia, LLC	.125 or greater	1491/254	OC1b-2 2 13 2015

*See Attachment



4706101731

RECEIVED
Office of-Oil and Gas

OCT 2 3 2015



4706101731

October 5, 2015

WV Department of Environmental Protection Office of Oil and Gas Management 601 57th 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

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: 10/21/2015		API No. 47			
			Operator's Well No. Kassay 1H			
		•	Well Pad N	lame: Kassay		
Notice has I						
Pursuant to th	ne provisions in West Virginia Code §	22-6A, the Operator has provi	ded the req	uired parties w	ith the Notice Forms listed	
	tract of land as follows:	•	74 ²	500000 4		
State: County:	West Virginia Monongalia		Easting: Northing:	569090.4 4390150.2		
District:	Clay	Public Road Acces	_		3 (Yank Hollow Road)	
Quadrangle:	Blacksville	Generally used far		Kassay	5 (Talik Hollow Road)	
Watershed:	Dunkard Creek	Generally used fair	in name.	Nassay		
prescribed by it has provide information re of giving the requirements Virginia Code	West Virginia Code § 22-6A-7(b), the secretary, shall be verified and sted the owners of the surface describe equired by subsections (b) and (c), see surface owner notice of entry to su of subsection (b), section sixteen of e § 22-6A-11(b), the applicant shall to have been completed by the applicant	hall contain the following infor- bed in subdivisions (1), (2) and ction sixteen of this article; (ii) rvey pursuant to subsection (a f this article were waived in vender proof of and certify to the	mation: (14 dd (4), subsethat the red), section to the viiting by	4) A certification (b), section (b), section (b), section (c), section	on from the operator that (i) tion ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice yner; and Pursuant to West	
that the Ope	West Virginia Code § 22-6A, the Operator has properly served the required ECK ALL THAT APPLY		s Notice C	ertification	OOG OFFICE USE ONLY	
☐ 1. NO1	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRE SEISMIC ACTIVITY WAS			☐ RECEIVED/ NOT REQUIRED	
■ 2. NO	TICE OF ENTRY FOR PLAT SURV	YEY or NO PLAT SURVE	Y WAS CO	ONDUCTED	☐ RECEIVED	
■ 3. NO	TICE OF INTENT TO DRILL or	NOTICE NOT REQUIRE NOTICE OF ENTRY FOR PEWAS CONDUCTED or			☐ RECEIVED/ NOT REQUIRED	
	,	☐ WRITTEN WAIVER BY (PLEASE ATTACH)	Y SURFAC	CE OWNER		
■ 4. NO	TICE OF PLANNED OPERATION				RECEIVED	
■ 5. PUE	BLIC NOTICE	4706101	173	1	☐ RECEIVED	
					• .	

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. Certifications of Notice shall serve as proof that the required parties have been noticed as required under wast kirchie as § 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, OCT 28 2015 the return receipt card or other postal receipt for certified mailing.

Certification of Notice is hereby given:

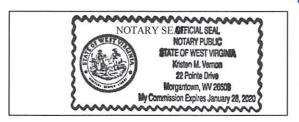
THEREFORE, I Hollie M. Medley, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by 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

 Its:
 Regulatory Coordinator
 Facsimile:
 304-241-5972

 Telephone:
 304-241-5752, ext. 7108
 Email:
 hmedley@nne-llc.com



Subscribed and sworn before me this and day of Oddar 2015

Notary Public

My Commission Expires January 28 2020

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 deprivacyofficer@wv.gov.

4706101731

RECEIVED
Office of Oil and Gas

DCT 2 3 2015

WW-6A (9-13)

