

INSTRUMENT PREPARED BY
VIRGINIA GAS AND OIL BOARD

ORDER RECORDED UNDER CODE
OF VIRGINIA SECTION 45.1-361.26

V I R G I N I A:

BEFORE THE VIRGINIA GAS AND OIL BOARD

APPLICANT: Hard Rock Exploration, Inc.) VIRGINIA GAS
AND OIL BOARD

RELIEF SOUGHT: PURSUANT TO VA. CODE § 45.1-361.20;)
(1) POOLING OF INTERESTS IN A **180.00**)
ACRE DRILLING UNIT DESCRIBED IN)
EXHIBIT A HERETO; LOCATED IN THE) DOCKET NO.
PILGRAMS KNOB GAS FIELD AND SERVED) 05/07/19-1480
BY WELL NO. HRVAE #11 (HEREIN "SUBJECT")
DRILLING UNIT") PURSUANT TO VA. CODE)
§ 45.1-361.21, FOR THE PRODUCTION OF)
GAS OTHER THAN COALBED METHANE GAS)
FROM SUBJECT FORMATIONS (herein)
referred to as "**Conventional Gas**" or)
"Gas"); and (2) DESIGNATE THE)
APPLICANT AS THE UNIT OPERATOR FOR)
THE SUBJECT DRILLING UNIT)

LEGAL DESCRIPTION:

DRILLING UNIT SERVED BY WELL NUMBERED)
HRVAE #11 TO BE DRILLED IN THE LOCATION)
DEPICTED ON **EXHIBIT A** HERETO)
C.L. Ritter Lumber Co.)
Tract 27, 849.61 Acres)
Patterson QUADRANGLE)
Garden MAGISTERIAL DISTRICT)
Buchanan COUNTY, VIRGINIA)
(the "Subject Lands" are more particularly)
described on **Exhibit A** attached hereto)
and made a part hereof))

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") at 9:00 a.m. on **July 19, 2005** Southwest Virginia Higher Education Center on the campus of Virginia Highlands Community College, Room 240, Abingdon, Virginia.

2. Appearances: **James E. Kaiser** appeared for the Applicant.

3. Jurisdiction and Notice: Pursuant to Va. Code § 45.1-361.1 et seq., the Board finds that it has jurisdiction over the subject matter. Based upon the evidence presented by Applicant, the Board also finds that the Applicant has (1) exercised due diligence in conducting a meaningful search of reasonably available sources to determine the identity and whereabouts of each gas and oil

owner, coal owner, or mineral owner having an interest in Subject Drilling Unit underlying and comprised of Subject Lands; (2) has represented to the Board that it has given notice to those parties (hereafter sometimes "person(s)" whether referring to individuals, corporations, partnerships, associations, companies, businesses, trusts, joint ventures or other legal entities) entitled by Va. Code § 45.1-361.19 to notice of the Application filed herein; and (3) that the persons set forth in their Application and Notice of Hearing have been identified by Applicant through its due diligence as Owners or Claimants of Conventional Gas interests underlying Subject Drilling Unit, including those set out in **Exhibit B-3** who have not heretofore leased, sold or voluntarily agreed with the Applicant to pool their Gas interests in Subject Drilling Unit. Conflicting Gas Owners/Claimants in Subject Drilling Unit are listed on **Exhibit E**. Further, the Board has caused notice of this hearing to be published as required by Va. Code § 45.1-361.19.B. Whereupon, the Board hereby finds that the notices given herein satisfy all statutory requirements, Board rule requirements and the minimum standards of due process.

4. Amendments: None.

5. Dismissals: None.

6. Relief Requested: Applicant requests (1) that pursuant to Va. Code § 45.1-361.20, the Board establish Subject Drilling Unit to be served by Well **HRVAE #11**; and (2) that pursuant to Va. Code § 45.1-361.21, the Board pool the rights, interests and estates in and to the Conventional Gas of the known and unknown persons listed in the attached **Exhibit B-3**, and that of their known and unknown heirs, executors, administrators, devisees, trustees, assigns and successors, both immediate and remote, for the drilling and operation, including production, of Conventional Gas from the Subject Drilling Unit established for Subject Formations underlying and comprised of the Subject Lands, (hereafter sometimes collectively identified and referred to as "Well Development and/or Operation in the Subject Drilling Unit"); and, (3) that the Board designate **Hard Rock Exploration, Inc.** as Unit Operator.

