

Case No.

1215

Application, Transcript,  
Small Exhibits, Etc.

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Small Exhibits, Etc.

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
HOBBS, NEW MEXICO

CASE NO. 1215

TRANSCRIPT OF HEARING

FEBRUARY 27, 1957  
DEARNLEY-MEIER AND ASSOCIATES  
COURT REPORTERS  
605 SIMMS BUILDING  
TELEPHONE 3-6691  
ALBUQUERQUE, NEW MEXICO

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
HOBBS, NEW MEXICO  
FEBRUARY 27, 1957

IN THE MATTER OF:

CASE NO. 1215: Application of Wilson Oil Company for an exception from the casing requirements in the Potash-Oil Area as established by Order R-111-A. Applicant, in the above-styled cause, seeks an order authorizing the following casing program, in lieu of the shallow zone casing requirements established by Order R-111-A, for its proposed well in the NE/4 NE/4 of Section 21, Township 20 South, Range 34 East, Lea County, New Mexico: 13-5/8 inch casing in top of the red bed to approximately 70 feet; 10-3/4 inch casing as cave string to about 700 feet; 8-5/8 inch casing, this being the water shut-off string to about 1300 feet, but in any event below the water; 7 or 5 1/2 inch string to be set and cemented at a point selected by the operator above pay zone. The well location is on federal acreage and is to be drilled with cable tools and the first productive horizon is expected at 3605 feet.

DEFEND:

Harren M. Hankin, Examiner.

PLANNED BY RECORDS

MR. HANKIN: Next case on the docket is Case 1215.

MR. SCOLBY: Case 1215. Application of Wilson Oil Company for an exception from the casing requirements in the Potash-Oil Areas as established by Order R-111-A.

MR. LAMB: If you please, I am Roydon Lamb, District Geologist for the New Mexico Oil Company, and appear on their



of the defined potash area.

We submit as Exhibit "B",

(Exhibit "B" marked  
for identification.)

a tabulation of casing records taken from the N. M. Oil Conservation Commission files, on wells drilled in the area of the proposed location. This tabulation gives the size, depth, and method of setting casing on these wells in T20S-R34E. To our knowledge, only four of the listed wells were drilled with rotary tools and 39 were drilled with cable tools. All of the 39 cable tool holes were drilled with a "dry hole" through the salt or Salado section. Thus, eliminating any contamination of the salt, potash section by water from overlying water zones.

We submit a diagram as Exhibit "C"

(Exhibit "C" marked  
for identification.)

showing the proposed casing program as set out in the application. This diagram shows that it is our plan to set 13-3/8 inch casing in the top of the Red Bed, this will shut-off all fresh water zones in recently deposited beds.

Since I rather than corrections are the order of the day, may I point out that we have a typographical error which appeared in the application and in the notice of the case. You may have noted that the size of the casing mentioned in the application should read 13 and 3/8; to my knowledge there isn't such a size.

Mr. HANCOCK is now discussing this correction.

13 and 5/8 inch surface casing to 13 and 3/3 which would be the proper casing that it should have been? If not, the correction will be so entered.

MR. LAMB: A string of 10-3/4 inch casing will be set at about 700 feet, to shut-off water, and/or dry cave section.

Most wells drilled in the area have encountered water in the Santa Rosa formation, which will be sealed off by the setting of 8-5/8 inch casing at approximately 1300 feet. The Dewey Lake formation immediately below the Santa Rosa consists of competent shaley silt deposits which have not carried water in this area. Thus, the 8-5/8 inch string of casing will seal off all water zones existing above the Rustler and Salado sections. The Salado will be drilled with a "dry hole" with cable tools. In the event unexpected water zones should be encountered in the Dewey Lake, it will be necessary to underdig the 8-5/8 inch casing so that it may be lowered to shut-off any water prior to the drilling of the Salado section.

