STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPT. OIL CONSERVATION COMMISSION

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

> CASE NO. 9316 Order No. R-111-P

APPLICATION OF THE **O!L** CONSERVATION DIVISION UPON ITS OWN MOTION TO REVISE ORDER **R-111**, AS AMENDED, PERTAINING TO THE POTASH AREAS OF EDDY AND LEA **COUNTIES**, NEW **MEXICO**.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on February 18, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this <u>21st</u> day of April, 1988, the Commission, a quorum **being present**, having considered the testimony presented and the exhibits received at said hearing, 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) Order R-111-A was entered July 14, 1955, and since that time no amendments have been entered, except amendments to Exhibit "A" attached thereto, despite significant advances in drilling technology and practices.

(3) Operation under Order R-111-A has become virtually unworkable because of 1) the lack of tolerance on the part of both oil/gas and potash industries in regarding the activities of the other industry in areas where leasehold interests are overlapping and 2) confusion recording the boundaries of the known Potash Leasing Area (KPLA) established by the U.S. Bureau of Land Management (BLM) and the R-111-A area as amended by Orders R-111-B through O.

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CO The then Director of the **Oil** Conservation Division (OCD) by memorandum dated March **21**, 1986 convened a study committee of volunteer **representatives** from the oil and potash industries and other interested parties.

(5) The committee met May 29, September 25-26, and November 13-14 (field trip) in 1986 and on March 19, 1987.

(6) By committee agreement a work committee was formed from the larger committee consisting of three members and one alternate from each industry and this work committee was chaired by the OCD Chief Petroleum Engineer and charged with the responsibility to develop proposed amendments to Order R-111-A. It met on April 30, May 1, July 23-24 and November 23, 1987.

(7) Each meeting of the work committee was held in the presence of **representatives** of both **BLM** and OCD; and at its final meeting November 23, 1987 an agreement was reached and signed by the committee members present, which agreement is attached hereto as Exhibit **"B"**, for the purpose of providing background information and **acknowledging** the concensus reached by **representatives** of the **Oil** and Gas and Potash industries relating to the multiple use of resources in the potash area.

(8) Exhibit "B" is regarded by the Commission as a report of both the work committee and the full study committee since a draft copy of a nearly identical agreement was furnished to each member of the study committee for comment, and comments received thereon were addressed at the final meeting.

(9) The agreement represents a compromise by both industries, the potash operators relinquishing lower grade marginal or uneconomic ore deposits in order to more fully protect their higher grade ore deposits; and the oil/gas operators receiving such lands containing sub-economic ore deposits as prospective drill-sites.

(10) The **Oil** and Gas Act, 70-2-3 F **NMSA** 1978, declares as waste "drilling or producing operations for **oil** or 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 -- or where such operations would interfere unduly with the orderly commercial development of such potash deposits".

(11) The **Oil** and Gas Act in 70-2-12 B(17) empowers the Division "to regulate and, where necessary, prohibit **drilling**

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or producing operations for oi I and gas" in areas which would cause waste as described in 70-2-3 F.

(12] The report of the work committee presents a reasonable process for determining where **wells** for **oil** and gas would cause waste of potash and the pertinent portions of said report should be contained in the order as a reasonable process for prohibiting oil and gas drilling in such areas in the absence of substantial evidence that waste of potash as described by the statute would not result.

(13) Release of methane into potash mine workings would endanger the **lives** of miners and would render further mining activities uneconomic because of the additional, and more expensive safety requirements which would be imposed by the Mine Safety and Health **Administration (MSHA)** of the U.S. Department of Labor.

(14) Salt and potash deposits are essentially non-porous and impermeable but are inter-bedded with clay seams which, in an undisturbed state are porous but of extremely low permeability.

(15) Primary mining activity creates minor localized disturbance but secondary mining causes subsidence of the overburden the effects of which tend to expand beyond the mined out area a distance **approximately equal** to the depth of the mined area.

(16) During the drilling of **wells** for oil and gas, measures should be taken to protect the **salt-protection** casing from internal pressures greater than the designed burst resistance plus a safety factor so as to prevent any possible entry of methane into the salt and potash interval.

(17) A proposed revision of Order R-111-A was presented at the hearing and comments were received thereon both orally at the hearing and in writing subsequent to the hearing, the record **being** held open for two weeks subsequent to the hearing, as announced by the Chairman.

(18) Testimony and comments both in support and in **opposition** to the proposed revision of the order were received at the hearing and subsequent thereto, some pointing out that the number of **oil** or gas **wells** which could be **drilled** under the terms of the committee report would be reduced but no comments addressed the possible waste of potash as a result of **additional** drilling.

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(19) One member of the work committee from the potash industry testified the proposed revision of Order R-111-A failed to prohibit drilling in the commercial ore areas and was therefore contrary to the work committee report and the **Oil** and Gas **Act**.

(20) The Commission cannot abdicate its discretion to consider applications to drill as exceptions to its rules and orders but in the interest of preventing waste of potash should deny any application to drill in commercial potash areas as recommended in the work committee report, unless a clear demonstration is made that commercial potash will not be wasted unduly as a result of the drilling of the we II.

(21) Confusion can be reduced and efficiencies can be obtained by making the area covered by Order R-111 coterminous with the KPLA as determined by the **BLM**, and the area should be expanded and contracted by the regular **pool** nomenclature procedure rather than by separate hearings and further revisions of Order R-111.

(22) Expansion of the R-111 area to coincide with the KPLA will bring under the purview of this order areas where potash is either absent or non-commercial and such areas should be granted less stringent casing, cementing and plugging requirements, at the discretion of the OCD district supervisor.

(23) The proposed revision of Order R-111-A will permit the drilling of wells for oil or gas in areas previously not available for such drilling and will prevent waste of potash, and further, will serve to reduce confusion and uncertainty in the conduct of operations by both the potash and oil/gas industries, all to the benefit of the state and its citizens.

IT IS THEREFORE ORDERED THAT:

This order **shall** be known as The Rules and Regulations Governing the Exploration and Development of **Oil** and Gas in Certain Areas Herein Defined, Which Are Known To Contain Potash Reserves.

A. OBJECTIVE

The objective of these **Rules** and Regulations is to prevent waste, protect correlative rights, assure maximum conservation of the oil, gas and potash resources of New **Mexico**, and permit the economic recovery of **oil**, gas and potash minerals in the area hereinafter defined. -5-Case No. 9316 Order No. R-111-P

B. THE POTASH AREA

(1) The Potash **Area**, as described in Exhibit A attached hereto and made a part hereof, represents the area in various parts of which potash mining operations are now in progress, or in which core tests indicate commercial potash reserves. Such area is coterminous with the Known Potash Leasing Area (KPLA) as determined by the U.S. Bureau of Land Management **(BLM)**.