7. Relief Granted: The requested relief in this cause shall be and hereby is granted.

7.1 The Board hereby: (1) establishes Subject Drilling Unit pursuant to Va. Code § 45.1-361.20; (2) pursuant to Va. Code § 45.1-361.21.C.3, Hard Rock Exploration, Inc. (hereafter "Unit Operator") is designated as the Operator authorized to drill and operate Well No. **HRVAE #11** in the Subject Drilling Unit at the location depicted on the plat attached hereto as **Exhibit A** to produce Conventional Gas from Subject Formations, subject to the permit provisions contained in § 45.1-361.27 et seq., Code of Virginia, 1950 as amended, to § 4 VAC 25-150 et seq., Gas and Oil Regulations and to § 4 VAC 25-160 et seq., Virginia Gas and Oil Board Regulations, all as amended from time to time; and (3) the rights, interests and estates in and to the Conventional Gas in Subject Drilling Unit including those of the known and unknown persons listed on **Exhibit B-3**, attached hereto and made a part hereof, and their known and unknown heirs, executors, administrators, devisees, trustees, assigns and successors, both immediate and remote, be and hereby are pooled in the Subject Formations in the Subject Drilling Unit underlying and comprised of the Subject Lands. There are no applicable field rules and the unit is subject to statewide spacing requirements of Va. Code § 45.1-361.17.

8. Election and Election Period: In the event any Gas owner named in the Application and Notice of Hearing has not heretofore reached a voluntary agreement to share in the operation of the well to be located in Subject Drilling Unit at a rate of payment mutually agreed to by said Gas owner and the Operator, then, such person may elect one of the options set forth in Paragraph 9 below and must give written notice of his election of the option selected under Paragraph 9 herein to the designated Unit Operator at the address shown below within thirty (30) days from the date of receipt of a copy of this Order. A timely election shall be deemed to have been made if, on or before the last day of said 30-day period, such electing person has delivered his written election to the designated Unit Operator at the address shown below or has duly postmarked and placed his written election in first class United States mail, postage prepaid, addressed to the Unit Operator at the address shown below.

9. Election Options:

- 9.1 Option 1 - To Participate In The Development and Operation of the Drilling Unit: Any Gas Owner or Claimant named in **Exhibit B-3** who has not reached a voluntary agreement with the Operator may elect to participate in the Well Development and Operation on the Subject Drilling Unit (hereafter "Participating Operator") by agreeing to pay the estimate of such Participating Operator's proportionate part of the actual and reasonable costs, including a reasonable supervision fee, of the Well Development and Operation, as more particularly set forth in Virginia Gas and Oil Board Regulation 4 VAC 25-160-100 (herein "Completed for Production Costs"). Further, a Participating Operator agrees to pay the estimate of such Participating Operator's proportionate part of the Estimated, Completed-for-Production Costs as set forth below to the Unit Operator within forty-five (45) days from the later of the date of mailing or the date of recording of this Order. The estimated Completion-for-Production Costs for the Subject Drilling Unit are as follows:

Estimated, Completed-for-Production Costs: \$408,454.50

Any gas owner and/or claimants named in **Exhibit B-3**, who elect this option (Option 1) understand and agree that their initial payment under this option is for their proportionate share of the Applicant's estimate of actual costs and expenses. It is also understood by all persons electing this option that they are agreeing to pay their proportionate share of the actual costs and expenses as determined by the operator named in this Board Order.

A Participating Operator's proportionate cost hereunder shall be the result obtained by multiplying the Participating Operators' "Percent of Unit" times the Completed-for-Production Cost set forth above. Provided, however, that in the event a Participating Operator elects to participate and fails or refuses to pay the estimate of his proportionate part of the Completed-for-Production Cost as set forth above, all within the time set forth herein and in the manner prescribed in Paragraph 8 of this Order, then such Participating Operator shall be deemed to have elected not to participate and to have elected compensation in lieu of participation pursuant to

Paragraph 9.2 herein.

