

BEFORE THE VIRGINIA GAS AND OIL BOARD

Applicant:	EnerVest Operating, L.L.C.)	
)	
)	
Relief Sought:	Pooling VCI-538898 Nora Grid AV-81)	
	Nora Coalbed Gas Field)	
Legal)	
Description:)	
	John H. Duty TC-224 Tract)	Docket Number:
	321 acres, more or less)	VGOB-18-1120-4195
	Hurricane District)	
	Duty Quadrangle)	
	Buchanan 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-538898 Nora Grid 81-AV 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-538898 Nora Grid 81-AV is currently or is anticipated to be pending before the Department of Mines, Minerals and Energy.

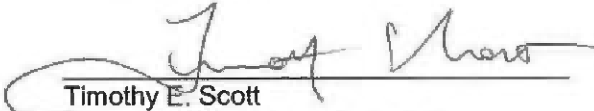
- (c) Applicant has exercised due diligence to locate each of the oil, gas and coalbed methane interest owners named herein at Exhibit B-3 and has made or is making a bona fide effort to reach an agreement with all unleased parties as to pooling their interest for the development and operation of the 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-538898 Nora Grid 81-AV should be pooled for the development and operation thereof.
- (d) Applicant proposes to drill at the permitted location to an approximate depth of 2,489 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 \$409,200.00 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 925 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-538898 Nora Grid 81-AV, 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 19th 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

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-538898 Grid AV-81)	VGOB-18-1120-4195
	Nora Coalbed Gas Field)	
)	
Legal)	
Description:	John H. Duty TC-224 Tract)	
	321 acres, more or less)	
	Hurricane District)	
	Duty Quadrangle)	
	Buchanan 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-538898 Nora Grid AV-81 described on Exhibit "A" to the Application, which is attached to this Notice, in Buchanan 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-538898 Nora Grid AV-81 containing approximately 58.77 acres, located on the above-referenced tracts situated approximately 5,000 feet northwest of the intersection of Virginia State Routes 600 and 651 and approximately 7,100 feet southwest of Boyd School in the Hurricane District, Duty Quadrangle of Buchanan 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 19th of October, 2018.

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

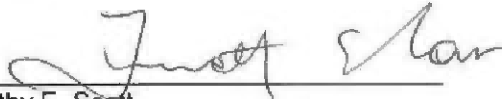

Timothy E. Scott

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

CERTIFICATE OF SERVICE

I, Timothy E. Scott, counsel for EnerVest Operating, L.L.C., hereby certify that I have on this, the 19th 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 19th day of October, 2018.



Timothy E. Scott

4,570'

1,405'

Well Coordinates: (VA St. Plane S. Zone, NAD 83 (1993))
 N 3,588,170.44 E 10,421,766.72

Well Coordinates: (VA St. Plane S. Zone, NAD 27 Calculated from NAD 83 (1993))
 N 307,293.76 E 938,780.57

