

BEFORE THE VIRGINIA GAS AND OIL BOARD

APPLICANT: CNX Gas Company LLC

DIVISION OF GAS AND OIL  
DOCKET NO.: VGOB 17-0321-4110

RELIEF SOUGHT: POOLING

LOCATION: SEE EXHIBITS "A" AND "A1"

HEARING DATE: March 21, 2017

UNIT NUMBER: CC-13

IN THE OAKWOOD COALBED METHANE GAS FIELD I

BUCHANAN COUNTY, VIRGINIA

APPLICATION

1. **Applicant and its counsel:** Applicant is **CNX Gas Company LLC**, 627 Claypool Hill Mall Road, Cedar Bluff, Virginia, 24609. Applicant's counsel is Mark A. Swartz, Hilliard & Swartz, LLP, 122 Capitol Street, FL 2, Charleston, WV 25301.

2. **Relief sought:** Pooling under Oakwood Coalbed Methane Gas Field I.

3. **Legal Authority:** Va. Code Ann. §45.1-361.1 et seq. 4 VAC 25-160-10 et seq. and relevant Virginia Gas and Oil Board Orders heretofore promulgated pursuant to law including OGCB 3-90; VGOB-91-1119-162; VGOB 92/02/16-0336; and VGOB 93/03/16-0349.

4. **Type of well(s):** Coalbed methane, including increased density wells as required by mining plans.

5. **Permit numbers, if any:**

6. **Plat:** Annexed hereto are Exhibit A and the Tract Identifications for Exhibit A. The Plat shows the size and shape of the unit and the boundaries of the tracts within the unit. The plat is certified by a licensed professional engineer and is attested by the undersigned on behalf of the applicant to be in conformity with existing orders issued by the Board.

7. **Status of interests to be pooled/re-pooled and Applicant' standing:** The respondents whose interests are sought to be pooled/re-pooled by the Applicant are:

*Pauline W. Shortridge; Roger Lee Null; Mary Rife Salyer*

Further, said respondents are listed in Exhibit B-3 hereto which describes their interests/claims. The respondents and others, if any, whose interests are subject to escrow under §45.1-361.21.D. are identified at Exhibit E. The annexed Exhibit B-3 at pages 2 and 3 sets forth the total interest(s) held by Applicant in the unit.

8. **Formation(s) to be produced and estimates:** All coal seams and associated strata below the Tiller seam of coal all as more particularly described in the annexed proposed order. The estimated total production from subject unit is **125 to 550** MMCF. The estimated amount of reserves from the subject drilling unit is **125 to 550** MMCF. These figures concerning

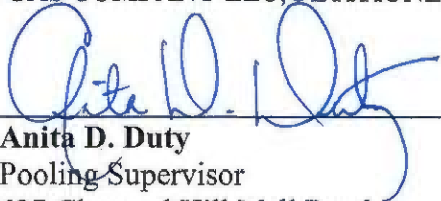
estimated production and the amount of reserves are, however, estimates only that are not based upon actual production and should not be relied upon for any purpose. It should not be assumed that final production before plugging and abandonment will equal estimated reserves.

9. **Estimate of allowable costs: \$687,867.00 (Well CC13 \$344,525.00 & CC13A \$343,342.00)** See Exhibit C which estimates/reports the costs associated with two frac wells. To the extent additional wells may be required by mine plans in the Buchanan No. 1 Mine, the costs of any such additional wells as may be permitted by the Division of Gas and Oil, in accordance with the provisions of §45.1-361.20.C., Code of Virginia, will not be allocated for frac well production to the subject unit by the Operator.

10. **Attestation:** The foregoing application, to the best of my knowledge, information, and belief, is true and correct.

**CNX GAS COMPANY LLC**  
BY ITS PROFESSIONAL MANAGER  
CNX GAS COMPANY LLC, PETITIONER

By: \_\_\_\_\_

  
**Anita D. Duty**  
Pooling Supervisor  
627 Claypool Hill Mall Road  
Cedar Bluff, Virginia 24609

BEFORE THE VIRGINIA GAS AND OIL BOARD

APPLICANT: CNX Gas Company LLC

DIVISION OF GAS AND OIL  
DOCKET NO. VGOB 17-0321-4110

RELIEF SOUGHT: POOLING

UNIT NUMBER: CC-13

NOTICE OF HEARING

HEARING DATE: March 21, 2017  
PLACE: Russell County Conference Center  
135 Highlands Drive  
Lebanon, Virginia 24266  
TIME: 9:00 AM

COMMONWEALTH OF VIRGINIA:

To: *Pauline W. Shortridge; Roger Lee Null; Mary Rife Salyer*

1. **Applicant and its counsel:** Applicant is CNX Gas Company LLC, 627 Claypool Hill Mall Road, Cedar Bluff, Virginia, 24609. Applicant's counsel is Mark A. Swartz, Hilliard & Swartz, LLP, 122 Capitol Street, FL 2, Charleston, WV 25301.