- 9.2 Option 2 - To Receive A Cash Bonus Consideration: In lieu of participating in the Well Development and Operation of Subject Drilling Unit under Paragraph 9.1 above, any Gas Owner or Claimant named in **Exhibit B-3** in the unit who has not reached a voluntary agreement with the Operator may elect to accept a cash bonus consideration of \$5.00 per net mineral acre owned by such person, commencing upon entry of this Order and continuing annually until commencement of production from Subject Drilling Unit, and thereafter a royalty of 1/8th of 8/8ths [twelve and one-half percent (12.5%)] of the net proceeds received by the Unit Operator for the sale of the Gas produced from any Well Development and Operation covered by this Order multiplied by the Gas owner's percentage Interest Within Unit as set forth in the Application and Notice of Hearing (for purposes of this Order, net proceeds shall be actual proceeds received less post-production costs incurred downstream of the wellhead, including, but not limited to, gathering, compression, treating, transportation and marketing costs, whether performed by Unit Operator or a third person) as fair, reasonable and equitable compensation to be paid to said Gas owner. The initial cash bonus shall become due and owing when so elected and shall be tendered, paid or escrowed within one hundred twenty (120) days of recording of this Order. Thereafter, annual cash bonuses, if any, shall become due and owing on each anniversary of the date of recording of this order in the event production from Subject Drilling Unit has not theretofore commenced, and once due, shall be tendered, paid or escrowed within sixty (60) days of said anniversary date. Once the initial cash bonus and the annual cash bonuses, if any, are so paid or escrowed, said payment(s) shall be satisfaction in full for the right, interests, and claims of such electing Gas owner in and to the Gas produced from Subject Formation in the Subject Lands, except, however, for the 1/8th royalties due hereunder.

Subject to a final legal determination of ownership, the election made under this Paragraph 9.2, when so made, shall be satisfaction in full for the right, interests, and claims of such electing person in any Well Development and Operation covered hereby and such electing person shall be deemed to and hereby does lease and assign its right, interests, and claims in and to the Gas produced from Subject Formation in the Subject Drilling Unit to the Applicant.

- 9.3. Option 3 - To Share In The Development And Operation As A Non-Participating Person On A Carried Basis And To Receive Consideration In Lieu Of Cash: In lieu of participating in the Well Development and Operation of Subject Drilling Unit under Paragraph 9.1 above and in lieu of receiving a cash bonus consideration under Paragraph 9.2 above, any Gas Owner or Claimant named in **Exhibit B-3** hereto who does not reach a voluntary agreement with the Operator may elect to share in the Well Development and Operation of Subject Drilling Unit on a carried basis (as a "Carried Well Operator") so that the proportionate part of the Completed-for-Production Costs

hereby allocable to such Carried Well Operator's interest is charged against such Carried Well Operator's share of production from Subject Drilling Unit. Such Carried Well Operator's rights, interests, and claims in and to the Gas in Subject Drilling Unit shall be deemed and hereby are assigned to the Unit Operator until the proceeds from the sale of such Carried Well Operator's share of production from Subject Drilling Unit (exclusive of any royalty, excess or overriding royalty, or other non-operating or non cost-bearing burden reserved in any lease, assignment thereof or agreement relating thereto covering such interest) equals three hundred percent (300%) for a leased interest or two hundred percent (200%) for an unleased interest (whichever is applicable) of such Carried Well Operator's share of the Completed-for-Production Costs allocable to the interest of such Carried Well Operator. Any Gas Owner and/or Claimant named in **Exhibit B-3** who elects this option (Option 3) understands and agrees that Completed-for-Production Costs are the Operator's actual costs for well development and operation. When the Unit Operator recoups and recovers from such Carried Well Operator's assigned interest the amounts provided for above, then, the assigned interest of such Carried Well Operator shall automatically revert back to such Carried Well Operator, and from and after such reversion, such Carried Well Operator shall be treated as if it had participated initially under Paragraph 9.1 above; and thereafter, such participating person shall be charged with and shall pay his proportionate part of all further costs of such well development.

Subject to a final legal determination of ownership, the election made under this Paragraph 9.3, when so made, shall be satisfaction in full for the right, interests, and claims of such electing person in any well development and operation covered hereby and such electing person shall be deemed to have and hereby does assign his right, interests, and claims in and to the Gas produced from Subject Formation in the Subject Drilling Unit to the Unit Operator for the period of time during which his interest is carried as above provided prior to its reversion back to such electing person.