(2) The Potash Area, as described in Exhibit "A" may be revised by the Division after due notice and hearing at the regular pool nomenclature hearings, to reflect changes made by BLM in its KPLA.

C. DRILLING IN THE POTASH AREA

(1) All drilling of oil and gas wells in the Potash Area shall be subject to these Rules and Regulations.

(2) No wells shall be drilled for oil or gas at a location which, in the opinion of the Division or its duly authorized representative, would result in undue waste of potash deposits or constitute a hazard to or interfere unduly with mining of potash deposits.

No mining operations **shall** be conducted in the Potash Area that would, in the opinion of the Division or its duly authorized **representative**, constitute a hazard to oil or gas production, or that would unreasonably interfere with the orderly development and production from any **oil** or gas **pool**.

(3) Upon discovery of oil or gas in the Potash Area, the Oil Conservation Division may promulgate pool rules for the affected area after due notice and hearing in order to address conditions not fully covered by these rules and the general rules.

(4) The **Division's** District **Supervisor** may waive the requirements of Sections D and F which are more rigorous than the general rules upon satisfactory showing that a location is outside the Life of Mine Reserves (LMR) and surrounding buffer zone as defined hereinbelow and that no commercial potash resources will be unduly diminished.

(5) AM encounters with flammable gas, including hydrogen sulfide, during drilling operations **shall** be reported immediately to the appropriate OCD District office followed by a written report of same.

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D. DRILLING AND CASING PROGRAM

(1) For the purpose of the regulations and the drilling of wells for oil and gas, shallow and deep zones are defined as follows:

(a) The shallow zone shall include all formations above the base of the Delaware Mountain Group or, above a depth of 5,000 feet, whichever is lesser.

(b) The deep zone shall include all formations **below** the base of the Del**aware 'Mounta**in Group or, below a depth of 5,000 feet, whichever is lesser.

(c) For the purpose of identification, the base of the Delaware Mountain Group is hereby identified as the geophysical log marker found at a depth of 7485 feet in the Richardson and Bass No. 1 Rodke well in Section 27, Township 20 South, Range 31 East, NMPM, Eddy County, New Mexico.

(2) Surface Casing String:

(a) A surface casing string of new or used oil field casing in good condition shall be set in the "Red Bed" section of the basal Rustler formation immediately above the salt section, or in the anhydrite at the top of the salt section, as determined necessary by the regulatory representative approving the drilling operations, and the cement shall be circulated to the surface.

(b) Cement **shall** be **allowed** to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

(c) Casing and water-shut-off tests shall be made both before and after drilling the plug and below the casing seat as follows:

> (i) If rotary tools are used, the mud **shal!** be displaced with water and a hydraulic pressure of six hundred (600) pounds per square **inch shal!** be applied. If a drop of one hundred (100) pounds per square inch or more should occur within thirty (30) minutes, corrective measures **shal!** be **applied**.

> (ii) If cable tools are used, the mud shall be bailed from the hole, and if the

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> hole does not remain dry for a period of one hour, corrective measures **shall** be **applied**.

(d) The above requirements for the surface casing string ${\sf shall}$ be applicable to both the shallow and deep zones.

(3) Salt Protection String:

(a) A salt protection string of new or used oi! field casing in good condition shal! be set not less than one hundred (100) feet nor more than six hundred (600) feet below the base of the salt section; provided that such string shal! not be set below the top of the highest known oil or gas zone. With prior approval of the OCD District Supervisor the wellbore may be deviated from the vertical after completely penetrating Marker Bed No. 126 (USGS) but that section of the casing set in the deviated portion of the wellbore shall be centralized at each joint.

(b) The **salt** protection string **shall** be cemented, as follows:

(i) For wells drilled to the shallow zone, the string may be cemented with a nominal volume of cement for testing purposes only. If the exploratory test well is completed as a productive well, the string shall be re-cemented with sufficient cement to fill the annular space back of the pipe from the top of the first cementing to the surface or to the bottom of the cellar, or may be cut and pulled if the production string is cemented to the surface as provided in sub-section D (5)(a)(i) below.

(ii) For wells drilled to the deep zone, the string must be cemented with sufficient cement to fill the annular space back of the pipe from the casing seat to the surface or to the bottom of the cellar.

(c) If the cement **fails** to reach the surface or the bottom of the cellar, where required, the top of the cement **shall** be located by a temperature, gamma ray or other survey and additional cementing **shall** be done **until** the cement is brought to the point required.

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(d) The fluid used to mix with the cement shall be saturated with the salts common to the zones penetrated and with suitable proportions but not less than 1% of calcium chloride by weight of cement.

(e) Cement **shall** be **allowed** to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the **plug** or initiating tests.

(f) Casing tests shall be made both before and after drilling the plug and below the casing seat, as follows:

(i) If rotary tools are used, the mud shall be displaced with water and a hydraulic pressure of one thousand (1000) pounds per square inch shall be applied. If a drop of one hundred (100) pounds per square inch or more should occur within thirty (30) minutes, corrective measures shall be applied.

(ii) If cable tools are used, the mud shall be bailed from the hole and if the hole does not remain dry for a period of one hour. corrective measures shall be applied.

(g) The Division, or its duly authorized representative, may require the use of centralizers on the salt protection string when in their judgment the use of such centralizers would offer further protection to the salt section.

(h) Before **drilling** the plug a drilling spool installed **below** the bottom blowout preventer or the **wellhead** casing outlet **shall** be equipped with a rupture disc or other automatic **pressure-relief** device set at 80% of the API-rated burst pressure of new casing or 60% of the API-rated burst pressure of used casing. The disc or relief device should be connected to the rig choke manifold system so that any **flow** can be **controlled** away from the rig. The disc or **relief** device **shall** remain installed as long as drilling activities continue in the **well** until the intermediate or production casing is run and cemented.

(i) The above requirements for the salt protection string shall be applicable to both the shallow and deep zones except for sub-section D (3) (b) (i) and (ii) above.

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(4) Intermediate String:

(a) In drilling **wells** to the deep zone for oil or gas, the operator **shall** have the option of running an intermediate **string** of pipe, unless the Division requires an intermediate string be run.

(b) Cementing procedures and casing tests for the intermediate string shall be the same as provided under sub-sections D (3) (c), (e) and (f) for the salt protection string.

(5) Production String:

(a) A production string **shall** be set on top or through the **oil** or gas pay zone and **shall** be cemented as **follows:**

(i) For wells drilled to the shallow zone the production string shall be cemented to the surface if the salt protection string was cemented only with a nominal volume for testing purposes, in which case the salt protection string can be cut and pulled before the production string is cemented; provided, that if the salt protection string was cemented to the surface, the production string shall be cemented with a volume adequate to protect the pay zone and the casing above such zone. i

(ii) For wells drilled to the deep zone, the production string shall be cemented with a volume adequate to protect the pay zone and the casing above such zone; provided, that if no intermediate string shall have been run and cemented to the surface, the production string shall be cemented to the surface.