2. **Relief sought:** Pooling

3. **Proposed provisions of order:** (a) Pooling all the interests and estates of the persons named above in coalbed methane in the unit in question; (b) Establishing a procedure whereby each respondent shall have the right to make elections; (c) Providing that any respondent who does not make a timely election shall be deemed to have leased or assigned his coalbed methane gas interests to the applicant at a rate to be established by the Board; (d) Designating CNX Gas Company LLC as Unit Operator; (e) Making any necessary provisions for the escrow of funds; (f) 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.

4. **Legal Authority:** Va. Code Ann. §45.1-361.1 et seq. 4 VAC 25-160-10 et seq. and relevant Virginia Gas and Oil Board Orders heretofore promulgated pursuant to law including OGCB 3-90; VGOB-91-1119-162; VGOB 92/02/16-0336; and VGOB 93/03/16-0349.

5. **Type of well(s):** Coalbed methane.

6. **Plat:** Annexed hereto are Exhibit A, Exhibit A1 and the Tract Identifications for Exhibit A. The Plat shows the size and shape of the unit and the boundaries of the tracts within the unit. The Tract Identification page shows the percentage of acreage in each tract. The plat is certified by a licensed professional engineer and is attested by the undersigned on behalf of the applicant to be in conformity with existing orders issued by the Board.

7. **Your interest or claim sought to be pooled by this Application pertains to coalbed methane gas.**

8. **Formation(s) to be produced and estimates:** All coal seams and associated strata below the Tiller seam of coal all as more particularly described in the annexed proposed

order. The estimated total production from subject unit is 125 to 550 MMCF. The estimated amount of reserves from the subject drilling unit is 125 to 550 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. It should not be assumed that final production before plugging and abandonment will equal estimated reserves.

9. Estimate of allowable costs: **\$687,867.00 (Well CC13 \$344,525.00 & CC13A \$343,342.00)**

10. Attestation: The foregoing application to the best of my knowledge, information, and belief is true and correct.

**NOTICE IS FURTHER GIVEN** that this cause has been set for hearing and the taking of evidence before the Board at 9:00 AM, on **March 21, 2017**, at the Russell County Government Conference Center, 139 Highlands Drive, Lebanon, Virginia 24266, and that notice will be published as required by law and the Rules of the Board.

