



BEFORE THE OIL CONSERVATION DIVISION
STATE OF NEW MEXICO

IN THE MATTER OF

APPLICATION OF YATES PETROLEUM
CORPORATION FOR AUTHORIZATION TO
DRILL, EDDY COUNTY, NEW MEXICO

CASES NO. 10446, 10447,
10448, 10449
ORDERS NO. R-9650, 9651,
9654, AND 9655

SUBPOENA DUCES TECUM

TO: Mr. Tony Herrell
Bureau of Land Management
Carlsbad Area Office
Carlsbad, New Mexico

Pursuant to Section 70-2-8, NMSA (1978) and Rule 1211 of the New Mexico Oil Conservation Commission's Rules of Procedure, you are hereby **ORDERED** to appear at the offices of the New Mexico Oil Conservation Commission, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, 87504, on the 21st day of May, 1992, at 9 a.m. and produce the documents and items specified in the attached Exhibit A.

This subpoena is issued on application of New Mexico Potash Corporation through its attorneys, Kemp, Smith, Duncan & Hammond, 500 Marquette, Suite 1200, Albuquerque, New Mexico 87102-2121.

Dated this 14th day of May, 1992.

NEW MEXICO OIL CONSERVATION COMMISSION

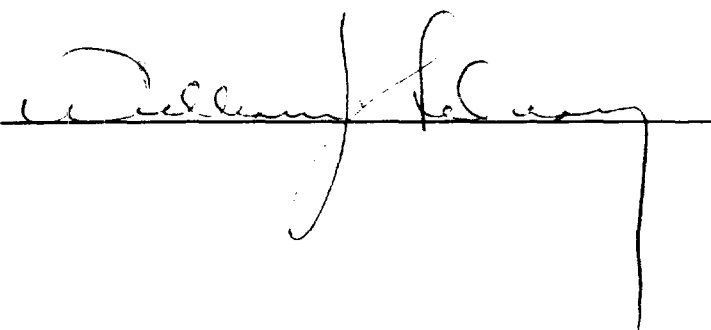
BY: 

EXHIBIT A

1. Produce documents showing the procedure followed by the Bureau of Land Management in determining the presence of commercial grade potash ore based upon core hole data.
2. Produce documents showing the average grade of potash ore mined by operators in the Potash Area.
3. Produce documents showing the criteria used by the Bureau of Land Management for determining if ore deposits are "commercial grade" ore.
4. Produce documents showing whether Section 2, Township 22 South, Range 31 East contains "commercial grade potash ore" under the standards followed by the Bureau of Land Management in making such determinations.

STATE OF NEW MEXICO
SECRETARY OF ENERGY, MINERALS AND NATURAL RESOURCES

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IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION COMMISSION FOR
THE PURPOSE OF CONSIDERING:

APPLICATION OF YATES PETROLEUM
CORPORATION FOR AUTHORIZATION TO
DRILL, EDDY COUNTY, NEW MEXICO

CASES NOS. 10448, 10449
ORDERS NOS. R-9654-C,
R-9655-C

APPEAL FROM DECISION AND ORDERS OF OIL CONSERVATION COMMISSION

NEW MEXICO POTASH CORPORATION ("New Mexico Potash"), pursuant to 70-2-26 NMSA (1987 Repl.), appeals from the decision and orders entered by the New Mexico Oil Conservation Corporation ("OCC") on January 14, 1994, in Cases Nos. 10448 and 10449, Orders Nos. R-9654-C and R-9655, and in support thereof shows the following:

1. On January 14, 1994, the OCC entered its decision and orders in Cases Nos. 10448 and 10449 approving the applications of Yates Petroleum Corporation ("Yates") to drill its Flora No. 1 and Flora No. 2 wells in the South one-half of Section 2, Township 22 South, Range 31 East. These well locations are within the area designated as the "Potash Area" by OCC Order R-111-P and raise important issues concerning the policies of the State of New Mexico in matters of safety and the development of its natural resources.

2. New Mexico Potash holds the potash mining lease covering Section 2 and therefore is adversely affected by the decision and orders being appealed.

3. The decision and orders being appealed contravene the public interest of the State of New Mexico because they approve the drilling of wells in an area that will create a safety hazard to

underground potash miners and unnecessarily waste valuable, non-replaceable potash deposits in violation of the Oil and Gas Act.

4. Evidence concerning the hazards of oil and gas wells in the vicinity of underground mining was presented to the OCC but was either ignored or misunderstood. No member of the OCC designated to hear and decide these cases had experience in mining or the safety hazards of underground mining, particularly with respect to the hazards of methane and other flammable gases in an underground mining environment.

5. If these wells are allowed and methane escapes from the well casings and either enters an underground mine or becomes trapped in the strata and is later encountered in future mining operations, an explosion could occur and either injure employees or, worse, result in fatal injuries. Further, if methane escapes from the well casing and enters the mining environment, all underground mines in the Potash Area could be required to comply with additional Federal Mine Safety and Health regulations applicable to "gassy" mines. The costs of complying with these additional regulations is prohibitive and could result in the elimination of the entire New Mexico potash industry.

6. The quantities of potash that will be wasted if these wells are allowed is enormous and such waste is unnecessary.

7. Evidence presented at the hearing established that Section 2 contains 6,833,000 recoverable tons of ore. The value of the product that could be mined and sold from this Section is \$102,274,580.00. The state royalties on products that would be sold on Section 2 would be \$3,988,709.00.

8. Stated another way, Section 2 contains enough potash to employ 260 employees for three years.

9. Flora No. 1 Well, by itself, will result in the loss of \$26,187,636 in potash product and state royalties of \$1,021,318.

10. Flora No. 2 by itself, will result in the loss of \$37,508,278 in potash product and state royalties in the amount \$1,462,823.

11. The approval of Flora No. 2, by itself, would result in the waste of the potash in practically the entire section.

12. Despite the evidence presented showing these potash deposits in Section 2, the OCC concluded, incredibly, that "NM Potash did not prove that the drilling of the [wells] will result in the waste of potash..." This conclusion can only be the result of an inability to understand issues involving the mining industry due to the lack of experience and knowledge by members of the OCC or, even worse, such a bias against the mining industry and in favor of the oil and gas industry as to violate the basic rights of the potash producers to obtain a fair and impartial decision on the issues involved. In either event, the decision is erroneous and must be reversed. Indeed, if this does not constitute "waste" of potash within the meaning of the Oil and Gas Act then it is difficult to imagine facts that would rise to that level.

13. The inability of members of the OCC to understand the mining industry and what indicates the presence of potash ore is amply shown by the following "finding" in Paragraph 16 of the decision where they conclude that:

"(16) Core hole K-162, drilled in January, 1992 and located 2,000 feet from the South line and 1,200 feet

from the East line of Section 2 did encounter commercial potash mineralization in both the 4th and 10th ore zones of the Salado Salt. While ignoring other valuable information such as radioactivity logs from other wells, and available data from barren core hole ERDA-6 in the SE/4 of Section 35, NM Potash used the information from core hole K-162 to contend that commercial quantities of potash are present throughout Section 2...."

The evidence "ignored" by New Mexico Potash (radioactivity logs), is generated by the oil and gas industry (sometimes) and has never been used by potash operators to determine the presence of potash. Moreover, the very logs referred to by the OCC are considered to be so unreliable that the U. S. Bureau of Land Management, which has a staff of people with experience in both mining and oil and gas, does not allow their use to determine the presence of "measured reserves." This evidence was presented to, but completely ignored - or not understood - by members of the OCC. In addition, evidence was presented by experts with experience in the Potash Area showing that the methods used by New Mexico Potash to determine that potash ore did, in fact, exist in Section 2, were the same methods followed by potash operators for over a quarter of a century. Even more troubling is the fact that the evidence presented at the hearing showed that the determination that Section 2 contained potash ore was not based solely upon core hole K-162 - as erroneously stated by the OCC - but by a triangular method using K-162 and two other core holes not even mentioned by the OCC.

14. The potash that will be wasted cannot be replaced. The potash deposits in Southeastern New Mexico are the only commercial deposits of potash in the United States that can be mined using conventional mining methods. Moreover, these deposits contain the

only deposits of langbeinite ore known to exist in the Northern Hemisphere. The careless wasting of these natural resources, as this decision and orders allow, is contrary to the interest of New Mexico and in violation of the Oil and Gas Act.