Well Coordinates: (Clinchfield Coal Co.)
 N 7,720.50 E 70,808.00

Well Coordinates: (Geographic N83)
 37.121261° -82.140528°

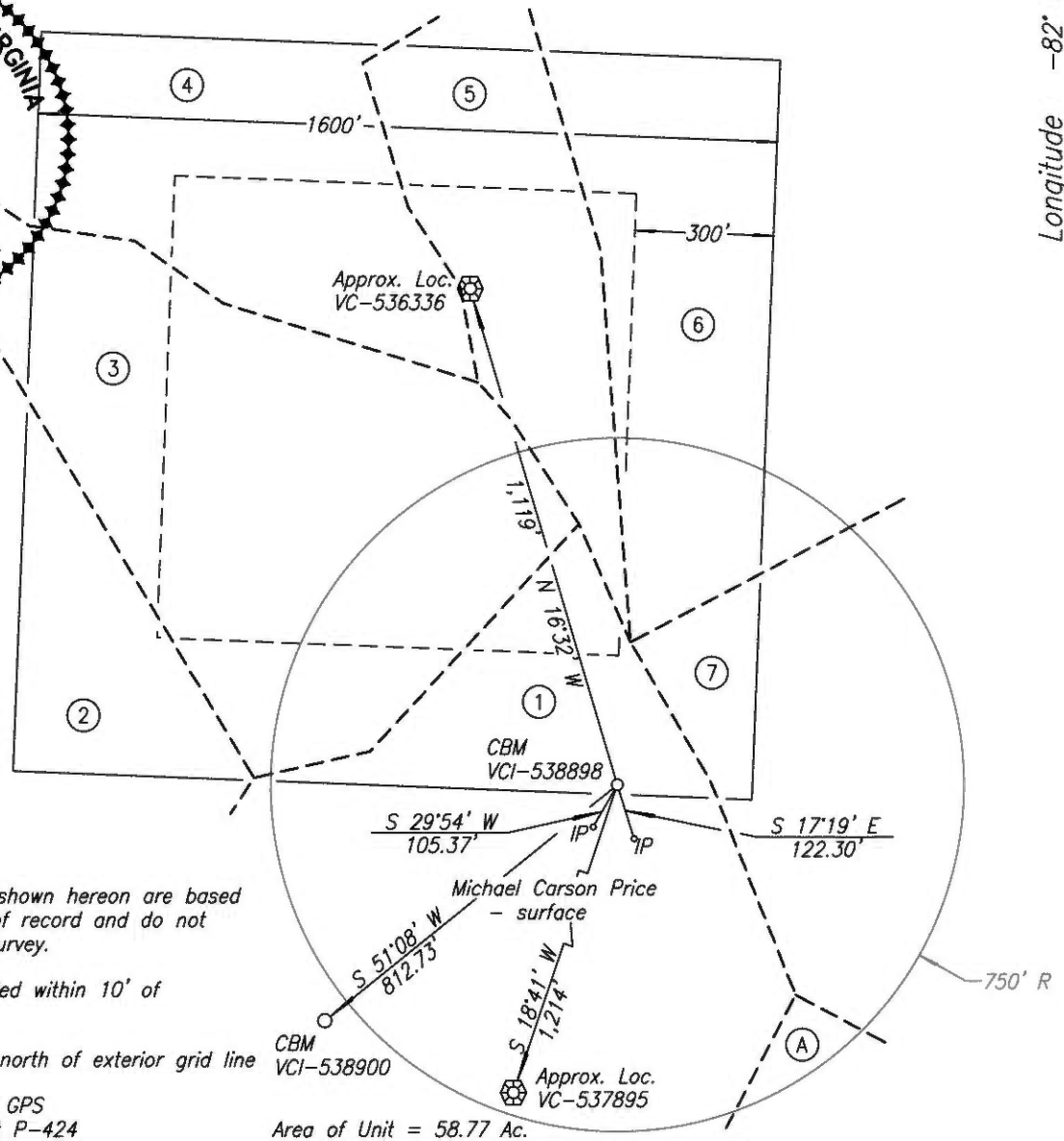
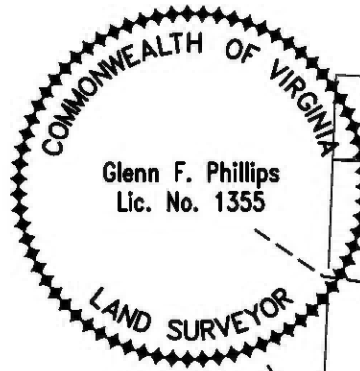
Well Coordinates: (UTM N27, Zone 17)
 N 13,480,017.53 E 1,307,951.96

Latitude 37° 07' 30"

Longitude -82° 07' 30"

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 and maps of record and do not depict a current boundary survey.

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

Note 3: Well spot is 20.50' north of exterior grid line

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

Area of Unit = 58.77 Ac.