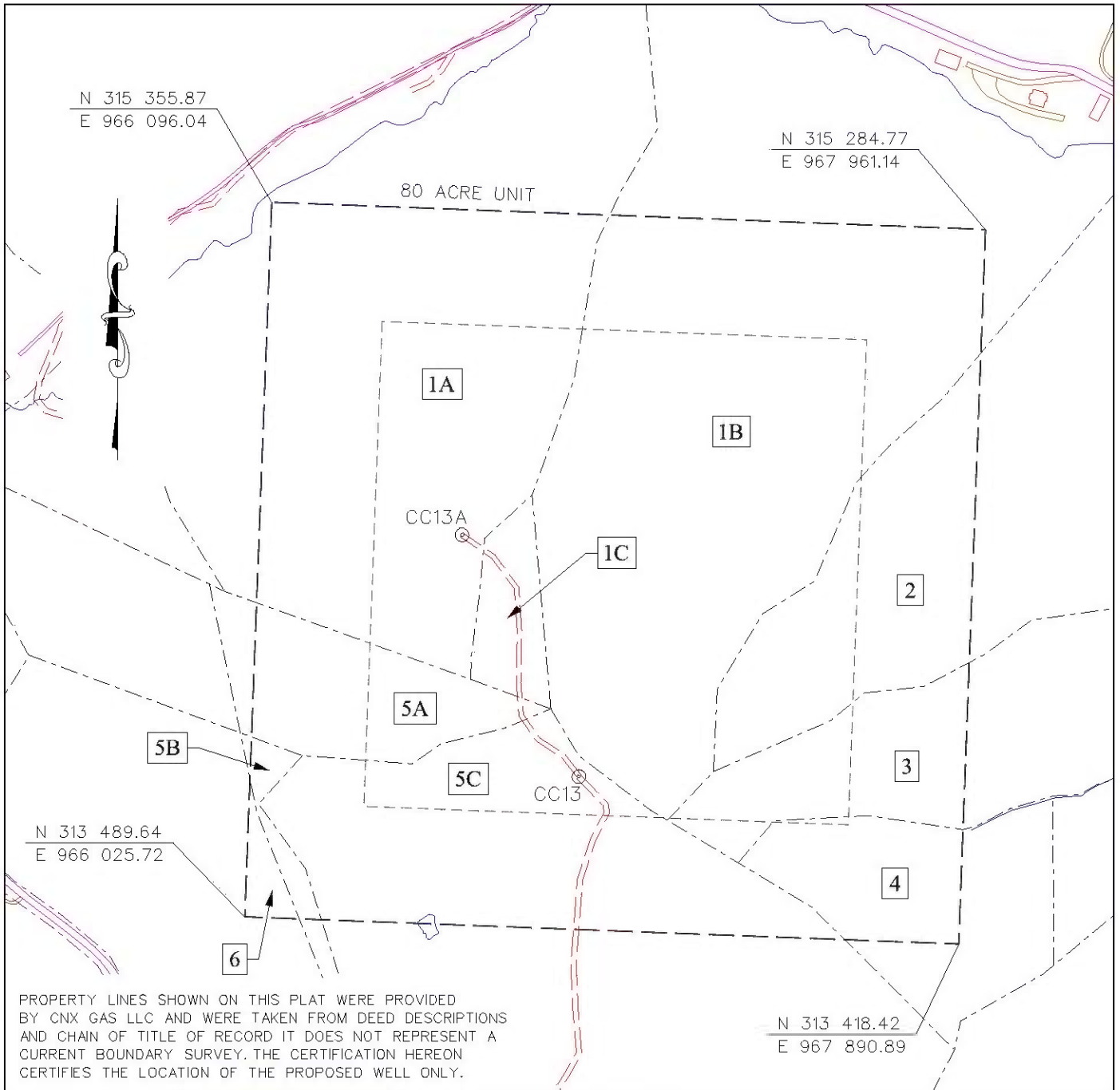
**NOTICE IS FURTHER GIVEN** that you may attend this hearing, with or without an attorney, and offer evidence or state any comments you have. For further information or a copy of the Application and Exhibits, either contact the Virginia Gas and Oil Board, State Oil and Gas Inspector, Department of Mines, Minerals and Energy, the Division of Gas and Oil, 135 Highland Drive, Lebanon, Virginia 24266, 276/415-9650 or the Applicant at the address shown below.

DATED: 2/15/17

**CNX GAS COMPANY LLC**  
BY ITS PROFESSIONAL MANAGER  
CNX GAS COMPANY LLC, PETITIONER

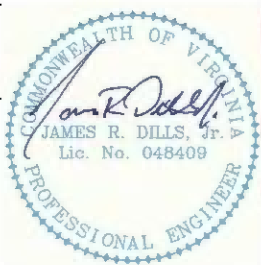
By:  \_\_\_\_\_

**Anita D. Duty**  
**Pooling Supervisor**  
627 Claypool Hill Mall Road  
Cedar Bluff, Virginia 24609



PROPERTY LINES SHOWN ON THIS PLAT WERE PROVIDED BY CNX GAS LLC AND WERE TAKEN FROM DEED DESCRIPTIONS AND CHAIN OF TITLE OF RECORD IT DOES NOT REPRESENT A CURRENT BOUNDARY SURVEY. THE CERTIFICATION HEREON CERTIFIES THE LOCATION OF THE PROPOSED WELL ONLY.

