

BEFORE THE VIRGINIA GAS AND OIL BOARD

Applicant:	EnerVest Operating, L.L.C.	)	
		)	
		)	
Relief Sought:	Pooling VCI-539510 Nora Grid BQ-25	)	
	Nora Coalbed Gas Field	)	
		)	
Legal Description:		)	
	Joseph D. Salyer Tract	)	Docket Number:
	292.920 acres, more or less	)	VGOB-18-1120-4194
	Kenady District	)	
	Caney Ridge Quadrangle	)	
	Dickenson County, Virginia	)	
		)	
	(See Exhibit "A" For Specific Description)	)	

APPLICATION

1. Parties: Applicant herein is EnerVest Operating, L.L.C., whose address for the purposes hereof is 408 West Main Street, Abingdon, Virginia 24210 Telephone: (276) 628-9001. The attorney for Applicant is Timothy E. Scott, whose address is 135 West Main Street, Suite 200, Kingsport, Tennessee 37660, Telephone: (423) 247-9376. The unleased entities or persons are listed on Exhibit B-3, attached hereto and made a party hereto. Set forth in Exhibit B is the name and last-known address of each owner of record identified by Applicant as having an interest in the oil, gas and coalbed methane underlying the unit described in Exhibit A, attached hereto and made part hereof. Each of the unleased individuals named in Exhibit B-3 is being made a party if living; if any such individual is deceased, then the unknown heirs, executors, administrators, devisees, trustees and assignees, both immediate and remote, of any such deceased individual are made parties herein. Each of the unleased entities listed in Exhibit B-3 that is a corporation is being made a party if such entity continues to have legal existence, and if any such corporation is dissolved, then the unknown successors, trustees, and assigns, both immediate and remote, of such dissolved corporation are made parties herein. Each of the unleased entities listed in Exhibit B-3 that is an unincorporated association is being made a party if such entity continues to have legal existence, and if any such unincorporated association is dissolved or otherwise not in existence, then the unknown successors, trustees and assigns, both immediate and remote, of such unincorporated association are made parties herein.

2. Allegation of Facts: Applicant is the owner of the right to develop and produce coalbed methane from all formations, from the surface to the total depth drilled within the Nora Coalbed Gas Field and underlying the lands described on Exhibit A attached hereto and made a part hereof and to appropriate the oil, gas and coalbed methane produced therefrom.

- (a) Applicant has proposed a plan of development and operation of the Formations underlying the drilling unit involved herein (described and depicted on Exhibit A attached hereto and made a part hereof) and has proposed to commence such plan of development and operation of such unit by a well, designated as well number VCI-539510 Nora Grid 25-BQ under such plan in the lands involved herein so as to produce oil, gas and coalbed methane from the proposed unit.
- (b) A Well work permit for well number VCI-539510 Nora Grid 25-BQ is currently or is anticipated to be pending before the Department of Mines, Minerals and Energy.

- (c) Applicant has exercised due diligence to locate each of the oil, gas and coalbed methane interest owners named herein at Exhibit B-3 and has made or is making a bona fide effort to reach an agreement with all unleased parties as to pooling their interest for the development and operation of the well involved herein. Simultaneously with the filing of this application, Applicant has provided notice to each of the unleased parties set forth in Exhibit B-3 pursuant to the provisions of § 45.1-361.19 of the Virginia Code Annotated. Applicant hereby notifies the Board that where the identity or location of any person is shown as "unknown" on Exhibit B-3, then Applicant is unable to provide such person with written notice of the application herein. Conflicting Owners/Claimants in the Subject Drilling Unit are listed in Exhibit E. The interest of all unleased persons in the Formations underlying the drilling unit for well number VCI-539510 Nora Grid 25-BQ should be pooled for the development and operation thereof.
- (d) Applicant proposes to drill at the permitted location to an approximate depth of 2,829 feet on the Subject Lands to test for oil, gas and coalbed methane in the Subject Formations, including all Pennsylvanian age coals from the top of the Aily, including but not limited to Raven, Jawbone Rider, Jawbone, Tiller, Upper Seaboard, Greasy Creek, Upper Horsepen, Middle Horsepen, War Creek, Beckley, Lower Horsepen, Pocahontas #9, Pocahontas #3, Pocahontas #2, and Pocahontas #1 and any unnamed coal seams and other associated formations known as the Nora Coalbed Gas Field. Applicant estimates the cost for a well to said depth to be \$406,100.00 for a well completed for production. Exhibit C, attached hereto and made part hereof, is Applicant's signed Authorization For Expenditure ("AFE") which shows the estimated cost of drilling, completing and equipping said well.
- (e) The estimated production over the life of the proposed well is 525 mmcf. These figures concerning estimated production and the amount of reserves are, however, estimates only that are not based upon actual production and should not be relied upon for any purpose.

3. Legal Authority: The relief sought by this Application is authorized by Virginia Code Annotated § 45.1-361.21 et seq. and § 4 VAC 25-160-70 et seq.