WELL LOCATION PLAT NORA GRID AV-81

COMPANY EnerVest Operating, LLC WELL NAME AND NUMBER VCI-538898
 TRACT NO. TC-224 ELEVATION 2,062.67' QUADRANGLE Duty
 COUNTY Buchanan DISTRICT Hurricane SCALE 1" = 400' DATE 6-19-2017

This Plat is a new plat x; an updated plat ; 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

Glenn F Phillips

Digitally signed by Glenn F Phillips
 DN: cn=US, o=IrisTrust ACES Business
 Representative, ou=GLENN F. PHILLIPS
 COMPANY P.C., cn=Glenn F. Phillips,
 0.9.2342.19200300.100.1.1=A01098000
 000138666F837500006DD
 Date: 2018.10.02 13:48:39 -0400

VCI-538898 PLAT
TRACT OWNERSHIP INFORMATION SCHEDULE
6/19/2017

- 1 . TC-224
John H. Duty
321 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. - (CBM)
Lease No. 907162
Michael Carson Price - oil & gas (CBM)
70.72 Acres (P/O 107 Acres)
Gas 5.52 Ac. 9.39%

- 2 . TC-224
John H. Duty
321 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. - (CBM)
Lease No. 909219
MGM Methane Corp. - oil & gas (CBM)
28 Acres
Gas 4.86 Ac. 8.27%

- 3 . TC-224
John H. Duty
321 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. - (CBM)
Partially Leased 910915
R. W. & Mary Gilbert Heirs et al. - oil & gas (CBM)
P/O 65 Acres
Gas 18.57 Ac. 31.60%

- 4 . TC-224
John H. Duty
321 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. - (CBM)
Lease No. 241909L
Geneva Owens (Life Estate) - oil & gas (CBM)
Lease No. 241919L
Gary Roger Hurley & Agnes Hurley (Remainder) - oil & gas (CBM)
98 Acres
Gas 10.44 Ac. 17.76%

- 5 . TC-224
 John H. Duty
 321 Acres
 ACIN LLC - coal
 Paramount 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. - (CBM)
 Lease No. 917038
 Roger Hurley et al. - oil & gas (CBM)
 8 Acres
 Gas 7.44 Ac. 12.66%
- 6 . T-595
 L. D. Jackson
 100 Acres
 ACIN LLC - coal
 Paramount 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 10.13 Ac. 17.24%
- 7 . T-598
 J. R. Lester
 125 Acres
 ACIN LLC - coal
 Paramount 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 1.81 Ac. 3.08%
- A . T-609
 John Pressley
 149 Acres
 ACIN LLC - coal
 Paramount 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

Exhibit "B"
VCI-538898
Docket No. VGOB-18-1120-4195

Tract	Lessor	Lease Status	Interest Within Unit	Gross Acreage in Unit
Coal Estate Only				
1	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Jim McKinney 408 West Main Street Abingdon, VA 24210 <i>Tax ID - Minerals Only</i>	Owner	9.39000000	5.52000000
2	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Jim McKinney 408 West Main Street Abingdon, VA 24210 <i>Tax ID - Minerals Only</i>	Owner	8.27000000	4.86000000
3	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Jim McKinney 408 West Main Street Abingdon, VA 24210 <i>Tax ID - Minerals Only</i>	Owner	31.60000000	18.57000000
4	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Jim McKinney 408 West Main Street Abingdon, VA 24210 <i>Tax ID - Minerals Only</i>	Owner	17.76000000	10.44000000
5	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Jim McKinney 408 West Main Street Abingdon, VA 24210 <i>Tax ID - Minerals Only</i>	Owner	12.66000000	7.44000000
6	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Jim McKinney 408 West Main Street Abingdon, VA 24210 <i>Tax ID - Minerals Only</i>	Owner	17.24000000	10.13000000
7	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-WIC, L.P. Attn: Jim McKinney 408 West Main Street Abingdon, VA 24210 <i>Tax ID - Minerals Only</i>	Owner	3.08000000	1.81000000
TOTAL GAS ESTATE			100.00000000	58.77000000
Percentage of Unit Leased		100.00000000		
Percentage of Unit Unleased		0.00000000		
Acreage in Unit Leased		58.77000000		
Acreage in Unit Unleased		0.00000000		