(b) Cementing procedures and casing tests for the production string shall be the same as provided under sub-section D (3) (c), (e) and (f) for the salt protection string; however if high pressure oil or gas production is discovered in an area, the Division may promulgate the necessary rules to prevent the charging of the salt section.

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E. DRILLING FLUID FOR SALT SECTION

The fluid used while drilling the salt section shall consist of water, to which has been added sufficient salts of a character common to the zone penetrated to completely saturate the mixture. Other admixtures may be added to the fluid by the operator in overcoming any specific problem. This requirement is specifically intended to prevent enlarged drill holes.

F. PLUCGING AND ABANDONMENT OF WELLS

(1) All wells heretofore and hereafter drilled within the Potash Area shall be plugged in a manner and in accordance with the general rules or field rules established by the Division that will provide a solid cement plug through the salt section and any water-bearing horizon and prevent liquids or gases from entering the hole above or below the salt section.

(2) The fluid used to mix the cement shall be saturated with the salts common to the salt section penetrated and with suitable proportions but not more than three (3) percent of calcium chloride by weight of cement being considered the desired mixture whenever possible.

G. DESIGNATION OF DRILLABLE LOCATION FOR WELLS

(a) Within ninety (90) days following effective date of this Order and annually thereafter by January 31 if revised, each potash lessee, without regard to whether the lease covers State or Federal lands, shall file with the District Manager, BLM, and the State Land Office (SLO), a designation of the potash deposits considered by the potash lessee to be its life-of-mine reserves ("LMR"). For purposes of this Agreement, "life-of-mine reserves" means 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. Information used by the potash lessee in identifying its LMR shall be filed with the BLM and SLO butwill be considered privileged and confidential "trade secrets and commercial. . .information" within the meaning of 43 C.F.R.§2.13(c) (4) (1986), Section 19-1-2.1 NMSA 1978, and not subject to public disclosure.

(b) Authorized officers of the BLM and SLO shall review the information submitted by each potash lessee

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in support of its LMR designation on their respective lands and verify upon request, that the data used by the potash lessee in establishing the boundaries of its LMR is consistent with data available to the BLM and SLO. Any disputes between the BLM and potash lessee concerning the boundary of a designated LMR shall be resolved in accordance with the Department of Interior's Hearings and Appeals Procedures, 43 C.F.R. Part 4 (1986).

(c) A potash lessee may amend its designated LMR by filing a revised designation with the BLM and SLO accompanied by the information referred to in Section A above. Such amendments must be filed by January 31 next following the date the additional data becomes available.

(d) Authorized officers of the BLM and SLO shall commit the designated LMR of each potash lessee to a map(s) of suitable scale and thereafter revise the map(s) as necessary to reflect the latest amendments to any designated LMRs. These maps shall be considered privileged and confidential and exempt from disclosure under 43 C.F.R. Part 2 and §19-1-2.1 NMSA 1978, and will be used only for the purposes set forth in this Order.

(e) The foregoing procedure can be modified by **policy** changes within the BLM and State Land Office.

(2) Before commencing drilling operations for oil or gas on any lands within the Potash Area, the well operator shall prepare a map or plat showing the location of the proposed well, said map or plat to accompany each copy of the Notice of Intention to Drill. In addition to the number of copies required by the Division, the well operator shall send one copy by registered mail to each potash operator holding potash leases within a radius of one mile of the proposed well, as reflected by the plats submitted under paragraph I (2). The well operator shall furnish proof of the fact that said potash operators were notified by registered mail of his intent by attaching return receipt to the copies of the Notice of Intention to Drill and plats furnished the Division.

(3) Drilling applications on federal lands will be processed for approval by BLM. Applications on state or patented lands will be processed by the Division and, in the case of state lands, in collaboration with the SLO. The Division will first ascertain from the BLM or SLO that the location is not within the LMR area. Active mine workings and mined-out areas shall also be treated as LMR. Any application to drill in the LMR area, including buffer zones, may be approved only by mutual agreement of lessor and lessees of -12-Case No. 9316 Order No. R-111-P

both potash and oil and gas interests. Applications to drill outside the LMR will be approved as indicated below; provided there is no protest from potash lessee within 20 days of his receipt of a copy of the notice:

- (a) a shallow we I I shall be drilled no closer to the LMR than one-fourth (1/4) mile or 110% of the depth of the ore, whichever is greater.
- (b) A deep well shall be drilled no closer than one-half (1/2) mile from the LMR.

H. INSPECTION OF DRILLING AND MINING OPERATIONS

A representative of any potash lessee within a radius of one mile from the well location may be present during drilling, cementing, casing, and plugging of any oil or gas wells to observe conformance with these regulations. Likewise, a representative of the oil and gas lessee may inspect mine workings on his lease to observe conformance with these regulations.

1. FILING OF WELL SURVEYS, MINE SURVEYS AND POTASH DEVELOPMENT PLANS

(1) Directional Surveys:

The Division may require an operator to file a certified directional survey from the surface to a point below the lowest known **potash-bearing** horizon on any **well drilled** within the Potash **Area**.

(2)Mine Surveys :

Within 30 days after the adoption of this order and thereafter on or before January 31st of each year, each potash operator **shall** furnish the Division two copies of a plat of a survey of the location of his **leaseholdings** and all of his open mine workings, which plat **shall** be **available** for **public** inspection and on a scale acceptable to the Division.

J. APPLICABILITY OF STATEWIDE RULES AND REGULATIONS

All general statewide rules and regulations of the Oil Conservation Division governing the development, operation, and production of oil and gas in the State of New

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Mexico not inconsistent or in **conflict** herewith, are hereby adopted and made **applicable** to the areas described herein.

IT IS FURTHER ORDERED THAT:

(1) Order R-111 and amendments through $\ensuremath{\text{R-111-O}}$ are hereby rescinded.

(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 $\ensuremath{\mathsf{hereinabove}}$ designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

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WILLIAM R. HUMPHRIES, Member

L.