- CBM WELL
- PROPOSED CBM WELL



Digitally signed by James R Dills Jr.  
 DN: c=US, o=IdenTrust ACES  
 Business Representative, ou=D. R.  
 PRICE ENGINEERING AND LAND  
 SURVEYING INC PC, cn=James R  
 Dills Jr.,  
 0.9.2342.19200300.100.1.1=A010  
 9690000012E01701153000027EA  
 Date: 2017.02.08 12:37:05 -05'00'

EXHIBIT A  
 OAKWOOD FIELD  
 UNIT CC13  
 FORCE POOLING  
 VGOB-17-0321-4110

Company CNX Gas Company LLC Well Name and Number UNIT CC13  
 Tract No. \_\_\_\_\_ Elevation \_\_\_\_\_ Quadrangle VANSANT  
 County BUCHANAN District HURRICANE Scale: 1" = 400' Date 2/8/17  
 This plat is a new plat X ; an updated plat \_\_\_\_\_ ; or a final plat \_\_\_\_\_

Form DGO-GO-7 \_\_\_\_\_ (Affix Seal)  
 Rev. 9/91 Licensed Professional Engineer or Licensed Land Surveyor

**CNX Gas Company LLC  
UNIT CC13  
Tract Identifications**

1. Harrison-Wyatt L.L.C. Big Axe Tr. 21 (370.00 Acre Tract) – Minerals  
Island Creek Coal Company – Coal Below Drainage Leased  
Revelations Energy, LLC – Coal Above Drainage Leased  
CNX Gas Company LLC – Oil, Gas and CBM Leased  
46.78 Acres      58.4750%
  
- 1A. CNX Gas Company, LLC, et al – Surface  
1B. Unknown Surface Owner  
1C. Donald R. Coleman – Surface
  
2. Pauline W. Shortridge (24.22 Acre Tract) – Fee  
Island Creek Coal Company – Coal Below Tiller Seam Leased  
8.01 Acres      10.0125%
  
3. Roger Lee Null (19.00 Acre Tract) – Fee  
Island Creek Coal Company – Coal Below Tiller Seam Leased  
4.68 Acres      5.8500%
  
4. Mary R. Salyer – Minerals  
Island Creek Coal Company – Coal Below Tiller Seam Leased  
Roger Lee Null – Surface  
3.37 Acres      4.2125%
  
5. Harrison-Wyatt L.L.C. Big Axe Tr. 54 (82.50 Acre Tract) – Minerals  
Island Creek Coal Company – Coal Below Drainage Leased  
Revelations Energy, LLC – Coal Above Drainage Leased  
CNX Gas Company LLC – Oil, Gas and CBM Leased  
16.62 Acres      20.7750%
  
- 5A. Donald R. Coleman – Surface  
5B. Unknown Surface Owner  
5C. Debra Ann Elswick – Surface
  
6. ACIN, LLC (144.00 Acre Tract) – Coal  
Norton Coal Company, LLC – Kennedy Seam Lease  
Contura CAPP Land, LLC – Coal Lease

"This title block is for general informational purposes only and does not reflect an analysis of the severance deed and its effect upon coal bed methane ownership and should not be relied upon for such purpose."

**CNX Gas Company LLC  
UNIT CC13  
Tract Identifications**

EnerVest Energy Institutional Fund XIV-A, L.P. (58.77988%) and EnerVest Energy Institutional Fund XIV-WIC, L.P. (41.22012%) – Oil, Gas and CBM

CNX Gas Company LLC – Oil, Gas and CBM – Deemed Leased via JOA

Unknown Surface Owner

0.54 Acres      0.6750%

"This title block is for general informational purposes only and does not reflect an analysis of the severance deed and its effect upon coal bed methane ownership and should not be relied upon for such purpose."

Exhibit B  
Unit CC-13  
Docket #VGOB 17-0321-4110  
List of all Owners/Claimants  
**(80 Acre Unit)**