15. This waste is also unnecessary. Evidence presented to the OCC during the hearing in these cases clearly established that the wells at issue could be drilled from a different surface location that would allow the oil and gas to be developed and, at the same time, reduce the potash that would be wasted. The OCC did not even mention this evidence in its decision. This failure, New Mexico Potash submits, is in violation of the Oil and Gas Act, contrary to the public interest of the State of New Mexico, and supported by nothing other than a bias by the OCC in favor of the oil and gas industry on issues involving potash mining.

16. Indeed, the evidence ignored by the OCC showed that there were already four wells along the East side of Section 2. (While not at issue in this appeal, these wells were allowed by the OCC without any determination of the potash that would be wasted and as a result, the wells wasted an estimated \$55,768,963 in potash product.) The evidence also showed that the wells involved in this appeal could be directionally drilled from these same locations for an additional cost of approximately \$135,723 more than the cost of a straight hole. Thus, instead of requiring the expenditure of this additional amount, the OCC is creating a safety hazard to underground miners, wasting almost \$100 million dollars worth of potash (and the royalties the State would otherwise receive from this ore), and causing over 200 employees to forfeit three years of

employment. Such a result is not in the public interest of the State of New Mexico.

17. The decision and orders are also erroneous for numerous other reasons, including the fact that they misapply the provisions of Rule R-111-P.

18. The decision and orders of the OCC should be stayed by the Secretary pending review because if the wells are drilled they cannot be removed if the OCC's decision is reversed.

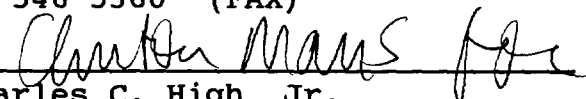
WHEREFORE, New Mexico Potash respectfully requests that the Secretary assume jurisdiction of this matter pursuant to Section 70-2-26 NMSA, issue an immediate order staying the decision and orders pending the Secretary's review, and following such review and any public hearing conducted pursuant to Section 70-2-26, issue an order directing the OCC to rescind its order and replace it with an order denying the applications for permits to drill the two wells at issue.

Respectfully submitted,

KEMP, SMITH, DUNCAN & HAMMOND, P.C.
P.O. Box 1276
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(505) 764-5480 (FAX)

By: Clinton Marrs

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(915) 546-5360 (FAX)

By: 
Charles C. High, Jr.
Attorneys for New Mexico Potash
Corporation

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Appeal of Decision and Orders of the Oil Conservation Commission was sent by certified mail, return receipt requested on this 3rd day of February, 1994, to Ernest L. Carroll, Attorney for Yates Petroleum Corporation, Losee, Carson, Haas, & Carroll, P. A., P. O. Drawer 239, Artesia, New Mexico 88210; James G. Bruce, The Hinkle Law Firm, 500 Marquette, N.W., Suite 500, Albuquerque, New Mexico 87103, attorney for Pogo Producing Company; Robert Stovall, General Counsel, New Mexico Oil Conservation Division, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, 87504; and W. Thomas Kellahin, Kellahin, Kellahin & Aubrey, Post Office Box 2265, Santa Fe, New Mexico 87504-2265, attorneys for Bass Enterprises Production Company.



Clinton Marrs

**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:**

**CASES NOS. 10446 and 10447
(DE NOVO)
Order Nos. R-9650-A and R-9651-A**

**APPLICATION OF YATES PETROLEUM
CORPORATION FOR AUTHORIZATION
TO DRILL, EDDY COUNTY, NEW MEXICO.**

INTERIM ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 31, 1992 and December 1, 1992, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 23rd day of August, 1993, the Commission, a quorum being present, having considered the record and being fully advised in the premises,

FINDS THAT:

1. Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

2. Commission Case Nos. 10446, 10447, 10448 and 10449 were consolidated at the time of the hearing for the purpose of receiving testimony.

3. The Applicant in this matter, Yates Petroleum Corporation ("Yates"), seeks approval to drill its Graham "AKB" State Wells No. 3 and No. 4 located within the Designated Potash Area pursuant to all applicable rules and procedures governing said area, as promulgated by Division Order No. R-111-P. The proposed wells are to be located at standard oil well locations comprising Units B and G of Section 2, Township 22 South, Range 31 East, NMPM, Eddy County, New Mexico, with each well scheduled to test the Delaware formation at an approximate depth of 8,500'. Standard 40-acre oil spacing and proration units for the Undesignated Lost Tank-Delaware Pool or Undesignated Livingston Ridge-Delaware Pool are dedicated to each well.

4. New Mexico Potash Corporation ("NM Potash"), owner of the state potash lease underlying all of Section 2 appeared at the hearing in opposition to the applications.

5. New Mexico Oil Conservation Commission ("NMOCC") Order No. R-111-P prohibits drilling operations within a Life of Mine Reserve ("LMR") or its attendant buffer zone unless the oil and gas operator and the mine operator mutually agree to permit drilling or the Commission grants an exception to NMOCC Order No. R-111-P upon a showing that commercial potash will not be wasted unduly as a result of the drilling of the well.

LIFE OF MINE RESERVES (LMR)

6. *Life of mine reserves ("LMR") has been defined in NMOCC Order No. R-111-P as those potash deposits within the potash area reasonably believed by the potash lessee to contain potash ore in sufficient thickness and grade to be mineable using current day mining methods, equipment and technology. Mine operators file LMR designation maps annually with the New Mexico State Land Office ("SLO") and with the U. S. Bureau of Land Management ("BLM") as required under this order. NM Potash had filed for and the BLM had established LMR designation for Section 35, Township 21 South, Range 31 East which LMR covers Federal minerals under BLM jurisdiction and had claimed LMR designation for Section 2 which is totally under jurisdiction of the SLO. The north half of Section 2 would be designated as either a SLO created LMR or as a BLM created buffer zone to the LMR designation established in Section 35. The south half of Section 2 would be outside the buffer zone created by the LMR in Section 35 by the BLM but would be within the SLO created LMR covering Section 2.*

Yates challenges NM Potash's designation of Section 2 as part of its LMR or buffer zone thereto, argues that an LMR is not established on State Land until designated by the SLO nor does it have retroactive effect once designated and contends notwithstanding an LMR designation that the Oil Conservation Commission is obligated to grant exceptions to Order No. R-111-P unless commercial potash will be unduly wasted as a result of drilling the subject wells. NM Potash argues that filing of an LMR designation effectively creates an area off limits to oil and gas drilling and that there should be no forum for oil and gas operators to challenge its LMR boundaries.

FINDING: An LMR is not established on state land until designated as such by the State Land Office. Furthermore, an LMR designation by itself cannot act retroactively to prohibit the drilling of wells for which an application to drill has previously been filed. At the time that the Applications to Drill the Graham No. 1 and No. 2 wells were filed, the proposed locations were not within the boundaries of a designated LMR. They were, however, within the buffer zone of the designated LMR for Section 35.

CASES NOS. 10446 and 10447

(DE NOVO)

Order Nos. R-9650-A and R-9651-A

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If an LMR designation and associated buffer zone prevents an oil and gas operator from developing his reserves, there should be a process for challenging that LMR designation or granting exceptions to allow drilling.

7. *Data used to create LMRs such as core hole data is considered confidential information to be viewed and evaluated by the Potash operator, the BLM and SLO. Unless the BLM or SLO question the LMR designation, the designation becomes effective without review of the supporting information. Oil companies are not privy to the boundaries of the LMR filed in the supporting information. This puts them at a competitive disadvantage in trying to challenge LMR designations or show that exceptions should be granted.*

FINDING: When the designation of an LMR by a Potash operator may prevent an oil and gas operator from accessing its property, the oil and gas operator must be given the opportunity to review the geologic basis for the designation, with appropriate restrictions to protect the confidentiality of the data, in order to make a meaningful challenge.

8. *NM Potash failed to use valuable information such as radioactivity logs to help define mineralized and barren zones. They used carnallite in combination with sylvite to arrive at their determination of commercial potash ore in core hole F-65 located 100 feet from the South and West lines of Section 34, Township 21 South, Range 31 East even though carnallite must be blended to obtain commercial ore, and they did not incorporate in their interpretation available data in core hole ERDA-6 in the SE/4 of Section 35, Township 21 South, Range 31 East. Their contention that commercial potash ore is present throughout Section 2 is based upon the results of the one core hole (K-162) drilled in Section 2 which did encounter commercial potash mineralization.*

FINDING: NM Potash did not prove the existence of commercial potash under Section 2.