10. Failure to Properly Elect: In the event a person named in **Exhibit B-3** hereto does not reach a voluntary agreement with the Applicant and fails to do so within the time, in the manner, and in accordance with the terms of this Order one of the alternatives set forth in Paragraph 9 above for which his interest qualifies, then such person shall be deemed to have elected not to participate in the proposed Well Development and Operation in Subject Drilling Unit and shall be deemed, subject to any final legal determination of ownership, to have elected to accept as satisfaction in full for such person's right, interests, and claims in and to the Gas the consideration provided in Paragraph 9.2 above for which its interest qualifies and shall be deemed to have leased and/or assigned his right, interests, and claims in and to Gas in the Subject Drilling Unit to the Unit Operator. Persons who fail to properly elect shall be deemed to have accepted the compensation and terms set forth herein at Paragraph 9.2 in satisfaction in full for the right, interests, and claims of such person in and to the Gas produced from Subject Formation underlying Subject Lands.

11. Default By Participating Person: In the event a person named in **Exhibit B-3** elects to participate under Paragraph 9.1, but fails or refuses to pay, to secure the payment or to make an arrangement with the Unit Operator for the payment of such person's proportionate part of the Estimated Completed-for-Production costs as set forth herein, all within the time and in the manner as prescribed in this Order, then such person shall be deemed to have withdrawn his election to participate and shall be deemed to have elected to accept as satisfaction in full for such person's right, interests, and claims in and to the Gas the consideration provided in Paragraph 9.2 above for which his interest qualifies depending on the excess burdens attached to such interest. Whereupon, any cash bonus consideration due as a result of such deemed election shall be tendered, paid or escrowed by Unit Operator within one hundred twenty (120) days after the last day on which such defaulting person under this Order should have paid his proportionate part of such cost or should have made satisfactory arrangements for the payment thereof. When such cash bonus consideration is paid or escrowed, it shall be satisfaction in full for the right, interests, and claims of such person in and to the Gas underlying Subject Drilling Unit in the Subject Lands covered hereby, except, however, for any 1/8th royalties which would become due pursuant to Paragraph 9.2 hereof.

12. Assignment of Interest: In the event a person named in **Exhibit B-3** is unable to reach a voluntary agreement to share in the Well Development and Operation contemplated by this Order at a rate of payment agreed to mutually by said Owner or Claimant and the Applicant, and said person elects or fails to elect to do other than participate under Paragraph 9.1 above in the Well Development and Operation in Subject Drilling Unit, then such person shall be deemed to have and shall have assigned unto Applicant such person's right, interests, and claims in and to said well, in Subject Formations in Subject Drilling Unit, and other share in and to Gas production to which such person may be entitled by reason of any election or deemed election hereunder in accordance with the provisions of this Order governing said elections.

13. Unit Operator (or Operator): Hard Rock Exploration, Inc., shall be and hereby is designated as Unit Operator authorized to drill and operate **Well No. HRVAE #11** in Subject Formations in Subject Drilling Unit, all subject to the permit provisions contained in Va. Code § 45.1-361.27 et seq., §§ 4 VAC 25-150 et seq., Gas and Oil Regulations and §§ 4 VAC 25-160 et seq., Virginia Gas and Oil Board Regulations, all as amended from time to time, and all elections required by this Order shall be communicated to Unit Operator in writing at the address shown below:

Hard Rock Exploration, Inc.
P.O. Box 13059
Charleston, WV 25360
Phone: (304) 546-6844
Fax: (304) 769-0533
Attn: Jim Stephens

14. Commencement of Operations: Unit Operator shall commence or cause to commence operations for the drilling of the well covered hereby within seven hundred and thirty (730) days from the date of this Order and shall prosecute the same with due diligence. If Unit Operator shall not have so commenced and/or prosecuted, then this Order shall terminate, except for any cash sums becoming payable hereunder; otherwise, unless sooner terminated by Order of the Board, this Order shall expire at 12:00 P.M. on the date on which the well covered by this Order is permanently abandoned and plugged. However, in the event an appeal is taken from this Order, then the time between the filing of

the Petition for Appeal and the final Order of the Circuit Court shall be excluded in calculating the two-year period referenced herein.