ERLING A. BROSTUEN, Member

20 WILLIAM J. LEMAY, Chairman and Secretary

EXHIBIT "A" CASE 9316 ORDER **R-111-P**

CONSOLIDATED LAND DESCRIPTION OF THE KNOWN POTASH LEASING AREA, AS OF FEBRUARY 3, 1988

EDDY $\operatorname{\textbf{COUNTY}}$, NEW MEXICO

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM
Section 10: SE/4 SE/4
Section 11: S/2 SW/4
Section 13: W/2 SW/4 and SE/4 SW/4
Section 14: W/2 NE/4, NW/4 and S/2
Section 14: W/2 NE/4, NW/4 and S/2 Section 15: E/2 NE/4, SE/4 SW/4 and SE/4
Section 22: $N/2$, $N/2$ SW/4, SE/4 SW/4 and SE/4
Section 23: All
Section 24: N/2 NW/4, SW/4 NW/4 and NW/4 SW/4
Section 26: NE/4, N/2 NW/4 and SE/4 NW/4
Section 27: N/2 NE/4 and NE/4 NW/4
TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM
Section 11: SE/4 SE/4
Section 12: SE/4 NE/4 and S/2
Section 13: Al I
Section 14: NE/4, SE/4 NW/4 and S/2
Section 15: SE/4SE/4
Section 22: NE/4, E/2 W/2 and SE/4
Section 23: Al I
Section 24: Al I
Section 25: NW/4 NW/4
Section 26: N/2 NE/4 and NW/4
Section 26: N/2 NE/4 and NW/4 Section 27: NE/4 and E/2 NW/4
Section 27: NE/4 and E/2 NW/4
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4.
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4. S/2 NW/4 and S/2
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4. S/2 NW/4 and S/2 Section 6: S/2 SE/4 and NE/4 SE/4
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4. S/2 NW/4 and S/2 Section 6: S/2 SE/4 and NE/4 SE/4 Sections 7 to 10 inclusive
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4. S/2 NW/4 and S/2 Section 6: S/2 SE/4 and NE/4 SE/4 Section 7 to 10 inclusive Section 11: S/2 NE/4 NW/4 NW/4 and S/2
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4. S/2 NW/4 and S/2 Section 6: S/2 SE/4 and NE/4 SE/4 Section 7 to 10 inclusive Section 12: NE/4, S/2 NW/4 and S/2
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4. S/2 NW/4 and S/2 Section 6: S/2 SE/4 and NE/4 SE/4 Section 7 to 10 inclusive Section 12: NE/4, S/2 NW/4 and S/2 Section 13: NE/4, W/2, N/2 SE/4 and SW/4 SE/4
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4. S/2 NW/4 and S/2 Section 6: S/2 SE/4 and NE/4 SE/4 Section 11: S/2 NE/4, NW/4 and S/2 Section 12: NE/4, S/2 NW/4 and S/2 Section 13: NE/4, W/2, N/2 SE/4 and SW/4 SE/4
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4. S/2 NW/4 and S/2 Section 6: S/2 SE/4 and NE/4 SE/4 Section 7 to 10 inclusive Section 11: S/2 NE/4, NW/4 and S/2 Section 12: NE/4, S/2 NW/4 and S/2 Section 13: NE/4, S/2 NW/4 and S/2 Section 14: Section 13: NE/4, S/2 NW/4 and S/2 Section 14: NE/4, S/2 NW/4 and S/2 Section 15: NE/4, M/2, N/2 SE/4 and SW/4 SE/4 Section 13: NE/4, W/2, N/2 SE/4 and SW/4 SE/4 Section 19: Lots 1, 2, and 3, NE/4, E/2 NW/4,
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4. S/2 NW/4 and S/2 Section 6: S/2 SE/4 and NE/4 SE/4 Sections 7 to 10 inclusive Section 11: S/2 NE/4, NW/4 NW/4 and S/2 Section 12: NE/4, S/2 NW/4 and S/2 Section 13: NE/4, W/2, N/2 SE/4 and SW/4 SE/4 Sections 14 to 18 inclusive Section 19: Lots 1, 2, and 3, NE/4, E/2 NW/4, NE/4 SW/4, E/2 SE/4 and
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4. S/2 NW/4 and S/2 Section 6: S/2 SE/4 and NE/4 SE/4 Sections 7 to 10 inclusive Section 11: S/2 NE/4, NW/4 NW/4 and S/2 Section 12: NE/4, S/2 NW/4 and S/2 Section 13: NE/4, N/2, N/2 SE/4 and SW/4 SE/4 Sections 14 to 18 inclusive Section 19: Lots 1, 2, and 3, NE/4, E/2 NW/4, NE/4 SW/4, E/2 SE/4 and NW/4 SE/4
Section 27: NE/4 and E/2 NW/4 TOWNSHIP 19 SOUTH RANCE 30 EAST, NMPM Section 2: SW/4 Section 3: W/2 SW/4, SE/4 SW/4, S/2 SE/4 and NE/4 SE/4 Section 4: Lots 3 and 4. SW/4 NE/4, S/2 NW/4 and S/2 Section 5: Lots 1, 2. and 3, S/2 NE/4. S/2 NW/4 and S/2 Section 6: S/2 SE/4 and NE/4 SE/4 Sections 7 to 10 inclusive Section 11: S/2 NE/4, NW/4 NW/4 and S/2 Section 12: NE/4, S/2 NW/4 and S/2 Section 13: NE/4, W/2, N/2 SE/4 and SW/4 SE/4 Sections 14 to 18 inclusive Section 19: Lots 1, 2, and 3, NE/4, E/2 NW/4, NE/4 SW/4, E/2 SE/4 and

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Section 25: Section 26:	NW/4 NW/4 NE/4 NE/4, W/2 NE/4, W/2, W/2 SE/4 and SE/4 SE/4
Section 27:	Al I
Section 28:	Al I
Section 29:	E/2, E/2 NW/4 and $NW/4 NW/4$
Section 32:	E/2 and SE/4 SW/4
Section 33 to	35 inclusive
Section 36:	NW/4 NW/4, $S/2 NW/4$ and $S/2$
	OUTH, RANGE 31 EAST. NMPM
TOWNSHIP 19 S Section 7:	Lots 1, 2, and 3 and $E/2$ NW/4
Section 7:	Lots 1, 2, and 3 and $E/2$ NW/4
Section 7:	Lots 1, 2, and 3 and E/2 NW/4 Lots 1, 2, and 3 and SW/4 NE/4,
Section 7: Section 18:	Lots 1, 2, and 3 and E/2 NW/4 Lots 1, 2, and 3 and SW/4 NE/4, E/2 NW/4 and NE/4 SW/4
Section 7: Section 18: Section 31:	Lots 1, 2, and 3 and E/2 NW/4 Lots 1, 2, and 3 and SW/4 NE/4, E/2 NW/4 and NE/4 SW/4 Lot 4
Section 7: Section 18: Section 31: Section 34:	Lots 1, 2, and 3 and E/2 NW/4 Lots 1, 2, and 3 and SW/4 NE/4, E/2 NW/4 and NE/4 SW/4 Lot 4 SE/4 SE/4

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TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM Section 31: Lot 4