9. *Maps showing inferred potash reserves in Section 35 were submitted by both Yates and N.M. Potash. Yates showed only the northwest quarter to contain potash reserves while N.M. Potash showed potash reserves underlying all of Section 35. Under the current NMOCC R-111-P Order the BLM has the authority to designate LMRs on federal lands and the BLM did include all of Section 35 in their LMR designation which would include a 1/2 mile buffer zone extending South to include the north half of Section 2, which would effectively deny drilling of the Graham "AKB" State Wells No. 3 and 4 because of their location in this buffer zone. The critical question, which was not adequately addressed at the hearing, is whether one mineral estate, federal lands in Section 35, can prevent resource development under a different mineral estate, state lands in Section 2, by virtue of the fact that it was designated by the federal estate to*

bear the burden of providing a measure of safety to the development of resources on its land.

FINDING: The application to drill the Graham No. 3 and Graham No. 4 in the north half of Section 2 should be temporarily denied because these wells are located within the Section 35 buffer zone of an LMR established under BLM jurisdiction. Yates does have the right to access these reserves however and the method of access should be an issue for future consideration by the Commission. Denying Yates the opportunity to access for the purpose of recovering oil and gas under their state oil and gas lease in order to provide a buffer for the development of potash on an adjacent federal tract would be confiscation of both Yates' and the State's oil and gas rights without compensation.

WASTE

10. NM Potash contended that if wells are drilled in Section 2 the potash cannot be recovered and that drilling wells and producing oil under Section 2 could be delayed until the potash ore is completely mined which timeframe was projected to be 30 to 50 years in the future. Such delay would render the present value of oil and gas reserves under Section 2 worthless. Yates testified that there ought to be areas of potash ore reserve that are protected from oil and gas drilling but Section 2 did not constitute one of those areas.

State law charges the Commission with preventing waste and "Waste" is defined to include "drilling or producing operations for oil and gas within any area containing commercial deposits of potash where such operations would have the effect unduly to reduce the total quantity of such commercial deposits of potash which may reasonably be recovered in commercial quantities." "Unduly" is defined as "excessively" or "immoderately". The Commission is also charged with preventing waste of oil and gas and protecting the correlative rights of owners of oil and gas.

FINDING: Waste occurs if oil and gas operations prevent NM Potash from safely mining commercial potash reserves and waste occurs and Yates' correlative rights are violated if Yates is prevented from developing their oil and gas reserves under the north half of Section 2.

11. Both sides presented extensive testimony relating to the economics of potash development in Southeast New Mexico. Economic arguments revolved around the relative value of each resource with each side trying to prove that the development of their resource at the exclusion of the other would provide the highest value to the State. Neither side examined the concept of mutual cooperation in development of oil and gas and potash.

FINDING: There should be a plan of operation which prevents waste, protects correlative rights, assures maximum conservation of oil, gas and potash resources in New Mexico and permits the economic recovery of oil, gas and potash ore if present commercially. Such a plan should not favor one resource over the other. The question is not whether oil wells should be drilled or potash ore mined, but how can ore be mined and oil and gas wells drilled and produced enabling each industry to recover their resource while ensuring the safety of all participants.

SAFETY

12. NM Potash argued that potash ore could not be mined if oil wells were drilled first in areas to be mined. Yates argued that potash has already been mined around 25 producing wellbores in oil pools producing from the Yates formation without incident. Testimony centered on safety issues such as the possibility of methane migration from oil and gas wells into the salt and eventually into potash mines. There was conjecture on what could go wrong with current cementing practices but no methane measurements were taken on any of the 1,000 plus wells drilled to date within the potash area or the three (3) dry holes within the present NM Potash mine workings.

FINDING: If oil and gas operations make potash mining unsafe, then potash will not be mined and may be wasted. This was not proved however and there is a need for direct surface measurements of methane gas in and around existing wells within the potash area and especially measurements and studies of the three dry holes within the NM Potash mine workings.

13. Additional safety issues such as subsidence were argued from a theoretical perspective by both sides but there were no direct surface field measurements in areas where potash mining has already caused some subsidence. Subsidence is a primary factor in defining buffer zones.

FINDING: To adequately address the extent of buffer zones and the effective radius of pillars around wells, there is a need for compiling and evaluating field data both within and over existing potash mine workings.

14. Although there have been no documented cases of oil and/or gas migration into New Mexico potash mines due to oil and gas operations, mine safety is a paramount issue because methane in a mine can cause a reclassification of that mine to "gassy" requiring use of special procedures and equipment the cost of which would render future mining uneconomic resulting in waste of potash.

FINDING: There is a need for additional methane monitoring measures which should be implemented adjacent to producing oil and gas wells to determine the presence or absence of methane in the salt section.

TECHNICAL COMMITTEE FORMATION

15. The application of Yates to drill their Graham No. 3 and Graham No. 4 should be temporarily denied but their right to access their oil and gas reserves under the north half of Section 2 should be acknowledged and should be governed by an operating plan to be produced by a joint technical committee composed of scientists and operating personnel from NM Potash and Yates. The purpose of this committee should be to gather and analyze data and to cooperate in designing a joint operating plan for both oil and gas and potash development. It should also serve to establish a procedure for future joint resource development in other areas.

Toward that end, the committee should examine the following issues specific to these applications:

- (1) Explore the economics of directional drilling with such possible incentive factors as: a) increased allowables, b) wider well spacing units such as 80 acres; c) decreased royalty rates on directionally drilled Delaware wells; d) unitization and its effect on field development, spacing patterns and field drainage.
- (2) Measure methane (if present) at the surface casing of plugged wells within the potash area which have produced or encountered shows of oil and gas.
- (3) Measure methane (if present) and evaluate the three wells within the mine workings as they relate to safety concerns.
- (4) Explore avenues of oil/potash cooperation in developing additional ore body information such as coring the 4th and/or 10th ore zone while drilling to the Delaware or running sensitive radioactivity logs through the salt section on oil wells or side wall coring ore zones after running radioactivity logs which would define the mineralized zones.
- (5) Measure subsidence over potash mines and its effect on the integrity of well casing.

- (6) Develop mining plans which incorporate oil and gas drilling and involve commitments by both parties. Mining plans were defined as a "snapshot in time" which change due to a variety of factors such as the grade of ore encountered and the utilization of available equipment. Mining plans are therefore little more than a "guess" of future activity and should not be relied upon until they incorporate oil and gas activity and firm development commitments by both NM Potash and Yates.
- (7) Define scientific standards which can establish an LMR which would be off limits to drilling and explore procedures for oil and gas input into that LMR determination.
- (8) Explore scientific measurements which can define a buffer zone and be adjusted on a site specific basis.
- (9) Drill pilot holes through the salt around a producing Delaware Sand well and measure any methane in the salt. Consider other monitoring projects which would supply "hard data".
- (10) Research alternative cementing practices in plugging procedures which could safely allow mining operations to be conducted closer to plugged and abandoned wells.
- (11) Form a safety subcommittee to address mine safety issues as they relate to methane monitoring and methane migration. The committee should help foster a better understanding of each industry and how it operates.
- (12) Examine the "confidentiality issues" and find a way to promote cooperation in the use of this information in the LMR designation process.
- (13) Explore mediation and conflict resolution as tools in resolving some of the tougher issues.
- (14) Produce a plan which will allow both companies to develop their respective reserves.
- (15) As a means of providing insight into specific issues 5, 6, 7, 8, 10, 11, 12, 13, and 14, listed above, a historical review should be made of the Wills Weaver and Eddy Potash Inc. mining operations in Township 20 South, Ranges 29 and 30 East.

IT IS THEREFORE ORDERED THAT:

1. The application of Yates Petroleum Corporation to drill their Graham No. 3 and Graham No. 4 in the north half of Section 2 is temporarily denied pending the submission of recommendations from the Technical Committee herein created. This committee shall consist of not more than 6 persons with technical and operational expertise, 3 from Yates, and 3 from NM Potash. The Technical Committee will address issues defined in Finding 15 and will report back to this Commission by August 1, 1994 with their recommended plan for oil and gas development under the north half of Section 2, Township 22 South, Range 31 East, NMPM, Eddy County, New Mexico which will not unduly waste commercial deposits of potash.

