

**HINKLE, COX, EATON, COFFIELD & HENSLEY,
L.L.P.**

ATTORNEYS AT LAW

400 PENN PLAZA, SUITE 700 POST OFFICE BOX 10
ROSWELL, NEW MEXICO 88202
(505) 622-6510 FAX (505) 623-9332

LEWIS C. COX JR. (1924-1993)
CLARENCE E. HINKLE (1901-1985)

OF COUNSEL
O. M. CALMOUN*
JOE W. WOOD
ROBERT D. TAICHERT
WYATT H. HEARD*

May 12, 1999

STANLEY K. AUSTEVEY, JR.
ELLEN S. CASEY
MARGARET CARTER LUDWIG
S. BARRY PAISNER
WYATT L. BROCKES*
DAVID M. RUSSELL*
ANDREW J. CLOUTIER
STEPHANIE LANCY
KIRT E. MOELLING*
JULIE P. NEERKEN
WILLIAM P. SLATTERY
CHRISTOPHER M. WOODY
JAMES A. GILLESPIE
GARY W. LARSON
JAMES H. WOOD*

MARCELE LINCOLN
MARCUS H. NELSON
TIMOTHY B. BROWN
JAMES T. MARTIN
MATTHEW E. FORBES*
DIANNA M. HENOOZA
DAVID B. LAWRENZ
ANNE MARIE TURNER
KENNETH E. WESTON*
JULIA COPPIN SWALLOW
CHRISTINE H. LANDAVAZZ
REBECCA H. ZUSCHLAG
ROCKY S. LAWDERMILK*

*NOT LICENSED IN NEW MEXICO

PAUL W. EATON
CONRAD E. COFFIELD
ROLD L. HENSLEY, JR.
STUART D. SHANOR
ERIC D. LANPHERE
C. D. MARTIN
ROBERT P. TINNIN, JR.
MARSHALL G. MARTIN
MASTON C. COURTNEY*
DON L. PATTERSON*
DOUGLAS L. LUNSFORD
NICHOLAS J. NOEDING
T. CALDER EZZELL, JR.
WILLIAM B. BURFORD*
RICHARD E. OLSON
RICHARD R. WILFONG*
THOMAS J. MCBRIDE

NANCY S. CUSACK
JEFFREY L. FORNACIARI
JERRY F. SHACKELFORD*
JEFFREY W. HELLBERG*
W. F. COUNTESS*
ALBERT L. PITTS
THOMAS M. HNASKO
JOHN C. CHAMBERS*
GARY D. COMPTON*
W. H. BRIAN, JR.*
RUSSELL J. BAILEY*
STEVEN D. ARNOLD
THOMAS D. HAINES, JR.
GREGORY J. NIBERT
JAMES M. HUDSON
THOMAS E. MOODY*
REBECCA NICHOLS JOHNSON

IN RE: LIMITED OPINION OF TITLE TO:)
)
State of New Mexico Oil and Gas Lease E-9659,)
insofar as it covers the following land located)
in Lea County, New Mexico:)
)
Township 21 South, Range 34 East, N.M.P.M.)
Section 34: S½)
)
for all depths from the surface down to the top of the)
Silurian formation, containing 320 acres, more or less.)
)
Llano 34 State No. 1 Well)

PAID

No. 30,259

Roca Resources Company, Inc.
Post Office Box 1981
Midland, Texas 79702-1981

BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 12622 Exhibit No. 12
Submitted by:
NEARBURG EXPLORATION COMPANY, L.L.C.
Special Commission Hearing: September 10,
2002

Gentlemen:

In connection with the title to the oil and gas mineral estate of the captioned land and oil and gas lease covering the same, we have examined the materials and instruments listed on Exhibit "A".

Based solely upon such examination, we now report the status of title to the oil and gas mineral estate of the captioned lands, and to the oil and gas lease covering the same, limited to the interests of Redrock Operating Ltd., Co., as of May 3, 1999, at 8:00 a.m. as to the State records, and as of April 12, 1999, at 7:00 a.m. as to the County records, as follows:

I. TITLE TO OIL AND GAS IN AND UNDER THE CAPTIONED LANDS, SUBJECT TO STATE OF NEW MEXICO OIL AND GAS LEASE E-9659 (or Title to 12.5% Royalty):

State of New Mexico All

II. RECORD TITLE TO LEASE K-9659:

Not Reported as it is held by a third party, apparently Chevron U.S.A. Inc.

III. TITLE TO OPERATING RIGHTS IN LEASE E-9659 AND TITLE TO OIL AND GAS PRODUCED, LIMITED TO THE INTERESTS OF REDROCK OPERATING LTD., CO. IN THE CAPTIONED LAND AND DEPTHS*:

	<u>Operating Rights</u>	<u>Net Interest in Production</u>
Redrock Operating Ltd., Co.	100%	.8750000 WI

* With respect to the SW¼, Redrock does not own any interest in the Morrow formation in the depths from 12,722 feet to 13,208 feet subsurface as determined in the Gamma Ray Log in the Shell State GRA No. 1 Well as Llano, NMESCO, and Minerals never conveyed these depths to Hadson. This is the gas storage interval. See Section IV, paragraph 2 (b).

Comment: We are not calculating the Operating Interests and Net Interests in Production in the Grama Ridge - Morrow Unit. The storage unit may be contracted, although the contraction does not appear of record. The Tract Participation Factors in the Gas Storage Agreement are inaccurate if the Unit has been contracted. See Exception to Title No. 7 below.

IV. OIL AND GAS LEASE - RENTALS AND ROYALTIES - ASSIGNMENTS - OVERRIDING ROYALTY INTEREST - GAS STORAGE AGREEMENT:

1. **Oil and Gas Lease - Rentals and Royalties:** The principal features of Lease E-9659 are as follows:

Form:	45 (Amended to conform to 1957 law which makes the lease a "commence" form lease).
Original Lessee:	Gulf Oil Corporation
Date:	December 20, 1955
Lands:	S½ Section 34, T21S, R34E
Royalty:	12.5%
Rentals:	Rentals in the amount of \$640 per year (50¢ per acre) have been paid through December 19, 1999.

Comment: Rentals on State of New Mexico oil and gas leases are payable throughout the life of the leases regardless of their producing status. See paragraph 3 of this Section IV below regarding two adjacent leases canceled by the Commissioner for failure to pay annual rentals.

REQUIREMENT A: Satisfy yourself that Lease E-9659 has been maintained in full force and effect to the current date and that the lease is currently in good standing.

2. **Assignments - Overriding Royalty Interests:** The materials examined reflect that previously the operating rights in the captioned leases insofar as they cover the captioned lands and depths were owned 2/3 by NMESCO Fuels, Inc. and 1/3 by Llano, Inc. We will limit our analysis to those assignments filed of record after the operating rights were acquired by Llano, Inc. and NMESCO Fuels, Inc. in the above stated proportions.

(a) **Llano & NMESCO - Minerals:** By Assignment of Operating Rights dated October 25, 1979, recorded on January 4, 1980 in Book 365, page 486, Llano, Inc. and NMESCO Fuels, Inc. assigned 100% of the operating rights in State Leases E-9659, embracing SE $\frac{1}{4}$ Section 34, and K-3592, embracing NE $\frac{1}{4}$ Section 34, for all depths from the surface down to 13,380 feet subsurface, to Minerals, Inc. This assignment reserves to assignors a 6.25% overriding royalty interest with a 30 day option to convert the same to a 25% leasehold interest after payout. In this connection, the materials examined reflect an Assignment of Operating Rights dated December 8, 1980, but effective November 1, 1980, recorded on December 15, 1980 in Book 382, page 87, wherein Minerals, Inc. reassigned to NMESCO Fuels, Inc. (2/3) and Llano, Inc. (1/3) an undivided 25% leasehold interest in said state leases embracing said lands and depth. This instrument specifies that the overriding royalty interest terminated. The October 25, 1979 Assignment of Operating Rights in favor of Minerals, Inc. also reserves to Llano and NMESCO a 30-day reassignment privilege and the right to purchase oil and gas produced. We also note for your information that by Communitization Agreement dated May 1, 1979, recorded on June 26, 1979 in Book 360, page 259, and approved by the Commissioner of Public Lands, the E $\frac{1}{2}$ Section 34, was communitized as to gas and associated liquid hydrocarbons producible from the Morrow formation, but terminated March 31, 1991.

(b) **NMESCO, Minerals, Llano - Hadson:** By Assignment of Operating Rights dated June 30, 1987, recorded in Miscellaneous Records Book 485, page 437, NMESCO Fuels, Inc., Minerals, Inc., and Llano, Inc. assigned all their right, title and interest in the operating rights in and to the N $\frac{1}{2}$ and S $\frac{1}{2}$ Section 34, Township 21 South, Range 34 East, and the N $\frac{1}{2}$ Section 3, Township 22 South, Range 34 East, which are held by assignors under State of New Mexico Oil and Gas Leases E-9141, E-9659, and K-3592. The assignors excepted all right, title and interest in and to the Morrow formation between the depths of 12,722 feet and 13,208 feet as determined in the Gamma Ray Log in the Shell State GRA No. 1 Well. This assignment contains a reassignment provision and is subject to a Farmout Agreement dated May 1, 1979, between Minerals, Llano, and NMESCO. Thereafter, by Assignment of Operating Rights dated March 1, 1988, but effective June 30, 1997, recorded in Miscellaneous Records Book 495, page 108, NMESCO Fuels, Inc., Minerals, Inc., and Llano, Inc., conveyed all their remaining right, title, and interest in the above described leases insofar as they cover the E $\frac{1}{2}$ Section 34 and the NE $\frac{1}{4}$ Section 3 to Hadson Petroleum (USA), Inc. specifically conveying all their interest in such lands in the Morrow formation for the depths from 12,722 feet down to 13,208 feet. (They did not convey these depths in the SW $\frac{1}{4}$ as these are

*new
car
added*

the depths of the Morrow gas storage reservoir. While we doubt that Redrock intended to acquire the storage interval in the SW $\frac{1}{4}$ and that you do not desire to acquire such interval, we have a requirement on point below. This assignment also contains a reassignment provision.

REQUIREMENT B: Submit for our examination a copy of the farmout agreement referenced above and we reserve further requirement. In the alternative, satisfy yourself that the farmout agreement is either no longer effective or does not contain any terms and provisions that are adverse to the interests reported herein.

REQUIREMENT C: Determine whether the depths from 12,722 feet to 13,208 feet as determined in the Gamma Ray Log in the Shell State GRA No. 1 Well in the Morrow formation in the SW $\frac{1}{4}$ will adversely affect your proposed operations. (These are the depths of the Morrow gas storage reservoir, which explains why they were never conveyed to Hadson.) However, if you intend to acquire such depths, Redrock must secure a quitclaim from NMESCO Fuels, Inc., Minerals, Inc., and Llano, Inc. as to these depths prior to your acquisition or you must arrange to secure a conveyance from these parties directly.

*new
to - 6/2/98
12/2/98*

(c) **Hadson - Hadson Energy:** A Certificate of the Secretary of State for the State of Delaware dated March 10, 1993, recorded in Miscellaneous Records Book 568, page 520, reflects that Hadson Petroleum (USA), Inc. merged into Hadson Energy Resources Corporation on December 21, 1992.

(d) **Hadson Energy - Apache Energy:** By Certificate dated December 22, 1994, recorded in Miscellaneous Records Book 598, page 636, Hadson Energy Resources Corporation changed its name to Apache Energy Resources Corporation effective January 1, 1995.

(e) **Apache Energy - Apache:** In connection with our title opinion on the Government A No. 1 and 2 Wells (HCECH T/O 30,258), we reviewed a decision of the Bureau of Land Management dated October 14, 1998, evidencing that Apache Energy Resources Corporation merged into Apache Corporation effective December 21, 1995. Evidence of this merger does not appear in the County Records and in this regard we refer you to Exception to Title No. 2 below.