LPI NO. 47			
PERATOR WE	LL NO.	Kassay 1H	
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 that	n the filing date of permit application.
Date of Notice: 10/9/2015 Date Permit Application Filed: 10/22 Notice of:	2/2015
PERMIT FOR ANY WELL WORK CONSTRUCTION OF A	ROVAL FOR THE AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6A-10	(b)
	OD OF DELIVERY THAT REQUIRES A PT OR SIGNATURE CONFIRMATION
certificate of approval for the construction of an impoundment or pit registered mail or by any method of delivery that requires a receipt of sediment control plan required by section seven of this article, and the surface of the tract on which the well is or is proposed to be located and gas leasehold being developed by the proposed well work, if described in the erosion and sediment control plan submitted pursuant 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, construmpoundment or pit as described in section nine of this article; (5) A have a water well, spring or water supply source located within one to 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 entering to the service of the service of the contrary, notice to a lien holder is not a section of the service of the contrary, notice to a lien holder is not a section of the service of the service of the contrary, notice to a lien holder is not a section of the service of the service of the contrary, notice to a lien holder is not a section of the service of the servic	r signature confirmation, copies of the application, the erosion and ne well plat to each of the following persons: (1) The owners of record of ted; (2) The owners of record of the surface tract or tracts overlying the the surface tract is to be used for roads or other land disturbance as not to subsection (c), section seven of this article; (3) The coal owner, apposed to be drilled is located [sic] is known to be underlain by one or cots overlying the oil and gas leasehold being developed by the proposed action, enlargement, alteration, repair, removal or abandonment of any my 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 (6) The operator of any natural gas storage field within which the tenants in common or other co-owners of interests described in the applicant one, chapterelector for this code. (2) Notwithstanding any notice to a landowner, unless the lien holder is the landowner. W. Va. ovide the Well Site Safety Plan ("WSSP") to the surface owner and any
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice	☑ Well Plat Notice is hereby provided to:
	COAL OWNER OR LESSEE
Name: See Attachment Address:	Name: See Attachment 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: See Attachment
Name:	Address:
Address:	OPERATOR OF ANY NATURAL CASE FIELD Name: Office of Oil and Gas Address: *Please attach additional forms if necessary
	*Please attach additional forms if necessary

WW-6A	
(8-13)	

API NO. 47-	-		
OPERATOR WE	ELL NO.	Kassay 1H	
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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well mad 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 in granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Sedhon 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, the prior to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal media and volatile organic compounds generated by the drilling of horizontal media and volatile organic to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a inding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise.

WW-6A	
(8-13)	

API NO. 47
OPERATOR WELL NO. Kassay 1H
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 aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

written Comment:
Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section to Offinis 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 RECEIVED
Office of Oil and Gas location or construction of the applicant's proposed well work to the Secretary at:

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

OCT 2 3 2015

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

Environmental Protection

WW-6A	
(8-13)	

API NO. 47-	- 2
OPERATOR WE	ELL NO. Kassay 1H
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 http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

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

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

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

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

4706101731

RECEIVED
Office of Oil and Gas

OCT 23 2015

WW-6A
(8-13)

API NO. 47-	-
OPERATOR WE	LL NO. Kassay 1H
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 deprivacyofficer@wv.gov.



Subscribed and sworn before me this day of Odda 2015

My Commission Expires January 28, 2020

4706101731

RECEIVED
Office of Oil and Gas

OCT 2 3 2015

Sı	urfa	ce	Ov	vne	r(s) :
----	------	----	----	-----	-----	------------

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

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

<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 lleen Morton Matteo (life estate) 404 Country Road Fairview, WV 26570

Coal Owner or Lesee:

Consolidated Coal Company
Attn: Analyst

1000 Consol Energy Drive Canonsburg, PA 15317

4706101731

RECEIVED
Office of Oil and Gas

OCT 2 8 2015

Surface Owner of Water Well and/or Water Purveyor:

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

4706101731

RECEIVED
Office of Oil and Gas

OCT 2 3 2015

WV Department of Environmental Protection

11/27/2015



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

4706101731

RECEIVED
Office of Oil and Gas

OCT 2 3 2015

ay		No.	Well	Operator
ay	٠.	No.	Well	Operator

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

entry	ce: 12/18/2013 Date of Planned I		an FORTY-FIVE (45) days prior to	
Delivery me	thod pursuant to West Virginia Code §	22-6A-10a		
☐ PERSO SERVIO		METHOD OF DELIVERY THAT R RECEIPT OR SIGNATURE CONFIL	1008 A. 500 St.	
on to the surf but no more t beneath such owner of min and Sediment Secretary, wh enable the sur	Vest Virginia Code § 22-6A-10(a), Prior to ace tract to conduct any plat surveys requihan forty-five days prior to such entry to: tract that has filed a declaration pursuant terals underlying such tract in the county to Control Manual and the statutes and rules ich statement shall include contact inform face owner to obtain copies from the secretary provided to:	red pursuant to this article. Such notice (1) The surface owner of such tract; (2) to section thirty-six, article six, chapter in a records. The notice shall include a startlated to oil and gas exploration and pation, including the address for a web p	shall be provided at least seven days to any owner or lessee of coal seams twenty-two of this code; and (3) any atement that copies of the state Erosion production may be obtained from the	
	CE OWNER(s)	CÓAL ÖWNER ÖR LE	SSFF	
Name: See Atta	AND THE RESERVE OF THE PROPERTY OF THE PROPERT			
	chmént	Name: See Attachment Address:		
71001035.		Tidatoss,	*	
Name:				
Address:		MINERAL OWNER(s)		
		Name: See Attachment		
Name:		Address:		
Address:				
		*please attach additional forms if ne	cessary	
Notice is her	ichy giron.	4 /	706	
Notice is her	est Virginia Code § 22-6A-10(a), notice is		~ (1) *7	
	on the tract of land as follows:		1/7	
State:	West Virginia	Approx. Latitude & Longitude:	569112.37, 4390193.76 (UTM NAD 83)	
County:	Monongalia	Public Road Access:	State Rt. 20 (Memorial Road)	
District:	Clay	Watershed:	Dunkard	
Quadrangle:	Blacksville, WV	Generally used farm name:	Kassay	
Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57 th Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx .				
	eby given by:	Address: 707 Virginia Street East,	o'il- koro	
Well Operator				
Telephone:	304.241.5752	Charleston, WV 25301 Facsimile: 304.241.5972	RECEIVED	
Email:	hmedley@nne-llc.com	Facsimile: 304.241.5972	Office of Oll and Gas	
The Office of oduties. Your peneded to corappropriately s	Privacy Notice: Dil and Gas processes your personal informersonal information may be disclosed to apply with statutory or regulatory requirecure your personal information. If you herivacy Officer at depprivacyofficer@wv.g	other State agencies or third parties in ements, including Freedom of Informave any questions about our use or you	nation AND Fames rion conficativill	