4. Relief Sought: Applicant requests the Virginia Gas and Oil Board to enter an order pooling all unleased interests or estates of all persons or entities owning oil, gas and coalbed methane interests in the Formations underlying the tracts encompassed by the drilling unit supporting well number VCI-539510 Nora Grid 25-BQ, and (I) authorizing the drilling and operation of a well for the production of oil, gas and coalbed methane from the pooled acreage; (II) designating Applicant as the party authorized to drill and operate such well; (III) prescribing the time, manner, and other conditions under which unleased parties owning an interest in the oil, gas and coalbed methane may elect to participate in the operation of such well, or to exercise their rights of election under the applicable statutes; (IV) providing that all reasonable costs and expenses of drilling, completing, equipping, operating, plugging and abandoning such well shall be borne, and all production therefrom, shared, by all participating parties in the proportion which the acreage in the pooled tracts owned or under lease to each such participating party bears to the total acreage in such unit; and (V) making provision for the payment of all reasonable costs of the operation, including a reasonable supervision fee, to the Applicant by all parties who elect to participate therein or who elect to be carried interest owners.

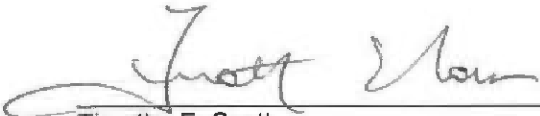
Dated this 19<sup>th</sup> day of October, 2018.

ENERVEST OPERATING, L.L.C

  
\_\_\_\_\_  
Timothy E. Scott  
135 West Main Street, Suite 200  
Kingsport, Tennessee 37660  
(423) 247-9376

**VERIFICATION**

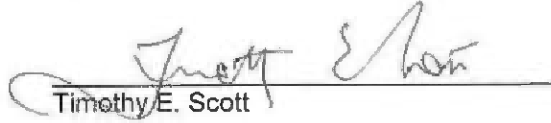
The foregoing Application to the best of my knowledge, information and belief is true and correct.

  
\_\_\_\_\_  
Timothy E. Scott

CERTIFICATE OF SERVICE

I, Timothy E. Scott, counsel for EnerVest Operating, L.L.C., hereby certify that I have on this, the 19<sup>th</sup> day of October, 2018, caused the foregoing notice and application to be served upon parties listed herein, at their address, by certified mail, return receipt requested.

Dated this 19<sup>th</sup> day of October, 2018.

  
\_\_\_\_\_  
Timothy E. Scott

BEFORE THE VIRGINIA GAS AND OIL BOARD

Applicant:	EnerVest Operating, L.L.C.	)	
		)	
Relief Sought:	Pooling	)	
		)	
Location:	See Exhibit "A"	)	Docket No.
Well Number:	VCI-539510 Nora Grid BQ-25	)	VGOB-18-1120-4194
	Nora Coalbed Gas Field	)	
		)	
Legal		)	
Description:	Joseph D. Salyer Tract	)	
	292.920 acres, more or less	)	
	Kenady District	)	
	Caney Ridge Quadrangle	)	
	Dickenson County, Virginia	)	

NOTICE OF HEARING

HEARING DATE: November 20, 2018  
PLACE: Russell County Conference Center  
Highland Drive  
Lebanon, Virginia  
TIME: 9:00 a.m.

COMMONWEALTH OF VIRGINIA: To all unleased persons owning an interest in the oil, gas and coalbed methane in and underlying the unit surrounding VCI-539510 Nora Grid BQ-25 described on Exhibit "A" to the Application, which is attached to this Notice, in Dickenson County, Virginia (hereinafter "Subject Lands") and adjacent lands, and in particular to the following persons, their known and unknown heirs, executors, administrators, devisees, trustees, assigns and successors, both immediate and remote:

See attached Exhibit B-3.

NOTICE IS HEREBY GIVEN that the Applicant is requesting that the Virginia Gas and Oil Board (hereinafter "Board") issue an order pooling all the rights, interests, and estates of the unleased persons pursuant to Virginia Code Ann. § 45.1-361.1 *et seq.* in regard to the drilling, development and production of oil, gas and coalbed methane from drilling unit VCI-539510 Nora Grid BQ-25 containing approximately 58.77 acres, located on the above-referenced tracts situated approximately 3,930 feet southeast of the intersection of Virginia State Routes 649 and 760 and approximately 3,600 feet northeast of Rugby School in the Kenady District, Caney Ridge Quadrangle of Dickenson County, Virginia.

Applicant requests that the Board issue an order providing as follows:

- a. Pooling all the interests and estates of the persons named herein and their known and unknown heirs, executors, administrators, devisees, trustees, assigns and successors, both immediate and remote, for the drilling, development and production of oil, gas and coalbed methane from the subject drilling unit for the Subject Formations underlying and comprised of the Subject Lands;
- b. Establishing a procedure whereby each person named herein shall have the right to elect (1) to assign or lease his oil, gas and coalbed methane interest in the subject drilling unit to the designated operator; (2) to enter into a voluntary agreement with the designated operator

to share in the operation (including the sharing in all reasonable costs of the drilling of the well and development of the unit) at a rate of payment mutually agreed to by the person making the election hereunder and the designated operator herein; or (3) to share in the operation of the well as a nonparticipating operator on a carried basis after the proceeds allocable to such person's share equal the following:

In the case of a leased tract, 300 percent of the share of the costs allocable to such person's interest; or

