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V I R G I N I A:

BEFORE THE VIRGINIA GAS AND OIL BOARD

DOCKET NO. VGOB 96-0618-0545

IN RE: ESTABLISHMENT OF THE BOUNDARIES OF A PROVISIONAL SEALED GOB AREA OF THE BEATRICE MINE IN BUCHANAN COUNTY, VIRGINIA AS DEPICTED IN EXHIBIT A HERETO (herein "Beatrice SG Field"), AND THE ESTABLISHMENT OF FIELD RULES THEREFOR AND DRILLING UNITS THEREIN PURSUANT TO VA. CODE § 45.1-361.20 FOR THE PRODUCTION OF GAS THEREFROM (herein sometimes referred to as "Sealed Gob Gas" or "Gas")

REPORT OF THE BOARD

FINDINGS AND ORDER

1. Hearing Date and Place: This matter came on for hearing before the Virginia Gas and Oil Board (hereafter "Board") on the Board's own motions at 9:00 a.m. on June 18, 1996, and again at 9:00 a.m. on August 20, 1996, Dickenson Conference Center, Southwest Virginia Education 4-H Center, Abingdon, Virginia.

2. Appearances: Mark A. Swartz of Kay, Casto, Chaney, Love & Wise appeared as counsel for Buchanan Production Company and for Consol, Inc. Les Arrington, Claude Morgan and Mark McClanahan appeared to present testimony to the Board. Wyatt Ratliff appeared in behalf of Ratliff Gas Company, Inc., operator of the 80-acre coalbed methane unit served by Ratliff No. 1 CBM Well, to present testimony and to object to the applicability of the Beatrice SG Field rules established by this Order to the 80-acre drilling unit served by the Ratliff #1 Well. Byron Thomas Fulmer, Virginia Gas and Oil Inspector, and Sandra B. Riggs, Assistant Attorney General, were present to represent the Board.

3. Jurisdiction: Pursuant to Va. Code § 45.1-361.1 et seq., the Board finds that it has jurisdiction over the subject matter. The Board has caused notice of these hearings to be published as required by Va. Code § 45.1-361.19.B. Whereupon, the Board hereby finds that the notice given herein satisfies all statutory requirements, Board rule requirements and the minimum standards of due process.

4. Action Considered: In fulfilling the objectives of the Virginia Gas and Oil Act set forth in Va. Code § 45.1-361.3 and the duties and responsibilities of the Board set forth in Va. Code § 45.1-361.15, and to prevent the waste of Gas, the drilling of unnecessary wells, and to protect correlative rights, pursuant to Va. Code § 45.1-361.20, the Board, on its own motion, considered the designation of the surface area consisting of approximately 6,180 acres which is depicted in Exhibit A hereto (herein "Subject Land") overlying a sealed gob area of the Beatrice Mine in Buchanan County, Virginia, which underlies the surface area consisting of approximately 6,180 acres as a pool for the development and production of Gas from the formations more particularly set forth and described in Paragraph 6.c. below (herein "Subject Formation"); and,



establishment of field rules applicable to and drilling units within Subject Formation underlying Subject Land designated as the Beatrice SG Field.

5. Findings:

a. The Virginia Oil and Gas Conservation Board, by its Oakwood Coal Bed Gas Field Order No. OGCB 3-90, as amended by Orders issued in VGOB Docket Nos. 93-0216-0325 and VGOB 93-0316-0348 (herein "Oakwood I Field Rules") heretofore established 80-acre drilling units for all wells drilled upon subject Lands for the production of occluded natural gas produced from coalbeds and rock strata associated therewith (herein "coalbed methane gas") from Subject Formation. By its terms, the Oakwood I Field Rules did not "apply to coalbed methane wells drilled into the gob area of any working mine or any other conventional gas well."

b. The Virginia Gas and Oil Board, by its Oakwood Coalbed Methane Gas Field II Order No. VGOB 91-1119-0162, as amended by Orders issued in VGOB Docket Nos. 93-0216-0325, 93-0316-0348 and 93-0316-0349 (herein "Oakwood II Field Rules") heretofore established the Oakwood II Field for Subject Formation underlying Subject Lands with the same 80-acre drilling units as the Oakwood I Field Rules. The Oakwood II Field Rules apply to all wells drilled for the production of coalbed methane gas from short holes, unsealed gob areas and/or gas from wells dependent upon a particular long wall mining plan applicable to any 80-acre drilling unit and thereby addresses coalbed methane gas produced from the active gob area of a working mine during long wall mining operations (herein "Active Gob"); however, the Oakwood II Field Rules, like the Oakwood I Field Rules, do not apply to or provide a method of allocation for the production of Gas from the Subject Formation once mining has been completed and the mine sealed ("herein "Sealed Gob").