<u>Kassay - Entry for Plat Survey</u>

s	Address	Surface Owner	TMP
0	1991 Daybrook Road, Fairview, WV 26570	Nehemiah Kassay Patty Kassay	17-48
0	P.O. Box 884, Bridgeport, WV 26330	Precision Oil and Gas Inc.	17-62
	Address	Surface Owner - Access Road	TMP
0	1991 Daybrook Road, Fairview, WV 26570	Nehemiah Kassay Patty Kassay	17-48
	·		
	Address	Mineral Owner	TMP
4	8615 Tiber Hollow Court Louisville, KY 40219	Alice Wise, A Widow	17-62
į	510 Brewer Street Akron, OH 44305	Alma M. Joseph, A Widower	17-62
4	22 Kurtz Street Apt 206 Athens, OH 45701	Almeada J. Barber, A Widow	17-62
1	3 Karen Court Fairmont, WV 26554	Ardella J. Clevenger	.7-62
Ł	316 North Main Street Bishop, CA 93514	Betty C, Lyons	.7-62
	Rt 1 Box 450 Riversville WV 26588	Betty Lee Sine, Widow	.7-62
.]	658 Mooresville Road Core, WV 26541	Billy Ray Tennant	7-62
<u>, </u>	4014 Trent Avenue Cleveland, OH 44109	C.W. Sine, A Single Man	7-62
]	159 Pine Drive Poca, WV 26559	Carol I Wise, Married	7-62
]	11724 Dry River Ct. Reston, VA 20191	Céleste M Frickleton	7-62
	2094 Croosroads Road Fairview, WV 26570	Cheryl Lisabeth Gallagher	7-62
	16005 Fleming Road Amesville, OH 45711	Connie Varner, A Single Woman	7-62
	910 Harlem Fairmont, WV 26554	Darlene Eddy, A/K/A Darlene S.	7-62
ĺ	8480 Rural Dale Road Blue Rock, OH 43760	Deborah Sudduth And Samuel	7-62
	Rt 1 Box 174 Fairmont, WV 26554	Dennis Keith Williams	
	404 Brown Run Rd. Burton, WV 26590	Diana Beth Thomas, A/K/A Diane	7-62
	404 Brown Run Rd. Burton, WV 26590	Diane Beth Thomas And Curtis	7-62
İ	5097 W. 148th Street Brook Park, OH 44142	Donald R Sine, Married	7-62
	5097 W. 148th Street Brook Park, OH 44142	Donald R. Sine And Irma Sine,	7-62
	153 South Heritage Drive Jenkins, KY 41537	Donald Rex Williams	7-62
	2833 West Roy E. Furman Highway Roger Wille PA 15359	Donna Lynn Chase, Married	7-62
3	4430 Fairmont Road Morgantown, WV 26501	Doris L Sine, Widow	7-62
J	7529 Praire Road, NE, Albuquerque, NM 87109-1801	Ellen J Woodruff, Widow	7-62
	607 Bryan Avenue Barrackville, WV 26559	Emza M. Parsons, A Widow	7-62
ı I	101 Mount Harmon Road Fairview, WV 26570	Everett A Sine, Jr, Married	7-62
	222 Happy Lane Fairview, WV 26570	Freddy W Williams, Married	7-62
	127 Dewey Ave. Spraggs, PA 15362	Gail Church, Married	7-62
	46 Breezy Drive Morgantown WY2650	Ginger K. Estle	7-62
A -		Helen Cummings, A Widow	7-62 7-62
Gas	P.O. Box 277 Grant Town, MY 2577 21200 State Rt. 676 Marietta, OH 45750	James Everett Williams II	
	16170 Fleming Road Ames 15, 21842015		7-62 7-63
		James Varner, A Single Man	'-62 '-62
າt ດf	16005 Fleming Road Amesville, OH 45711 P.O. Box 31 White Part 1594	Janet Varner, A Widow	'-62
tool	P.O. Box 311 Pantices 149 25544	Jarrod Williams	'-62

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	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	Myrtle L. Sine	8044 Smokey Drain Road Core, WV 26529
L7-48	Nehemiah Kassay and Patty A. Kassay	1991 Daybrook Road, Fairview, WV 26570
17-62	Nehemiah Kassay And Patty A. Kassay	✓ 1991 Daybrook Road, Fairview, WV 26570
7-62	Nola M Williams, Widow	61 Vermillion Drive Pentress, WV 26544
7-62	Pamela Brown And Carl Brown	1327 Irish Road Philo, OH 43771
.7-62	Pamela J. Yurisko	RR 3 Box 197B Shinnston, WV26431
.7-62	Pamela Rena Hall, Married	290 Oak Street Waynesburg, PA 15370
. 7 -62	Patricia Ann Hostutler, Single	✓ 1460 Jakes Run Road Fairglew, WV 26570
7-62	Patricia Van Tassell, Married	7024 Pam Drive Millington, 7N 38053
7-62	Paul Varner, A Single Man	472 Scott Street Nelsonville, OH 457,64
7-62	Peggy A Morris, Married	37534 Landis Ave. Zephyrhills, FL 33541
7-62	Raymer Tennant	154 Behler Road Fairview, WV 26570
7-62	Rebecca Gail Foley	1175 Range Road Wadestown, WV 26590
7-62	Rebecca Lynne Strahler	307 Marion Street Marietta, OH 45750
7-62	Richard Tennant	Rt 2 Box 335 C Fayet 中間の可以2回の
7-62	Rickey Jane Buchanan, A	✓ 4603 Red Tail Hawk (3) 解析 (2) (2) (3) (3) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
7-62	Robert Ora Wheeler And Paula	5210 Cass Street Oak Lawn, IL 60453
7-62	Robert Varner, A Single Man	16005 Fleming Road Ame Gile, 20145717
7-62	Rodney Wayne Tennant	1733 Jakes Run Road Fairview, WV 26570 WV Department O