In the case of an unleased tract, 200 percent of the share of costs allocable to such person's interest;

c. Providing that any person named herein who does not make a timely written election under the terms of the Order to be entered herein shall be deemed to have leased his oil, gas and coalbed methane interest in the subject drilling unit to the operator designated herein at a rate to be established by the Board;

d. Designating Applicant, EnerVest Operating, L.L.C., as Operator; providing that the Operator shall have the right to drill, develop, produce, market and sell oil, gas and coalbed methane produced from the subject drilling unit; granting the Operator the right to market and sell oil, gas and coalbed methane produced from the subject drilling unit which is attributable to the conflicting claims and interest pooled herein; providing that the Operator shall have an operator's lien on the oil, gas and coalbed methane estate and rights owned or claimed by the unleased persons named herein in the subject drilling unit; and granting the Operator the right to drill at any legal or specially permitted location on the subject drilling unit;

e. Making any necessary provision for the escrow of funds pursuant to Va. Code Ann. § 45.1-361.22;

f. Providing that the Order to be entered herein shall expire two (2) years from the date of its issuance if operations for the development of the subject drilling unit have not commenced by said date; but further providing that if operations have commenced during said two year period, then said order shall remain in effect for so long as operations continue on the subject drilling unit;

g. Providing that the conduct of operations on any tract in the subject drilling unit shall be deemed to be the conduct of operations on all tracts in the drilling unit; and providing that the production allocated to any tract in the pooled drilling unit shall be in the same proportion as the acreage of that tract bears to the total acreage in the drilling unit; and

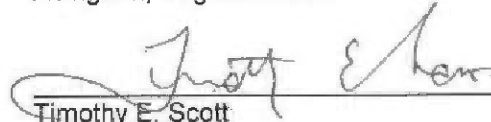
h. Granting such other relief as is merited by the evidence and is just and equitable, whether or not such relief has been specifically requested herein.

NOTICE IS FURTHER GIVEN that this cause has been set for hearing and the taking of evidence before the Board at **9:00 a.m. on November 20, 2018** at the **Russell County Conference Center, Highland Drive**, Lebanon, Virginia, and that notice will be published as required by the law and the rules of the Board.

NOTICE IS FURTHER GIVEN that you may attend this hearing, with or without an attorney, and offer evidence or state any comments you have. The Board rules require that any written objections you wish to file must be filed with the Board at least 10 days before the hearing. For further information, contact the Virginia Gas and Oil Board, State Gas and Oil Inspector, Department of Mines, Minerals and Energy, Division of Gas and Oil, 135 Highland Drive, Lebanon, Virginia, 24266, (276) 415-9650 or the Applicant at the address shown below.

DATED this 19<sup>th</sup> of October, 2018.

EnerVest Operating, L.L.C.  
408 West Main Street  
Abingdon, Virginia 24212



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Timothy E. Scott

Counsel for  
EnerVest Operating, L.L.C.  
135 West Main Street  
Suite 200  
Kingsport, Tennessee 37660  
(423) 247-9376

Well Coordinates: (Geographic N83)  
37.032437° -82.450080°

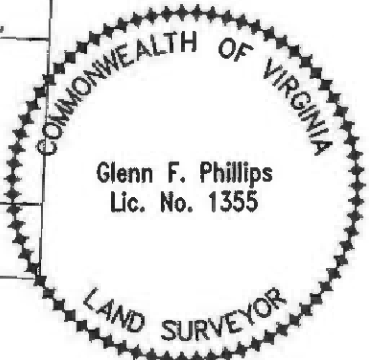
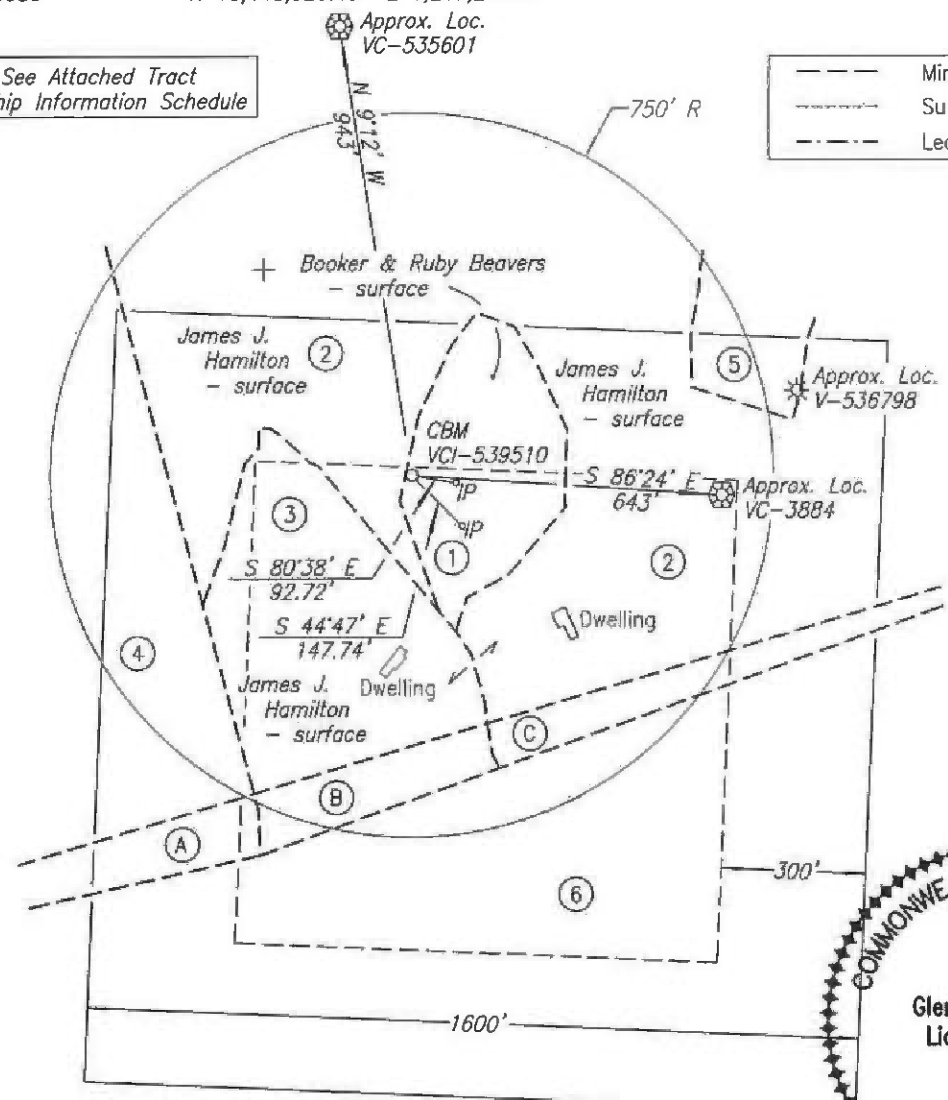
Well Coordinates: (UTM N27, Zone 17)  
N 13,448,920.45 E 1,217,234.97