2. Jurisdiction of this cause is hereby retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



Gary Carlson

GARY CARLSON, Member

Bill Weiss

WILLIAM W. WEISS, Member

William J. Lemay

WILLIAM J. LEMAY, Chairman

S E A L

STATE OF NEW MEXICO
SECRETARY OF ENERGY, MINERALS AND NATURAL RESOURCES

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IN THE MATTER OF THE HEARING CALLED
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12. Despite the evidence presented showing these potash deposits in Section 2, the OCC concluded, incredibly, that "NM Potash did not prove that the drilling of the [wells] will result in the waste of potash..." This conclusion can only be the result of an inability to understand issues involving the mining industry due to the lack of experience and knowledge by members of the OCC or, even worse, such a bias against the mining industry and in favor of the oil and gas industry as to violate the basic rights of the potash producers to obtain a fair and impartial decision on the issues involved. In either event, the decision is erroneous and must be reversed. Indeed, if this does not constitute "waste" of potash within the meaning of the Oil and Gas Act then it is difficult to imagine facts that would rise to that level.

13. The inability of members of the OCC to understand the mining industry and what indicates the presence of potash ore is amply shown by the following "finding" in Paragraph 16 of the decision where they conclude that:

"(16) Core hole K-162, drilled in January, 1992 and located 2,000 feet from the South line and 1,200 feet

from the East line of Section 2 did encounter commercial potash mineralization in both the 4th and 10th ore zones of the Salado Salt. While ignoring other valuable information such as radioactivity logs from other wells, and available data from barren core hole ERDA-6 in the SE/4 of Section 35, NM Potash used the information from core hole K-162 to contend that commercial quantities of potash are present throughout Section 2...."

The evidence "ignored" by New Mexico Potash (radioactivity logs), is generated by the oil and gas industry (sometimes) and has never been used by potash operators to determine the presence of potash. Moreover, the very logs referred to by the OCC are considered to be so unreliable that the U. S. Bureau of Land Management, which has a staff of people with experience in both mining and oil and gas, does not allow their use to determine the presence of "measured reserves." This evidence was presented to, but completely ignored - or not understood - by members of the OCC. In addition, evidence was presented by experts with experience in the Potash Area showing that the methods used by New Mexico Potash to determine that potash ore did, in fact, exist in Section 2, were the same methods followed by potash operators for over a quarter of a century. Even more troubling is the fact that the evidence presented at the hearing showed that the determination that Section 2 contained potash ore was not based solely upon core hole K-162 - as erroneously stated by the OCC - but by a triangular method using K-162 and two other core holes not even mentioned by the OCC.

14. The potash that will be wasted cannot be replaced. The potash deposits in Southeastern New Mexico are the only commercial deposits of potash in the United States that can be mined using conventional mining methods. Moreover, these deposits contain the

only deposits of langbeinite ore known to exist in the Northern Hemisphere. The careless wasting of these natural resources, as this decision and orders allow, is contrary to the interest of New Mexico and in violation of the Oil and Gas Act.

15. This waste is also unnecessary. Evidence presented to the OCC during the hearing in these cases clearly established that the wells at issue could be drilled from a different surface location that would allow the oil and gas to be developed and, at the same time, reduce the potash that would be wasted. The OCC did not even mention this evidence in its decision. This failure, New Mexico Potash submits, is in violation of the Oil and Gas Act, contrary to the public interest of the State of New Mexico, and supported by nothing other than a bias by the OCC in favor of the oil and gas industry on issues involving potash mining.

16. Indeed, the evidence ignored by the OCC showed that there were already four wells along the East side of Section 2. (While not at issue in this appeal, these wells were allowed by the OCC without any determination of the potash that would be wasted and as a result, the wells wasted an estimated \$55,768,963 in potash product.) The evidence also showed that the wells involved in this appeal could be directionally drilled from these same locations for an additional cost of approximately \$135,723 more than the cost of a straight hole. Thus, instead of requiring the expenditure of this additional amount, the OCC is creating a safety hazard to underground miners, wasting almost \$100 million dollars worth of potash (and the royalties the State would otherwise receive from this ore), and causing over 200 employees to forfeit three years of

employment. Such a result is not in the public interest of the State of New Mexico.

17. The decision and orders are also erroneous for numerous other reasons, including the fact that they misapply the provisions of Rule R-111-P.

18. The decision and orders of the OCC should be stayed by the Secretary pending review because if the wells are drilled they cannot be removed if the OCC's decision is reversed.

WHEREFORE, New Mexico Potash respectfully requests that the Secretary assume jurisdiction of this matter pursuant to Section 70-2-26 NMSA, issue an immediate order staying the decision and orders pending the Secretary's review, and following such review and any public hearing conducted pursuant to Section 70-2-26, issue an order directing the OCC to rescind its order and replace it with an order denying the applications for permits to drill the two wells at issue.

Respectfully submitted,

KEMP, SMITH, DUNCAN & HAMMOND, P.C.
P.O. Box 1276
Albuquerque, New Mexico 87103-1276
(505) 247-2315
(505) 764-5480 (FAX)

By: Clinton Marrs

KEMP, SMITH, DUNCAN & HAMMOND, P.C.
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(915) 533-4424
(915) 546-5360 (FAX)

By: Clinton Marrs for
Charles C. High, Jr.
Attorneys for New Mexico Potash
Corporation

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Appeal of Decision and Orders of the Oil Conservation Commission was sent by certified mail, return receipt requested on this 3rd day of February, 1994, to Ernest L. Carroll, Attorney for Yates Petroleum Corporation, Losee, Carson, Haas, & Carroll, P. A., P. O. Drawer 239, Artesia, New Mexico 88210; James G. Bruce, The Hinkle Law Firm, 500 Marquette, N.W., Suite 500, Albuquerque, New Mexico 87103, attorney for Pogo Producing Company; Robert Stovall, General Counsel, New Mexico Oil Conservation Division, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, 87504; and W. Thomas Kellahin, Kellahin, Kellahin & Aubrey, Post Office Box 2265, Santa Fe, New Mexico 87504-2265, attorneys for Bass Enterprises Production Company.

Clinton Marrs
Clinton Marrs

**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION COMMISSION
FOR THE PURPOSE OF CONSIDERING:**

**DE NOVO
CASE NOS. 10446 and 10447
Order No. R-9650-B/R-9651-B**

**APPLICATION OF YATES PETROLEUM
CORPORATION FOR AUTHORIZATION TO
DRILL, EDDY COUNTY, NEW MEXICO.**

INTERIM ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on September 9, 1992, October 21, 1992 and December 1, 1992 at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 10th day of February, 1994, the Commission, a quorum being present, having considered the record and being fully advised in the premises withdraws Order No. R-9650-A and Order No. R-9651-A and,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) Commission Case Nos. 10446, 10447, 10448, and 10449 were consolidated at the time of the hearing for the purpose of receiving testimony.
- (3) On August 23, 1993, the Commission issued Orders No. R-9650-A and R-9651-A.
- (4) Upon application by New Mexico Potash Corporation, a rehearing was held at 9 o'clock a.m. on November 10, 1993 at Santa Fe, New Mexico, before the Commission.

(5) The Applicant in this matter, Yates Petroleum Corporation ("Yates"), seeks approval to drill its Graham "AKB" State Wells No. 3 and No. 4 located within the Designated Potash Area pursuant to all applicable rules and procedures governing said area, as promulgated by Division Order No. R-111-P. The proposed wells are to be located at standard oil well locations comprising Units B and G of Section 2, Township 22 South, Range 31 East, NMPM, Eddy County, New Mexico, with each well scheduled to test the Delaware formation at an approximate depth of 8,500'. Standard 40-acre oil spacing and proration units for the Undesignated Lost Tank-Delaware Pool or Undesignated Livingston Ridge-Delaware Pool are dedicated to each well.

(6) New Mexico Potash Corporation ("NM Potash"), owner of the state potash lease underlying all of Section 2 appeared at the hearing in opposition to the applications.