	Acres in Unit	Percent of Unit
<b>I. COAL OWNERSHIP</b>		
<b><u>Tract #1 - 46.78 acres</u></b>		
(1) H-W Financial, LLC <i>Big Axe Tr. 21 (370.00 Acre Tract)</i> P.O. Box 11000 Danville, VA 24543	46.78 acres	58.4750%
<b><u>Tract #2 - 8.01 acres</u></b>		
(1) Pauline W. Shortridge <i>(24.22 Acre Tract)</i> 64 Kyle Circle Millsboro, DE 19966	8.01 acres	10.0125%
<b><u>Tract #3 - 4.68 acres</u></b>		
(1) Roger Lee Null <i>(19.00 Acre Tract)</i> PO Box 487 Oakwood, VA 24631	4.68 acres	5.8500%
<b><u>Tract #4 - 3.37 acres</u></b>		
(1) Mary Rife Salyer 1088 Twin Branch Rd. Grundy, VA 24614	3.37 acres	4.2125%
<b><u>Tract #5 - 16.62 acres</u></b>		
(1) H-W Financial, LLC <i>Big Axe Tr. 54 (82.50 Acre Tract)</i> P.O. Box 11000 Danville, VA 24543	16.62 acres	20.7750%
<b><u>Tract #6 - 0.54 acres</u></b>		
(1) ACIN LLC c/o Western Pocahontas Properties LP P.O. Box 2827 1035 Third Avenue, Suite 300 Huntington, WV 25727 <i>(144.00 Acre Tract)</i>	0.54 acres	0.6750%
<i>Note: There is no conflict with the Oil and Gas owner</i>		
<b>II. OIL &amp; GAS OWNERSHIP</b>		
<b><u>Tract #1 - 46.78 acres</u></b>		
(1) H-W Financial, LLC <i>Big Axe Tr. 21 (370.00 Acre Tract)</i> P.O. Box 11000 Danville, VA 24543	46.78 acres	58.4750%
<b><u>Tract #2 - 8.01 acres</u></b>		
(1) Pauline W. Shortridge <i>(24.22 Acre Tract)</i> 64 Kyle Circle Millsboro, DE 19966	8.01 acres	10.0125%

**Exhibit B**  
**Unit CC-13**  
**Docket #VGOB 17-0321-4110**  
**List of all Owners/Claimants**  
**(80 Acre Unit)**

	Acres in Unit	Percent of Unit
<b><u>Tract #3 - 4.68 acres</u></b>		
(1) Roger Lee Null <i>(19.00 Acre Tract)</i> PO Box 487 Oakwood, VA 24631	4.68 acres	5.8500%
<b><u>Tract #4 - 3.37 acres</u></b>		
(1) Mary Rife Salyer 1088 Twin Branch Rd. Grundy, VA 24614	3.37 acres	4.2125%
<b><u>Tract #5 - 16.62 acres</u></b>		
(1) H-W Financial, LLC <i>Big Axe Tr. 54 (82.50 Acre Tract)</i> P.O. Box 11000 Danville, VA 24543	16.62 acres	20.7750%
<b><u>Tract #6 - 0.54 acres</u></b>		
(1) EnerVest Energy 300 Capital Street, Suite 200 Charleston, WV 25301 <i>(previously Range Resources)</i>	0.54 acres	0.6750%

Exhibit B-3  
Unit CC-13  
Docket #VGOB 17-0321-4110  
List of all Unleased Owners/Claimants  
(80 Acre Unit)

	Acres in Unit	Percent of Unit
<b>II. OIL &amp; GAS OWNERSHIP</b>		
<b><u>Tract #2 - 8.01 acres</u></b>		
(1) Pauline W. Shortridge (24.22 Acre Tract) 64 Kyle Circle Millsboro, DE 19966	8.01 acres	10.0125%
<b><u>Tract #3 - 4.68 acres</u></b>		
(1) Roger Lee Null (19.00 Acre Tract) PO Box 487 Oakwood, VA 24631	4.68 acres	5.8500%
<b><u>Tract #4 - 3.37 acres</u></b>		
(1) Mary Rife Salyer 1088 Twin Branch Rd. Grundy, VA 24614	3.37 acres	4.2125%
<b><u>UNLEASED OIL &amp; GAS OWNERS:</u></b>		
	Acres in Unit	16.0600
	Percentage of Unit	20.0750%

Company:     CNX Gas Company LLC

Virginia Gas And Oil Template – Estimated Authorization For Expenditure (AFE)

AFE #	N/A	Property #	N/A	Version #	
Well Name:	CC13	Field:	Oakwood	Completed By:	R.E. Stator
Location:	Buchanan County	Operator:	CNX Gas Company LLC	Date:	Feb. 15, 2017
Expected Pay Zones:	coal seams below Tiller incl. Poca 3 and Squire	Estimated Total Depth:	2,600 ft	AAPG Class:	CBM
Proposed Work:	To drill, complete, and produce	Participant(s):	N/A	W.I.	