Latitude 37° 02' 30"

Longitude -82° 25' 00"

Note: See Attached Tract  
Ownership Information Schedule

--- Mineral Line  
- - - Surface Line  
- - - Lease Line



Note 1: The boundary lines shown hereon are based on deeds, plats maps of record, and certain lines shown on the well plat "EQT Production Co. ... VCI-539510 ... 7-29-2009." They are not based upon a current field survey.

Note 2: The well will be drilled within 10' of the permitted coordinates.

Note 3: Well spot is 17.72' south of interior grid line

Well elevation determined by GPS survey from HARN Monument P-424

Area of Unit = 58.77 Ac.

Well Coordinates: (VA St. Plane S. Zone, NAD 83 (1993))  
N 3,559,486.21 E 10,330,236.07

Well Coordinates: (VA St. Plane S. Zone, NAD 27 Calculated from NAD 83 (1993))  
N 278,612.37 E 847,251.60

Well Coordinates: (Clinchfield Coal Co.)  
S 24,617.73 W 19,474.62

WELL LOCATION PLAT NORA GRID BQ-25

COMPANY EnerVest Operating, LLC WELL NAME AND NUMBER VCI-539510  
TRACT NO. Booker & Ruby Beavers ELEVATION 2,460.33' QUADRANGLE Caney Ridge  
COUNTY Dickenson DISTRICT Kenady SCALE 1" = 400' DATE 4-19-2017

This Plat is a new plat     ; an updated plat x; or a final location plat     

+ Denotes the location of a well on United States topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.

~~Licensed Professional Engineer or~~ Licensed Land Surveyor

VCI-539510 PLAT  
TRACT OWNERSHIP INFORMATION SCHEDULE  
4/19/2017

1. DI-42  
Joseph D. Salyer  
292.920 Acres  
ACIN LLC - coal  
Paramont Contura, LLC - coal lessee  
WBRD LLC - coal  
Dickenson-Russell Contura, LLC - coal lessee  
Lease No. 245507  
Booker & Ruby Beavers - oil, gas & CBM  
3.29 Acres  
Gas 3.29 Ac. 5.60%
2. DI-42  
Joseph D. Salyer  
292.920 Acres  
ACIN LLC - coal  
Paramont Contura, LLC - coal lessee  
WBRD LLC - coal  
Dickenson-Russell Contura, LLC - coal lessee  
Lease No. 245217  
James J. Hamilton - 2/3 int. oil, gas & CBM  
Susan C. & Kurt Lantz - 1/3 int. oil, gas & CBM  
54.55 Acres  
Gas 15.82 Ac. 26.92%
3. DI-42  
Joseph D. Salyer  
292.920 Acres  
ACIN LLC - coal  
Paramont Contura, LLC - coal lessee  
WBRD LLC - coal  
Dickenson-Russell Contura, LLC - coal lessee  
Lease No. 245216  
James J. Hamilton - oil, gas & CBM  
10.0 Acres  
Gas 5.98 Ac. 10.18%
4. Unleased  
Hagan Estates - coal, oil, gas & CBM  
Tract No., 192  
54 Acres  
Gas 4.50 Ac. 7.66%
5. DI-42  
Joseph D. Salyer  
292.920 Acres  
ACIN LLC - coal  
Paramont Contura, LLC - coal lessee  
WBRD LLC - coal  
Dickenson-Russell Contura, LLC - coal lessee  
Lease No. 245516  
Susan C. & Kurt Lantz - oil, gas & CBM  
3.25 Acres  
Gas 0.76 Ac. 1.29%
6. T-624  
W. H. Aston  
213 Acres  
ACIN LLC - coal  
Paramont Contura, LLC - coal lessee  
WBRD LLC - coal  
Dickenson-Russell Contura, LLC - coal lessee  
EnerVest Energy Institutional Fund XIV-A, L.P., EnerVest Energy Institutional Fund XIV-A1, L.P., &  
EnerVest Energy Institutional Fund XIV-WIC, L.P. - oil, gas & CBM  
Gas 25.35Ac. 43.13%