LIFE OF MINE RESERVES (LMR)

(7) "Life of mine reserves" ("LMR") has been defined in New Mexico Oil Conservation Commission ("NMOCC") Order No. R-111-P as those potash deposits within the potash area reasonably believed by the potash lessee to contain potash ore in sufficient thickness and grade to be mineable using current day mining methods, equipment and technology. Mine operators file any revisions to their LMR's annually with the New Mexico State Land Office ("SLO") and with the U.S. Bureau of Land Management ("BLM") as required under that order.

(8) NMOCC Order No. R-111-P requires that a well operator notify each potash operator within one mile of a proposed well before commencing drilling operations. That order also requires the Oil Conservation Division to ascertain if a proposed well is within an LMR area. The order provides that any drilling application within an LMR or its buffer zone may be approved only with the agreement of the potash operator. Any drilling application outside an LMR and its buffer zone may be approved provided there is no protest from the potash operator within twenty days of his notice. Exceptions from NMOCC Order No. R-111-P will only be granted if an oil and gas operator can show that a well within an LMR or its buffer zone will not waste potash or a potash operator can show that a well outside an LMR and its buffer zone will waste potash.

(9) NM Potash has previously designated an LMR in Section 35, Township 21 South, Range 31 East (directly North of Section 2) which designation has not been challenged in these cases. Upon receiving notification on or about November 22, 1991 that Yates intended to drill oil and gas wells within Section 2, NM Potash caused a core hole to be drilled in the SE/4 of Section 2 in order to ascertain whether or not potash reserves were present. After determining that the core hole results showed the presence of commercial potash ore, NM Potash submitted a revision of its LMR designation to the SLO on or about January 14, 1992. The revised LMR included all of Section 2.

(10) The Graham "AKB" State Wells No. 3 and No. 4 would be outside the LMR previously established for Section 35 but would be within its buffer zone. Also, the proposed wells would be included in any LMR established for Section 2.

(11) Yates challenges NM Potash's designation of Section 2 as part of its LMR, argues that an LMR is not established on state land until designated by the SLO nor does it have retroactive effect once designated and contends notwithstanding an LMR designation that the Commission is obligated to grant exceptions to Order No. R-111-P unless commercial potash will be unduly wasted as a result of drilling the subject wells. NM Potash argues that the filing of an LMR designation effectively creates an area off limits to oil and gas drilling and that there should be no forum for oil and gas operators to challenge its LMR boundaries.

(12) The intent of the notification requirement in NMOCC Order No. R-111-P is to determine if a proposed drill site for an oil and gas well is within a designated LMR or its buffer zone. It is not intended to give a potash lessee information concerning where oil and gas drilling will occur so that the potash operator may immediately revise its LMR to preclude the proposed drilling. Any revision of LMRs should be in the normal course of mining business as reserves are delineated and mining plans updated; it should not be in response to planned drilling activity for oil and gas. Therefore, NM Potash should be precluded from revising its LMR to encompass Section 2 since it did so only after receiving notice that Yates intended to drill for oil and gas within Section 2.

(13) For purposes of drilling the Graham "AKB" State Wells No. 3 and No. 4, no valid LMR is established for Section 2. Therefore, the proposed wells are outside any LMR and its buffer zone for Section 2. However, the proposed wells are within the buffer zone for the LMR previously established in Section 35 and the applications to drill should be denied unless the drilling and production of the wells will not waste potash.

WASTE

(14) State law charges the Commission with preventing waste and "waste" is defined to include "drilling or producing operations for oil or gas within any area containing commercial deposits of potash where such operations would have the effect to unduly reduce the total quantity of such commercial deposits of potash which may reasonably be recovered in commercial quantities". "Unduly" is defined as "excessively" or "immoderately". The Commission also is charged with preventing waste of oil and gas and protecting the correlative rights of owners of oil and gas.

(15) Waste occurs if oil and gas operations prevent NM Potash from safely mining commercial potash reserves and waste occurs if Yates is prevented from developing their oil and gas reserves under the north half of Section 2.

(16) Both sides presented extensive testimony relating to the economics of potash development in Southeast New Mexico. Economic arguments revolved around the relative value of each resource with each side trying to prove that the development of their resource at the exclusion of the other would provide the highest value to the State. Such arguments were highly speculative and did not address the total economic picture. Neither side examined the concept of mutual cooperation in development of oil and gas and potash.

(17) There should be a plan of operation which prevents waste, protects correlative rights, assures maximum conservation of oil, gas and potash resources in New Mexico and permits the economic recovery of oil, gas and potash ore if present commercially. Such a plan should not favor one resource over the other. The question is not whether oil wells should be drilled or potash ore mined, but how can ore be mined and oil and gas wells drilled and produced enabling each industry to recover their resource while ensuring the safety of all participants.

(18) NM Potash argued that potash ore could not be mined if oil wells were drilled first in areas to be mined. Yates argued that potash has already been mined around 25 producing wellbores in oil pools producing from the Yates formation without incident. Testimony centered on safety issues such as the possibility of methane migration from oil and gas wells into the salt and eventually into potash mines. There was conjecture on what could go wrong with current cementing practices but no methane measurements were taken on any of the 1,000 plus wells drilled to date within the potash area or dry holes within present mine workings.

(19) If oil and gas operations make potash mining unsafe, then potash will not be mined and may be wasted. This was not proved however and there is a need for direct surface measurements of methane gas in and around existing wells within the potash area.

(20) Additional safety issues such as subsidence were argued from a theoretical perspective by both sides but there were no direct surface field measurements in areas where potash mining has already caused some subsidence. Subsidence is a primary factor in defining buffer zones.

(21) To adequately address the extent of buffer zones and the effective radius of pillars around wells, there is a need for examining new information and exploring new technologies relating to subsidence.

(22) Although there have been no documented cases of oil and/or gas migration into New Mexico potash mines due to oil and gas operations, mine safety is a paramount issue because methane in a mine can cause a reclassification of that mine to "gassy" requiring use of special procedures and equipment the cost of which would render future mining uneconomic resulting in waste of potash.

(23) There is a need to investigate methane monitoring which could be implemented adjacent to or within producing oil and gas wells to evaluate the potential for methane migration from the producing wellbore into adjacent rock formations.

TECHNICAL STUDY

(24) The Oil Conservation Division should contract with the New Mexico Bureau of Mines and Mineral Resources ("Bureau") or such other entity as approved by the Director of the Oil Conservation Division. The contract should provide that:

- (1) the Bureau seek technical assistance from Yates Petroleum Corporation and other producers of oil and gas within the potash enclave, New Mexico Potash Corporation and other potash producers, the New Mexico Petroleum Recovery Research Center, the Petroleum and Natural Gas Engineering Department of the New Mexico Institute of Mining and Technology, the Mineral and Environmental Engineering Department of the New Mexico Institute of Mining and Technology, the New Mexico State Land Office, the United States Department of Energy and the United States Bureau of Land Management; and
 - (2) the Bureau and its subcontractors develop and provide to the Commission technical and economic information from which the Commission may design a joint operating plan for both oil and gas and potash development. The Commission plan should also serve to establish a procedure for future joint resource development in other areas.
- (25) In developing the technical and economic information, the Bureau should:
- (1) explore the economics of directional drilling incorporating such possible incentive factors as: a) increased allowables, b) wider well spacing units such as 80 acres; c) decreased royalty rates on directionally drilled Delaware wells; d) unitization and its effect on field development, spacing patterns and field drainage;
 - (2) measure methane (if present) at the surface casing of plugged wells within the potash area which have produced or encountered shows of oil and gas;
 - (3) measure methane (if present) and evaluate wells within potash mine workings as they relate to safety concerns;

- (4) explore avenues of oil/potash cooperation in developing additional ore body information;
- (5) quantify the subsidence potential over potash mines and its effect on the integrity of well casing;
- (6) examine the role of mining plans in scheduling of potash and petroleum extraction;
- (7) explore new technology which can help define LMRs and the buffer zone;
- (8) evaluate old and new cementing practices and recommend appropriate operating practices;
- (9) examine the "confidentiality issues" and find a way to promote cooperation in the use of this information in the LMR designation process;
- (10) examine wells which have been drilled near potash mine workings within the potash enclave and their effect upon potash mining;
- (11) confer periodically with the Director of the Oil Conservation Division as to the progress of the above investigations. If additional studies are needed they will be negotiated as supplementary contracts.

(26) The application of Yates to drill their Graham No. 3 and Graham No. 4 wells should be temporarily denied until the Commission designs the joint operating plan based upon the information received from the Bureau.