(f) **Apache - Redrock:** By Assignment and Bill of Sale dated effective March 1, 1998, recorded in Lea County Records Book 863, page 504, Apache Corporation conveyed to Redrock Operating Ltd., Co., all its interest in Lease E-9659 covering the S $\frac{1}{2}$ Section 34 for all depths from the surface down to the top of the Silurian formation. This assignment was made without warranty covenants.

3. **Gas Storage Agreement:** The captioned lands are embraced in the Unit Agreement for Operation of the Grama Ridge - Morrow Unit Area, dated April 25, 1973, and approved by the Commissioner of Public Lands on August 27, 1973, as amended by Amendment to Unit Agreement dated September 1, 1976, and approved by the Commissioner of Public Lands on January 26, 1977. Floyd Prado with the State Land Office advised us in August, 1988 that the Gas Storage Agreement was renewed September 1, 1986, and is extended to September 1, 1991. The unit files indicate the unit has been further extended and renewed as the BLM records reflect a letter dated March 30, 1998, reflecting that new injection and withdrawal rates shall be in effect for the period from

November 1, 1995, to October 31, 2005. The materials examined further reflect that LG&E Natural Pipeline Company is filing the most recent Plans of Operations and may be the present operator of the gas storage unit. (The materials do not reflect any conveyances or formal appointment of operator documents evidencing that LG&E is the successor operator to Llano, Inc. the original operator.) The record owners of the leases committed to the unit, executed both the Agreement and the amendment thereto.

The Unit Agreement is for secondary recovery and gas storage purposes, and the unitized interval is from 12,722 feet to 13,208 feet, as shown on the Schlumberger Sonic Log Gamma Ray Log of the Shell Oil Company State GRA Well No. 1 located 1980 feet FNL and 660 FWL Section 3 of the unit area. Llano, Inc. was designated as unit operator, (and as noted above, LG&E may now be the current operator.) Among other things, the unit operator is required to file a plan of operations concurrently with the filing of the Unit Agreement for final approval (which has been done) and thereafter, from time to time, to submit additional plans embracing an additional specified period of operation. You should satisfy yourself that such plans of operation have been timely filed and that the operator has complied with the same with reasonable diligence. In the event of breach of any approved plan of operation, the agreement may be terminated by the Commissioner, upon notice to unit operator and lessees of record in the manner prescribed by Section 19-10-20 N.M.S.A. (1978), which requires notice of intention to cancel and 30 days within which to correct such breach. Exhibit "B" attached to the Amendment to Unit Agreement reflects the existing tract participation for the lands committed to the unit. The tracts and unit participation are described as follows:

<u>Tract Description</u>	<u>Lease No.</u>	<u>Percentage of Participation</u>
S½ Section 3, T22S-R33E (320 acres)	B-158-3	16.60475%
N½ Section 3, T22S-R33E (327.16 acres)	E-9141	16.97627%
S½ Section 34, T21S-R34E (320 acres)	E-9659	16.60475%
N½ Section 34, T21S-R34E (320 acres)	K-3592-1*	16.60475%
S½NW¼, N½NW¼, SE¼NE¼ Section 33, T21S-R34E (600 acres)	E-7574-1*	31.13389%
SW¼NE¼ Section 33, T21S-R34E (40 acres)	N/A (Fee Lease)	<u>2.07559%</u> 100.00000%

* Leases canceled by the Commissioner of Public Lands.

The material examined reflects that Leases K-3592-3 and E-7574-3 have been canceled by the Commissioner for failure to pay annual rentals thereon. By Notice dated January 13, 1999, addressed to Apache Resources Corp. Lease K-03592-3 is canceled for nonpayment of rentals effective January 13, 1999. Lease K-3592-3 covered the N½ Section 34. By Notice dated March 4, 1999, addressed to Kaiser-Francis Oil Company Lease E-7574-3 is canceled for nonpayment of rentals. Lease E-7574-3 apparently covered all or a portion of Section 33 of the captioned township and range. A letter from Kaiser-Francis to the Commissioner dated February 8, 1999, reflects it

declined to make further rental payments and that it "contacted LG&E, who has a gas storage unit on the property, but have received no response to date." (We have not analyzed the effect of the cancellations upon unit operations. If this matter is important to you, please resubmit the matter for our full review and consideration.)

Section 11 of the Unit Agreement, as amended, provides for certain storage, injection and withdrawal fees. Section 22 of the Unit Agreement, as amended, provides that the injection and withdrawal fees provided in Section 11 shall be effective for a period of five years from September 1, 1976, the effective date of the amendment, and shall be renegotiated every five years thereafter. As noted above, it appears the unit may have been extended to October 31, 2005. Failure by the parties to renegotiate new fees 60 days prior to the expiration of the fourth year of any five year period shall cause the agreement to terminate upon expiration of not more than three years from the preceding five year period. The Unit Agreement, as amended, is to remain in effect so long as unitized substances are being produced from or stored within the unitized formation; however, the agreement may be terminated at any time by not less than 75% on an acreage basis of the owners of the working interest committed to the Unit.

The foregoing is only intended as a very brief discussion of some of the more pertinent terms of the Unit Agreement and Amendment thereto. If you have not already done so, you should examine copies of the Unit Agreement, the amendment thereto and the Letter Agreement dated July 28, 1980, and satisfy yourself as to all the terms and provisions thereof, and compliance with the same by the operator and working interest owners.

Our prior opinion noted the existence of four producing wells located within the boundaries of the federal (Sections 4 and 10, T22S, R34E) and state (the captioned lands) storage unit areas, which apparently are not in communication with the state and federal gas storage units. We do not know the current status of these wells. Mr. Clifton R. Reed, who worked for Llano, Inc., in its Hobbs office, previously furnished us with certain information in August, 1988, including bottom hole pressure tests, which he believed clearly indicated that the storage wells in the state and federal gas storage units are not in communication with the four actively producing wells also within the unit boundaries. This information reflected that the storage wells on or about August 13, 1987, had a pressure of approximately 1978 psig and the producing wells have pressures of 1200 or more psig above that level. Also in this connection, Mr. Reed furnished Order No. R-5995, entered by the New Mexico Oil Conservation Division, Case No. 6496, on May 10, 1979, wherein the Division (which is the New Mexico Conservation Authority) contracted the horizontal limits of the Grama Ridge - Morrow Gas Pool to E $\frac{1}{2}$ Section 33, W $\frac{1}{2}$ Section 34, Township 21 South, Range 34 East, N.M.P.M. and W $\frac{1}{2}$ Section 3, All Section 4, and W $\frac{1}{2}$ Section 10, Township 22 South, Range 34 East, N.M.P.M., from the previously existing horizontal boundaries of All Sections 33 and 34, Township 21 South, Range 34 East, N.M.P.M. and All Sections 3, 4 and 10, Township 22 South, Range 34 East, N.M.P.M. The Order was obtained at about the time Minerals, Inc. was promoting the drilling of its No. 1 Llano "3" State Com Well in the E $\frac{1}{2}$ Section 3. This Order is evidence that geologic data was presented to the Division sufficient to prove that the Morrow storage formation in fact did not extend onto the E $\frac{1}{2}$ of the unit lands (being the E $\frac{1}{2}$ Section 34, E $\frac{1}{2}$ Section 3, E $\frac{1}{2}$ Section 10) because of the existence of "an upthrust fault block bounded on ... the east and a north-south trending fault." The Order is probably not binding on the Commissioner of Public Lands with respect to the state storage unit, and is certainly not binding on the Bureau of Land Management.

with respect to the federal storage unit. However, it probably could be used as persuasive evidence that those portions of the storage formations in the E½ of the unit are not in communication with the remaining unit lands, and therefore would be good evidence in the event a contraction of the units was sought.

The State Unit Agreement reflects that it is both for storage and secondary recovery purposes, and in fact assigns tract participations with respect to the unitized Morrow formation. Because of the way the State Agreement is structured, the Commissioner of Public Lands could conceivably claim a violation of the agreement and seek to terminate the same if non-storage wells are completed in the storage formation. However, the agreement does provide a 30 day cure provision and in that event, Redrock could prove that there is not any communication between the storage wells in the W½ of Section 34, Township 21 South, Range 34 East, and W½ Section 3, Township 22 South, Range 34 East, and the producing wells in the E½ of said sections, the state unit could always be contracted in the event the Commissioner gives notice of termination. The plans of operation with respect to the state unit from July 1978 to December 1998 do not reflect that the Commissioner has ever given notice that non-storage wells were drilled on portions of the unit premises in the E½ of Section 34 and the E½ of Section 3. While the necessary filings were made with the Oil Conservation Division, it is doubtful that its knowledge could be imputed to the Commissioner. However, the fact that the wells were drilled many years ago would support an argument for contraction of the unit in the event the Commissioner should assert a default under the unit agreement and attempt to terminate the same.

Based on the foregoing, it is our conclusion that you are reasonably safe in permitting the operating rights in the 320 acre proration units for the existing producing wells vested in Redrock Operating Ltd., Co. (You will not be in a position to conduct operations in the storage interval in the SW¼ Section 34 as Redrock owns no interest therein. We refer you to Exception to Title No. 7 and the discussion preceding Requirement C below for a limitation on Redrock's interests in the SW¼.) As noted above, the New Mexico Oil Conservation Division has in effect already made the determination that the storage unit does not geologically include the lands upon which the producing wells are located, with the possible exception of the No. 1A Government Well in the W½ Section 10, Township 22 South, Range 34 East, N.M.P.M.

new land added

★

In connection with our prior examination we submitted on August 11, 1988, a certificate to be executed by Llano, Inc., NMESCO Fuels, Inc., Minerals, Inc., and Hadson Petroleum (USA), Inc. regarding the producing wells within the official storage unit boundaries. In this regard we have the following requirement.

REQUIREMENT D: If it has not already been done, the certificate which we previously submitted to Llano, Inc. on August 11, 1988, regarding the lack of communication between the active producing wells and the gas storage wells should be executed by appropriate officers of Llano, Inc., NMESCO Fuels, Inc. or their respective successors. In addition, you should review all pressure data and carefully determine that there is no communication between the storage wells and the actively producing wells. Finally, you should satisfy yourself that the Unit Operator is in full compliance with the terms of the Storage Unit Agreement and that the same is in full force and effect.

REQUIREMENT E: Determine the effect, if any, of the cancellation of Leases K-3592-3 and E-7574-3 upon your proposed operations. We note that if you are contemplating a 320 acre communitized spacing unit being the E½ or W½ of the Section, the cancellation of Lease K-3592-3 will delay your proposed operations until the State Land Office has reissued a lease covering the N½.

COMMENT: It appears that many of the producing wells in this area are no longer producing. If this is the case and there are no producing wells on the captioned lease, then the terms of the Unit Agreement may be the only thing holding the captioned lease and preventing it from terminating. If this is the case, please make sure that you do not allow a missed rental payment to cause the Commissioner of Public Lands to cancel the captioned lease as has occurred with respect to adjoining leases. The Ongard Well Completion data dated May 4, 1999, reflects that the Llano 34 State Com Well located 1,650 feet FSL and 660 feet FEL produced in the months of March and September, 1998, but no other months. We refer you to Requirement A above regarding your satisfying yourself that this lease has been maintained by production or other matters down to a current date.

V. **EXCEPTIONS TO TITLE AND REMARKS:**

1. **Possible Adverse Claim:** Stephen L. Collins executed a Mortgage to New Mexico Bank & Trust Company dated May 14, 1980, recorded on June 17, 1980 in Book 377, page 518, mortgaging his oil and gas leasehold estate committed to the Llano 34 State Comm. No. 1 Well in Section 34, Township 22 South, Range 34 East. In this Mortgage, Mortgagor warranted a .0187234 working interest and a .0152 net revenue interest. The Mortgage secures a promissory note in the principal amount of \$35,000.00. The Mortgage has not been released of record. This Mortgagor owns no leasehold interest of record in Section 34, and this Mortgage has the effect of clouding title to the operating rights owned by Redrock Operating Ltd., Co.