15. Operator's Lien: Unit Operator, in addition to the other rights afforded hereunder, shall have a lien and a right of set off on the Gas estates, rights, and interests owned by any person subject hereto who elects to participate under Paragraph 9.1 in the Subject Drilling Unit to the extent that costs incurred in the drilling or operation on the Subject Drilling Unit are a charge against such person's interest. Such liens and right of set off shall be separable as to each separate person and shall remain liens until the Unit Operator drilling or operating the well covered hereby has been paid the full amounts due under the terms of this Order.

16. Escrow Provisions:

Applicant has represented to the Board that there **are no** unknown and/or unlocatable Gas owners in the Subject Drilling Unit whose interests are subject to the escrow requirements of Paragraph 16.1; and, the Applicant has represented to the Board that there **are no** conflicting claimants in Subject Drilling Unit whose payments are subject to the provisions of Paragraph 16.2 hereof. Therefore, by the Order and unless and until otherwise ordered by the Board, the Escrow Agent **is not** required to establish an interest-bearing escrow account for the Subject Drilling Unit.

Wachovia Bank
Corporate Trust PA1328
123 South Broad Street
Philadelphia, PA 19109-1199
Attn: Rachel Rafferty

16.1 Escrow Provisions for Unknown or Unlocatable Persons: If any payment of bonus, royalty payment or other payment due and owing cannot be made because the person entitled thereto cannot be located or is unknown, then such cash bonus, royalty payment or other payment shall not be commingled with any funds of the Unit Operator and shall, pursuant to Va. Code § 45.1-361.21.D, be deposited by the Operator into the Escrow Account, commencing within one hundred twenty (120) days of recording of this Order, and continuing thereafter on a monthly basis with each deposit to be made by a date which is no later than sixty (60) days after the last day of the month being reported and/or for which funds are subject to deposit. Such funds shall be held for the exclusive use of, and sole benefit of the person entitled thereto until such funds can be paid to such person(s) or until the Escrow Agent relinquishes such funds as required by law or pursuant to order of the Board in accordance with Va. Code § 45.1-361.21.D.

16.2 Escrow Provisions For Conflicting Claimants: If any payment of bonus, royalty payment, proceeds in excess of ongoing operational expenses, or other payment due and owing under this Order cannot be made because the person entitled thereto cannot be made certain due to conflicting claims of ownership and/or a defect or cloud on the title, then such cash bonus, royalty payment, proceeds in excess of ongoing operational expenses, or other payment, together with Participating Operator's Proportionate Costs paid to Unit Operator pursuant to Paragraph 9.1 hereof, if any, (1) shall not be commingled with any funds of the Unit Operator; and (2) shall, pursuant to Va. Code §§ 45.1-361.22.A.2, 45.1-361.22.A.3 and 45.1-361.22.A.4, be deposited by

the Operator into the Escrow Account within one hundred twenty (120) days of recording of this Order, and continuing thereafter on a monthly basis with each deposit to be made by a date which is no later than sixty (60) days after the last day of the month being reported and/or for which funds are subject to deposit. Such funds shall be held for the exclusive use of, and sole benefit of, the person entitled thereto until such funds can be paid to such person(s) or until the Escrow Agent relinquishes such funds as required by law or pursuant to Order of the Board.