IT IS THEREFORE ORDERED THAT:

(1) The Oil Conservation Division shall contract with the Bureau of Mines and Mineral Resources to develop the technical and economic information as outlined in Finding No. 24 and No. 25.

(2) The application of Yates Petroleum Corporation to drill their Graham No. 3 and Graham No. 4 wells in the N/2 of Section 2 is temporarily denied pending action by the Commission on the information developed by the Bureau.

(3) Jurisdiction of this cause is hereby retained for the entry of such further orders as the Commission may deem necessary.

CASE NO. 10446 and 10447
Order No. R-9650-B/R-9651-B
Page -7-

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



Gary Carlson

GARY CARLSON, Member

Bill Weiss

WILLIAM W. WEISS, Member

William J. Lemay

WILLIAM J. LEMAY, Chairman

S E A L

**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION COMMISSION
FOR THE PURPOSE OF CONSIDERING:**

**DE NOVO
CASE NO. 10448 and 10449
Order No. R-9654-C/R-9655-C**

**APPLICATION OF YATES PETROLEUM
CORPORATION FOR AUTHORIZATION TO
DRILL, EDDY COUNTY, NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on September 9, 1992, October 21, 1992 and December 1, 1992 at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 14th day of January, 1994, the Commission, a quorum being present, and having considered the record and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) Commission Case Nos. 10446, 10447, 10448, and 10449 were consolidated at the time of the hearing for the purpose of receiving testimony.

(3) On August 23, 1993, the Commission issued Orders No. R-9654-B and R-9655-B.

(4) Upon application by New Mexico Potash Corporation, a rehearing was held at 9 o'clock a.m. on November 10, 1993 at Santa Fe, New Mexico, before the Commission.

(5) The Applicant in this matter, Yates Petroleum Corporation ("Yates"), seeks approval to drill its Flora "AKF" State Wells No. 1 and No. 2, all within the Designated Potash Area pursuant to all applicable rules and procedures governing said area, as promulgated by Division Order No. R-111-P. The proposed wells are to be located at standard oil well locations comprising Units K and N of Section 2, Township 22 South, Range 31 East, NMPM, Eddy County, New Mexico, with each well scheduled to test the Delaware formation at an approximate depth of 8,500'. Standard 40-acre oil spacing and proration units for the Undesignated Lost Tank-Delaware Pool or Undesignated Livingston Ridge-Delaware Pool are dedicated to each well.

(6) New Mexico Potash Corporation ("NM Potash"), owner of the state potash lease underlying all of Section 2 appeared at the hearing in opposition to the applications.

LIFE OF MINE RESERVES (LMR)

(7) "Life of mine reserves" ("LMR") has been defined in New Mexico Oil Conservation Commission ("NMOCC") Order No. R-111-P as those potash deposits within the potash area reasonably believed by the potash lessee to contain potash ore in sufficient thickness and grade to be mineable using current day mining methods, equipment and technology. Mine operators file revisions to their LMR's annually with the New Mexico State Land Office ("SLO") and with the U.S. Bureau of Land Management ("BLM") as required under that order.

(8) NMOCC Order No. R-111-P requires that a well operator notify each potash operator within one mile of a proposed well before commencing drilling operations. That order also requires the Oil Conservation Division to ascertain if a proposed well is within an LMR area. The order provides that any drilling application within an LMR or its buffer zone may be approved only with the agreement of the potash operator. Any drilling application outside an LMR and its buffer zone may be approved provided there is no protest from the potash operator within twenty days of his notice. Exceptions from NMOCC Order No. R-111-P will only be granted if an oil and gas operator can show that a well within an LMR or its buffer zone will not waste potash or a potash operator can show that a well outside an LMR and its buffer zone will waste potash.

(9) NM Potash has previously designated an LMR in Section 35, Township 21 South, Range 31 East (directly North of Section 2) which designation has not been challenged in these cases. Upon receiving notification on or about November 22, 1991 that Yates intended to drill oil and gas wells within Section 2, NM Potash caused a core hole to be drilled in the SE/4 of Section 2 in order to ascertain whether or not potash reserves were present. After determining that the core hole results showed the presence of commercial potash ore, NM Potash submitted a revision of its LMR designation to the SLO on or about January 14, 1992. The revised LMR included all of Section 2.

(10) The Flora "AKF" State Wells No. 1 and No. 2 would be outside the LMR and buffer zone previously established for Section 35 but would be included in any LMR established for Section 2.

(11) Yates challenges NM Potash's designation of Section 2 as part of its LMR, argues that an LMR is not established on state land until designated by the SLO nor does it have retroactive effect once designated and contends notwithstanding an LMR designation that the Commission is obligated to grant exceptions to Order No. R-111-P unless commercial potash will be unduly wasted as a result of drilling the subject wells. NM Potash argues that the filing of an LMR designation effectively creates an area off limits to oil and gas drilling and that there should be no forum for oil and gas operators to challenge its LMR boundaries.

(12) The intent of the notification requirement in NMOCC Order No. R-111-P is to determine if a proposed drill site for an oil and gas well is within a designated LMR or its buffer zone. It is not intended to give a potash lessee information concerning where oil and gas drilling will occur so that the potash operator may immediately revise its LMR to preclude the proposed drilling. Any revision of LMRs should be in the normal course of mining business as reserves are delineated and mining plans updated; it should not be in response to planned drilling activity for oil and gas. Therefore, NM Potash should be precluded from revising its LMR to encompass Section 2 since it did so only after receiving notice that Yates intended to drill for oil and gas within Section 2.

(13) For purposes of drilling the Flora "AKF" State Wells No. 1 and No. 2, no valid LMR is established for Section 2. Therefore, the proposed wells are outside the LMR and its buffer zone.

WASTE

(14) State law charges the Commission with preventing waste and "waste" is defined to include "drilling or producing operations for oil or gas within any area containing commercial deposits of potash where such operations would have the effect to unduly reduce the total quantity of such commercial deposits of potash which may reasonably be recovered in commercial quantities". "Unduly" is defined as "excessively" or "immoderately". The Commission also is charged with preventing waste of oil and gas and protecting the correlative rights of owners of oil and gas.

(15) Even though the Flora "AKF" State No. 1 and No. 2 wells are not within the boundaries or the buffer zone of a designated LMR, the applications to drill should nevertheless be denied if the wells would result in the waste of potash, contrary to New Mexico law. However, the burden of proving that the wells would result in such waste is on NM Potash, the party opposing the applications.

(16) Core hole K-162, drilled in January, 1992 and located 2,000 feet from the South line and 1,200 feet from the East line of Section 2 did encounter commercial potash mineralization in both the 4th and 10th ore zones of the Salado Salt. While ignoring other valuable information such as radioactivity logs from other wells, and available data from barren core hole ERDA-6 in the SE/4 of Section 35, NM Potash used the information from core hole K-162 to contend that commercial quantities of potash are present throughout Section 2. In addition, based upon evidence concerning the economics of the potash mining industry and the capital costs necessary to extend NM Potash's mine to Section 2, it is merely speculation that Section 2 will be mined at all in the foreseeable future.

(17) NM Potash did not prove that the drilling of the Flora "AKF" State No. 1 and No. 2 wells will result in the waste of potash contrary to New Mexico law and therefore, the applications of Yates to drill such wells in the S/2 of Section 2 should be granted.

IT IS THEREFORE ORDERED THAT:

(1) The application of Yates to drill their Flora No. 1 and Flora No. 2 Wells in the S/2 of Section 2 is hereby approved.

(2) Jurisdiction of this cause is hereby retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



Gary Carlson

GARY CARLSON, Member

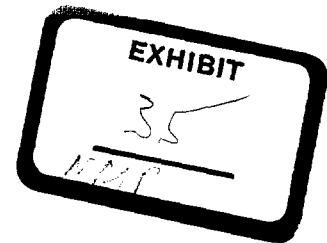
Bill Weiss

WILLIAM W. WEISS, Member

William J. Lemay

WILLIAM J. LEMAY, Chairman

S E A L



BEFORE THE OIL CONSERVATION DIVISION
STATE OF NEW MEXICO

IN THE MATTER OF

APPLICATION OF YATES PETROLEUM
CORPORATION FOR AUTHORIZATION TO
DRILL, EDDY COUNTY, NEW MEXICO

CASES NO. 10446, 10447,
10448, 10449

SUBPOENA DUCES TECUM

TO: Floyd O. Prando
Director
Oil, Gas and Minerals Division
Office of the Commissioner of Public Lands
310 Old Santa Fe Trail
Santa Fe, New Mexico 87504

RECEIVED

SEP 04 1992

OIL CONSERVATION DIVISION

Pursuant to Section 70-2-8, NMSA (1978) and Rule 1211 of the New Mexico Oil Conservation Commission's Rules of Procedure, you are hereby **ORDERED** to appear at the offices of the Oil Conservation Commission, 310 Old Santa Fe Trail, Santa Fe, New Mexico, on the 10th day of September, 1992, at 9 a.m. and bring with you the documents listed in Exhibit A.