Section 31.	LOL 4	
Section 33:	Lots 1 to 4 inclusive and $N/2 S/2$	
Section 34:	Lots 1 to 4 inclusive and $N/2$ S/2	
Section 35:	Lots 1 to 4 inclusive and $N/2$ S/2	
Section 36:	Lots 1 to 4 inclusive, SE/4 NE/4,	
	NW/4 SW/4 and NE/4 SE/4	

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM
Section 22: SE/4 NE/4, E/2 SW/4 and SE/4
Section 23: S/2NW/4, SW/4.W/2SE/4 and SE/4 SE/4
Section 25: $SW/4 NW/4$, $W/2 SW/4$ and $SE/4 SW/4$
Section 26: Al I
Section 27: Al I
Section 28: S/2SE/4andNE/4SE/4
Section 30: Lots 2 to 4 inclusive, S/2 NE/4,
SE/4 NW/4, $E/2$ SW/4 and $SE/4$
Section 31: Al I
Section 32: $NE/4$, $S/2$ $NW/4$ and $S/2$
Sections 33 to 35 inclusive
Section 36: $W/2 \text{ NE}/4$, SE/4 NE/4, NW/4 and S/2
TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM

Section 31: Lots 3 and 4

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TOWNSHIP 2() SOUTH, RANCE 29 EAST, NMPM Section 1: SE/4 NE/4 and E/2 SE/4 Section 1 SW/4 NW/4, W/2 SW/4 and SE/4 SW/4 Section 13: NW/4 NE/4, S/2 NE/4, NW/4 and S/2 E/2 E/2, SE/4 SW/4 and W/2 SE/4 Section 14: Section 15: Section 22: E/2 and E/2 NW/4Section 23: Al I Section 24: SW/4 NE/4, W/2, W/2 SE/4 and SE/4 SE/4 Section 25: N/2, SW/4, W/2SE/4 and NE/4SE/4Section 26: Al I Section 27: E/2 Section 34: NE/4Section 35: N/2W/2 NE/4 and NW/4 Section 36: TOWNSHIP 20 SOUTH, RANGE 30 EAST, NMPM Sections 1 to 4 inclusive Section 5: Lots 1 to 3 inclusive, S/2 N/2 and S/2 Lots 5, 6, and 7, S/2 NE/4, E/2 SW/4Section 6 and SE/4Section 7 Lots 1 and 2. E/2 and E/2 NW/4 Sections 8 to 17 inclusive Section 18 E/2 E/2 and SE/4 SW/4 Section 19 Sections 20 to 29 inclusive Section 30: Lots 1 to 3 i Lots 1 to 3 inclusive, E/2 and E/2 W/2 Section 31: NE/4 and E/2SE/4Sections 32 to 36 inclusive TOWNSHIP 20 SOUTH, RANGE 31 EAST. NMPM Section 1: Lots 1 to 3 inclusive, S/2 N/2 and S/2Section 2: Al I Section 3: Lots 1 and 2, S/2 NE/4 and SE/4 Section 6: Lots 4 to 7 inclusive, SE/4 NW/4, E/2 SW/4, W/2 SE/4 and SE/4 SE/4 Section 7: All $\rm S/2~N/2$ and $\rm S/2$ Section 8: Section 9: S/2 NW/4, SW/4, W/2 SE/4 and SE/4 SE/4 E/2 and SW/4Section 10: Sections 11 to 36 inclusive

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TOWNSHIP 20 SOUTH, RANGE 32 EAST, NMPM Sections 1 to 4 inclusive Section 5: S/2 SE/4 Section 6: Lots 4 to 7 inclusive, SE/4 NW/4, E/2 SW/4 and SW/4 SE/4 Sections 7 to 36 inclusive

TOWNSHIP 20 **SOUTH,** RANGE 33 EAST, NMPM Sections 1 to 36 inclusive

TOWNSHIP 20 SOUTH, <u>RANCE 34 EAST</u>, NMPM Section 6: Lots 3 to 7 inclusive, SE/4 NW/4, E/2 SW/4, W/2 SE/4 and SE/4 SE/4 Section 7: ALL SW/4, S/2 NW/4, W/2 SE/4 and Section 8: SE/4 SE/4 Section 16: W/2 NW/4, SE/4 NW/4, SW/4 and S/2 SE/4 Sections 17 to 21 inclusive Section 22: N/2 NW/4, SW N/2 NW/4, SW/4 NW/4, SW/4, W/2 SE/4, and SE/4 SE/4 Section 26: SW/4, W/2 SE/4 and SE/4 SE/4 Sections 27 to 35 inclusive Section 36: SW/4 NW/4 an SW/4 NW/4 and W/2 SW/4

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TOWNSHIP 21 SOUTH, RANGE 29 EAST, NMPM Sections 1 to 3 inclusive Section 4: Lots 1 through 16, NE/4 SW/4 and SE/4 Lot 1 Section 5: Section 10: N/2NE/4, SE/4NE/4 and SE/4SE/4 Sections 11 to 14 inclusive Section 15: E/2 NE/4 and NE/4 SE/4Section 23: N/2 NE/4 $\text{E}\,/\,2$, $\text{N}/2\,\text{NW}\,/\,4$ and $\text{SE}\,/\,4\,\text{NW}\,/\,4$ Section 24: Section 25: NE/4 NE/4 and S/2 SE/4Section 35: Lots 2 to 4 inclusive, S/2 NE/4, NE/4 SW/4 and N/2 SE/4 Lots 1 to 4 inclusive, NE/4, E/2 NW/4 and N/2 S/2 Section 36:

TOWNSHIP 21 SOUTH, **RANGE** 30 EAST, NMPM Sections 1 to 36 inclusive

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TOWNSHIP 21 SOUTH, RANGE 31 EAST, NMPM Sections 1 to 36 inclusive

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TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM Sections 1 to 27 inclusive Section 28: N/2 and N/2 S/2 Sections 29 to 31 inclusive NW/4 NE/4, NW/4 and NW/4 SW/4 Section 32: Section 34: N/2 NE/4 Section 35: N/2 N/2 Section 36: ${\tt E/2. N/2 NW/4},$ SE/4 NW/4 and NE/4 SW/4 TOWNSHIP 21 SOUTH, RANGE 33 EAST, NMPM Section 1: Lots 2 to 7 inclusive, Lots 10 to 14 inclusive. N/2 SW/4 and SW/4 SW/4 Sections 2 to 11 inclusive NW/4 NW/4 and SW/4 SW/4 N/2 NW/4, S/2 N/2 and S/2 Section 12: Section 13: Sections 14 to 24 inclusive Section 25: N/2. SW/4 and W/2 SE/4 Sections 26 to 30 inclusive Section 31: Lots 1 to 4 inclusive, NE/4, E/2 W/2, N/2 SE/4 and SW/4 SE/4 Section 32: Section 33: N/2 and NW/4 SW/4N/2 NE/4, N/2 NW/4 and E/2 SE/4 Section 34: Section 35: ALL Section 36: W/2 NE/4, NW/4 and S/2 TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM Section 17: W/2 Section 17: Section 18: ALL Section 19: Lots 1 to 4 inclusive, NE/4, E/2 W/2. N/2 SE/4 and SW/4 SE/4 $\rm NW/4~NW/4$ Lots 1 and 2 and NE/4 NW/4 Section 20: Section 30: Section 31: Lots 3 and 4