17-62	Roxana Cahill	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

4706101731

RECEIVED
Office of Oil and Gas

OCT 2 3 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.

		ovided at least TEN (10) days prior to filing a Date Permit Application Filed: 10/21/2015	a permit application.		
Delivery m	ethod pursuant to West Virginia (Code § 22-6A-16(b)			
☐ HAND	CERTIFIED MAI	L			
DELIV	TERY RETURN RECEI	PT REQUESTED			
receipt required drilling a horosthis subsection in and if availa	ested or hand delivery, give the surf prizontal well: <i>Provided</i> , That notice ection as of the date the notice was properties and the surface of the surface	t ten days prior to filing a permit application acc owner notice of its intent to enter upon the given pursuant to subsection (a), section to provided to the surface owner: <i>Provided, ho</i> face owner. The notice, if required, shall into a mail address of the operator and the operator.	the surface owner's land for the purpose of en of this article satisfies the requirements wever, That the notice requirements of this lude the name, address, telephone number,		
Name: See At		Name:	- /		
Address:		Address:			
Pursuant to		notice is hereby given that the undersigned ing a horizontal well on the tract of land as formula to the state of land as forest of land as formula to the state of land as formula to the sta			
Quadrangle:	Blacksville	Generally used farm name:	Kassay		
Watershed: Dunkard Creek This Notice Shall Include: Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57 th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx .					
Notice is h	ereby given by:				
Well Operat	or: Northeast Natural Energy LLC	Authorized Representative	: Hollie Medley, Regulatory Coordinator		
Address:	707 Virginia Street 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 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.

OCT 23 2015



Surface Owner(s):

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

Nehemiah and Patty Kassay 1991 Daybrook Road Fairview, WV 26570

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

470610173.

RECEIVED
Office of Oil and Gas

OCT 2 3 2015

WW-6A5 (1/12)

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

Notice Time Date of Notic	Requirement: notice shall be provide: 10/09/2015 Date Perm	ed no later th it Applicatio			application.
Delivery met	hod pursuant to West Virginia Cod	le § 22-6A-1	6(c)		47.
	FIED MAIL EN RECEIPT REQUESTED	☐ HAND DELIV			cation, an operator shall, by certified mail 1
return receipt the planned o required to be drilling of a h damages to th	requested or hand delivery, give the speration. The notice required by the provided by subsection (b), section torizontal well; and (3) A proposed e surface affected by oil and gas oper	surface owners subsection ten of this art surface use a rations to the	er whose land in shall included icle to a surfa and compense extent the date	will be used for de: (1) A copy ace owner whos ation agreemen mages are comp	cation, an operator shall, by certified mail 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. Ited in the records of the sheriff at the time
(at the address Name: See Attac	by provided to the SURFACE OW listed in the records of the sheriff at		Name:	::	
		ose of drilling	g a horizonta JTM NAD 8 Public Road A	I well on the tra- Easting: Northing:	well operator has developed a planned ct of land as follows: 569090.4 4390150.2 County Route 25/3 (Yank Hollow Road) Kassay
Pursuant to We to be provide horizontal we surface affect information re	d by W. Va. Code § 22-6A-10(b) to all; and (3) A proposed surface use an ed by oil and gas operations to the elated to horizontal drilling may be located at 601 57 th Street, SE,	o a surface of ad compensate extent the day obtained from	owner whose ion agreement mages are command the Secret	land will be un nt containing an empensable und ary, at the WV	code section; (2) The information required used 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 or by visiting

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

OCT 2 3 2015

WV Department of Environmental Pro/27/2015

Surface Owner(s):

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

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

4706101731

<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 2 3 2015

WV Department of Environmental Protection

11/27/2015

API NO. 47-		-		
OPERATOR	WELL	NO.	Kassay 1H	
Well Pad Nar	ne: Kas	say		

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.