Gen	Sub	Description	Casing Point	Completion	Total Cost
		Leasehold Costs	\$0	\$0	\$0
		Permit / Title Opinion / Survey / Insurance	\$5,300	\$0	\$5,300
		Building Location	\$50,000	\$0	\$50,000
		Roads / Stone / Culverts	\$34,000	\$0	\$34,000
		Surface Damages	\$0	\$0	\$0
		Drilling - Footage	\$50,000	\$0	\$50,000
		Drilling - Mobilization	\$0	\$0	\$0
		Drilling - Dayrate	\$0	\$0	\$0
		Mud & Chemicals (Drilling)	\$0	\$0	\$0
		Fuel	\$0	\$0	\$0
I		Cement Surface casing	\$2,000	\$0	\$2,000
N		Cement intermediate casing	\$6,000	\$0	\$6,000
T		Open Hole Logging & Testing	\$3,900	\$0	\$3,900
A		Trucking / Dozer (Drilling)	\$0	\$0	\$0
N		Rental Tools & Equipment (Drilling)	\$0	\$0	\$0
G		Drilling - Bits	\$0	\$0	\$0
I		Technical Supervision (Drilling)	\$0	\$0	\$0
B		Fresh Water Hauling (Drilling)	\$0	\$0	\$0
L		Overhead Rate	\$0	\$0	\$0
E		Misc. & Contingencies	\$0	\$3,000	\$3,000
S		Location Rds/Stone/Culverts	\$0	\$0	\$0
		Trucking / Dozer (Completion)	\$0	\$0	\$0
		Technical Supervision (Completion)	\$0	\$0	\$0
		Cased Hole Logging / Perforating	\$0	\$0	\$0
		Stimulation / Fracturing	\$0	\$82,000	\$82,000
		Completion Rig	\$0	\$0	\$0
		Reclamation & Damages	\$0	\$0	\$0
		Haul Pit Water / Disposal	\$0	\$0	\$0
		Cement Production Casing	\$0	\$0	\$0
		Rental Tools & Equipment (Completion)	\$0	\$0	\$0
		Fresh Water Hauling (Completion)	\$0	\$0	\$0
		Roustabout Labor	\$0	\$3,800	\$3,800
		<b>TOTAL INTANGIBLES</b>	<b>\$151,200</b>	<b>\$88,800</b>	<b>\$240,000</b>

Code	Code	Description	Casing Point	Completion	Total Cost	
T		13 3/8" Conductor	75 Ft	\$7,500	\$0	\$7,500
A		9 5/8" 26 lb/ft LS Surface Csg	0 Ft	\$0	\$0	\$0
N		7" 19 lb/ft LS Intermediate Csg	500 Ft	\$5,915	\$0	\$5,915
G		4 1/2" 9.5 lb/ft M-65 Production Csg	2,350 Ft	\$17,625	\$0	\$17,625
I		4 1/2" 10.5 lb/ft M-65 Production Csg	20 Ft	\$1,200	\$0	\$1,200
B		2-3/8" 4.7 lb/ft J55 8rd Production Tubing	2,350 Ft	\$0	\$17,085	\$17,085
L		Wellhead Equipment / Fittings	\$0	\$8,200	\$8,200	
E		Tank Battery	\$0	\$0	\$0	
S		Separator / Heater / Treater	\$0	\$15,000	\$15,000	
		Gas Lift Equipment	\$0	\$0	\$0	
		Rods / Stuffing Box	\$0	\$13,000	\$13,000	
		Downhole Pump	\$0	\$0	\$0	
		Pumping Unit / Motor	\$0	\$11,000	\$11,000	
		SS EQT-Packer,PF,FC,Nlp	\$0	\$0	\$0	
		Valves & Fittings	\$0	\$0	\$0	
		Flow Line labor/material	\$0	\$5,000	\$5,000	
		Sales line labor/mat/row	\$0	\$5,000	\$5,000	
		<b>TOTAL TANGIBLES</b>	<b>\$32,240</b>	<b>\$72,285</b>	<b>\$104,525</b>	

<b>GRAND TOTAL WELL COST</b>			<b>\$183,440</b>	<b>\$161,085</b>	<b>\$344,525</b>
153	115	Plugging & Abandonment	\$25,000		
<b>Production Costs :</b>			<b>\$344,525</b>	<b>Dry Hole Costs :</b>	<b>\$208,440</b>

Prepared by: Bob Stator Title: Permit Agent Date: 2/15/17

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 UNFORESEEN RIGHT-OF-WAY PROBLEMS.

Company:     CNX Gas Company LLC

Virginia Gas And Oil Template – Estimated Authorization For Expenditure (AFE)

AFE #	N/A	Property #	N/A	Version #	
Well Name:	CC13A	Field:	Oakwood	Completed By:	R.E. Staton
Location:	Buchanan County	Operator:	CNX Gas Company LLC	Date:	Feb. 15, 2017
Expected Pay Zones:	coal seams below Tiller incl. Poca 3 and Squire	Estimated Total Depth:	2,600 ft	AAPG Class:	CBM
Proposed Work:	To drill, complete, and produce	Participant(s):	N/A	W.I.	