**Areas of mineral ownership to be determined:**

- A. Same as either Area 4 or Area 6 above.  
Gas 0.77 Ac. 1.31%
- B. Same as either Area 3 or Area 6 above.  
Gas 1.09 Ac. 1.85%
- C. Same as either Area 2 or Area 6 above.  
Gas 1.21 Ac. 2.06%

**Exhibit "A"**  
**2400-R-534**

**Exhibit "B"**  
**VCI-539510**  
**Docket No. VGOB-18-1120-4194**

Tract	Lessor	Lease Status	Interest Within Unit	Gross Acreage in Unit
<b>Coal Estate Only</b>				
1	Tax ID: 4950 Tammy Beavers, Guardian for Matthew Beavers 326 Hillside Farms Rd Clintwood, VA 24228	Leased	2.80000000	1.64500000
	Tammy Beavers, Guardian for Emily Beavers 326 Hillside Farms Rd Clintwood, VA 24228	Leased	2.80000000	1.64500000
	<b>Tract 1 Totals</b>		<b>5.60000000</b>	<b>3.29000000</b>
2	Tax ID: Minerals Only James J & Daphne Hamilton 743 Copperhead Road Coeburn, VA 24230	Leased	17.94666667	10.54666667
	Susan C & Kurt Lantz 3912 Park Hurst Dr Bryan, TX 77802	Leased	8.97333333	5.27333333
	<b>Tract 2 Totals</b>		<b>26.92000000</b>	<b>15.82000000</b>
3	James J & Daphne Hamilton 743 Copperhead Road Coeburn, VA 24230 Tax ID: 4682	Leased	10.18000000	5.98000000
4	The Hagen Estates c/o George W. Williams P.O. Box 675 Tazewell, VA 24651 Tax ID: Minerals Only	Unleased	7.66000000	4.50000000
5	Susan C & Kurt Lantz 3912 Park Hurst Dr Bryan, TX 77802 Tax ID: Minerals Only	Leased	1.29000000	0.76000000
6	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Kevin Miller 408 West Main Street Abingdon, VA 24210 Tax ID: 20156	Owner	43.13000000	25.35000000
A	The Hagen Estates c/o George W. Williams P.O. Box 675 Tazewell, VA 24651 Tax ID: Minerals Only	Unleased	1.31000000	0.77000000
	<b>OR</b>			
	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P.	Owner	1.31000000	0.77000000

Attn: Kevin Miller  
 408 West Main Street  
 Abingdon, VA 24210  
 Tax ID: 20156

B	James J & Daphne Hamilton 743 Copperhead Road Coeburn, VA 24230 Tax ID: 4682	Leased	1.85000000	1.09000000
	<b>OR</b>			
	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Kevin Miller 408 West Main Street Abingdon, VA 24210 Tax ID: 20156	Owner	1.85000000	1.09000000
C	Tax ID: Minerals Only James J & Daphne Hamilton 743 Copperhead Road Coeburn, VA 24230	Leased	1.37333333	0.80666667
	Susan C & Kurt Lantz 3912 Park Hurst Dr Bryan, TX 77802	Leased	0.68666667	0.40333333
	<b>OR</b>			
	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Kevin Miller 408 West Main Street Abingdon, VA 24210 Tax ID: 20156	Owner	2.06000000	1.21000000
	<b>TOTAL COAL ESTATE</b>		100.00000000	58.77000000
	Percentage of Unit Leased		87.12000000	
	Percentage of Unit Unleased		7.66000000	
	Acreage in Unit Leased		51.20000000	
	Acreage in Unit Unleased		4.50000000	
	Undetermined Ownership Percentage (A,B,&C)		5.22000000	
	Undetermined Ownership Acreage (A,B,&C)		3.07000000	

**Exhibit "B"**  
**VCI-539510**  
**Dcoekt No. VGOB-18-1120-4194**

Tract	Lessor	Lease Status	Interest Within Unit	Gross Acreage in Unit
<b>Gas Estate Only</b>				
1	Tax ID: 4950 Tammy Beavers, Guardian for Matthew Beavers 326 Hillside Farms Rd Clintwood, VA 24228	Leased	2.80000000	1.64500000
	Tammy Beavers, Guardian for Emily Beavers 326 Hillside Farms Rd Clintwood, VA 24228	Leased	2.80000000	1.64500000
	<b>Tract 1 Totals</b>		<b>5.60000000</b>	<b>3.29000000</b>
2	Tax ID: Minerals Only James J & Daphne Hamilton 743 Copperhead Road Coeburn, VA 24230	Leased	17.94666667	10.54666667
	Susan C & Kurt Lantz 3912 Park Hurst Dr Bryan, TX 77802	Leased	8.97333333	5.27333333
	<b>Tract 2 Totals</b>		<b>26.92000000</b>	<b>15.82000000</b>
3	James J & Daphne Hamilton 743 Copperhead Road Coeburn, VA 24230 Tax ID: 4682	Leased	10.18000000	5.98000000
4	The Hagen Estates c/o George W. Williams P.O. Box 675 Tazewell, VA 24651 Tax ID: Minerals Only	Unleased	7.66000000	4.50000000
	EQT Production Company Attn: Tracy Coyne and Taylor Vactor 625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222	Unleased Lessee	0.00000000	0.00000000
5	Susan C & Kurt Lantz 3912 Park Hurst Dr Bryan, TX 77802 Tax ID: Minerals Only	Leased	1.29000000	0.76000000
6	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Kevin Miller 408 West Main Street Abingdon, VA 24210 Tax ID: 20156	Owner	43.13000000	25.35000000
A	The Hagen Estates c/o George W. Williams	Unleased	1.31000000	0.77000000