c. The Board, by its Pilgrim Knob Gas Field Order entered June 17, 1991, heretofore established the Pilgrims Knob Field which includes six (6) of the drilling units underlying Subject Lands; however, the Pilgrims Knob Field Rules apply to conventional natural gas wells drilled into and producing from the Berea Sandstone formation.

d. As of the date hereof, the Virginia Department of Mines, Minerals and Energy's Division of Gas and Oil has issued one permit for a coalbed methane gas well drilled in Subject Formation underlying Subject Land, i.e., Permit #2567 dated October 21, 1993, and issued October 25, 1993, to Ratliff Gas Company, Inc. for the Ratliff #1 Well. On February 17, 1995, upon the application of Ratliff Gas Company, Inc., the Board entered its pooling order pursuant to the Oakwood II Field Rules for Unit U-19, the 80-acre drilling unit served by the Ratliff #1 Well, VGOB Docket No. 94-1024-0475, as amended in VGOB Docket Nos. 96-0416-0542, 94-1024-0475-1 and 96-1024-0542-1, and named Ratliff Gas Company, Inc. as the unit operator of Oakwood II Unit U-19. In its application for the pooling of Unit U-19, the unit operator estimated the amount of reserves contained within Unit U-19 to be 500 MMCF and the estimated average production for the U-19 unit over its life to be 337.5 MMCF.



e. By letter dated January 26, 1995, from Mark A. Swartz, Attorney for Buchanan Production Company and Consol, Inc., to Byron T. Fulmer, Department of Mines, Minerals and Energy's Division of Gas and Oil, the Board was advised of the completion of sealing of the Beatrice Mine located in the Pocahontas No. 3 seam underlying Subject Lands as of January 26, 1995. The Beatrice Mine was a shaft mine in which active mining occurred over a period of ten to twelve years; therefore, the sealing of the entire mine by the sealing of its shafts once mining was completed. Beatrice Pocahontas Company, the permittee of the longwall mining operations which were conducted in the Beatrice Mine has permitted through the Department of Mines, Minerals and Energy's Division of Mines twelve (12) vertical ventilation holes (herein "VVHs") drilled for mine safety purposes, which are now in the sealed gob area of the Beatrice Mine, which have not yet been either plugged and sealed or converted to coalbed methane wells for the production of Gas.

f. The experience of CONSOL, Inc., a unit operator who has produced gas which the Board finds comparable to Subject Formations underlying Subject Lands, reveals that the total gas liberated is approximately 20 million cubic feet per acre mined; therefore, the estimated total gas which would be liberated from the 6,180 acres comprising Subject Lands is estimated to be approximately 123,600 million cubic feet, or approximately 1.6 BCF per 80-acre drilling unit contained within the Beatrice Field. Of the total gas liberated, seventy-five percent (75%) of said gas is generally liberated before mining and during the active mining phase, either through production or by venting through VVHs, leaving approximately twenty-five percent (25%) of the gas to be produced from the sealed gob area of a mine once mining has been completed. The Board finds that the estimated amount of reserves contained within each of the 80-acre drilling units created in the Beatrice Field is 300 to 400 MMCF, and that the estimated average production from said units over their lives is 350 MMCF.

6. Decision. Based on the evidence presented, including testimony with respect to production from comparable sealed gob areas, property lines of the Subject Lands, the depths at which production from the pool has been or is likely to be found, the nature and character of mining in the Beatrice Mine and its conversion to a sealed gob area from which a majority of production is expected, the allowable production that should be allocable to each of the 80-acre drilling units heretofore created by the Oakwood I Field Rule and the Oakwood II Field Rule and continued by this Order, and other geographical and scientific data pertaining to the pool, the Board is of the opinion that establishment of provisional field rules creating drilling units for the production of sealed gob gas from Subject Formation is necessary to prevent waste, to avoid the drilling of unnecessary wells, and to protect the correlative rights within the Beatrice SG Field. The Board hereby ORDERS as follows:

a. For purposes of this Order, sealed gob gas is defined as that gas produced from Subject Formation underlying Subject Land.

b. Establishes the boundaries of the Beatrice SG Field to be the Subject Formation underlying Subject Land, which Subject Land is shown on Exhibit A attached hereto and made a part hereof.



c. Establishes the following 80-acre drilling units within the Beatrice SG Field for the production of Gas from the pool in Subject Formation underlying Subject Lands:

<u>Subject Formation/Pool</u>	<u>Unit Size</u>	<u>Permitted Well Location</u>	<u>Allowable Production Per 80-Acre Unit</u>	<u>Field and Well Classification</u>
All coal seams below the Tiller seam (including the Upper Seaboard, Greasy Creek, Middle Seaboard, Upper Horsepen, Middle Horsepen, War Creek, Lower Horsepen, Pocahontas No. 9, Pocahontas No. 8, as amended Pocahontas No. 7, ("Oakwood I") Pocahontas No. 6, and Board's Pocahontas No. 5, Order VGOB Pocahontas No. 4, 91-1119-0162, Pocahontas No. 3, as amended Pocahontas No. 2, ("Oakwood II") and various other unnamed seams and associated strata (herein "Subject Formation")	Approximately 80-acre drilling units (more or less) with the same Grid and locations established by Order OGCG 3-90, as amended ("Oakwood I") and Board's Order VGOB 91-1119-0162, as amended ("Oakwood II") and various other overlying the Sealed Gob Area of the Beatrice Mine as depicted on Exhibit A	Any point within drilling unit	350 MMCF	Beatrice SG Field

d. Establishes the size and shape of each 80-acre drilling unit to be as shown on Exhibit "A" attached and the permitted location for wells for the production of sealed gob gas to be at any point within a unit;

e. In accordance with Va. Code § 45.1-361.20.B.6, establishes the allowable production allocable to each 80-acre drilling unit contained within the Beatrice Field to be 350 MMCF. In the event an acre within the Beatrice SG Field's boundaries contains less than 80-acres, then such acre shall be allocated an allowable production determined by multiplying the number of acres in said area times 350 MMCF and dividing the result by eighty (80).

f. A unit operator may produce in excess of the allowable production established in Paragraph 6.e. above for a drilling unit in which a well is located only if, upon application to the Board, the Board authorizes the combining of two or more contiguous and/or noncontiguous drilling units within the Beatrice SG Field into a single drilling unit for purposes of calculating their combined allowable production and assigns the allowable production of each of the combined units to said well. Before the Board will grant an application

to combine drilling units within the Beatrice SG Field and allocate their combined allowable production to a designated well within said field, the applicant must demonstrate that: the requested relief is necessary to avoid the drilling of unnecessary wells, applicant has acquired through voluntary agreements or by Board action pursuant to Va. Code 45.1-361.21 and 45.1-361.22 the right to conduct operations on all of the acreage within the units to be combined; and that the proposal is not an unreasonable or arbitrary exercise of applicant's right to explore for or produce Gas.

g. Establishes those coalbed methane wells heretofore permitted and drilled or permitted in the Oakwood I Field and/or in the Oakwood II Field, as properly permitted wells in the 80-acre Beatrice SG drilling unit in which it is located for the production of sealed gob gas from Subject Formations underlying Subject Lands, if done in accordance with the applicable Board Order(s), the law and regulations applicable at the time, and in compliance with the requirements of this Board Order.

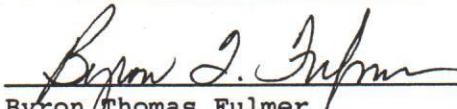
7. Conclusion: The relief considered by the Board is necessary to maximize the development, production and utilization of sealed gob gas and to protect the rights of persons owning interests in gas resources contained within the Beatrice SG Field while: avoiding the drilling of unnecessary wells, preventing or to assisting in preventing the various types of waste of gas prohibited by statute, or any of said wastes; and protecting or assist in protecting the correlative rights of interested parties. Therefore, all terms and provisions set forth above be and hereby are adopted and IT IS SO ORDERED.

8. Effective Date: This Order shall be effective as of January 26, 1995, the date of the completion of the sealing of the shafts of the Beatrice Mine.

DONE AND EXECUTED this 6<sup>th</sup> day of November, 1996, by a majority of the Virginia Gas and Oil Board.

  
Chairman, Benny R. Wampler


DONE AND PERFORMED this 6<sup>th</sup> day of November, 1996, by Order of this Board.

  
Byron Thomas Fulmer  
Principal Executive to the Staff  
Virginia Gas and Oil Board



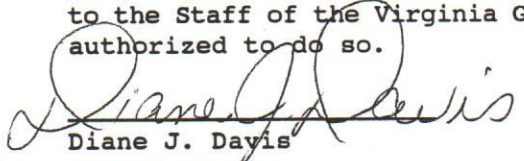
STATE OF VIRGINIA           )  
COUNTY OF WISE            )