REQUIREMENT F: Satisfy yourself, through inquiry of Redrock Operating Ltd., Co. that its predecessor's in title did not assign any operating rights to Stephen L. Collins in Section 34, since date of Llano's, NMESCO's and Hadson's acquisition of operating rights in Section 34. If possible, an affidavit to this effect should be obtained and recorded in the Lea County records. We reserve possible further requirement pending conclusion of your investigation.

2. **Unrecorded Assignment:** The corporate merger from Apache Energy Resources Corporation into Apache Corporation as noted in Section IV, paragraph 2 (e) above is not recorded in the county records. In this regard we have the following requirement.

REQUIREMENT G: A Certificate reflecting the merger of Apache Energy Resources Corporation into Apache Corporation should be recorded in the office of the County Clerk in and for Lea County, New Mexico.

3. **Possible Gas Dedication:** This opinion does not cover the question of possible dedication of natural gas deposits under prior contract subject to the jurisdiction of governmental regulatory agencies. Such dedication may survive the expiration of oil and gas leases owned by the party making the dedication. In this connection the oil and gas leases embracing the captioned land

are subject to certain gas purchase contracts in favor of Phillips Petroleum Company, dated June 11, 1964 and December 2, 1965. These gas contracts are briefly analyzed in our prior opinions to Llano, Inc. which were examined in connection with our original limited opinion of title herein. In addition, the materials examined reflect that Llano, Inc., successor in interest to Shell Oil Company, amended the December 2, 1965, Phillips Petroleum Company contract by Contract Amendment dated June 1, 1979, recorded on November 14, 1979 in Book 364, page 305.

4. **Reassignment Obligations:** The assignments analyzed in Section IV, paragraphs 2 (a) and (b) above contain reassignment obligations that should be noted in your lease file. This is advisory.

5. **Typographical Error in Mortgage Release:** Bank of America executed a Release of Deed of Trust, Mortgage, Assignment, Security Agreement and Financing Statement dated October 15, 1992, recorded in Mortgage Records Book 592, page 337, releasing various mortgage instruments by Hadson Corporation. Two of the instruments referenced in the release contain errors. The first refers to a mortgage recorded in Book 521, page 406, but the correct page is 348. The second is a mortgage recorded in Book 522, page 109, but the correct Book is 552. Since the mortgage lien is completely released as to the captioned land, we make no requirement although we suggest that you secure a release which correctly references all of the mortgage instruments.

6. **Surface:** The surface estate of S½S½ Section 34, Township 21 South, Range 34 East, was owned of record by The Merchant Livestock Company. The surface estate of the balance of the land described in the caption hereof is owned of record by the State of New Mexico, but the same is subject to state grazing lease GT-2533 held by The Merchant Livestock Company, expiring October 1, 2003, and a business lease BL-978 held by GPM Gas Corp, expiring September 25, 1999. The materials under examination also reflect a number of surface rights-of-way crossing portions of the captioned land. Unless requested, we will not list rights of way. This is advisory.

7. **Proposed Production from the Unitized Formation:** The Unit Agreement for the operation of the Grama Ridge Morrow Unit Area dated April 25, 1973, reflects that the unitized formation is the Morrow sands lying between the depths of 12,722 feet and 13,208 feet as shown on the Schlumberger Sonic Log Gamma Ray Log of the Shell Oil Company State GRA Well No. 1 located 1980 feet FNL and 660 feet FWL Section 3 of the Unit Area. Unitized substances are defined as the oil, gas, gasoline and associated fluid hydrocarbons in the unitized formation and the unit area covers all of Section 34. Apparently the captioned well was drilled and completed within this interval, but was not deemed to be producing from the storage reservoir and that the Morrow Storage formation did not extend into the E½ of Section 34. As a result, it appears that Redrock's predecessors in title operated the captioned well without regard to the Unit Agreement. The materials examined do not reflect any separate agreement under which the parties operated this well and its effect on the unit. While this may have been a satisfactory method of conducting business when the unit and the well were each operated by the same or related entities, it becomes more complicated when separate entities operate the well and the gas storage unit. It would be in your best interest, if it has not already been obtained, to secure an agreement with the Gas Storage Unit operator with respect to how the captioned well will be treated and considered, if at all, for unit purposes. It is quite possible that Redrock has already obtained such an agreement in the conduct of its operations on the captioned well, and you should inquire of the existence of such an agreement. If it does not have an agreement, you should give some attention and thought as to the terms and

provisions that should be included within an agreement concerning your proposed operations within this "unit area." It would behoove both the unit operator and you to have an agreement in place, particularly if you intend to stimulate production from the unitized formation. In this regard we have the following requirement.

REQUIREMENT H: Inquire of Redrock whether it has an agreement with the unit operator concerning operations of the captioned well viz a viz the unit. If such an agreement exists, submit it for our examination and we reserve possible further requirement. If the agreement does not exist, you should secure such an agreement prior to your conduct of any operations on the captioned well insofar as it pertains to the unitized formation. Thereafter, you should conduct your operations accordingly.

8. **Limitation of Opinion:** In addition, our opinion is further limited as follows:

(a) **Unsubmitted Agreements:** This opinion does not deal with any matters not revealed by the materials examined, such as unsubmitted agreements, or spacing and proration unit orders.

(b) **Surface - Rights of Way:** This opinion does not cover such matters as area, boundaries, location on the ground, rights of way or other matters which can be determined only from an actual ground survey.

(c) **Securities and Environmental Laws:** This opinion does not deal with any question of state or federal securities or environmental laws or the possible affect thereon on title to the captioned leases and lands or interest assigned therein, or liability imposed thereby. This includes the interest you acquired by virtue of the above described mortgage.

(d) **Physical Examination:** As noted above, our prior opinion was based in part upon a physical examination of the records of Lea County, New Mexico, as reflected by entries in the Tract Book Records and Miscellaneous Indices of Elliott & Waldron Title & Abstract Company, Inc. in Lovington, New Mexico, and of the records of the Commissioner of Public Lands for the State of New Mexico in Santa Fe, New Mexico. All liability for errors and omissions must be limited to those instruments actually examined by us. We have not reviewed the records of the Secretary of State for the State of New Mexico for any financing statements or other instruments affecting the interest of the parties reported in this opinion.

(e) **Four Corners Doctrine:** The New Mexico Supreme Court has repealed the "Four Corners" Doctrine in New Mexico. It has declared that parties to documents affecting title to real property which are otherwise unambiguous on their face may nevertheless introduce unrecorded and unREFERRED to instruments and oral testimony as evidence to prove that the title document accomplishes a result other than that suggested by a plain reading of the title document and any documents expressly referenced therein. The Supreme Court cases have not directly dealt with the fact situation involving a subsequent bona fide purchaser for value. This opinion does not deal with any ambiguity in a title document not apparent on its face, and the subsequent impact of such ambiguity on title to the affected interest.

provisions that should be included within an agreement concerning your proposed operations within this "unit area." It would behoove both the unit operator and you to have an agreement in place, particularly if you intend to stimulate production from the unitized formation. In this regard we have the following requirement.

REQUIREMENT H: Inquire of Redrock whether it has an agreement with the unit operator concerning operations of the captioned well viz a viz the unit. If such an agreement exists, submit it for our examination and we reserve possible further requirement. If the agreement does not exist, you should secure such an agreement prior to your conduct of any operations on the captioned well insofar as it pertains to the unitized formation. Thereafter, you should conduct your operations accordingly.

8. **Limitation of Opinion:** In addition, our opinion is further limited as follows:

(a) **Unsubmitted Agreements:** This opinion does not deal with any matters not revealed by the materials examined, such as unsubmitted agreements, or spacing and proration unit orders.

(b) **Surface - Rights of Way:** This opinion does not cover such matters as area, boundaries, location on the ground, rights of way or other matters which can be determined only from an actual ground survey.

(c) **Securities and Environmental Laws:** This opinion does not deal with any question of state or federal securities or environmental laws or the possible affect thereon on title to the captioned leases and lands or interest assigned therein, or liability imposed thereby. This includes the interest you acquired by virtue of the above described mortgage.

(d) **Physical Examination:** As noted above, our prior opinion was based in part upon a physical examination of the records of Lea County, New Mexico, as reflected by entries in the Tract Book Records and Miscellaneous Indices of Elliott & Waldron Title & Abstract Company, Inc. in Lovington, New Mexico, and of the records of the Commissioner of Public Lands for the State of New Mexico in Santa Fe, New Mexico. All liability for errors and omissions must be limited to those instruments actually examined by us. We have not reviewed the records of the Secretary of State for the State of New Mexico for any financing statements or other instruments affecting the interest of the parties reported in this opinion.

(e) **Four Corners Doctrine:** The New Mexico Supreme Court has repealed the "Four Corners" Doctrine in New Mexico. It has declared that parties to documents affecting title to real property which are otherwise unambiguous on their face may nevertheless introduce unrecorded and unREFERRED to instruments and oral testimony as evidence to prove that the title document accomplishes a result other than that suggested by a plain reading of the title document and any documents expressly referenced therein. The Supreme Court cases have not directly dealt with the fact situation involving a subsequent bona fide purchaser for value. This opinion does not deal with any ambiguity in a title document not apparent on its face, and the subsequent impact of such ambiguity on title to the affected interest.

(f) **Reliance:** Without our prior written consent, this opinion may be relied upon only by the addressee hereof.

9. **Taxes:** Under the current taxing practices of the New Mexico taxing authorities, severed minerals are not assessed for ad valorem tax purposes, therefore, no ad valorem taxes are due and payable under the current taxing practices. This is advisory.

Respectfully submitted,

HINKLE, COX, EATON, COFFIELD & HENSLEY, L.L.P.

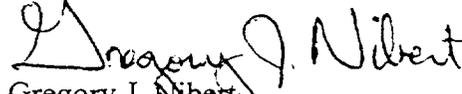

Gregory J. Nibert

EXHIBIT "A"

(a) Limited Opinion of Title No. 26,644, dated August 16, 1988, and the Limited Cumulative Supplemental thereto dated December 28, 1988, addressed to Bank of America National Trust & Savings Association, which reported title to the lands and interests covered in this opinion based upon prior title opinions of this firm and supplemental physical searches of the State and County Records, collectively covering the time periods from inception of records down to December 15, 1988 at 9:00 a.m. as to the State Records and from inception of records down to December 12, 1988, at 8:00 a.m. as to the County Records.

(b) Federal Abstract Company Abstract of Title No. 49458 purporting to contain all instruments filed in the office of the Commissioner of Public Lands of New Mexico, pertaining to the State Lease and lands described in the caption hereof, which are located in the State Land Office at Santa Fe, New Mexico, for the time period from December 15, 1988 at 9:00 a.m. down to May 3, 1999 at 8:00 a.m.

(c) Elliott & Waldron Title & Abstract Company, Inc. abstract of title No. 99-196 purporting to contain all instruments in the offices of the County Clerk and of the District Court Clerk pertaining to the mineral estate only of the lands described in the caption hereof for the time period from December 12, 1988 at 7:00 a.m. down to April 12, 1999 at 7:00 a.m.

(d) The Unit files maintained by the Bureau of Land Management Roswell Field Office in Roswell, New Mexico with respect to the Unit Agreement for the Operation of the Grama Ridge Morrow Unit Area on May 5, 1999.

Redrock Operating Ltd., Co.
P.O. Box 140505
Dallas, Texas 75214

May 17, 1999

John Hillman
Roca Resources Company, Inc.
P.O. Box 1981
Midland, TX 79702-1981

Dear John,

I received copies of the title opinions prepared for sections 10 and 34. The following are our responses to those cited requirements, and suggestions for curing the defects:

Section 10

Follow-up

Requirement A - ROCA Resources should contact the appropriate agency to determine the lease validity (ie. MMS). Redrock's past correspondence indicates that it is valid.

Follow-up

Requirement B - It is unclear as to what ROCA wants for evidence of lands to be assigned. The assignment states the lease number being assigned. The MMS can confirm the lands covered by the lease. Attached is a copy of the lease description.

?

Requirement C - Redrock proposes that the overriding royalty retained be reduced unless Redrock obtains a correctional assignment of the override.