P.O. Box 675  
 Tazewell, VA 24651  
 Tax ID: Minerals Only

**OR**

EnerVest Energy Institutional Fund XIV-A, L.P.  
 & EnerVest Energy Institutional Fund XIV-WIC, L.P.  
 Attn: Kevin Miller  
 408 West Main Street  
 Abingdon, VA 24210  
 Tax ID: 20156

Owner 1.31000000 0.77000000

B James J & Daphne Hamilton  
 743 Copperhead Road  
 Coeburn, VA 24230  
 Tax ID: 4682

Leased 1.85000000 1.09000000

**OR**

EnerVest Energy Institutional Fund XIV-A, L.P.  
 & EnerVest Energy Institutional Fund XIV-WIC, L.P.  
 Attn: Kevin Miller  
 408 West Main Street  
 Abingdon, VA 24210  
 Tax ID: 20156

Owner 1.85000000 1.09000000

C Tax ID: Minerals Only  
 James J & Daphne Hamilton  
 743 Copperhead Road  
 Coeburn, VA 24230

Leased 1.37333333 0.80666667

Susan C & Kurt Lantz  
 3912 Park Hurst Dr  
 Bryan, TX 77802

Leased 0.68666667 0.40333333

**OR**

EnerVest Energy Institutional Fund XIV-A, L.P.  
 & EnerVest Energy Institutional Fund XIV-WIC, L.P.  
 Attn: Kevin Miller  
 408 West Main Street  
 Abingdon, VA 24210  
 Tax ID: 20156

Owner 2.06000000 1.21000000

**TOTAL GAS ESTATE**

100.00000000 58.77000000

Percentage of Unit Leased 87.12000000  
 Percentage of Unit Unleased 7.66000000

Acreage in Unit Leased 51.20000000  
 Acreage in Unit Unleased 4.50000000

Undetermined Ownership Percentage (A,B,&C) 5.22000000  
 Undetermined Ownership Acreage (A,B,&C) 3.07000000

**Exhibit "B-3"**  
**VCI-539510**  
**Docket No. VGOB-18-1120-4194**

Tract	Lessor	Lease Status	Interest Within Unit	Gross Acreage in Unit
<b>Gas Estate Only</b>				
4	The Hagen Estates c/o George W. Williams P.O. Box 675 Tazewell, VA 24651 Tax ID: Minerals Only	Unleased	7.66000000	4.50000000
	EQT Production Company Attn: Tracy Coyne and Taylor Vactor 625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222	Unleased Lessee	0.00000000	0.00000000
	<b>TOTAL GAS ESTATE</b>		<b>7.66000000</b>	<b>4.50000000</b>

**Coal Estate Only**

4	The Hagen Estates c/o George W. Williams P.O. Box 675 Tazewell, VA 24651 Tax ID: Minerals Only	Unleased	7.66000000	4.50000000
	EQT Production Company Attn: Tracy Coyne and Taylor Vactor 625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222	Unleased Lessee	0.00000000	0.00000000
	<b>TOTAL COAL ESTATE</b>		<b>7.66000000</b>	<b>4.50000000</b>

Company: EnerVest Operating, LLC.

Virginia Gas And Oil Template -- Estimate Authorization For Expenditure (AFE)

AFE #

Well Name: VCI-539510

Location: DICKENSON, VA

Expected Pay Zones: PENNSLVANIA COALS

Proposed Work: DRILL, COMPLETE AND PLACE INTO PRODUCTION

Property #

Version # 1

Field: NORA FIELD

Completed By: TEAM

Operator: EnerVest Operating, LLC.

Date: 10/12/2018

Estimated Total Depth: 2,829 FT

AAPG Class: DEVELOPMENT

Participant(s): EnerVest Operating, LLC.