This subpoena is issued on application of New Mexico Potash Corporation through its attorneys, Kemp, Smith, Duncan & Hammond, 500 Marquette, Suite 1200, Albuquerque, New Mexico 87102-2121.

Dated this ____ day of September, 1992.

NEW MEXICO OIL CONSERVATION COMMISSION

BY: 

EXHIBIT A

The term "document" as used herein means every writing and record of every type and description in the possession, custody or control of the State Land Office, whether prepared by you or otherwise, which is in your possession or control or known by you to exist, including but not limited to all drafts, papers, books, writings, records, letters, photographs, tangible things, correspondence, communications, telegrams, cables, telex messages, memoranda, notes, notations, work papers, transcripts, minutes, reports and recordings of telephone or other conversations or of interviews, conferences, or meetings. It also includes diary entries, affidavits, statements, summaries, opinions, reports, studies, analyses, evaluations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, plans, specifications, sketches, instructions, charts, manuals, brochures, publications, schedules, price lists, client lists, journals, statistical records, desk calendars, appointment books, lists, tabulations, sound recordings, computer printouts, books of accounts, checks, accounting records, vouchers, and invoices reflecting business operations, financial statements, and any notes or drafts relating to the foregoing, without regard to whether marked confidential or proprietary. It also includes duplicate copies if the original is unavailable or if the duplicate is different in any way, including marginal notations, from the original.

1. Produce all documents showing the action to be taken by the State Land Office upon the filing of an LMR designation by a

potash lessee in accordance with Section G of Oil Conservation Commission Order R-111-P.

2. Produce all documents showing the standards used by the State Land Office in reviewing and/or approving an LMR designation filed by a potash lessee.

3. Produce all documents showing the standards used by the State Land Office in determining the existence of commercial deposits of potash or potassium.

4. Produce all documents showing the appeal procedures of a potash lessee in connection with disputes with the State Land Office over the review and/or disapproval of an LMR designation.

5. Produce all documents explaining the duties of the State Land Office under Oil Conservation Commission Order R-111-P.

6. Produce all documents showing the procedures adopted by the State Land Office under Section G, paragraphs (a), (b), (c), (d), and (e).

7. Produce all documents showing the procedures adopted by the State Land Office under Section G, paragraph 3.

8. Produce all documents showing the standards and/or guidelines relied upon by the State Land Office in limiting its finding of commercial deposit of potash to the SE4 Section 2, Township 22 South, Range 31 East, based upon core hole #162, as stated in its letter of March 27, 1992, a copy of which is attached.

9. Produce all documents showing the "justification" that a potash lessee must provide to the State Land Office to extend an LMR onto state land, as stated in the attached letter of March 27, 1992.

BEFORE THE OIL CONSERVATION DIVISION
STATE OF NEW MEXICO

IN THE MATTER OF

APPLICATION OF YATES PETROLEUM
CORPORATION FOR AUTHORIZATION TO
DRILL, EDDY COUNTY, NEW MEXICO

CASES NO. 10446, 10447,
10448, 10449

SUBPOENA DUCES TECUM

TO: Floyd O. Prando
Director
Oil, Gas and Minerals Division
Office of the Commissioner of Public Lands
310 Old Santa Fe Trail
Santa Fe, New Mexico 87504

RECEIVED

SEP 08 1992

OIL CONSERVATION DIVISION

Pursuant to Section 70-2-8, NMSA (1978) and Rule 1211 of the New Mexico Oil Conservation Commission's Rules of Procedure, you are hereby **ORDERED** to appear at the offices of the Oil Conservation Commission, 310 Old Santa Fe Trail, Santa Fe, New Mexico, on the 10th day of September, 1992, at 9 a.m. and bring with you the documents listed in Exhibit A.

This subpoena is issued on application of New Mexico Potash Corporation through its attorneys, Kemp, Smith, Duncan & Hammond, 500 Marquette, Suite 1200, Albuquerque, New Mexico 87102-2121.

Dated this ____ day of September, 1992.

NEW MEXICO OIL CONSERVATION COMMISSION

BY: 

EXHIBIT A

The term "document" as used herein means every writing and record of every type and description in the possession, custody or control of the State Land Office, whether prepared by you or otherwise, which is in your possession or control or known by you to exist, including but not limited to all drafts, papers, books, writings, records, letters, photographs, tangible things, correspondence, communications, telegrams, cables, telex messages, memoranda, notes, notations, work papers, transcripts, minutes, reports and recordings of telephone or other conversations or of interviews, conferences, or meetings. It also includes diary entries, affidavits, statements, summaries, opinions, reports, studies, analyses, evaluations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, plans, specifications, sketches, instructions, charts, manuals, brochures, publications, schedules, price lists, client lists, journals, statistical records, desk calendars, appointment books, lists, tabulations, sound recordings, computer printouts, books of accounts, checks, accounting records, vouchers, and invoices reflecting business operations, financial statements, and any notes or drafts relating to the foregoing, without regard to whether marked confidential or proprietary. It also includes duplicate copies if the original is unavailable or if the duplicate is different in any way, including marginal notations, from the original.

1. Produce all documents showing the action to be taken by the State Land Office upon the filing of an LMR designation by a

potash lessee in accordance with Section G of Oil Conservation Commission Order R-111-P.

2. Produce all documents showing the standards used by the State Land Office in reviewing and/or approving an LMR designation filed by a potash lessee.

3. Produce all documents showing the standards used by the State Land Office in determining the existence of commercial deposits of potash or potassium.

4. Produce all documents showing the appeal procedures of a potash lessee in connection with disputes with the State Land Office over the review and/or disapproval of an LMR designation.

5. Produce all documents explaining the duties of the State Land Office under Oil Conservation Commission Order R-111-P.

6. Produce all documents showing the procedures adopted by the State Land Office under Section G, paragraphs (a), (b), (c), (d), and (e).

7. Produce all documents showing the procedures adopted by the State Land Office under Section G, paragraph 3.

8. Produce all documents showing the standards and/or guidelines relied upon by the State Land Office in limiting its finding of commercial deposit of potash to the SE4 Section 2, Township 22 South, Range 31 East, based upon core hole #162, as stated in its letter of March 27, 1992, a copy of which is attached.

9. Produce all documents showing the "justification" that a potash lessee must provide to the State Land Office to extend an LMR onto state land, as stated in the attached letter of March 27, 1992.



JIM BACA
COMMISSIONER

State of New Mexico
OFFICE OF THE
Commissioner of Public Lands
Santa Fe

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

March 27, 1992

New Mexico Potash Corp.
Attn: Mr. R. H. Lane
P. O. Box 610
Hobbs, NM 88240

Dear Mr. Lane:

The State Land Office reviewed data from your core hole #162, supplemented by your discussion of March 19 in this office. It is our conclusion that core hole #162 did encounter an economical accumulation of Sylvite. The quality of ore is such that the SE4 Section 2, Township 22 South, Range 31 East contains a commercial deposit.

We continue to feel that one test hole is not adequate to seal off a full Section of land and will continue to request justification for LMRs extended onto state land. Order No. R-111-P clearly states that we are entitled to the information used to identify an LMR (see G (a) line 12 and following) and shall request it in the future.

Counsel advises that chronology shall be a guide to decisions involving this section. Since the Buffer Zone in the N2 Section 2 is long established, no wells shall be drilled in the N2 without consent of potash lessee, unless R-111-P is changed. All existing wells and all wells permitted in the S2 Section 2 before this date are approved by the Commissioner. No further development will be approved by the Commissioner, unless there is a justifying change or abandonment of Order R-111-P.