After drilling the Salado and Mansfield formations, it is the operator's plan to set a string of 7 or 8-1/2 inch casing at a point above the known producing horizons. Based on the operator's interpretation of the available information, this point shall be approximately 1500 feet, and will prevent the contamination of possible petrol. prospects. The protective string would be cased with cement, if deemed advisable, prior to the drilling of the known pay zone. The oil commercial production is developed, the string of casing will be cemented at 1500 feet, and a string of 8-1/2 inch casing will be cemented at 1500 feet, and a string of 8-1/2 inch casing will be cemented at 1500 feet, and a string of 8-1/2 inch casing will be cemented at 1500 feet.

above out-lined casing program will prevent contamination of the salt section by the existing overlying water bearing zones. It will also protect possible potash deposits from contamination by lower oil, and/or gas bearing zones.

We have recited exact sizes of casing to be used in the drilling of this proposed well, in the selection of a drilling contractor, as well as changes of conditions, we request permission to increase the number of strings, the size of the string or the depth to which it is to be setoff the casing mentioned above. Any change in this direction would give us leeway for greater protection of possibly potash deposits and would be with the approval of the New Mexico O. C. C. and the U. S. G. S. representative.

It is our opinion that this program will adequately protect possible potash deposits under the conditions which should exist. However, if any unexpected conditions occur, the operator will take action to protect the potash deposits from contamination. In view of this possibility, it is therefore requested that the New Mexico Oil Conservation Commission establish and retain administrative jurisdiction over the drilling of the proposed well at the location above described.

Copies of the application were filed with the following potash companies:

Potash Company of America  
National Potash Company  
U. S. Potash Company



Duvall Potash Company

International Mineral & Chemical Corporation

(Exhibit "D" marked  
for identification.)

Southwest Potash Company

Kerr-McGee Oil Industries, Inc.

Farm Chemical Research Development Company

(Exhibit "E" marked  
for identification.)

who own all the potash rights in the area, either under lease or permit, and this program has been discussed in detail with their representatives. Copy was sent to the National Potash Company, U. S. Potash Company, Duvall Potash Company, International Mineral & Chemical Corporation, Southwest Potash Company, and a copy was mailed to Kerr-McGee Oil Industries, but arrived at the Farm Chemical Resources Development Corporation, being designated as "D" and "E." Copies of the application were mailed to the following oil companies: Phillips Petroleum, Atlantic Refining and Kerr-McGee Oil Industries. Also a copy of this application was mailed to the U.S.G.S. in Hobbs, New Mexico, and was discussed personally with them in detail. And we have Exhibit "F" from the U.S.G.S.

Q. Now, does that conclude your testimony?

A. Yes.

Q. Now, would you like to introduce Exhibits "A" through "F" in this case?

A. Please.

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MR. MANKIN: Is there objections to Exhibits "A" through "F" in this case? If not, they will be admitted in evidence. Is that all you had?

A Yes, sir.

Q (By Mr. Mankin.) Mr. Lamb, what is the primary reason that you desire to get exception to Rule Order R-111-A in this particular case as pertains to the salt string?

A As pertaining to the salt string --

Q Yes.

A -- or to the entire program?

Q The entire program, but primarily as it concerns the salt string.

A Well, the R-111-A requires a string of casing to be set in the top of or in it anhydrite above the salt section and cemented solid. It is my understanding that this would mean protection from the contamination of salt potash deposits from overlying water bearing zones, and it is our feeling in drilling of cable tools, we naturally will ~~use~~ "dry hole" through the salt section and prevent contamination of that salt section by the overlying water beds. That drilling the entire salt section to the base of the salt, the salt protection strings under R-111-A says that we may be permitted to drill one hundred to six hundred feet below the Salado, and set a string of casing to be tacked with cement, possibly later pulled, in a "dry hole". This, in my understanding, would mean that protection from the salt section by the underlying

possible oil and gas zones. It also says that it shall be set above any known oil and gas bearing zone. That is our plan to use a string of casing, it may be tacked, if deemed advisable, if not, it can be landed and later pulled, if no production is encountered.

Q (By Mr. Cooley.) Mr. Lamb, your answer is very informative but not quite responsive to the question. You propose certain casing program and R-111-A requires another. A Right.

Q What is the ground for the requested exception?

A We feel that there is no justification for the cementing of the shallow string 1700 foot string, cemented solid to the surface if we drill with cable tools through the salt section and there is no contamination from the overlying water.