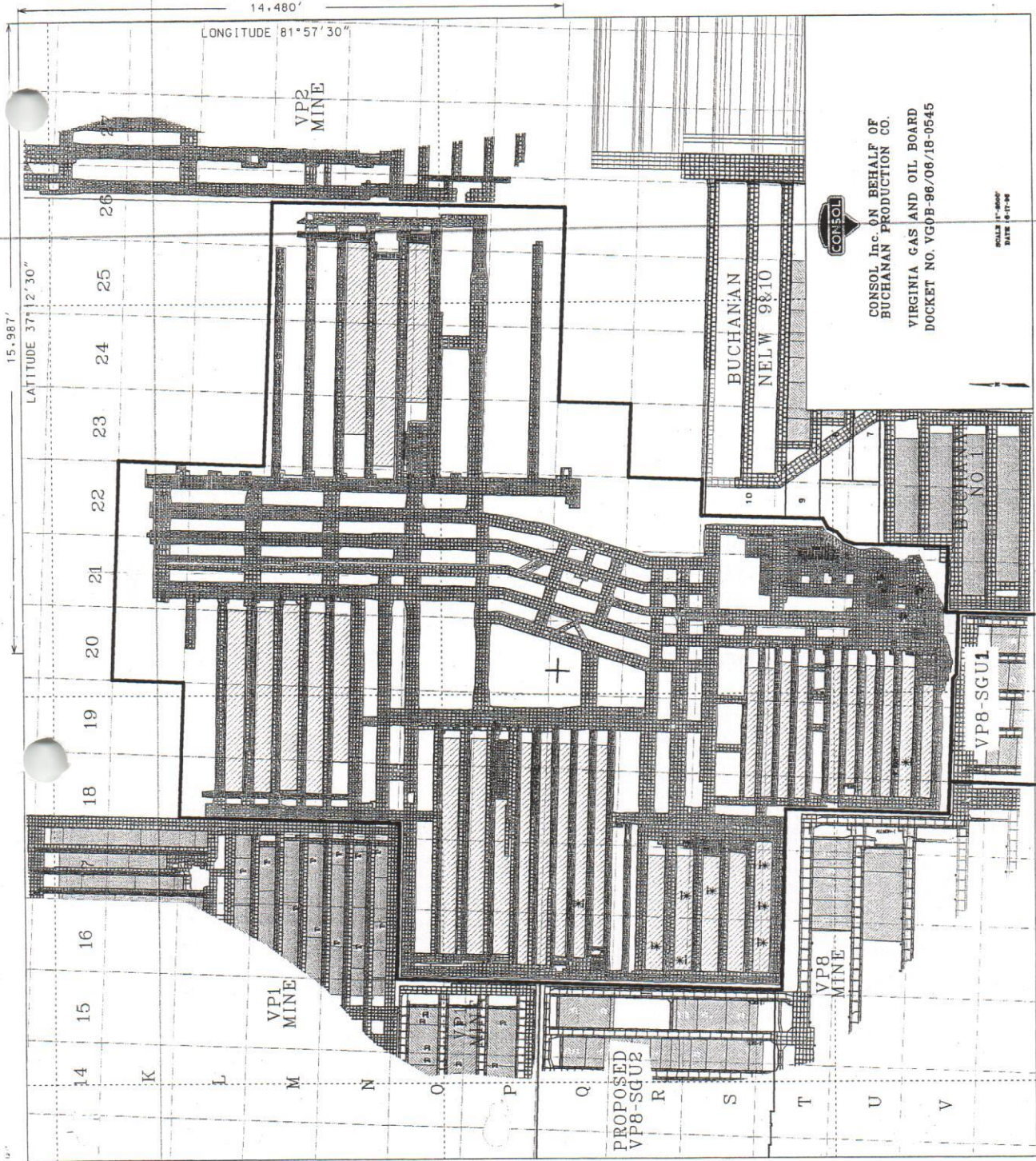
Acknowledged on this 6<sup>th</sup> day of November, 1996,  
personally before me a notary public in and for the Commonwealth of Virginia,  
appeared Benny Wampler, being duly sworn did depose and say that he is Chairman  
of the Virginia Gas and Oil Board, that he executed the same and was authorized  
to do so.

  
Susan G. Garrett  
Notary Public  
My commission expires: 07/31/98

STATE OF VIRGINIA           )  
COUNTY OF WASHINGTON:    )

Acknowledged on this 10<sup>th</sup> day of November, 1996, personally  
before me a notary public in and for the Commonwealth of Virginia, appeared Byron  
Thomas Fulmer, being duly sworn did depose and say that he is Principal Executive  
to the Staff of the Virginia Gas and Oil Board, that he executed the same and was  
authorized to do so.

  
Diane J. Davis  
Notary Public  
My commission expires: 09/30/97



CONSOL Inc. ON BEHALF OF  
BUCHANAN PRODUCTION CO.  
VIRGINIA GAS AND OIL BOARD  
DOCKET NO. VGOB-96/06/18-0545

SCALE 1" = 200'  
DATE 10-17-94