EDDY COUNTY. NEW MEXICO

TOWNSHIP 22 SOUTH, RANCE 28 EAST, NMPM Section 36: E/2 E/2

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TOWNSHIP 22 SOUTH, RANCE 29 EAST, NMPM Sections 1 and 2 inclusive

Sections 1 and 2 inclusive Section 3 SE/4 SW/4 and SE/4 Section 9 S/2 NE/4 and S/2 Sections 10 to 16 inclusive Section 17 S/2 SE/4 Section 19 SE/4 NE/4 and E/2 SE/4 Section 20 to 28 inclusive Section 29 N/2 N/2, S/2 NE/4 and SE/4 Section 30 NE/4 NE/4 Section 31 Lots 1 to 4 inclusive, S/2 NE/4, E/2 W/2 and SE/4 Sections 32 to 36 inclusive

TOWNSHIP 22 **SOUTH, RANCE** 30 EAST, NMPM Sections 1 to 36 inclusive

TOWNSHIP 22SOUTH, RANGE 31 EAST, NMPMSections 1 to 11 inclusiveSection 12:NW/4 NE/4, NW/4 and NW/4 SW/4Section 13:S/2 NW/4 and SW/4Sections 14 to 23 inclusiveSection 24:W/2Section 25:NW/4Section 26:NE/4 and N/2 NW/4Sections 27 to 34 inclusive

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TOWNSHIP 22 SOUTH, RANGE 32 EAST, NMPM Section 1: Lot 1 Section 6: Lots 2 Lots 2 to 7 inclusive and SE/4 NW/4 TOWNSHIP 22 SOUTH, RANGE 33 EAST. NMPM Lots 1 to 4 inclusive, S/2 N/2 and Section 1: N/2 S/2 Al I Section 2: Section 3: Lot 1, SE/4 NE/4 and SE/4 Section 6: Lot 4 Section 10: NE/4Section 11: NW/4 NE/4 and NW/4

TOWNSHIP 2: SOUTH, RANGE 34 EAST, NMPM Section 6: Lots 4 to 6 inclusive

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EDDY COUNTY, NEW MEXICO

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM Section 1: Lot 1 TOWNSHIP 23 SOUTH, RANGE 29 EAST, NMPM Sections 1 to 5 inclusive Lots 1 to 6 inclusive, S/2 NE/4, Section 6: ${\tt SE/4NW/4}$, ${\tt E/2SW/4} \, {\tt and SE/4}$ Section 7: NE/4 and NE/4 NW/4Section 8: N/2, N/2SW/4, SE/4SW/4andSE/4 Sections 9 to 16 inclusive Section 17: NE/4 and E/2 SE/4Sections 21 to 23 inclusive Section 24: N/2, SW/4 and N/2 SE/4 Section 25: W/2NW/4 and NW/4SW/4Section 26: Al I Section 27: AII Section 28: N/2, N/2 SW/4, SE/4 SW/4 and SE/4 Section 33: N/2NE/4 and NE/4NW/4Section 34: NE/4, E/2NW/4, NW/4NW/4, NE/4 SW/4 and SE/4 Al I Section 35: W/2 NE/4, NW/4 and N/2 SW/4Section 36: TOWNSHIP 2 3 SOUTH, RANGE 30 EAST, NMPM Sections 1 to 18 inclusive N/2, N/2 SW/4, SE/4 SW/4 and SE/4 Section 19 Section 20 ALL Section 21 Al I Section 22 N/2, S/2 SW/4, N/2 S/2 and SE/4 SE/4 Sections 23 to 25 inclusive E/2, SE/4 NW/4 and **SW/4** N/2 NW/4, SW/4 NW/4, SE/4 SW/4, Section 26 Section 27 S/2 SE/4 and NE/4 SE/4N/2 and SW/4Section 28 Section 29 Section 30 N/2 and SE/4N/2 NE/4 Section 32 N/2 NE/4 Section 33 SE/4 NE/4, N/2 NW/4, NE/4 SE/4 and S/2 SE/4Sections 34 to 36 inclusive TOWNSHIP23SOUTH, RANGE31EAST, NMPMSection2:Lot 4, SW/4 NW/4 and W/2 SE/4Sections3 to 7 inclusive Section 8: NE/4NE/4, W/2NE/4 and W/2Section 9: Section 10: N/2 N/2 NW/4 NW/4 and SE/4 SE/4

S/2 NE/4 , S/2 SW/4 and SE/4

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Section 11:

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Section 12: SW/4 NW/4 and SW/4Section 13: SW/4 NE/4, W/2 and W/2 SE/4Section 14: Al I Section 15: E/2, SE/4NW/4 and SW/4SW/4 and S/2SE/4Section 16: NW/4 and S/2Section 17: Sections 18 to 23 inclusive Section 24: W/2 NE/4 and W/2 Section 24: Section 25: W/2NE/4, NW/4, N/2SW/4 and NW/4 SE/4 Sections 26 to 34 inclusive Section 35: N/2 NW/4 and SW/4 NW/4TOWNSHIP 24 SOUTH, RANGE 29 EAST, NMPM Section 2: Section 3: Lots 2 to 4 inclusive Lot 1 TOWNSHIP 24 SOUTH, RANGE 30 EAST, NMPM Section 1: Lots 1 to 4 inclusive, S/2 N/2, SW/4 and NW/4 SE/4Al 1 Section 2: Section 3: Section 4: All Lots 1 and 2, S/2 NE/4, SE/4 NW/4, SW/4 SW/4. E/2 SW/4 and SE/4 $\text{N}/2\,,$ N/2 SW/4, SE/4 SW/4 and SE/4 Section 9: Section 10: Al I Al I Section 11: W/2 NW/4 and NW/4 SW/4Section 12: W/2 NE/4 and NW/4Section 14: Section 15: NE/4 and N/2 NW/4TOWNSHIP 24 SOUTH, RANCE 31 EAST, NMPM Section 3: Lots 2 to 4 inclusive, SW/4 NE/4, S/2 NW/4, SW/4 and W/2 SE/4Section 4: A] T Section 5: Lots 1 to 4 inclusive, S/2 N/2, N/2 S/2 and SE/4 SE/4Section 6: Lots 1 to 6 inclusive, S/2 NE/4, SE/4 NW/4, NE/4 SW/4 and N/2 SE/4 E/2 and NW/4Section 9: Section 10: W/2 NE/4 and W/2Section 35: Lots 1 to 4 inclusive, S/2 N/2 and N/2 S/2 Section 36: Lots 1 and 2, SW/4 NW/4 and N/2 SW/4 TOWNSHIP 25 SOUTH, RANCE 31 EAST, NMPM Section 1: Section 2: Lots 3 and 4 and S/2 NW/4 Lots 1 to 4 inclusive and S/2 N/2