Gen	Sub	Description	Casing Point	Completion	Total Cost
		Leasehold Costs	\$0	\$0	\$0
		Permit / Title Opinion / Survey / Insurance	\$5,300	\$0	\$5,300
		Building Location	\$50,000	\$0	\$50,000
		Roads / Stone / Culverts	\$34,000	\$0	\$34,000
		Surface Damages	\$0	\$0	\$0
		Drilling - Footage	\$50,000	\$0	\$50,000
		Drilling - Mobilization	\$0	\$0	\$0
		Drilling - Dayrate	\$0	\$0	\$0
		Mud & Chemicals (Drilling)	\$0	\$0	\$0
		Fuel	\$0	\$0	\$0
I		Cement Surface casing	\$2,000	\$0	\$2,000
N		Cement Intermediate casing	\$6,000	\$0	\$6,000
T		Open Hole Logging & Testing	\$3,900	\$0	\$3,900
A		Trucking / Dozer (Drilling)	\$0	\$0	\$0
N		Rental Tools & Equipment (Drilling)	\$0	\$0	\$0
G		Drilling - Bits	\$0	\$0	\$0
I		Technical Supervision (Drilling)	\$0	\$0	\$0
B		Fresh Water Hauling (Drilling)	\$0	\$0	\$0
L		Overhead Rate	\$0	\$0	\$0
S		Misc. & Contingencies	\$0	\$3,000	\$3,000
		Location Rds/Stone/Culverts	\$0	\$0	\$0
		Trucking / Dozer (Completion)	\$0	\$0	\$0
		Technical Supervision (Completion)	\$0	\$0	\$0
		Cased Hole Logging / Perforating	\$0	\$0	\$0
		Stimulation / Fracturing	\$0	\$82,000	\$82,000
		Completion Rig	\$0	\$0	\$0
		Reclamation & Damages	\$0	\$0	\$0
		Haul Pit Water / Disposal	\$0	\$0	\$0
		Cement Production Casing	\$0	\$0	\$0
		Rental Tools & Equipment (Completion)	\$0	\$0	\$0
		Fresh Water Hauling (Completion)	\$0	\$0	\$0
		Roustabout Labor	\$0	\$3,800	\$3,800
		<b>TOTAL INTANGIBLES</b>	<b>\$151,200</b>	<b>\$88,800</b>	<b>\$240,000</b>

Code	Code	Description	Casing Point	Completion	Total Cost	
		13 3/8" Conductor	75 Ft	\$7,500	\$0	\$7,500
		9 5/8" 26 lb/ft LS Surface Csg	0 Ft	\$0	\$0	\$0
		7" 19 lb/ft LS Intermediate Csg	400 Ft	\$4,732	\$0	\$4,732
		4 1/2" 9.5 lb/ft M-65 Production Csg	2,350 Ft	\$17,625	\$0	\$17,625
		4 1/2" 10.5 lb/ft M-65 Production Csg	20 Ft	\$1,200	\$0	\$1,200
		2-3/8" 4.7 lb/ft J55 8rd Production Tubing	2,350 Ft	\$0	\$17,085	\$17,085
		Wellhead Equipment / Fittings	\$0	\$6,200	\$6,200	
		Tank Battery	\$0	\$0	\$0	
		Separator / Heater / Treater	\$0	\$15,000	\$15,000	
		Gas Lift Equipment	\$0	\$0	\$0	
		Rods / Stuffing Box	\$0	\$13,000	\$13,000	
		Downhole Pump	\$0	\$0	\$0	
		Pumping Unit / Motor	\$0	\$11,000	\$11,000	
		SS EQT-Packer,PF,FC,Nip	\$0	\$0	\$0	
		Valves & Fittings	\$0	\$0	\$0	
		Flow Line labor/material	\$0	\$5,000	\$5,000	
		Sales line labor/mat/row	\$0	\$5,000	\$5,000	
		<b>TOTAL TANGIBLES</b>	<b>\$31,057</b>	<b>\$72,285</b>	<b>\$103,342</b>	

<b>GRAND TOTAL WELL COST</b>			<b>\$182,257</b>	<b>\$161,085</b>	<b>\$343,342</b>
153	115	Plugging & Abandonment	\$25,000		
			<b>Production Costs :</b>	<b>\$343,342</b>	<b>Dry Hole Costs :</b>
					<b>\$207,257</b>

Prepared by: Bob Staton Title Permit Agent Date 2/15/17

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 UNFORESEEN RIGHT-OF-WAY PROBLEMS.