Exhibit "B"
VCI-538898
Docket No. VGOB-18-1120-4195

Tract	Lessor	Lease Status	Interest Within Unit	Gross Acreage In Unit
Gas Estate Only				
1	Carol Elaine Price PO Box 27 Davenport, VA 24239 Tax ID - 2HH208014	Leased	9.39000000	5.52000000
2	MGM Methane Corp. ATTN: James Rasnaka P.O. Box 830 Grundy, VA 24616 Tax ID - Minerals Only	Leased	6.27000000	4.86000000
3	Tax ID - Minerals Only Imogene Boyd P.O. Box 2366 Lebanon, VA 24266	Leased	0.60253968	0.47161905
	Donnie C. Turner and Shelia Turner, h/w 6124 Windsor Dr. Columbus, GA 31908	Leased	0.40126984	0.23580952
	Kathleen Boyd Caskey 730 FM 1003 Apt 102 Cibola, TX 78108	Leased	0.80253968	0.47161905
	Arlene Deel 28131 Dickenson Highway Haysi, VA 24256	Unleased	11.53650794	6.77952381
	Hope Boyd 1523 Indian Grave Gap Road Vansant, VA 24656	Leased	0.60253968	0.47161905
	Amanda Elkins 75 Oak Lawn Circle Lebanon, VA 24266	Leased	0.80253968	0.47161905
	Elizabeth Turner PO Box 1443 Fortston, GA 37808	Unleased	0.40126984	0.23580952
	Olis Shey Gilbert and Edna Gilbert (h/w) 1824 Hollow Poplar Road Davenport, VA 24239	Leased	12.03809524	7.07428571
	LeRoy Trivett Unknown/Unlocatable	Unleased	2.00634921	1.17904762
	James Trivett Unknown/Unlocatable	Unleased	2.00634921	1.17904762
	Tract 3 Totals		31.60000000	18.57000000
4	Agnes Geraldine Hurley 5428 Murphy Rd Vansant, VA 24656 Tax ID - 2HH208025	Leased	17.78000000	10.44000000
5	Agnes Geraldine Hurley 5426 Murphy Rd Vansant, VA 24656 Tax ID - 2HH208025	Leased	12.66000000	7.44000000
6	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-W/C, L.P. Attn: Jim McKinney 408 West Main Street Abingdon, VA 24210 Tax ID - Minerals Only	Owner	17.24000000	10.13000000
7	EnerVest Energy Institutional Fund XIV-A, L.P. & EnerVest Energy Institutional Fund XIV-W/C, L.P. Attn: Jim McKinney 408 West Main Street Abingdon, VA 24210 Tax ID - Minerals Only	Owner	3.08000000	1.81000000
	TOTAL GAS ESTATE		100.00000000	58.77000000
	Percentage of Unit Leased		84.04952381	
	Percentage of Unit Unleased		15.95047619	
	Acreage in Unit Leased		56.77000000	
	Acreage in Unit Unleased		9.37342857	

Exhibit "B-3"
VCI-538898
Docket No. VGOB-18-1120-4195

Tract	Lessor	Lease Status	Interest Within Unit	Gross Acreage in Unit
Gas Estate Only				
3	<i>Tax ID - Minerals Only</i> Arlene Deel 28131 Dickenson Highway Haysi, VA 24256	Unleased	11.53650794	6.77952381
	Elizabeth Turner PO Box 1443 Fortston, GA 37808	Unleased	0.40126984	0.23580952
	LeRoy Trivett Unknown/Unlocatable	Unleased	2.00634921	1.17904762
	James Trivett Unknown/Unlocatable	Unleased	2.00634921	1.17904762
TOTAL GAS ESTATE			15.95047619	9.37342857

Company: EnerVest Operating, LLC.