Sincerely,

JIM BACA
COMMISSIONER OF PUBLIC LANDS

BY: *Floyd O. Prando*
FLOYD O. PRANDO, Director
Oil, Gas and Minerals Division
(505) 827-5744

JB/FOP/dj



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BEFORE THE OIL CONSERVATION DIVISION
STATE OF NEW MEXICO

IN THE MATTER OF

APPLICATION OF YATES PETROLEUM
CORPORATION FOR AUTHORIZATION TO
DRILL, EDDY COUNTY, NEW MEXICO

CASES NO. 10446, 10447,
10448, 10449

SUBPOENA DUCES TECUM

TO: John Yates
President
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210

RECEIVED

SEP 02 1992

OIL CONSERVATION DIVISION

Pursuant to Section 70-2-8, NMSA (1978) and Rule 1211 of the New Mexico Oil Conservation Commission's Rules of Procedure, you are hereby **ORDERED** to appear at the offices of Kemp, Smith, Duncan & Hammond, P.C., 500 Marquette, N. W., Suite 1200, Albuquerque, New Mexico 87102-2121, on the 8th day of September, 1992, at 10 a.m. and produce the documents and items specified in the attached Exhibit A.

This subpoena is issued on application of New Mexico Potash Corporation through its attorneys, Kemp, Smith, Duncan & Hammond, 500 Marquette, Suite 1200, Albuquerque, New Mexico 87102-2121.

Dated this 2nd day of September, 1992.

NEW MEXICO OIL CONSERVATION COMMISSION

BY: 

EXHIBIT A

The term "document" as used herein means every writing and record of every type and description in the possession, custody or control of Yates Petroleum Corporation, whether prepared by you or otherwise, which is in your possession or control or known by you to exist, including but not limited to all drafts, papers, books, writings, records, letters, photographs, tangible things, correspondence, communications, telegrams, cables, telex messages, memoranda, notes, notations, work papers, transcripts, minutes, reports and recordings of telephone or other conversations or of interviews, conferences, or meetings. It also includes diary entries, affidavits, statements, summaries, opinions, reports, studies, analyses, evaluations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, plans, specifications, sketches, instructions, charts, manuals, brochures, publications, schedules, price lists, client lists, journals, statistical records, desk calendars, appointment books, lists, tabulations, sound recordings, computer printouts, books of accounts, checks, accounting records, vouchers, and invoices reflecting business operations, financial statements, and any notes or drafts relating to the foregoing, without regard to whether marked confidential or proprietary. It also includes duplicate copies if the original is unavailable or if the duplicate is different in any way, including marginal notations, from the original.

1. Produce all documents showing the costs of drilling the Bonneville "AKK" Federal #3 well in Section 24, Township 21 South,

Range 31 East with a bottom hole location 1980' FSL and 660' FWL in Section 19, Township 21 South, Range 32 East.

2. Produce all documents showing the profitability of the Bonneville "AKK" Federal #3 well in Section 24, Township 21 South, Range 31 East with a bottom hole location 1980' FSL and 660' FWL in Section 19, Township 21 South, Range 32 East.

3. Produce all documents showing the projected profitability of the Bonneville "AKK" Federal #3 well in Section 24, Township 21 South, Range 31 East with a bottom hole location 1980' FSL and 660' FWL in Section 19, Township 21 South, Range 32 East.

4. Produce all documents showing the costs of drilling the Graham Nos. 1 and 2 wells in Section 2, Township 22 South, Range 31 East.

5. Produce all documents showing the profitability of the Graham Nos. 1 and 2 wells in Section 2, Township 22 South, Range 31 East.

6. Produce all drilling contracts entered into by Yates Petroleum Corporation for the drilling of the Bonneville "AKK" Federal #3 well in Section 24, Township 21 South, Range 31 East with a bottom hole location 1980' FSL and 660' FWL in Section 19, Township 21 South, Range 32 East.

7. Produce all reports, graphs, charts, or other writings or drawings prepared by any expert witness who will testify in this matter.

8. Produce copies of all exhibits which will be offered into evidence in this matter.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

RECEIVED

JUL 14 1992

OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF
YATES PETROLEUM CORPORATION FOR
PERMITS TO DRILL, EDDY COUNTY,
NEW MEXICO.

APPLICATIONS FOR HEARINGS
de novo in CASE NOS.:

10446/Order R-9650
10447/Order R-9651
10448/Order R-9654
10449/Order R-9655

RENEWED REQUEST FOR HEARING DATE

COMES NOW Yates Petroleum Corporation ("Yates"), as Applicant in the above-noted cases, and hereby renews its request that the Oil Conservation Commission set a date for the continuation of the hearing de novo on said applications, and would respectfully reiterate that, at the close of the initial hearing on May 22, 1992, in said cases the Commission indicated that, once it had ruled on New Mexico Potash Corporation's request to quash subpoenas issued at the request of Yates, said hearing should be set. On June 12, 1992, an order was issued by the Oil Conservation Commission denying New Mexico Potash Corporation's Motion to Quash, no action has been taken on New Mexico Potash's Application for Rehearing on said Motion, and ten days have passed since its filing, therefore, Yates once again requests that the hearing date be set.

LOSEE, CARSON, HAAS & CARROLL, P.A.

By: 

Ernest L. Carroll

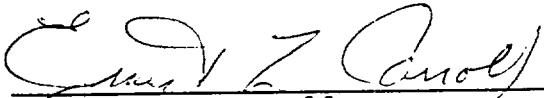
P. O. Drawer 239

Artesia, New Mexico 88211-0239

(505) 746-3505

Attorneys for Applicant, Yates Petroleum
Corporation

I hereby certify that I caused to be
mailed a true and correct copy of the
foregoing to all counsel of record
this July 13, 1992.



Ernest L. Carroll

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION COMMISSION
FOR THE PURPOSE OF CONSIDERING;**

**CASES NOS. 10446, 10447,
10448, 10449
Order No. R-9679-A**

**APPLICATION OF YATES PETROLEUM
CORPORATION FOR A PERMIT TO DRILL,
EDDY COUNTY, NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing on motions to quash sub poenas duces tecum at 9:00 a.m. on July 16, 1992, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 16th day of July, 1992, the Commission, a quorum being present, having considered the arguments of counsel,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) These cases have been consolidated for purpose of hearing.

(3) Yates Petroleum Corporation has requested and the Commission has issued the following sub poena duces tecum:

(a) dated May 6, 1992, directed to Leslie Cone, District Manager, Bureau of Land Management.

(4) The Bureau of Land Management filed a motion to quash said sub poena duces tecum on June 30, 1992.

(5) Said motion sets forth valid reasons to quash and no party has responded to said motion.

(6) Upon review the Commission agreed that the motion to quash should be granted.

IT IS THEREFORE ORDERED THAT:

(1) The motion of the Bureau of Land Management to quash the sub poena duces tecum, identified in Finding No. (3) herein, issued by the Commission at the request of Yates Petroleum Corporation is hereby granted.

(2) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



Gary Carlson

GARY CARLSON, Member

Bill Weiss

WILLIAM W. WEISS, Member

William J. Lemay

WILLIAM J. LEMAY, Chairman

S E A L

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION COMMISSION
FOR THE PURPOSE OF CONSIDERING;

CASES NOS. 10446, 10447,
10448, 10449
Order No. R-9679-A

APPLICATION OF YATES PETROLEUM
CORPORATION FOR A PERMIT TO DRILL,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

July 16, '92
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NOW, on this ____ day of July, 1992, the Commission, a quorum being present, having considered the arguments of counsel,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) These cases have been consolidated for purpose of hearing.

(3) Yates Petroleum Corporation has requested and the Commission has issued the following sub poena duces tecum:

(b) dated May 6, 1992, directed to Leslie Cone, District Manager, Bureau of Land Management.

(4) The Bureau of Land Management filed a motion to quash said sub poena duces tecum on June 30, 1992.

(5) *Said motion sets forth valid reasons to quash and no party has responded to said motion.*
(5) Upon review ~~of the motion to quash~~ the Commission agreed that the motion should

to quash

be granted.

IT IS THEREFORE ORDERED THAT:

(1) The motion of the Bureau of Land Management to quash the sub poena duces tecum, identified in Finding No. (3) herein, issued by the Commission at the request of Yates Petroleum Corporation is hereby granted.

(2) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.