Amount: \$406,100

Exhibit "C"  
2400-R-534

Description	Casing Point	Completion	Total Cost
Roads / Stone / Culverts	\$9,000	\$0	\$9,000
Location Rds/Stone/Culverts	\$0	\$500	\$500
Building Location/Materials	\$17,000	\$2,500	\$19,500
Reclamation & Damages	\$10,000	\$0	\$10,000
Surface Damages	\$0	\$0	\$0
Permit / Title Opinion / Survey / Insurance	\$13,000	\$0	\$13,000
Drilling - Dayrate	\$0	\$0	\$0
Drilling - Footage	\$49,500	\$0	\$49,500
Completion Rig	\$0	\$7,000	\$7,000
Drilling - Bits	\$0	\$1,500	\$1,500
Mud & Chemicals (Drilling)	\$0	\$700	\$700
Fresh Water Hauling (Completion)	\$0	\$3,900	\$3,900
Cement Production Casing	\$0	\$12,000	\$12,000
Trucking / Dozer (Completion)	\$0	\$4,800	\$4,800
Cement Services	\$6,000	\$0	\$6,000
Trucking / Dozer (Drilling)	\$1,900	\$0	\$1,900
Rental Tools & Equipment (Completion)	\$0	\$4,000	\$4,000
Fresh Water Hauling (Drilling)	\$1,700	\$0	\$1,700
Cased Hole Logging / Perforating	\$0	\$17,000	\$17,000
Rental Tools & Equipment (Drilling)	\$0	\$0	\$0
Open Hole Logging & Testing	\$3,000	\$4,700	\$7,700
Stimulation / Fracturing	\$0	\$95,000	\$95,000
Roustabout Labor	\$1,700	\$2,900	\$4,600
Overhead Rate	\$6,000	\$1,000	\$7,000
Misc. & Contingencies (Insurance)	\$300	\$0	\$300
Haul Pit Water / Disposal	\$0	\$2,900	\$2,900
Drilling - Mobilization	\$0	\$0	\$0
Fuel	\$1,000	\$0	\$1,000
Technical Supervision (Drilling)	\$0	\$0	\$0
Technical Supervision (Completion)	\$0	\$0	\$0
Environmental & Safety	\$600	\$500	\$1,100
<b>TOTAL INTANGIBLES</b>	<b>\$120,700</b>	<b>\$160,900</b>	<b>\$281,600</b>

Description	Unit	Casing Point	Completion	Total Cost
1" Conductor	Ft	\$1,100	\$0	\$1,100
2 1/2" 26 lb/ft LS Surface Csg	Ft	\$0	\$0	\$0
7" 19 lb/ft LS Intermediate Csg	Ft	\$8,200	\$0	\$8,200
4 1/2" 9.6 lb/ft M-65 Production Csg	Ft	\$0	\$16,100	\$16,100
Wellhead Equipment / Fittings		\$1,400	\$8,600	\$10,000
2 3/8" 4.7 lb/ft J55 3rd Production Tubing	Ft	\$0	\$10,000	\$10,000
Rods / Stuffing Box		\$0	\$4,300	\$4,300
Downhole Pump		\$0	\$1,600	\$1,600
Electric Service & Equipment		\$0	\$20,000	\$20,000
Tank Battery		\$0	\$7,000	\$7,000
Flow Line labor/material		\$0	\$18,300	\$18,300
Valves & Fittings		\$0	\$0	\$0
Separator / Heater / Treater		\$0	\$5,500	\$5,500
4 1/2" 10.5 lb/ft M-65 Production Csg	Ft	\$0	\$0	\$0
Gas Lift Equipment		\$0	\$0	\$0
Pumping Unit / Motor		\$0	\$10,000	\$10,000
Sales line labor/material		\$0	\$15,200	\$15,200
<b>TOTAL TANGIBLES</b>		<b>\$7,700</b>	<b>\$116,800</b>	<b>\$124,500</b>

**GRAND TOTAL WELL COST** \$128,400 \$277,700 \$406,100

Plugging & Abandonment \$30,000

Production Costs : \$406,100 Dry Hole Costs : \$158,400

Operations C.M. Randolph Date 10/15/18  
 Engineering Tom Lynch Date 11/15/18  
 Geology Justin Date 10/15/18  
 Land Chad Date 10/15/18

THIS IS AN ESTIMATE OF PROJECTED WELL DRILLING, COMPLETION, EQUIPMENT AND INFLINE COSTS. THESE ESTIMATES ARE PROJECTIONS ONLY AND ACTUAL RELATED COSTS MAY VARY FROM WELL TO WELL DEPENDING UPON ACTUAL FINAL DEPTH AND OTHER FACTORS INCLUDING, BUT NOT LIMITED TO, SEASONAL MATERIAL COSTS, WEATHER CONDITIONS, AND UNFORSEEN RIGHT-OF-WAY PROBLEMS.

**Exhibit "E" - Escrow Owners**  
**VCI-539510**  
**Docket No. VGOB-18-1120-4194**

Tract	Lessor	Lease Status	Interest Within Unit	Gross Acreage in Unit
<b>Gas Estate Only</b>				
A	The Hagen Estates c/o George W. Williams P.O. Box 675 Tazewell, VA 24651 Tax ID: Minerals Only	Unleased	1.31000000	0.77000000
	EQT Production Company Attn: Tracy Coyne and Taylor Vactor 625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222	Unleased Lessee	0.00000000	0.00000000
	<b>OR</b>			
	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Kevin Miller 408 West Main Street Abingdon, VA 24210 Tax ID: 20156	Owner	1.31000000	0.77000000
B	James J & Daphne Hamilton 743 Copperhead Road Coeburn, VA 24230 Tax ID: 4682	Leased	1.85000000	1.09000000
	<b>OR</b>			
	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Kevin Miller 408 West Main Street Abingdon, VA 24210 Tax ID: 20156	Owner	1.85000000	1.09000000
C	Tax ID: Minerals Only James J & Daphne Hamilton 743 Copperhead Road Coeburn, VA 24230	Leased	1.37333333	0.80666667
	Susan C & Kurt Lantz 3912 Park Hurst Dr Bryan, TX 77802	Leased	0.68666667	0.40333333
	<b>OR</b>			
	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Kevin Miller 408 West Main Street Abingdon, VA 24210 Tax ID: 20156	Owner	2.06000000	1.21000000
<b>TOTAL GAS ESTATE</b>			<b>5.22000000</b>	<b>3.07000000</b>