STATEMENT OF AGREEMENT BETWEEN THE POTASH INDUSTRY AND OIL AMD GAS INDUSTRY ON CONCURRENT OPERATIONS IN THE POTASH AREA IN EDDY AND LEA COUNTIES. HEW MEXICO

Introduction

This Statement of Agreement sets **forth** the joint agreement of the Potash Industry and Oil and Gas Industry on important issues concerning **the** concurrent development of potash and oil and gas reserves in Eddy and Lea Counties, New Mexico. It represents the efforts of numerous representatives from each Industry over many months and is intended to resolve many of the disputes that have arisen as a result of concurrent oil and gas drilling activities in the vicinity of underground potash **mining.**

The parties recognize that this Agreement will not resolve all disputes or disagreements that may arise and that regulatory intervention may still be necessary in some instances. By entering into this Agreement, . however, each industry recognizes the right of the other to develop its mineral resources in a safe and economical manner and acknowledges that concurrent development of multiple mineral resources places certain limits on each industry. Each also agrees that these limits can be better defined through good faith discussions among industry representatives familiar with industry technology and practices than repeated and prolonged litigation or administrative proceedings.

> EXHIBIT "B" CASE NO. 9316 ORDER NO. R-111-P

In attempting to accomplish this, **each** Industry has made concessions on issues considered critical to it in a good faith effort to obtain concessions from the other. For this reason, both Industries agree that the terms of this Statement of Agreement are subject to the following conditions:

- 1. Upon approval by representatives of each Industry, the terms of the Agreement will be submitted to and must be adopted without substantial change by the New Mexico Oil Conservation Commission ("OCC") in lieu of the current Order R-111A, as amended;
- The terms of the Acreement will be submitted to and must be adopted without substantial change by the U. S. Department of Interior, Bureau of Land Management ("BLM") in lieu of Section III (E) of the Secretary of the Interior's Order of October 21, 1986 [51 Fed. <u>Reg</u>. 39425];
- 3. Each Industry will use its best efforts to secure approval of the terms of the Agreement from the OCC and BLM; and
- 4. In the event the terms in the Agreement are not adopted without substantial change by both the OCC and the BLM, this Statement of Agreement will become null and void and will not be referred to by any Industry representative on the Study Committee in any future proceeding before the OCC or BLM.

It is the intention of the parties to this Agreement that: (1) certain areas of potash deposits, called "life-of-minereserves" or "LMR's," be permanently protected from oil and gas drilling activities; and (2) to make available for oil and gas drilling activities, certain areas within the Potash Area. The area of potash deposits protected will be determined in accordance with this Agreement but, generally speaking, will encompass the yellow, orange and a major portion of the blue

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areas shown on the BLM Potash Resources Map as it existed on October 1, **1984.** Areas in the Potash Area that will be available for oil and gas drilling activities will be **those** areas outside the designated **LMR's which**, generally speaking, will be the red, green, grey and a minor portion of the blue areas shown on the BLM Potash Resources Map as it existed on October 1, 1984, less areas designated as buffer zones by this Agreement.

I. The Potash Area

A. The Area covered by this Agreement shall be known as the **"Potash** Area".

B. The "Potash Area" includes those tracts of land in Southeastern New Mexico, from the surface downward, which are designated as a "potash **area"** by the Secretary of the Department of Interior in Section V of the Order dated October 21, 1986 and published in the **Federal Register** on October 28, 1986 **[51 Fed. <u>Reg.</u> 39426]**. It shall also include any subsequent revisions to such **designations.** The terms "potash" and "commercial deposits of potash" shall have the same meaning as assigned by the U. S. Department of Interior.

C. It is the intent of the parties to this Agreement that the "Potash Area" designated by the State of New Mexico be identical to that designated by the U. S. Department of Interior. Accordingly, if the "potash area" designated in the Secretarial Order of October 21, 1986 [51 Fed. <u>Reg</u>. 39425] is revised, the OCC, on its own motion after notice and hearing as

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provided by applicable laws and regulations, will adopt the same revision.

II. Designation ot Mine Reserves

Α. Within ninety (90) days following adoption of this Agreement by the OCC and BLM and annually thereafter by January 31 if revised, each potash lessee, without regard to whether the lease covers State or Federal lands, shall file with the District Manager, BLM, a designation of the potash deposits considered by the potash lessee to be its life-of-mine reserves ("LMR"). For purposes of this Agreement, "life-of-mine reserves" means 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. Information used by the potash lessee in identifying its LMR shall be filed with the BLM but will be considered privileged and confidential "trade secrets and commercial . . . information" within the meaning of 43 C.F.R. §2.13(c)(4) (1986) and not subject to public disclosure.

An authorized officer of the BLM shall review the в. information submitted by each potash lessee in support of its LMR designation and verify, upon request, that the data used by the potash lessee in establishing the boundaries of its LMR is consistent with data available to the BLM. Any disputes between the BLM and potash lessee concerning the boundary of a designated LMR shall be resolved in accordance with the

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Department of Interior's Hearings and Appeals Procedures, 43 C.F.R. Part 4 (1986).

C. A potash lessee may amend its designated LMR by filing a revised designation with the BLM accompanied by the information referred to in Section A above. Such amendments must be filed by January 31 next following the date the . additional data becomes available.

D. An authorized officer of the BLM shall commit the designated LMR of each potash lessee to a map(s) of suitable scale and thereafter revise the map(s) as necessary to reflect the latest amendments to any designated LMRs. These maps shall be considered privileged and confidential and exempt from disclosure under 43 C.F.R. Part 2 and will be used only for the purposes set forth in this Agreement.

III. Drilling in the Potash Area

A. All oil and gas wells drilled in the Potash Area after approval of this Agreement by the OCC and BLM, including those currently pending **before** the OCC and/or BUM, shall be subject to the terms of this Agreement.

B. It is the policy of the OCC and BLM to approve or deny applications for permits to drill (APD's) in the Potash Area in accordance with the following:

1. LMR and Buffer Zone. No oil or gas well shall be allowed from a surface location: (a) within the LMR of any potash lessee; (b) within one-fourth (1/4) mile, or a distance equal to the depth of the ore plus ten percent (10%), whichever is greater, of the LMR of any potash lessee; or (c) where the well casing will pass within one-fourth (1/4) mile, or **a** distance equal to

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the depth of the ore plus ten percent (10%), whichever is greater, of the LMR of any potash lessee.