OK

Requirement D - Llano or any of the other entities is unwilling to sign an agreement of this nature. ROCA will have to satisfy themselves as to potential communication with the storage field. There have been no claims made by Llano, and the records indicate that the well is not in communication.

OK

Requirement E - This requirement is one of an advisory nature and is not necessary. ROCA should be able to determine the succession of Apache based on the certificates provided and attached hereto.

?

Requirement F - Our response is the same as in requirement C above.

*Follow-up
Identify well
Rebate*

Requirement G - This requirement is not applicable to the rights being assigned. It is only applicable to gas being stored in the storage field. We never intended to assign gas from the storage field. *Over section 7 & 8 for storage gas only*

BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 12622 Exhibit No. 13
Submitted by:
NEARBURG EXPLORATION COMPANY, L.L.C.
Special Commission Hearing: September 10,
2002

Section 34

Follow-up

Requirement A - The State of New Mexico can confirm that the lease is held by the Storage agreement.

Follow-up

Requirement B - We do not have a copy of a farmout agreement and to our knowledge there is no farmout agreement in effect.

OK

Requirement C - We did not intend to convey any interests in the storage interval. Therefore this is an advisory item only.

OK

Requirement D - Llano or any of the other entities is unwilling to sign an agreement of this nature. ROCA will have to satisfy themselves as to potential communication in the storage interval. Well records indicate that the well has not produced from the storage interval. Further, the State will testify as to whether the terms of the storage agreement are in compliance.

Follow-up
as noted on 5/12/99

Requirement E - This requirement is subject to ROCA's evaluation of intended operations.

Requirement F - According to completion records the well has never been produced or completed in the storage interval. This matter needs to be reviewed by ROCA to their satisfaction. *Stephen L. Coleman Chairman*

OK

Requirement G - This requirement is one of an advisory nature and is not necessary. ROCA should be able to determine the succession of Apache based on the certificates provided and attached.

OK

Requirement H - The only agreement that Redrock is aware of pertains to the storage agreement as noted in requirement C.

Call me once you have had a chance to review.

Very Truly Yours,

Mark L. Stanger

Mark L. Stanger

R 34 E

TXO
S. Wilson Deep #1
TD 13,117

BTA Oil
Merchant 8700 JV-P #1
TD 12,748

Nearburg Prod. Co.
Grama Ridge '23' State #1
TD 12,920

Sinclair Oil
So. Wilson Deep Ut. #1
TD 14,368

BTA Oil
20005 JV-P State "23" Com #1
TD 12,950

Ohio Oil
Wilson State #1-A-24
TD 14,073

Pogo Prod.
State "L" 921 #2
TD 14,550

Devon Energy
O. W. State #1
TD 13,300

-8945

-10,735

Pogo Prod.
GRW #1
TD 13,405

Pogo Prod.
State Comm #2-L
TD 13,107

-9246

Pogo Prod.
State "L" 922 #2
TD 14,182

BTA Oil
Grama 8817 #2-B
TD 13,260

Texaco
New Mexico St. #1-BZ
TD 13,350

Getty Oil
Getty State #1-25
TD 13,162

-10,235

BTA Oil
Grama 8817 #1-B
TD 13,308

-9457

-9385

Nearburg Prod. Co.
Grama Ridge '34' #1
TD 13,500

BTA Oil
Burgundy 20005 JV-P #1
TD 13,353

Getty Oil
Getty 35 State #2
TD 13,297

Getty Oil
Getty 36 St. Co. #1
TD 13,346

-9700'

Shell Oil
GRB State #1
TD 14,601

Minerals Inc.
Llano "34" St. Com. #1
TD 13,280

Getty Oil
Getty 35 State #1
TD 13,355

-9545

-9524

Shell Oil
S. Wilson Ut. #2
TD 13,384

-9501

-9448

-9522

Getty Oil
Getty State Co. #1-1
TD 13,428

32

Shell Oil
Shell Fed. #1-GR-4
TD 14,869

Shell Oil
State #1
TD 13,250

Minerals Inc.
Llano 3 State Co. #1
TD 13,310

Getty Oil
Two State #1
TD 13,386

Getty Oil
Getty State 2 #1
TD 13,350

-9665

5

C. W. Trainer
Harris Fed. #1
TD 14,054

-10,405

3

4

2

1

0

-1

-2

-3

-4

-5

-6

-7

-8

-9

-10

-11

-12

-13

-14

-15

-16

-17

-18

-19

-20

-21

-22

-23

-24

-25

-26

-27

-28

-29

-30

-31

-32

-33

-34

-35

-36

-37

-38

-39

-40

-41

-42

-43

-44

-45

-46

-47

-48

-49

-50

-51

-52

-53

-54

-55

-56

-57

-58

-59

-60

-61

-62

-63

-64

-65

-66

-67

-68

-69

-70

-71

-72

-73

-74

-75

-76

-77

-78

-79

-80

-81

-82

-83

-84

-85

-86

-87

-88

-89

-90

-91

-92

-93

-94

-95

-96

-97

-98

-99

-100

-101

-102

-103

-104

-105

-106

-107

-108

-109

-110

-111

-112

-113

-114

-115

-116

-117

-118

-119

-120

-121

-122

-123

-124

-125

-126

-127

-128

-129

-130

-131

-132

-133

-134

-135

-136

-137

-138

-139

-140

-141

-142

-143

-144

-145

-146

-147

-148

-149

-150

-151

-152

-153

-154

-155

-156

-157

-158

-159

-160

-161

-162

-163

-164

-165

-166

-167

-168

-169

-170

-171

-172

-173

-174

-175

-176

-177

-178

-179

-180

-181

-182

-183

-184

-185

-186

-187

-188

-189

-190

-191

-192

-193

-194

-195

-196

-197

-198

-199

-200

-201

-202

-203

-204

-205

-206

-207

-208

-209

-210

-211

-212

-213

-214

-215

-216

-217

-218

-219

-220

-221

-222

-223

-224

-225

-226

-227

-228

-229

-230

-231

-232

-233

-234

-235

-236

-237

-238

-239

-240

-241

-242

-243

-244

-245

-246

-247

-248

-249

-250

-251

-252

-253

-254

-255

-256

-257

-258

-259

-260

-261

-262

-263

-264

-265

-266

-267

-268

-269

-270

-271

-272

-273

-274

-275

-276

-277

-278

-279

-280

-281

-282

-283

-284

-285

R 34 E

TXO
S. Wilson Deep #1
TD 13,117

BTA Oil
Merchant 8700 JV-P #1
TD 12,748

Nearburg Prod. Co.
Grama Ridge '23' State #1
TD 12,920

Ohio Oil
Wilson State #1-A-24
TD 14,073
18/0

Pogo Prod.
State "L" 921 #2
TD 14,550
18/5

Devon Energy
O. W. State #1
TD 13,300

Sinclair Oil
So. Wilson Deep Ut. #1
TD 14,368
48/6

BTA Oil
2005 JV-P State "23" Com #1
TD 12,950

Pogo Prod.
GRW #1
TD 13,405

Pogo Prod.
State Comm #2-L
TD 13,107

28 Pogo Prod.
State "L" 922 #2
TD 14,182
3/0

57/17 BTA Oil
Grama 8817 #2-B
TD 13,260

BTA Oil
Grama 8817 #1-B
TD 13,308

Getty Oil
Getty State #1-25
TD 13,162

Nearburg Prod. Co.
Grama Ridge '34' #1
TD 13,500

BTA Oil
Burgundy 2005 JV-P #1
TD 13,353

Getty Oil
Getty 35 State #2
TD 13,297

Getty Oil
Getty 36 St. Co. #1
TD 13,346

33 Shell Oil
S. Wilson Ut. #2
TD 13,384

Shell Oil
GRB State #1
TD 14,601

34 Minerals Inc.
Llano "34" St. Com. #1
TD 13,280

Getty Oil
Getty 35 State #1
TD 13,355

33/31

17/2

Shell Oil
Shell Fed. #1-GR-4
TD 14,869

Shell Oil
State #1
TD 13,250

Minerals Inc.
Llano 3 State Co. #1
TD 13,310

Getty Oil
Two State #1
TD 13,386

Getty Oil
Getty State #1
TD 13,350

Getty Oil
Getty State Co. #1-1
TD 13,428

82/6

44/6

66/27

14/3

62/4

25/1

Oryx Energy
Grama Ridge Fed. #2
TD 13,375

68/38
Oryx Energy
Grama Ridge Federal 8817 JV P #1
TD 13,350

Superior Oil
Government #1-A
TD 13,400

Minerals Inc.
Government #2-A
TD 13,430

L-B Oil
State #1
TD 13,451

24/0

Texaco
New Mexico St. #1-DU
TD 13,294

Enron
Grama Ridge-St. #1
TD 13,570

BTA Oil
8817 JV-P Grama Ridge Fed #3
TD 13,360

BTA Oil
Grama 8817 #1
TD 13,500

BTA Oil
Chiso 8711 #1
TD 13,500

BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 12622 Exhibit No. 15
Submitted by:
NEARBURG EXPLORATION COMPANY, L.L.C.
Special Commission Hearing: September 10, 2002

Great Western Drilling Co.

Grama Ridge Prospect
Lea County, New Mexico

Lower Morrow "B" Sand
Gross Isopach
Productive from "B" Sd.

Scale: 1"=2000'
C.I. = 20'

RGC
8/02

American Quasar
15 OJO Chiso Unit #2
TD 13,584

R 34 E

TXO
S. Wilson Deep #1
TD 13,117

BTA Oil
Merchant 8700 JV-P #1
TD 12,748

Nearburg Prod. Co.
Grama Ridge '23' State #1
TD 12,920

Sinclair Oil
So. Wilson Deep Ut. #1
TD 14,368

BTA Oil
20005 JV-P State "23" Com #1
TD 12,950

Ohio Oil
Wilson State #1-A-24
TD 14,073

Pogo Prod.
State "L" 921 #2
TD 14,550

Devon Energy
O. W. State #1
TD 13,300

Pogo Prod.
State Comm #2-L
TD 13,107

Pogo Prod.
GRW #1
TD 13,405

BTA Oil
Grama 8817 #2-B
TD 13,260

Texaco
New Mexico St. #1-BZ
TD 13,350

Pogo Prod.
State "L" 922 #2
TD 14,182

BTA Oil
Grama 8817 #1-B
TD 13,308

Nearburg Prod. Co.
Grama Ridge '34' #1
TD 13,500

BTA Oil
Burgundy 20005 JV-P #1
TD 13,353

Getty Oil
Getty 35 State #2
TD 13,297

Getty Oil
Getty 36 St. Co. #1
TD 13,346

Shell Oil
S. Wilson Ut. #2
TD 13,384

Shell Oil
GRB State #1
TD 14,601

Minerals Inc.
Llano "34" St. Com. #1
TD 13,280

Getty Oil
Getty 35 State #1
TD 13,355

Shell Oil
Shell Fed. #1-GR-4
TD 14,869

Shell Oil
State #1
TD 13,250

Minerals Inc.
Llano 3 State Co. #1
TD 13,310

Getty Oil
Two State #1
TD 13,386

Getty Oil
Getty State 2 #1
TD 13,350

Getty Oil
Getty State Co. #1-1
TD 13,428

Enron
Grama Ridge-St. #1
TD 13,570

Oryx Energy
Grama Ridge Fed. #2
TD 13,375

Oryx Energy
Grama Ridge Federal 8817 JV P #1
TD 13,350

Superior Oil
Government #1-A
TD 13,400

Minerals Inc.
Government #2-A
TD 13,430

L-B Oil
State #1
TD 13,451

Texaco
New Mexico St. #1-DU
TD 13,294

BTA Oil
8817 JV-P Grama Ridge Fed #3
TD 13,360

Superior Oil
Government #1-A
TD 13,400

Minerals Inc.
Government #2-A
TD 13,430

L-B Oil
State #1
TD 13,451

L-B Oil
State Com. #2
TD 13,432

BTA Oil
Grama 8817 #1
TD 13,500

American Quasar
OJO Chiso Unit #2
TD 13,584

BTA Oil
Chiso 8711 #1
TD 13,500

Great Western Drilling Co.