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

AFE #

Well Name: VC-538898

Location: Buchanan 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: 2,489 FT

AAPG Class: DEVELOPMENT

Participant(s): EnerVest Operating, LLC. Amount: \$409,200

Description	Casing Point	Completion	Total Cost
Roads / Stone / Culverts	\$12,000	\$0	\$12,000
Location Rds/Stone/Culverts	\$0	\$500	\$500
Building Location/Materials	\$27,000	\$2,500	\$29,500
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	\$43,500	\$0	\$43,500
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	\$11,000	\$11,000
Trucking / Dozar (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	\$2,700	\$4,700	\$7,400
Stimulation / Fracuring	\$0	\$95,000	\$95,000
Rouslabour 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
TOTAL INTANGIBLES	\$127,400	\$159,900	\$287,300

Description	Casing Point	Completion	Total Cost
1" Conductor	\$1,100	\$0	\$1,100
26 lb/ft LS Surface Csg	\$0	\$0	\$0
19 lb/ft LS Intermediate Csg	\$3,800	\$0	\$3,800
4 1/2" 9.5 lb/ft M-65 Production Csg	\$0	\$14,300	\$14,300
Wellhead Equipment / Fittings	\$1,400	\$8,800	\$10,200
2-3/8" 4.7 lb/ft J55 8rd Production Tubing	\$0	\$8,900	\$8,900
Rods / Stuffing Box	\$0	\$3,800	\$3,800
Downhole Pump	\$0	\$1,600	\$1,600
Electric Service & Equipment	\$0	\$23,000	\$23,000
Tank Battery	\$0	\$7,000	\$7,000
Flow Line labor/material	\$0	\$18,500	\$18,500
Valves & Fittings	\$0	\$0	\$0
Separator / Heater / Treater	\$0	\$5,500	\$5,500
4 1/2" 10.5 lb/ft M-65 Production Csg	\$0	\$0	\$0
Gas Lift Equipment	\$0	\$0	\$0
Pumping Unit / Motor	\$0	\$10,000	\$10,000
Sales line labor/material	\$0	\$14,200	\$14,200
TOTAL TANGIBLES	\$6,300	\$115,600	\$121,900
GRAND TOTAL WELL COST	\$133,700	\$275,500	\$409,200
Plugging & Abandonment	\$30,000		
Production Costs :	\$409,200	Dry Hole Costs :	\$163,700