17. Special Findings: The Board specifically and specially finds:
- 17.1. Applicant is **Hard Rock Exploration, Inc.** Applicant is duly authorized and qualified to transact business in the Commonwealth of Virginia;
- 17.2. Applicant **Hard Rock Exploration, Inc.** is an operator in the Commonwealth of Virginia, and has satisfied the Board's requirements for operations in Virginia;
- 17.3. Applicant **Hard Rock Exploration, Inc.** claims ownership of Gas leases on **76.34%** percent of Subject Drilling Unit and the right to explore for, develop and produce Gas from same;
- 17.4. Applicant has proposed the drilling of Well **HRVAE #11** to a depth of **4900** feet on the Subject Drilling Unit at the location depicted in **Exhibit A** to develop the pool of Gas in Subject Formations, and to complete and operate Well **HRVAE #11** for the purpose of producing Conventional Gas.
- 17.5 The estimated production of the life of the proposed Well **HRVAE #11** is **300 MMCF**.
- 17.6 With this Application, notice was provided to everyone claiming an ownership interest relative to the production of conventional gas in the Subject Drilling Unit. Set forth in **Exhibit B-3**, is the name and last known address of each Owner or Claimant identified by the Applicant as Gas owners in Subject Drilling Unit who has not, in writing, leased to the Applicant or the Unit Operator or agreed to voluntarily pool his interests in Subject Drilling Unit for its development. Gas interests unleased to the Operator and listed in **Exhibit B-3** represent **23.66%** percent of Subject Drilling Unit;
- 17.7 Applicant's evidence established that the fair, reasonable and equitable compensation to be paid to any person in lieu of the right to participate in the Wells are those options provided in Paragraph 9 above;
- 17.8 The Subject Drilling Unit does not constitute an unreasonable or arbitrary exercise of Applicant's right to explore for or produce Gas;
- 17.9 The relief requested and granted is just and reasonable, is supported by substantial evidence and will afford each person listed and named in **Exhibit B-3** hereto the opportunity to recover or receive, without unnecessary expense, such person's just and fair share of the production from Subject Drilling

Unit. The granting of the Application and relief requested therein will ensure to the extent possible the greatest ultimate recovery of Conventional Gas, prevent or assist in preventing the various types of waste prohibited by statute and protect or assist in protecting the correlative rights of all persons in the subject common sources of supply in the Subject Lands. Therefore, the Board is entering an Order granting the relief herein set forth.

18. Mailing Of Order And Filing Of Affidavit: Applicant or its Attorney shall file an affidavit with the Secretary of the Board within sixty (60) days after the date of recording of this Order stating that a true and correct copy of said Order was mailed within seven (7) days from the date of its receipt by the Unit Operator to each Respondent named in **Exhibit B-3** pooled by this Order and whose address is known.

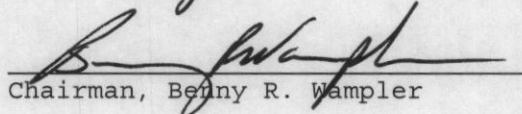
19. Availability of Unit Records: The Director shall provide all persons not subject to a lease with reasonable access to all records for Subject Drilling Unit which are submitted by the Unit Operator to said Director and/or his Inspector(s).

20. Conclusion: Therefore, the requested relief and all terms and provisions set forth above be and hereby are granted and IT IS SO ORDERED.

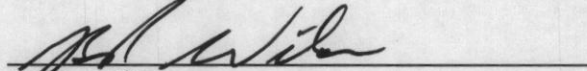
21. Appeals: Appeals of this Order are governed by the provisions of Va. Code Ann. § 45.1-361.9 which provides that any order or decision of the Board may be appealed to the appropriate circuit court.

22. Effective Date: This Order shall be effective as of the date of the Board's approval of this Application, which is set forth at Paragraph 1 above.

DONE AND EXECUTED this 16th day of August, 2005, by a majority of the Virginia Gas and Oil Board.

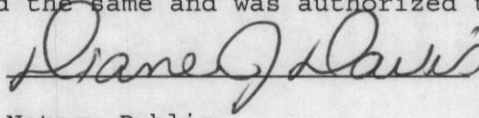

Chairman, Benny R. Wampler

DONE AND PERFORMED this 17th day of August, 2005, by Order of this Board.


B. R. Wilson
Principal Executive To The Staff
Virginia Gas and Oil Board

STATE OF VIRGINIA)
COUNTY OF ~~WISE~~ WASHINGTON

Acknowledged on this 16th day of August, 2005, 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.