Grama Ridge Prospect

Lea County, New Mexico

Morrow "B₂" Sand
Net Isopach

(GR ≤ 50 API, Ø ≥ 8% Den.)

Productive from "B₂" Sd.

Scale: 1"=2000'

C.I. = 5'

RGC

8/02

BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 12622 Exhibit No. 16
Submitted by:

NEARBURG EXPLORATION COMPANY, L.L.C.

Special Commission Hearing: September 10, 2002

2nd sand down from top of

R 34 E

TXO
S. Wilson Deep #1
TD 13,117

BTA Oil
Merchant 8700 JV-P #1
TD 12,748

Nearburg Prod. Co.
Grama Ridge '23' State #1
TD 12,920

Sinclair Oil
So. Wilson Deep Ut. #1
TD 14,368

BTA Oil
20005 JV-P State "23" Com #1
TD 12,950

Ohio Oil
Wilson State #1-A-24
TD 14,073

Pogo Prod.
State "L" 921 #2
TD 14,550

Devon Energy
O. W. State #1
TD 13,300

Pogo Prod.
GRW #1
TD 13,405

BTA Oil
Grama 8817 #2-B
TD 13,260

Pogo Prod.
State Comm #2-L
TD 13,107

Pogo Prod.
State "L" 922 #2
TD 14,182

BTA Oil
Grama 8817 #1-B
TD 13,308

Texaco
New Mexico St. #1-BZ
TD 13,350

Getty Oil
Getty State #1-25
TD 13,162

Nearburg Prod. Co.
Grama Ridge '34' #1
TD 13,500

BTA Oil
Burgundy 20005 JV-P #1
TD 13,353

Getty Oil
Getty 35 State #2
TD 13,297

Getty Oil
Getty 36 St. Co. #1
TD 13,346

Shell Oil
S. Wilson Ut. #2
TD 13,384

Shell Oil
GRB State #1
TD 14,601

Minerals Inc.
Llano "34" St. Com. #1
TD 13,280

Getty Oil
Getty 35 State #1
TD 13,355

Getty Oil
Getty 35 State #1
TD 13,355

Getty Oil
Getty State Co. #1-1
TD 13,428

Shell Oil
Shell Fed. #1-GR-4
TD 14,869

Shell Oil
State #1
TD 13,250

Minerals Inc.
Llano 3 State Co. #1
TD 13,310

Getty Oil
Two State #1
TD 13,386

Getty Oil
Getty State 2 #1
TD 13,350

Getty Oil
Getty State Co. #1-1
TD 13,428

C. W. Trainer
Harris Fed. #1
TD 14,054

Oryx Energy
Grama Ridge Fed. #2
TD 13,375

Oryx Energy
Grama Ridge Federal 8817 JV #1
TD 13,350

Superior Oil
Government #1-A
TD 13,400

Minerals Inc.
Government #2-A
TD 13,430

L-B Oil
State #1
TD 13,451

Texaco
New Mexico St. #1-DU
TD 13,294

Enron
Grama Ridge-St. #1
TD 13,570

BTA Oil
8817 JV-P Grama Ridge Fed #3
TD 13,360

BTA Oil
Grama 8817 #1
TD 13,500

BTA Oil
Chiso 8711 #1
TD 13,500

American Quasar
OJO Chiso Unit #2
TD 13,584

Great Western Drilling Co.

Grama Ridge Prospect
Lea County, New Mexico

Morrow "A" Sand
Net Isopach

(GR ≤ 50, Ø ≥ 8%)

Productive from "A" Sd.

Scale: 1"=2000'
C.I. = 5'

RGC
8/02

BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 12622 Exhibit No. 17
Submitted by:
NEARBURG EXPLORATION COMPANY, L.L.C.
Special Commission Hearing

Schlumberger

REPEAT FORMATION TESTER

COUNTY GRAMMA
FIELD GRAMMA MORROW EAST
LOCATION LLANO 34 STATE COM #1
WELL LLANO 34 STATE COM #1
COMPANY MINERALS INC.

COMPANY MINERALS INCORPORATED
WELL LLANO 34 STATE COM #1
FIELD GRAMMA RIDGE MORROW EAST
COUNTY LEA STATE NEW MEXICO

NOTED
LLANO INC.
BOX 1320
HOBBS, NEW MEXICO 88240

LOCATION 1650' FSL & 660' FEL
API SERIAL NO. SEC TWP RANGE
34 21-S 34-E

Other Services:
CL
CNL/FDC
DLL
BHC

Permanent Datum: G.L. ; Elev.: 3651
Log Measured From: K.B. 21 Ft. Above Perm. Datum
Drilling Measured From: K.B.

Elev.: K.B. 36:2
D.F. 36:1
G.L. 36:1

Date	9-1-79	
Run No.	ONE	
Test No's.		
Type Fluid in Hole	SALT MID	
Dens.	12.2	55
Visc.		
pH	8.5	2
Fluid Loss		
Source of Sample	CIRC	
R _m @ Meas. Temp.	.05 @ 99 °F	@ °F
R _{mf} @ Meas. Temp.	.04 @ 99 °F	@ °F
R _{mc} @ Meas. Temp.	.08 @ 99 °F	@ °F
Source: R _{mf} R _{mc}	M C	
R _m @ BHT	.03 @ 177 °F	@ °F
Circulation Stopped	1800	8-31
Logger on Bottom	0000	9-2
Max. Rec. Temp.	177 °F	°F
Recorded By	MILLNER	
Witnessed By	COLLINS	

Run No.	BORE-HOLE RECORD			Size
	Bit	From	To	

BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 12622 Exhibit No. 18
Submitted by:
NEARBURG EXPLORATION COMPANY, L.L.C.
Special Commission Hearing: September 10, 2002

The well name, location and borehole reference data were furnished by the customer.

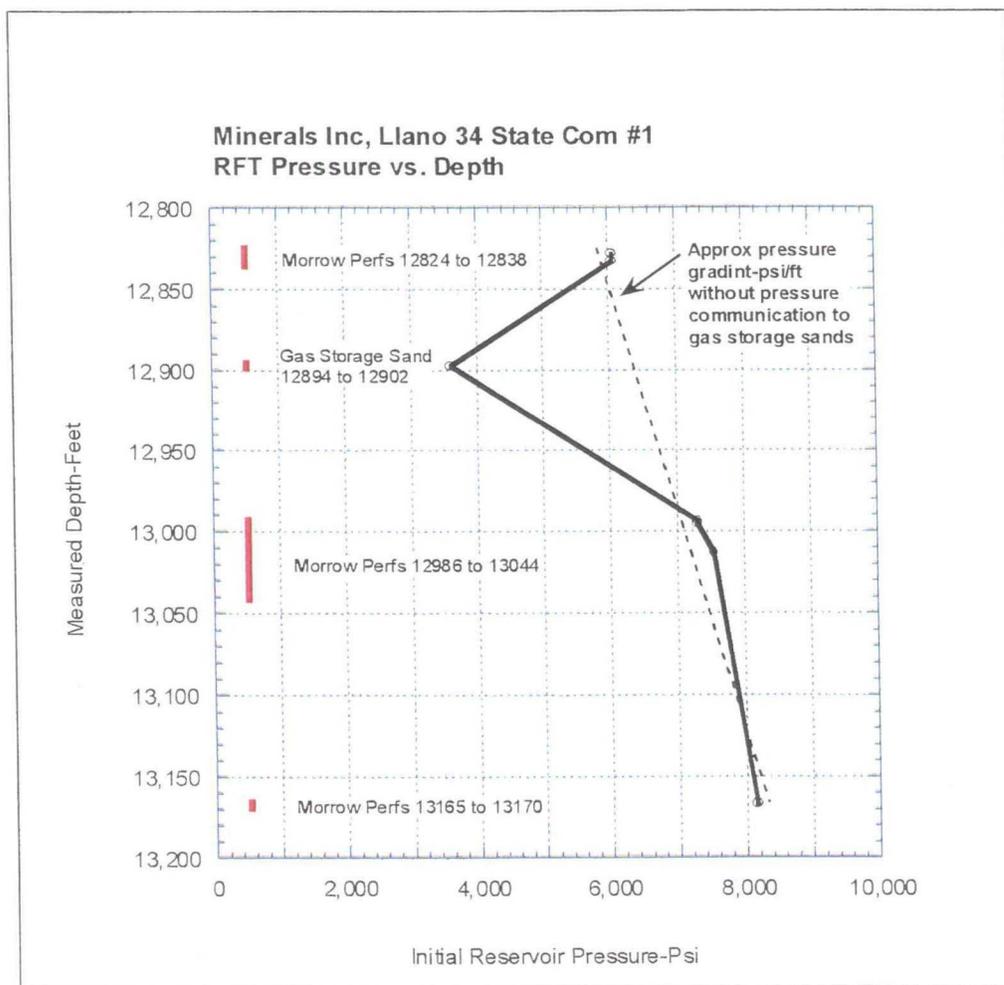
EQUIPMENT DATA	
Run No.	ONE
RFP No.	8042
RPP No.	1571
RVP No.	MILLNER
RFM No.	152
RFC No.	163
Run No.	ONE
Operating rig time	
Logging Truck No.	
F.T. Truck No.	
F.T. Engineer	
F.T. Operator	
Location	HOBBS

22
22
22

Minerals Inc, Llano 34 State Com #1

RFT Data and Results

Measured Depth (ft)	Subsea Depth (ft)	RFT Pressure (psi)	Pressure Gradient (psi/ft)	RFT Results
12828	-9156	6044	0.47	Not in communication with Morrow gas storage sands
12833	-9161	6043	0.47	Not in communication with Morrow gas storage sands
12897	-9225	3597	0.28	In communication with Morrow gas storage sands
12897	-9225	3596	0.28	In communication with Morrow gas storage sands
12994	-9322	7294	0.56	Not in communication with Morrow gas storage sands
12995	-9323	7286	0.56	Not in communication with Morrow gas storage sands
13013	-9341	7536	0.58	Not in communication with Morrow gas storage sands
13166	-9494	8139	0.62	Not in communication with Morrow gas storage sands
13167	-9495	8134	0.62	Not in communication with Morrow gas storage sands

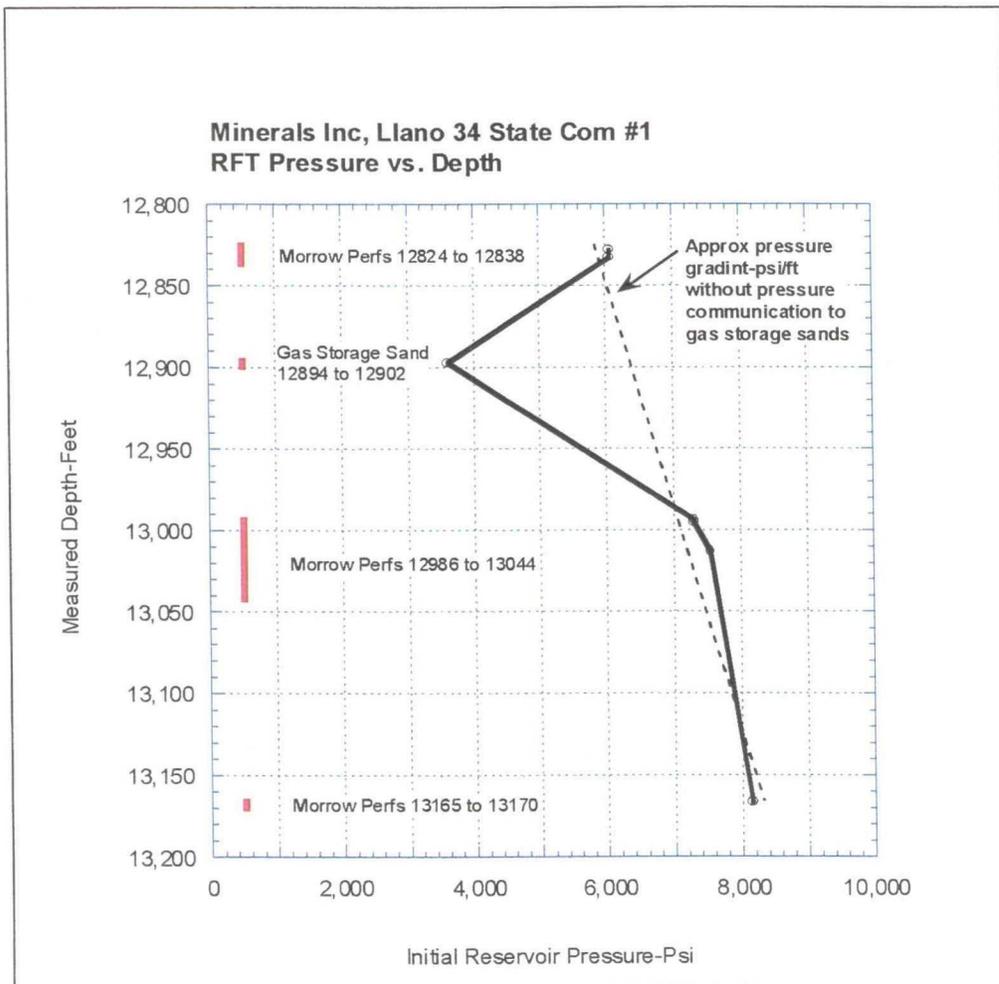


BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 12622/12908 Exhibit No. 18
Submitted by:
NEARBURG EXPLORATION COMPANY, L.L.C.
Special Commission Hearing: October 21, 2002