Q The ground is, then, it would be an unnecessary expense, you would give the same point of protection for less money?

A That's correct.

MR. MANKIN: Going again on the same point, Mr. Lamb, it was your indication that you feel you would get adequate protection by landing the 8 and 5/8's at approximately 1200 feet instead of carrying it on down below the salt? -- A That's right.

MR. MANKIN: -- by going ahead and taking your 7 or 8 inch casing in the top of your proposed pay zone and then later recement it, if necessary? A That's right.

MR. COOLEY: Could you give me approximate cost figures if it were completed in accordance with 111-A?

A One line, the casing cemented solid, and the rest of it clear

is about five thousand dollars.

Q (By Mr. Cooley.) Difference?

A The value of the pipe, if we set it in the basis which I have proposed, you can salvage the entire string; if you set it and cement it, you lose the entire string. The pipe alone is worth about five thousand dollars, then you are out the additional expense of running and cementing.

Q What would you estimate that to be?

A I would say that would be approximately twenty-five hundred dollars.

Q Then a rough estimate of the difference?

A Would be around seventy-five hundred dollars on that string.

MR. MANKIN: I have one other question, Mr. Lamb. You indicated that you have presented this matter to the Federal Company of America, which is the Mine Safety Company in the West, you have nothing in writing from them?

A No, sir.

MR. MANKIN: I am going to ask you a question now. Is there any further question? If you have any further question, did indicate did you not, Mr. Lamb, that you had given this to be under the supervision of the Commission and the Department of the Interior, did you not hear that? I mentioned that.

MR. MANKIN: I see. If there are no further questions of the witness, the witness may be excused. Is there any statements to be made in this case?

MR. PROTZ: My name is D. Protz, Potash Company of America. As Mr. Lamb stated, we have discussed this particular well and program, and do not find we have any objections as it is laid out here. I do want to say that we will be on the well, too, quite a bit of the time, I suppose, and I have no questions of Mr. Lamb, I don't believe. That is all.

MR. MANKIN: Thank you.

MR. LAMB: I might add, Mr. Mankin, if there are any unusual conditions to be discussed with the U.S.G.S., and the Commission, the P.C.A. will be advised of these conditions.

MR. MANKIN: Is there further statements in this case? If not, we will take the case under advisement.

## C E R T I F I C A T E

STATE OF NEW MEXICO )  
: ss  
COUNTY OF BERNALILLO )

I, THURMAN J. MOODY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript by me and/or under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my hand and seal, this, the 10th day of January, 1957, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Thurman J. Moody  
Notary Public

My Commission Expires:

April 3, 1960.

January 27 1957  
W. J. Moody

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE NO. 1215  
Order No. R-968

APPLICATION OF WILSON OIL COMPANY  
FOR AN EXCEPTION TO THE SHALLOW  
ZONE CASING REQUIREMENTS IN THE  
POTASH-OIL AREA AS ESTABLISHED BY  
ORDER R-111-A.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 10 o'clock a.m. on February 27, 1957, at Hobbs, New Mexico, before Warren W. Mankin, Examiner, duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 22<sup>nd</sup> day of March, 1957, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Warren W. Mankin, and being fully advised in the premises,

FINDS:

1. That due notice having been given as required by law, the Commission has jurisdiction of this case and the subject matter thereof.

2. That the applicant, Wilson Oil Company, proposes to drill an exploratory well with cable tools in the Potash-Oil Area, as defined by Commission Order R-111-A, at a point 660 feet from the North line and 660 feet from the East line of Section 21, Township 20 South, Range 34 East, NMPL, Lea County, New Mexico.

3. That the applicant proposes to case the said well as follows rather than in the manner prescribed by Order R-111-A:

13 3/8 inch casing in top of the red bed (surface string) to approximately 70 feet;

10 3/4 inch casing (cave string) to about 700 feet;

8 3/8 inch casing (water shut-off string) to about 1100 feet, but at any event below the water;

7 or 8 1/2 inch casing (production string) to be cemented at a point selected by the operator above pay zone.

4. That the applicant should be permitted to pull all other casing except the production string in the event that commercial oil or gas production is found.

5. That the production string should be cemented throughout its entire length in the event commercial oil or gas production is encountered.