N/A

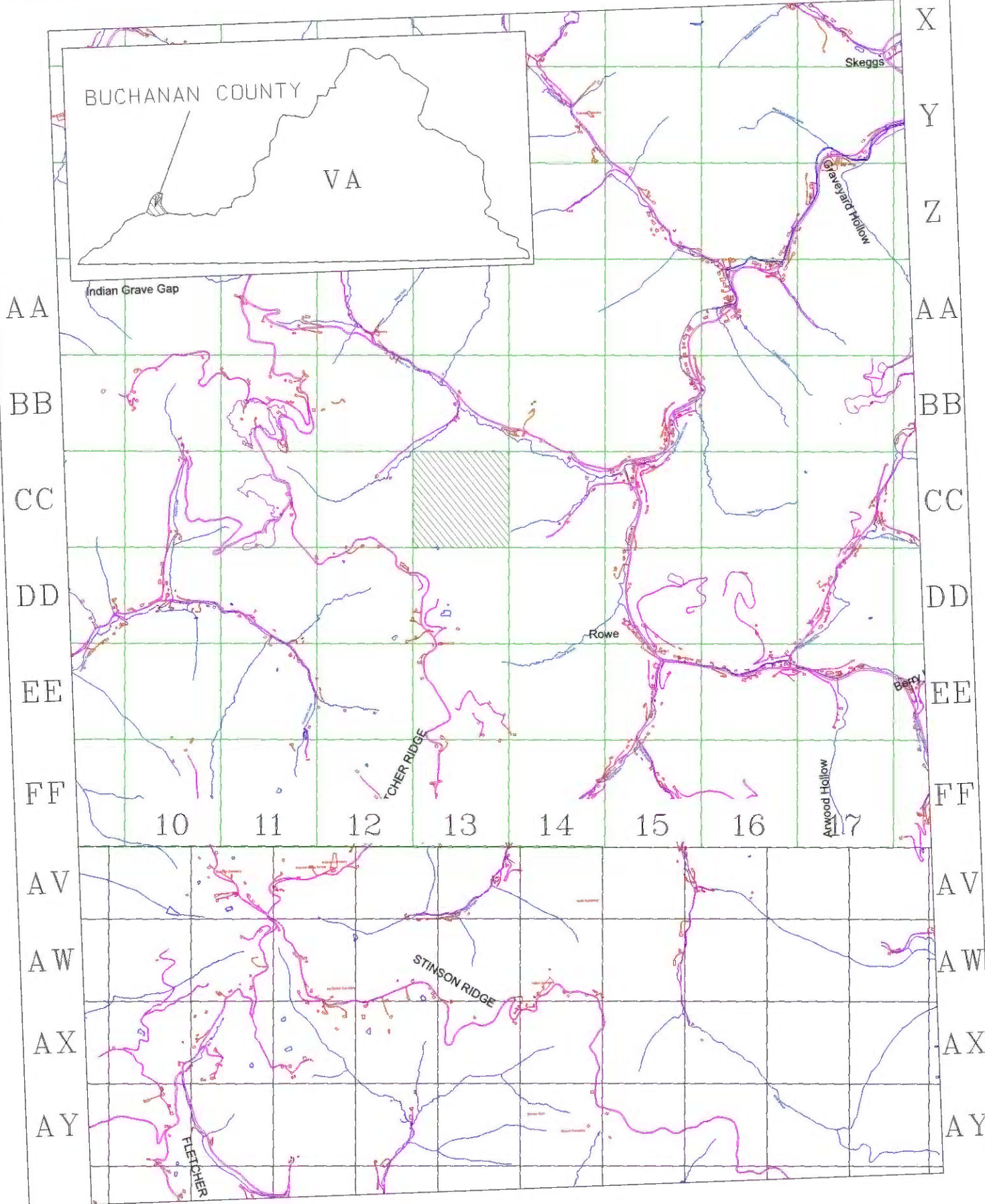


EXHIBIT A1  
 UNIT CC-13  
 VGOB 17-0321-4110