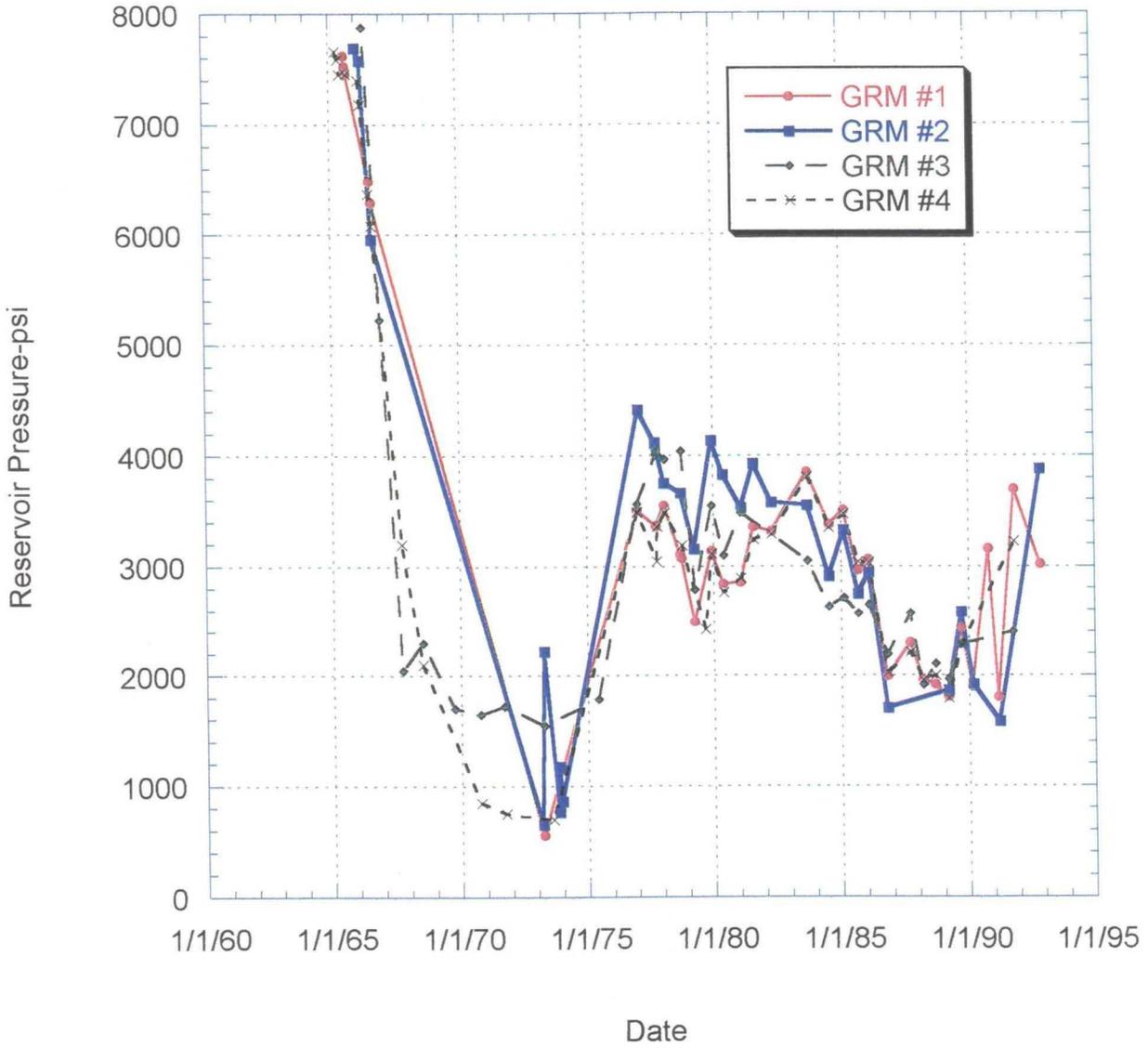
Minerals Inc, Llano 34 State Com #1

RFT Data and Results

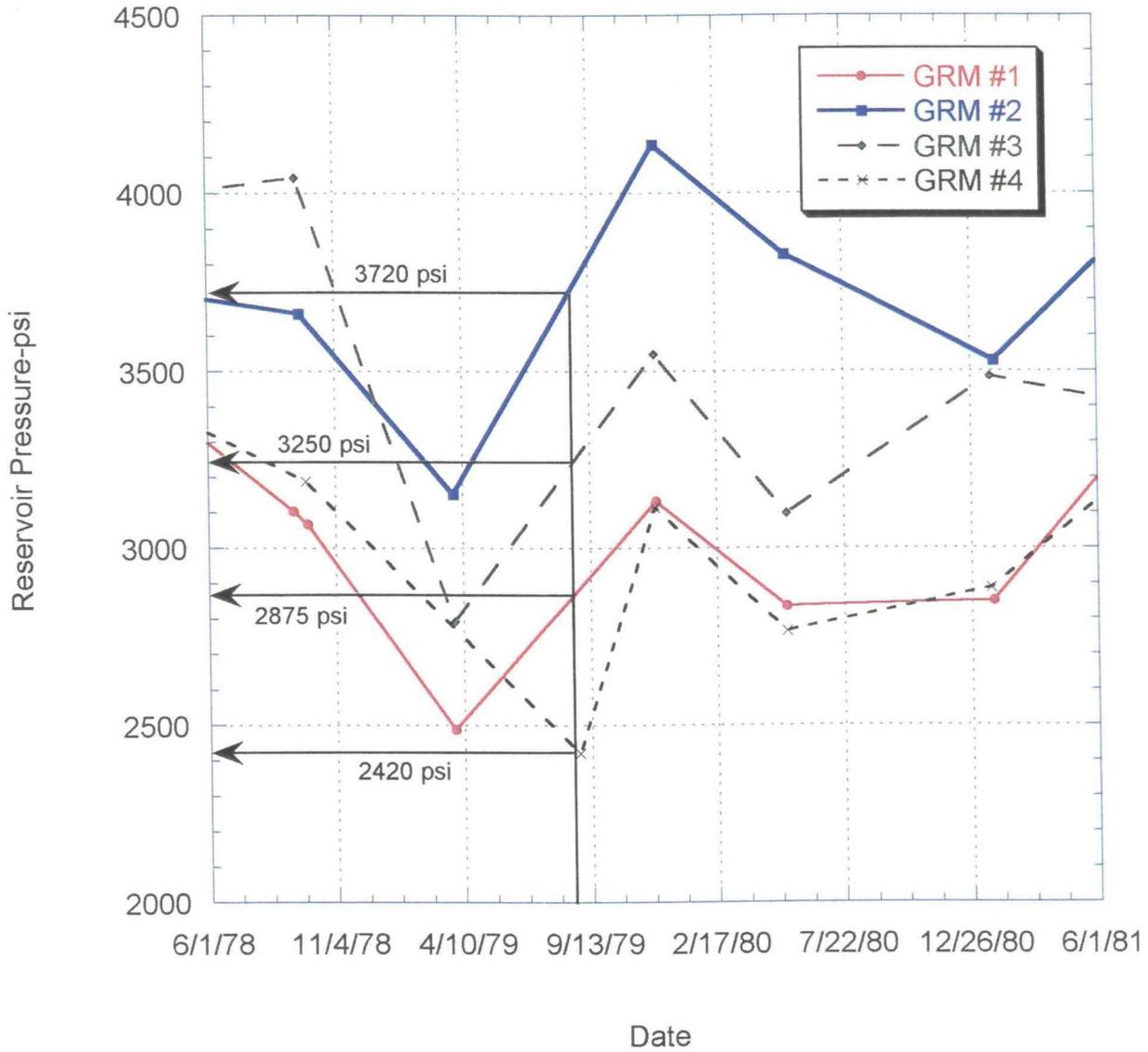
Measured Depth (ft)	Subsea Depth (ft)	RFT Pressure (psi)	Pressure Gradient (psi/ft)	RFT Results
12828	-9156	6044	0.47	Not in communication with Morrow gas storage sands
12833	-9161	6043	0.47	Not in communication with Morrow gas storage sands
12897	-9225	3597	0.28	In communication with Morrow gas storage sands
12897	-9225	3596	0.28	In communication with Morrow gas storage sands
12994	-9322	7294	0.56	Not in communication with Morrow gas storage sands
12995	-9323	7286	0.56	Not in communication with Morrow gas storage sands
13013	-9341	7536	0.58	Not in communication with Morrow gas storage sands
13166	-9494	8139	0.62	Not in communication with Morrow gas storage sands
13167	-9495	8134	0.62	Not in communication with Morrow gas storage sands