issue the well	work permit at any time.			time to more those series and a series of
	VOLUNTARY STA	TEMENT	OF NO OBJ	JECTION
provisions list	h hereby state that I have re	ad the Instructi	ons to Persons Na	amed on Page WW-6A and the associated olication for a Well Work Permit on Form
WW-6A and	attachments consisting of pages one (1) th	rough	, including t	he erosion and sediment control plan, if
required, and	the well plat, all for proposed well work on the	ne tract of land	as follows:	
State:	West Virginia	UTM NAD	Facting	569090.4
County:	Monongalia		Northing:	4390150.2
District:	Clay	Public Roa	d Access:	County Route 25/3 (Yank Hollow Road)
Quadrangle:	Blacksville	Generally t	ised farm name:	Kassay
Watershed:	Dunkard Creek			
*Please check	the box that applies			ION BY A NATURAL PERSON
■ SURFAC				hemiah Kassay
■ SURFAC	E OWNER (Road and/or Other Disturba	ince)	Print Name: W/Date: _/O -/	EHEMIAH RASSAY
□ SURFAC	CE OWNER (Impoundments/Pits)		FOR EXECUT	ION BY A CORPORATION, ETC.
□ COAL O	WNER OR LESSEE		Company:	
□ COAL O	PERATOR		Its:	
■ WATER	PURVEYOR			
□ OPERA7	TOR OF ANY NATURAL GAS STORA	GE 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 normal course of furthers or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will as 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.

WV Department of Environmental Photograph 15

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

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

VOLUNTARY STATEMENT OF NO OBJECT

Instructions to Persons Named on Page WW-6A

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

Comment and Waiver Provisions

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

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

VOLUNTARY STATEMENT OF NO OBJECTION I, Hance Can Sunter, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through , including the 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 Easting: 569090.4 UTM NAD 83 4390150.2 County: Monongalia Northing: Public Road Access: County Route 25/3 (Yank Hollow Road) District: Clay Generally used farm name: Kassay Quadrangle: Blacksville Watershed: **Dunkard Creek** I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials. FOR EXECUTION BY A NATURAL PERSON *Please check the box that applies ☐ SURFACE OWNER ☐ SURFACE OWNER (Road and/or Other Disturbance) ☐ SURFACE OWNER (Impoundments/Pits) FOR EXECUTION BY A CORPORATION, ETC. ☐ COAL OWNER OR LESSEE Company: By: ☐ COAL OPERATOR Its: WATER PURVEYOR Signature: Date:

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, as parcologue 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 of the 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 1H
Well Pad Name: Kassay	

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

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 STA	TEMENT	OF	NO OB	JECTION
WW-6A and	ted above and that I have received copies of attachments consisting of pages one (1) the	ead the Instruct f a Notice of A arough	ions to	o Persons Nation, an App	amed on Page WW-6A and the associated plication for a Well Work Permit on Form
required, and State:	the well plat, all for proposed well work on the	he tract of land	as foll		500000 4
County:	West Virginia Monongalia	UTM NAD	83	Easting: Northing:	569090.4 4390150.2
District:	Clay	Public Roa	d Acc		County Route 25/3 (Yank Hollow Road)
Quadrangle:	Blacksville	Generally i	used f	arm name:	Kassay
Watershed:	Dunkard Creek				
issued on thos *Please check	the box that applies		FOF	REXECUT	ON BY A NATURAL PERSON
□ SURFAC	***************************************				-+
	CE OWNER (Road and/or Other Disturba	nce)	Print	Name:	18,20/5
□ SURFAC	CE OWNER (Impoundments/Pits)		FOE	EXECUTI	ON BY A CORPORATION, ETC.
□ COAL O	WNER OR LESSEE		Com	pany:	
□ COAL O	PERATOR		By: _ Its: _		
■ WATER	PURVEYOR		Sign	ature:	
□ OPERAT	TOR OF ANY NATURAL GAS STORA	GE 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 oar telephone number. 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 but peffice will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact WV Department of DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Earl Ray Tomblin Charleston, West Virginia 25305-0430 • (304) 558-3505
Governor

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

July 30, 2014

4706101731

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

Subject: DOH Permit for the Kassay Pad, Monongalia County Kassay 1H

Dear Dr. Martin,

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.

Day K. Clayton

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 2 3 2015

WV Departmental Protection

Planned Additives to be used in Fracturing Stimulations

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