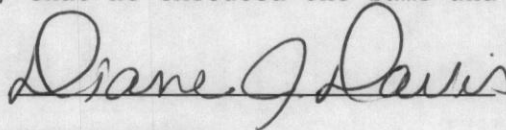


Notary Public

My commission expires: 9/30/05

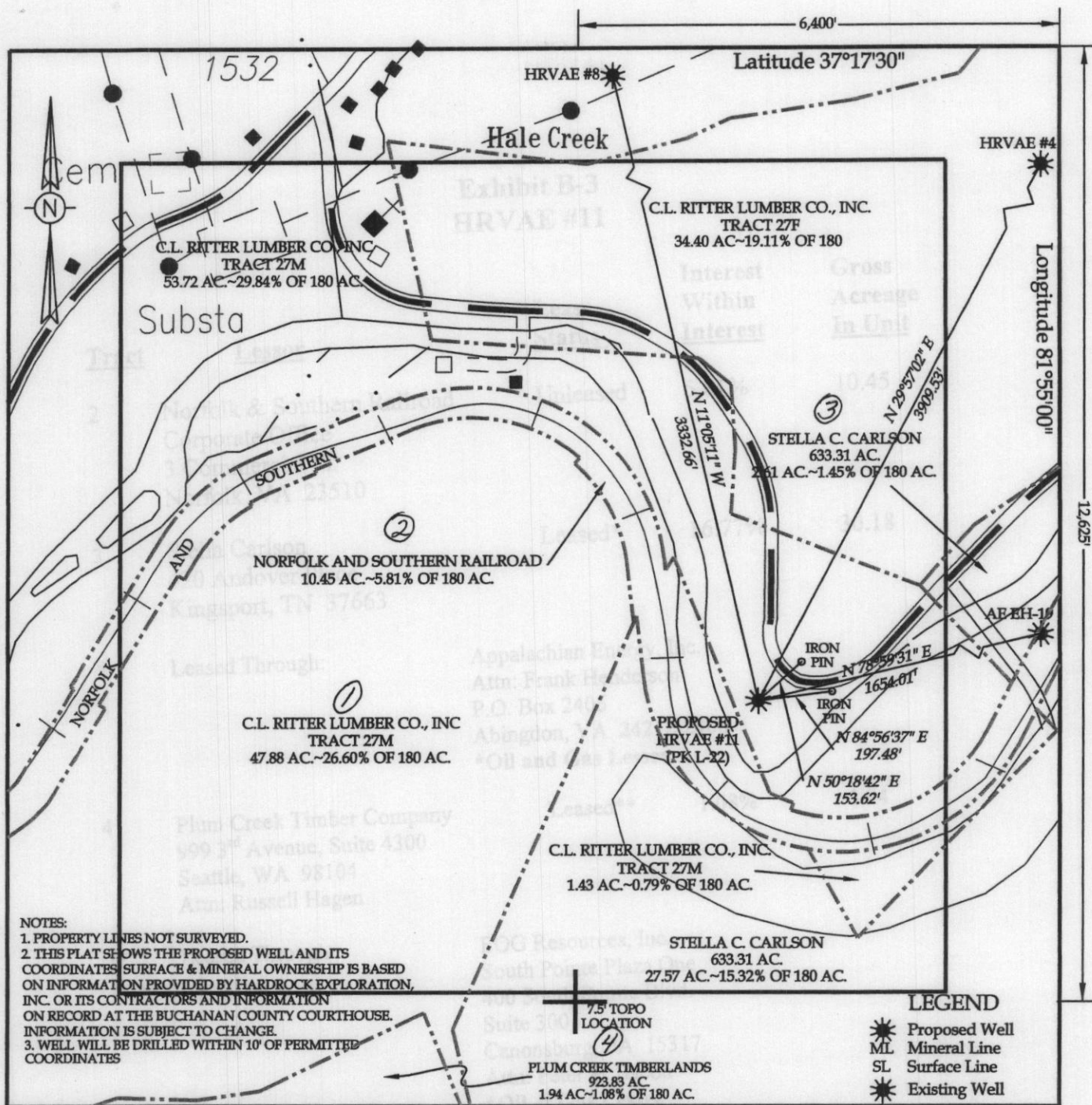
STATE OF VIRGINIA)
COUNTY OF WASHINGTON)

Acknowledged on this 17th day of August, 2005, personally before me a notary public in and for the Commonwealth of Virginia, appeared B. R. Wilson, 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.



Notary Public

My commission expires: 9/30/05



Company HARDROCK EXPLORATION, INC. Well Name or Number HRVAE #11 (PK L-22)

Tract No. C.L. RITTER LUMBER CO., INC. ~ TRACT 27M Quadrangle PATTERSON

District GARDEN

Well Coordinates (Virginia State Plane) N: 354,488.04 E: 999,423.89

Elevation: 1526.22 Method Used to Determine Elevation: Trig. Levels from GPS derived elevation.

County BUCHANAN Scale: 1" = 400' Date 6-14-05

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.