GRM Unit Morrow Gas Storage Unit Reservoir Pressure vs. Time



GRM Unit
Morrow Gas Storage Unit Reservoir Pressure vs. Time



GRM Unit Reservoir Pressure

GRM Unit #1				GRM Unit #2				GRM Unit #3				GRM Unit #4			
Date	SITP-psi	BHP-psi	ΔP-psi	Date	SITP-psi	BHP-psi	ΔP-psi	Date	SITP-psi	BHP-psi	ΔP-psi	Date	SITP-psi	BHP-psi	ΔP-psi
7/31/1965		7611		1/12/1966		7688		5/11/1966		7880		4/1/1965		7658	
8/20/1965		7519		3/21/1966		7572		11/30/1966		5230		5/9/1965		7582	
9/1/1965	5937	7452	1515	8/10/1966		5951		9/19/1967		1562		6/1/1965	5807	7451	1644
7/19/1966	5025	6481	1456	9/19/1967	1627			7/3/1968		1750		9/1/1965		7456	
8/11/1966	4913	6286	1373	7/3/1968	803			9/22/1969		1333		2/21/1966		7401	
9/19/1967	2498			9/30/1970	492			9/30/1970		1267		3/21/1966		7179	
7/3/1968	1548			9/16/1971	385			9/6/1971		1334		6/30/1966		6367	
9/29/1969	719			3/10/1973	175	650	475	4/4/1973		1131	1548	8/11/1966		6079	
9/30/1970	468			4/17/1973	890	2220	1330	12/7/1974		1358		9/17/1967		6079	
9/16/1971	365			11/3/1973	236	763	527	5/30/1975		1297		7/3/1968		3200	665
3/29/1973	184	548	364	11/13/1973	489	1175	686	8/15/1975		1586	1786	9/30/1970		2100	512
12/28/1976	2617	3498	881	12/21/1973	665	860	195	12/14/1976		2457	3562	9/16/1971		850	165
9/29/1977	2498	3355	857	1/24/1977	3330	4409	1079	12/16/1976		2453	3563	8/1/1973		750	126
1/23/1978	2581	3540	959	9/19/1977	3079	4107	1028	9/22/1977		2839	4020	12/7/1974		700	99
9/14/1978	2258	3102	844	9/22/1977	3083	4121	1038	9/26/1977		2847	4052	8/15/1975			
10/2/1978	2260	3066	806	1/23/1978	2766	3749	983	1/23/1978		2786	3968	12/14/1976			
3/30/1979	1850	2488	638	9/22/1978	2601	3662	1061	9/19/1978		2655	4044	12/15/1976			
12/5/1979	2314	3131	817	3/29/1979	2338	3151	813	3/29/1979		1988	2793	8/05/12/16/1976			
5/13/1980	2093	2835	742	12/5/1979	3097	4136	1039	12/3/1979		2395	3548	9/29/1977			
1/22/1981	2105	2851	746	5/13/1980	2848	3827	979	5/13/1980		2192	3098	10/2/1977			
7/28/1981	2475	3351	876	1/24/1981	2624	3529	905	1/20/1981		2464	3486	1/23/1978			
8/30/1983	2841	3308	861	7/24/1981	2918	3925	1007	8/30/1983		2159	3053	8/30/1979			
7/12/1984	2447	3373	926	4/7/1982	2621	3572	951	7/7/1984		1872	2636	12/3/1979			
1/28/1985	2577	3497	920	9/2/1983	2619	3548	929	1/28/1985		1899	2716	5/13/1980			
8/26/1985	2150	2958	808	7/7/1984	2128	2909	781	8/26/1985		1806	2570	1/20/1981			
1/28/1986	2269	3055	786	8/26/1985	2003	2748	745	10/22/1986		1573	1887	7/28/1981			
10/22/1986	1458	1992	534	1/28/1986	2162	2942	762	9/14/1987		1817	2571	4/7/1982			
9/14/1987	1689	2293	604	10/22/1986	1268	1701	433	3/15/1988		1373	1915	8/30/1983			
3/15/1988	1456	1958	502	3/14/1989	1361	1863	502	9/6/1988		1476	2111	7/7/1984			
9/6/1988	1412	1911	499	9/18/1989	1862	2584	502	3/14/1989		1431	1971	1/28/1985			
3/14/1989	1313	1806	493	3/7/1990		1917	9/18/1989		1611	2281	670	8/26/1985			
9/18/1989	1783	2434		3/12/1991		1578	10/3/1991		2399			1/28/1986			
3/1/1990		1906		1/14/1992								10/22/1986			
10/22/1990		3155		11/9/1992		2898						9/14/1987			
3/4/1991		1802										3/15/1988			
10/30/1991	2710	3690	980									9/6/1988			
11/12/1992	2240	3015	775									3/14/1989			
												9/18/1989			
												10/30/1991			

MEMORANDUM

TO: Donald L. Garey

DATE: November 16, 1979

RE: Engineering Evaluation and Update of
Minerals, Inc.'s Llano 34 State Com. No. 1

*Bill Can
See Page 2*

This memorandum is an engineering summary of the probable and actual producing pays encountered during the drilling of the subject well. Also included is an update of the completion work performed thus far and estimates of possible future courses of actions to re-establish acceptable production rates.

Evaluation of Productive Zones

Strawn: The Strawn Lime Reef was encountered in the interval 11,700' to 11,800'. A drillstem test over this interval indicated small amounts of gas flow plus oil recovery in the drillpipe. The initial completion attempt of this well was made in this interval. The reef was perforated and acidized twice, resulting in a potential after the second acid job of swabbing 11 barrels of oil and 203 MCF gas per day. This indicated a very marginal oil zone and these perforations were squeezed with cement. Prior to abandonment of the well, this particular zone should be reperforated and treated as necessary to pump an estimated 15 to 20 barrels of oil per day and flow an estimated 250 to 350 MCF of gas per day.

Atoka: Two zones of interest were encountered in the Atoka Formation. The first zone at 12,200', a limey dolomite, with marginal porosity, is considered a salvage zone. This zone produced minor amounts of gas on drillstem test; and it is estimated that after perforating and treating, it may be capable of producing 250 to 300 MCF of gas per day.

The second Atoka Zone covers the interval 12,400' to 12,475', consisting of 15 feet of net pay of five to six percent porosity. Schlumberger considers this zone to be a very good prospect for producing gas in commercial quantities. On drillstem test this interval flowed 60 MCF per day at a back pressure of 29 psi. Being a limey dolomite, Schlumberger is of the opinion that this zone after treatment may be capable of producing 1,500 to 2,000 MCF per day. Following the depletion of the known productive Morrow gas intervals, this appears to be the next producing interval in which a recompletion attempt should be made.

Morrow: Detailed mechanical pressure measurements downhole, log analysis and actual flow tests upon completion indicate the Morrow to be productive in the following zones:

Upper Morrow (Morrow "A"): The Upper Morrow has 14 feet of net sand pay with a porosity range of 14 to 18 percent at a depth of 12,824'. A bottomhole pressure obtained exclusively in this interval indicated 6,044 psig. Since virgin Morrow pressures in this area are higher and log analysis indicates the two east offset wells (Getty 35 State No. 1 and Getty 36 State No. 1) are producing from a correlative interval, it is concluded that the Getty wells are in communication with the subject

well and are able to drain this Upper Morrow interval. Following the completion attempt in the Strawn Reef, the Upper Morrow was perforated and dual tubing strings were run into the well. After the well had been flanged up, the Upper Morrow was swabbed in and within a few hours flowed at the rate of 3,600 MCFPD with a flowing tubing pressure of 1350 psi. The Upper Morrow remained at this sustained rate for a period of four hours and indications were that the zone had cleaned up; and, therefore, the well was shut in. Two days later a four-point back pressure test, as required by the New Mexico Oil Conservation Division, was run and the Upper Morrow at the highest selected flow rate during this test flowed 2,346 MCF per day with a flowing tubing pressure of 1453 psi. This zone was then shut in to await pipeline connection.

Morrow "B": The Morrow "B" Zone was developed in this well across the interval 12,895' to 12,902'. An independent pressure measurement on this interval showed that the bottomhole pressure of the Morrow "B" is 3597 psi. This indicates that at the subject well's location the Morrow "B" Zone is in direct communication with the Llano-operated Grama Ridge Morrow Underground Gas Storage System; and therefore, as stipulated in the farmout agreement, the Morrow "B" will not be produced from the subject wellbore.

Lower Morrow (Morrow "D", "E" and "F"): The Lower Morrow Zone in the Llano "34" consists of the Morrow "D" and "E" and a producing sand newly-identified as the Morrow "F" Zone. The Lower Morrow interval may have approximately 25 feet of net sand pay over a gross interval of 12,986' to 13,170' with porosity ranging from 7 to 13 percent. Each of the three zones making up the Lower Morrow indicated individual virgin bottomhole pressure; for example, the "D" recorded 7286 psi, the "E" 7536 psi and the "F" 8139 psi. After the Upper Morrow had been flowed at sustained rates and shut in, the Lower Morrow was perforated across the three Morrow Zones and shortly afterwards was flowing 1,600 MCFPD at a flowing tubing pressure of 750 psi. The well also indicated the capability of flowing five barrels of oil per hour. Two days later on a four-point back pressure test the well flowed 1,594 MCF per day at a flowing tubing pressure of 1595 psi with 3½ to 5 barrels of oil per hour.

Update of Well Completion

Analysis of the Upper Morrow indicates direct communication with the east offset wells and the reservoir pressures encountered in the Lower Morrow are substantially higher than the Upper Morrow; therefore, dual completion equipment consisting of a permanent packer between the two zones and two strings of tubing with related tools were installed in the well. The well was successfully completed and tested in the Upper Morrow and Lower Morrow as noted above and then shut in while waiting for approximately two weeks for a pipeline connection. This shut-in period apparently has resulted in blocking off the Upper Morrow with fine sands to the point where this zone is incapable of producing at the present time. The Lower Morrow was put on line to the purchaser and flowed at an initial rate of 800 MCFPD but declined to a rate of 350 MCF per day within a few days. During the past week an acid treatment was performed on the Lower Morrow.

The Lower Morrow is now flowing into the pipeline 430 MCFPD along with 8 barrels of distillate and 12 barrels of water to the tanks. Present plans call for continuing to flow the Lower Morrow for some time to allow it to clean up further. This occurrence of Morrow flowing at good sustained rates and being unable to re-establish original flow after a shut-in is not totally uncommon in southeast New Mexico. The Upper Morrow is thought to be blocked with fine sand in the annulus between the Lower Morrow tubing string and the 4½" liner. Evaluation of the most economical way to return the Upper Morrow to its full producing potential is in progress.

Possible Future Course of Action

The possible future actions to be taken on the Lower Morrow are the following:

Reperforate the Lower Morrow producing interval and/or, consider an alcohol-acid treatment of the Lower Morrow depending on the final outcome of the last acid job performed on this interval.

Re-establishment of production from the Upper Morrow may be accomplished through a sliding sleeve on the Lower Morrow tubing string which is situated in close proximity to the Upper Morrow perforations. It is conceivably possible to open the sliding sleeve on the Lower Morrow tubing string and produce the Upper Morrow through this Lower Morrow string. Another alternative available and under consideration is to perforate the Lower Morrow tubing string immediately opposite the Upper Morrow perforations and in that way produce the Upper Morrow through the Lower Morrow string.

If none of these remedial efforts result in the desired production from the Morrow interval, the one remaining course of action is to pull the dual tubing strings and recomplete the well jointly in the Upper and Lower Morrow as a single completion. Recompletion cost of the well as a single Morrow well after pulling both tubing strings is estimated to cost in the range of \$150,000. It is anticipated that an improved rate from the Morrow may be achieved through the other above enumerated alternatives at an estimated cost of less than \$50,000.

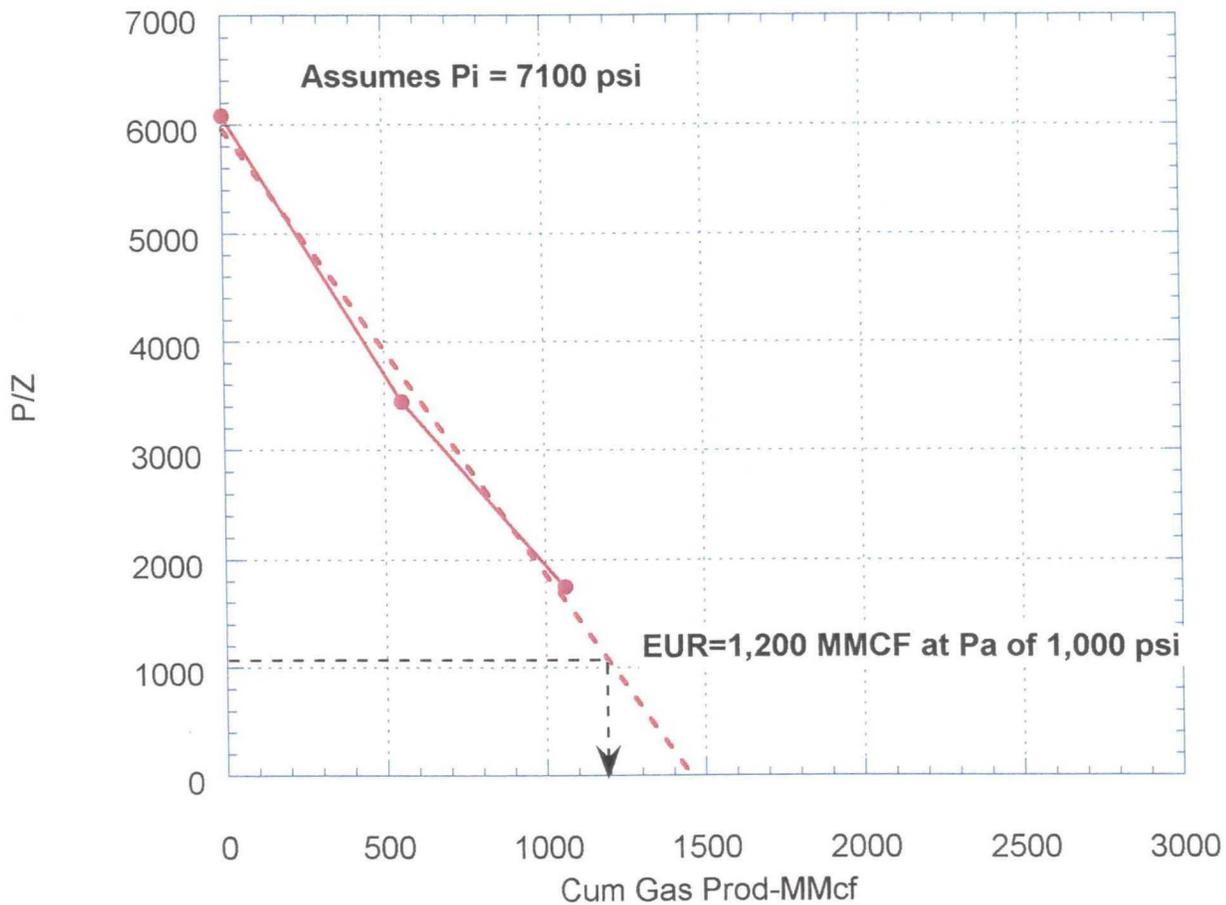
You will be timely advised as remedial efforts proceed.