Operations C.M. Randall Date 10/15/18

Engineering [Signature] Date 10/15/2018

Geology [Signature] Date 10/15/18

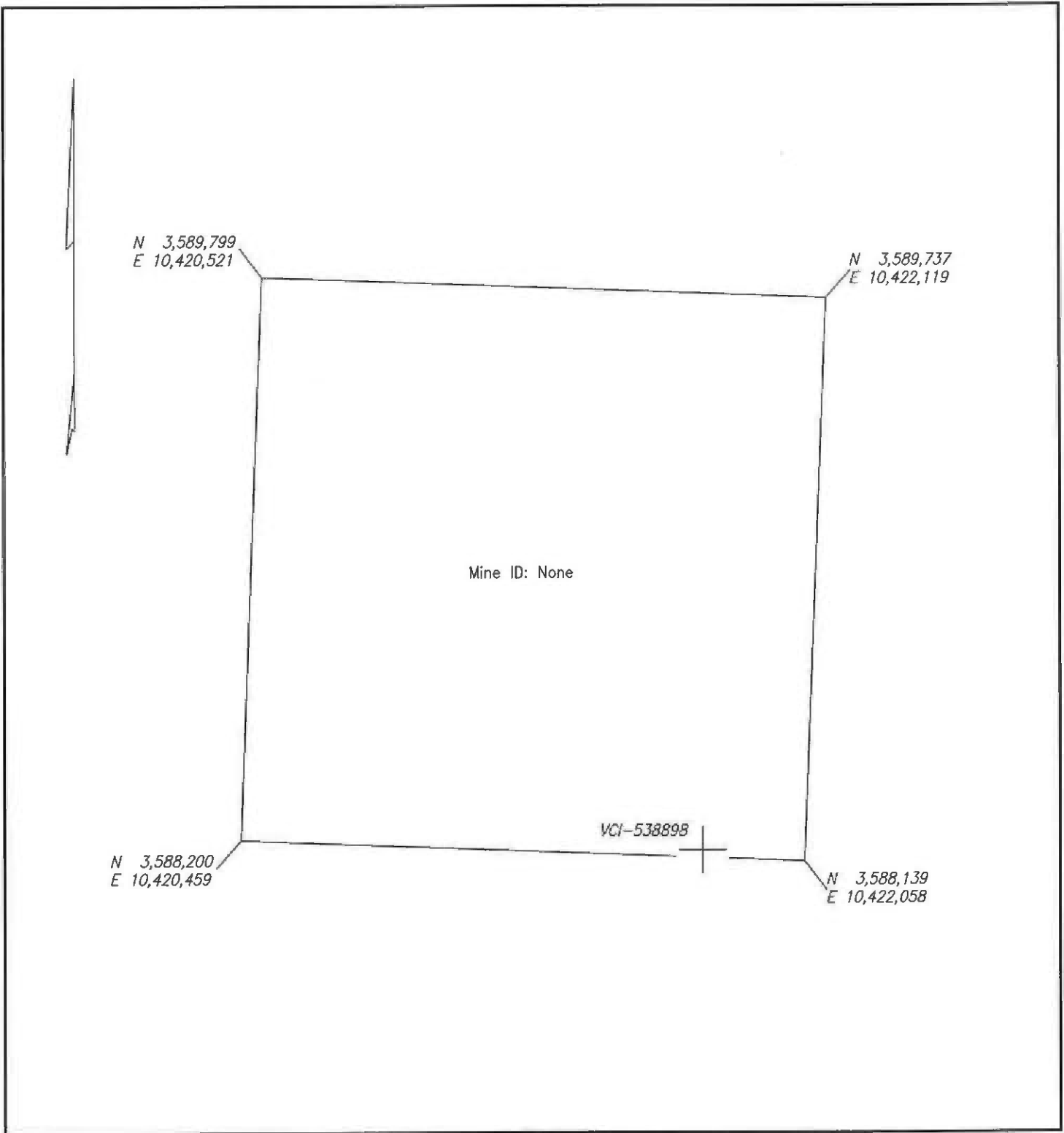
Land [Signature] Date 10/15/18

THIS IS AN ESTIMATE OF PROJECTED WELL DRILLING, COMPLETION, EQUIPMENT AND PIPELINE COSTS. THESE ESTIMATES ARE PROJECTIONS ONLY AND ACTUAL BILLED 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 UNPREDSEEN RIGHT-OF-WAY PROBLEMS.

Exhibit "C"
2400-R-533

Exhibit "E" - Escrow Owners
VCI-538898
Docket No. VGOB-18-1120-4195

Tract	Lessor	Lease Status	Interest Within Unit	Gross Acreage in Unit
Gas Estate Only				
2	<i>Tax ID - Minerals Only</i> LeRoy Trivett Unknown/Unlocatable	Unleased	2.00634921	1.17904762
	James Trivett Unknown/Unlocatable	Unleased	2.00634921	1.17904762
TOTAL GAS ESTATE			4.01269841	2.35809524



WELL & MINE LOCATION MAP NORA GRID AV-81

COMPANY EnerVest Operating, LLC WELL NAME AND NUMBER VCI-538898
 QUADRANGLE Duty PERMIT NO. _____ SCALE 1" = 400' DATE 6-19-2017

Exhibit "L"
2400-R-533

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