Mine ID: 10561  
Lower Banner Mines

N 3,559,830  
E 10,329,624

N 3,559,763  
E 10,331,224

+

VCI-539510

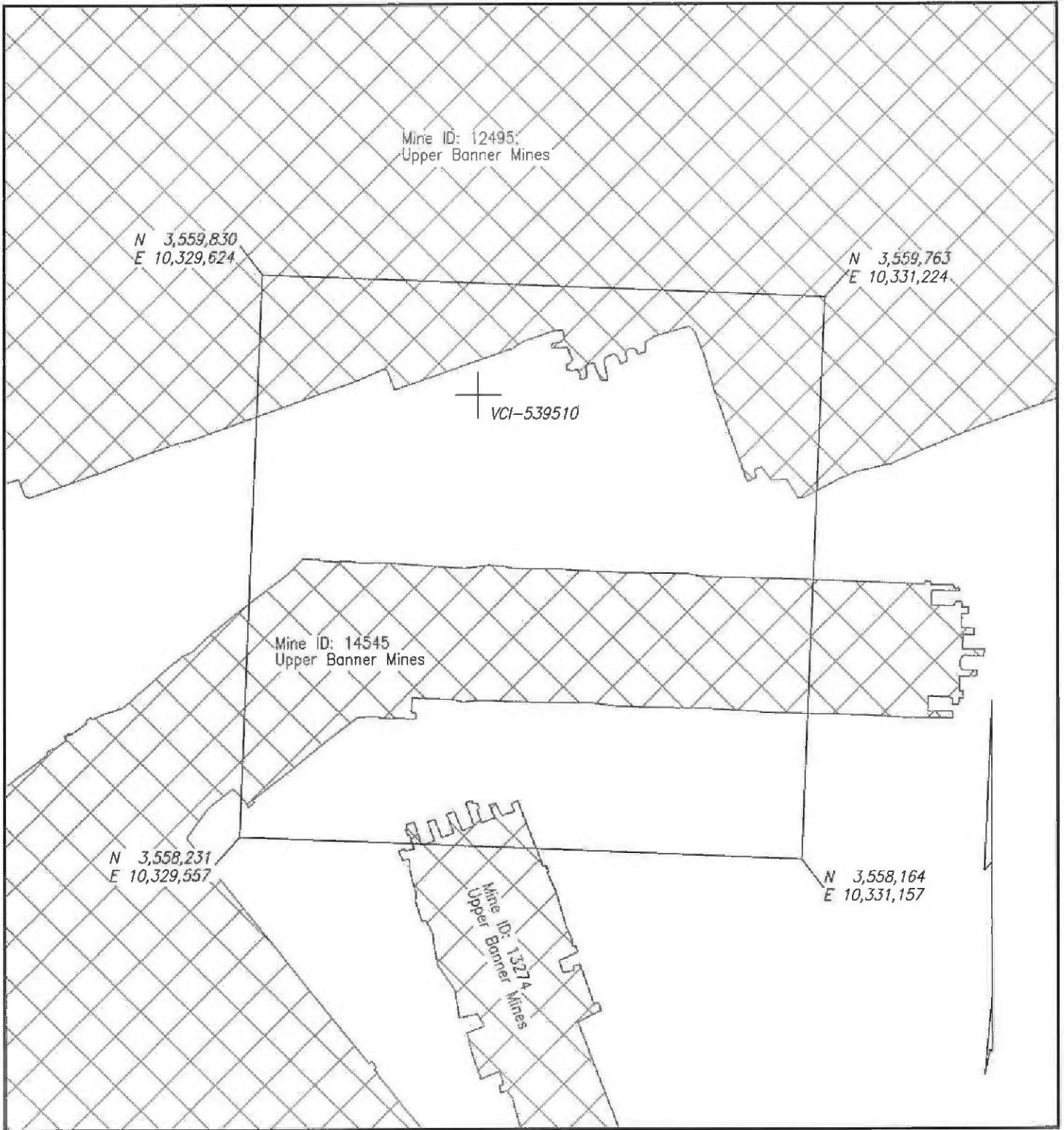
N 3,558,231  
E 10,329,557

N 3,558,164  
E 10,331,157

WELL & MINE LOCATION MAP NORA GRID BQ-25

COMPANY EnerVest Operating, LLC WELL NAME AND NUMBER VCI-539510  
QUADRANGLE Caney Ridge PERMIT NO. \_\_\_\_\_ SCALE 1" = 400' DATE 4-19-2017

NOTE: The mine locations are approximate locations taken from downloaded DMME data.  
The maps are to be used for anticipated drilling hazards only.



WELL & MINE LOCATION MAP NORA GRID BQ-25

COMPANY EnerVest Operating, LLC WELL NAME AND NUMBER VCI-539510  
 QUADRANGLE Caney Ridge PERMIT NO. \_\_\_\_\_ SCALE 1" = 400' DATE 4-19-2017

NOTE: The mine locations are approximate locations taken from downloaded DMME data.  
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