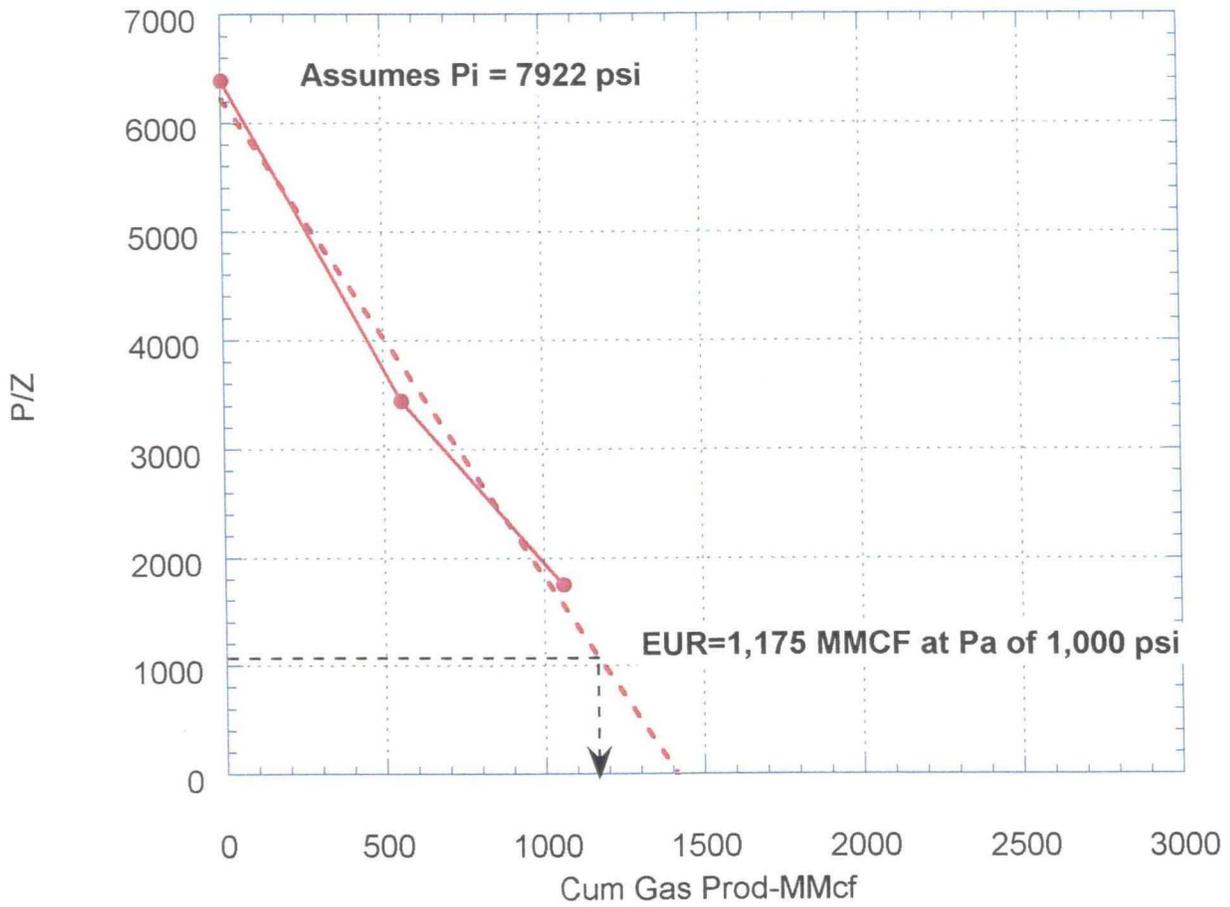
Al Klaar

AK:saw

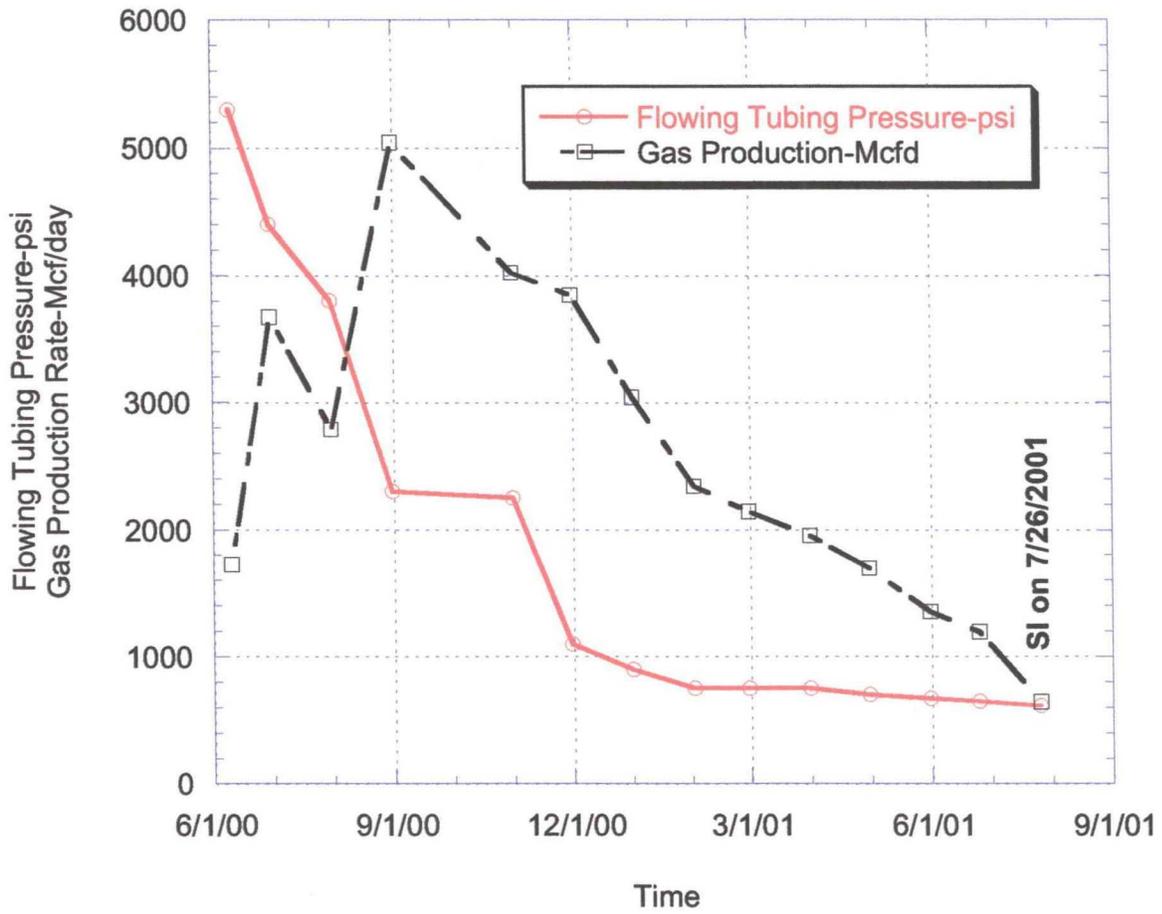
**Nearburg Grama Ridge East 34 State #1
Cum Gas Prod vs. P/Z**



**Nearburg Grama Ridge East 34 State #1
Cum Gas Prod vs. P/Z**



Grama Ridge 34 #1 Tubing Pressure and Flow Rate vs Time



Nearburg Producing Company

Exploration and Production
Midland, Texas

Page 1 of 1

September 3, 2002

Nearburg Grama Ridge East 34 State #1 Well
34H- 21S-34E
1548 FNL & 990 FEL
Lea County, New Mexico

P/Z Data, Reservoir and Physical Properties

Perfs: 13134-13156 (22 feet)
Mid Point of Perfs: 13145 (-9339 feet subsea)
KB: 3706 feet
Reservoir Temperature: 184°F
SG_{gas}: 0.63
SG_{cond}: 57°API
Avg porosity: 11%
Avg water saturation: 20%
B_{gi}(7100 psi): $(35.35*(7100))/(1.1691*(184+460)) = 333 \text{ Scf/ft}^3$
B_{gi}(7922 psi): $(35.35*(7922))/(1.2405*(184+460)) = 351 \text{ Scf/ft}^3$
B_{ga}(1000 psi): $(35.35*(1000))/(0.9274*(184+460)) = 59 \text{ Scf/ft}^3$
Gas recovery_(7100 psi): $333-59 = 274 \text{ Scf/ft}^3$ (82%)
Gas recovery_(7922 psi): $351-59 = 292 \text{ Scf/ft}^3$ (83%)
P_i (flowing): 6955 psi (calculated using Ryder-Scott consultants PC program and initial rate and surface flowing tubing pressure)
P_i (static): 7100 psi to 7922 psi
(lower limit based on personal experience with similar Morrow wells, upper limit from RFT data on the GRM Unit #2 Well)
P₍₁₁₋₃₋₀₀₎: 3057 psi @13145 feet (70 hour shut-in)
P₍₂₋₆₋₀₂₎: 1562 psi @13145 feet (4560 hour shut-in)
Z_(7100 psi): 1.1691
Z_(7922 psi): 1.2405
Z_(3057 psi): 0.8896
Z_(1562 psi): 0.8964
Z_(1000 psi): 0.9274
P/Z_(7100 psi): $7100/1.1691 = 6073 \text{ psi}$
P/Z_(7922 psi): $7922/1.2405 = 6386 \text{ psi}$
P/Z_(3057 psi): $3057/0.8896 = 3436 \text{ psi}$
P/Z_(1562 psi): $1562/0.8964 = 1743 \text{ psi}$
P/Z_(1000 psi): $1000/0.9274 = 1078 \text{ psi}$
Cum Gas to 11-3-2000: 555 MMcf
Cum Gas to 2-6-2002: 1060 MMcf

Volumetric Gas Reserves

Reservoir volume: 1134 ac-ft
OGIP_(7100 psi): $(43560*1134*0.11*(1.0-0.20)*333)/1000 = 1447531 \text{ Mcf} = 1447 \text{ MMcf}$
OGIP_(7922 psi): $(43560*1134*0.11*(1.0-0.20)*351)/1000 = 1525776 \text{ Mcf} = 1526 \text{ MMcf}$
RGIP_(7100 psi): $1447*.82 = 1187 \text{ MMcf}$
RGIP_(7900 psi): $1526*.83 = 1267 \text{ MMcf}$