- 2. Outside Buffer Zone But Within One-Half (1/2) mile of LMR. An APD for an oil or gas well at a location more than one-fourth (1/4) mile, or a distance equal to the depth of the ore plus ten percent (10%), whichever is greater, but less than one-half (1/2) mile from the LMR of any potash lessee may be approved only if: (a) the bottom hole location does not extend below the base of the Delaware Mountain Group, and (b) the well is drilled in accordance with the cementing and casing requirements set forth in Section V.
- 3. More Than One-Half Mile But Less Than One Mile From LMR. An APD for an oil or gas well at a location more than one-half (1/2) mile but less than one mile from the LMR of any potash lessee may be approved regardless of the depth of the bottom hole location provided: (a) wells with bottom hole locations below the base of the Delaware Mountain Group are drilled in accordance with the cementing and casing requirements set forth in Section V of this Agreement, and (b) wells to bottom hole locations above the base of the Delaware Mountain Group may be drilled without regard to the requirements in Section V of this Agreement but must be drilled in accordance with then current Industry safety standards.
- 4. More Than One Mile From LMR. An APD for an oil or gas well at a location more than one mile from the LMR of any potash lessee may be approved regardless of the depth of the bottom hole location and without regard to the requirements of Section V of this Agreement.
- 5. Open Mine Workings. No oil or gas well shall be allowed from any location where the well casing will pass within **one-fourth** (1/4) mile or a distance equal to the depth of the ore plus ten percent (10%), whichever is greater, of any open mine workings.
- 6. Abandoned Mine Workings. No oil or gas well shall be allowed from any location where the well casing will pass through or within one-fourth (1/4) of a mile or a distance equal to the depth of the ore plus ten percent (10%), whichever is greater, of any abandoned mine workings that are connected to an existing mine by an opening or barrier of one-hundred (100) feet or less unless the APD is accompanied by the sealing and safety plan and certification described in Paragraph C below.

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7. An APD for a directionally drilled oil or gas well to a bottom hole location underlying the LMR of any potash lessee may be approved subject to the limitations and requirements set forth in Paragraphs 1 - 6 above. Directionally drilled holes shall be drilled vertically until they have completely penetrated Marker Bed No. 126 (U.S.G.S.) of the Salado Formation at which time they may be deviated.

C. An oil and gas operator desiring to drill a well to a bottom hole location that does not extend below the base of the Delaware Mountain Group from a surface location where the well casing will pass through or within one-fourth (1/4) of a mile or a distance equal to the depth of the ore plus ten percent (10%), whichever is greater, of abandoned mine workings that are connected to an existing mine by any opening or a barrier of one-hundred (100) feet or less shall prepare and submit to all affected potash lessees a plan and program for sealing off the area to be penetrated from other mine workings. Approval of any such plan shall be in the sole discretion of the affected potash lessees. Any 'approved plan shall be attached by the oil and gas operator to the APD for filing with the OCC, and/or BLM. The oil and gas operator shall also complete a certification in the form prescribed by the OCC and/or BLM that the drilling of such well will not create a safety hazard to affected potash lessees.

D. It is the belief of both parties that the provisions of this Agreement eliminate the need for drilling islands and three-year mining plans and, therefore, both agree that no drilling islands will be established in the Potash Area and the filing of three-year mining plans will be eliminated.

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IV. Location of Wells and Notice to Potash Lessee

A. The BLM, upon request, will advise oil and gas lessees of the surface locations where wells will be allowed to develop the leases. Oil or gas leases covering areas designated a LMR by a potash lessee will be unitized to the extent possible with other areas where drilling is allowed.

An oil or gas operator desiring to drill an oil or gas Β. well in the Potash Area or within one (1) mile of a potash lease shall prepare and file an APD with the OCC and/or BLM along with a map or plat showing the location of the proposed well. One copy of the APD and map or plat shall be served by registered mail, return receipt requested, on all potash leaseholders within one (1) mile of the proposed well location. However, if the APD is for an oil or gas well that will penetrate abandoned mine workings, all potash leaseholders in the Potash Area shall be notified. Proof of such service shall be attached to the APD and filed with the OCC and/or Within twenty (20) days of service of an APD and required BLM. documents, any potash leaseholder within one (1) mile of the proposed well location (or any affected potash lessee if the proposed well will penetrate abandoned mine workings) may file an objection with the OCC to the proposed well. If the objections cannot be resolved by agreement of the parties, the matter shall be referred for hearing before the OCC.

C. The failure of a potash leaseholder to object to a well location or its agreement to the drilling locations

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referred to in this Agreement shall not constitute a release of liability. Oil and gas leaseholders and those persons and/or entities involved in the development of the lease shall be responsible as provided by law for any damages caused by them to any person by the release of gases or liquids into the strata or atmosphere as a result of drilling activities.

V. Drilling and Casing Program

[Same as current R-111-A]

VI. Drilling Fluid for Salt Section [Same as current R-111-A]

VII. **Plugging** and Abandonment of Wells

[Same as current R-111-A]

VIII. Filing of Well Surveys

The OCC may require an oil and gas operator to file a certified directional survey **from** the surface to a point below the lowest known potash bearing horizon on all wells drilled in the Potash Area. All encounters with flammable gases, including **H.,S**, shall be reported by the operator to the OCC.

IX. Additional Safety Requirements and Emergency Action

A. All oil and gas drilling activities within the Potash Area shall be performed using appropriate technology, equipment, and procedures to reduce the hazards of such activities to underground mines and miners and be conducted in accordance with the prudent operator standard.

B. Only the minimum number of wells necessary to develop an oil or gas lease will be allowed within the Potash Area.

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C. In the event the increased oil and gas drilling activities allowed by this Agreement result in a safety hazard or if data developed in the course of such increased activities make it reasonably appear that such activities are or will become a hazard to underground miners or mining activities, the BLM and/or OCC will, upon request, initiate proceedings in accordance with NMSA 70-2-23 and/or other applicable laws and regulations to review such data and take whatever emergency steps are **found** necessary to eliminate such hazard. Potash lessees may, in addition, initiate actions for injunctive relief under NMSA 70-2-29. The taking or failure to take such action by the OCC or any potash lessee shall not relieve the oil and gas lessee from liability for any damages caused by its oil and gas activities.

AGREED TO AND APPROVED THIS 23nd DAY OF herennes 1987, ΒY THE FOLLOWING REPRESENTATIVES OF EACH INDUSTRY COMPRISING THE POTASH-OIL AREA SPECIAL RULES STUDY COMMITTEE:

For the **OTN** and Gas Industry: Taboz-t

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For the Potash Undustry:

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