6. That the aforementioned casing program will confine the water, oil and gas to the strata in which they naturally occur and will afford adequate protection for the potash deposits in the area.

7. That in any event, the applicant should make adequate provisions for the protection of potash deposits in the area.

8. That all interested potash operators were notified of the subject application and that no objections have been registered with the Commission.

IT IS THEREFORE ORDERED:

1. That the applicant, Wilson Oil Company, be and the same is hereby authorized to drill an exploratory well by use of cable tools in the Potash-Oil Area at a point 660 feet from the North line and 660 feet from the East line of Section 21, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and to case said well in the following manner:

13 3/8 inch casing in top of the red bed (surface string) to approximately 70 feet;

10 3/4 inch casing (cave string) to about 700 feet;

8 3/8 inch casing (water shut-off string) to about 1300 feet, but in any event below the water;

7 or 5 1/2 inch casing (production string) to be set and cemented at a point above the pay zone to be selected by the operator.

2. That in the event commercial oil or gas production is found, the applicant may pull all other casing except the production string.

3. That the production string be cemented throughout its entire length in the event commercial oil or gas production is encountered.

4. That, notwithstanding the foregoing, the applicant shall make adequate provisions for the protection of the potash



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Case No. 1215  
Order No. R-968


bearing strata regardless of the conditions encountered in drilling said well.

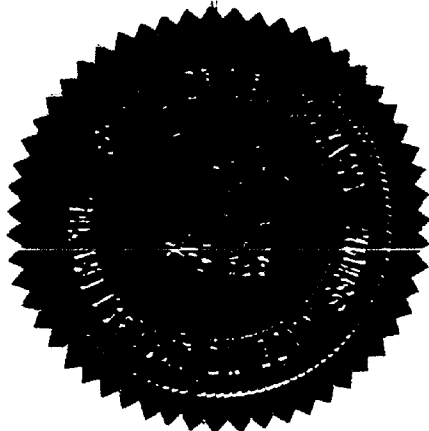
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
EDWIN L. MECHEM, Chairman

  
MURRAY E. MORGAN, Member

  
A. L. PORTER, Jr., Member & Secretary



ir/

OIL CONSERVATION COMMISSION  
P. O. BOX 871  
SANTA FE, NEW MEXICO

March 22, 1957

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P

Y

Mr. Harry Dupont  
U.S. Geological Survey  
P.O. Box 1838  
Hobbs, New Mexico

Dear Sir:

We enclose a copy of Order R-968 issued March 22, 1957, by the Oil Conservation Commission in Case 1215, which was heard on February 27th in Hobbs.

Very truly yours,

A. L. Porter, Jr.  
Secretary - Director

bp  
Encl.

OIL CONSERVATION COMMISSION  
P. O. BOX 871  
SANTA FE, NEW MEXICO

March 22, 1957

C  
O  
P  
Y

Potash Company of America  
P.O. Box 31  
Carlsbad, New Mexico

Gentlemen:

We enclose a copy of Order R-968 issued March 22, 1957, by the Oil Conservation Commission in Case 1215, which was heard on February 27th in Hobbs.

Very truly yours,

A. L. Porter, Jr.  
Secretary - Director

ALP:bp  
Encl.

Case #1213

WILSON OIL COMPANY  
Santa Fe, New Mexico

February 11, 1957

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Secretary-Director

Re: Request for exception to Order No. R-111-A  
pertaining to casing program for location  
NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Sec. 21, T-20-S, R-34-E, Lea  
County, New Mexico.

Gentlemen:

Wilson Oil Company, the applicant herein, has obtained operating rights on the E $\frac{1}{2}$ NE $\frac{1}{4}$  of Section 21, under Federal lease, Las Cruces Serial Number 070315. The royalty under this tract is reserved by the United States Government.

Order No. R-111-A, dated October 13, 1955, established general casing rules for wells drilled within a designated area. Due to varying formations and water zones, these general rules are not applicable or necessary over the entire area for the protection of possible commercial potash deposits, or of the production of oil and gas from the underlying horizons.

The proposed well will be located on the NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 21 and consequently will be only about 660 feet within the potash area as defined in Order R-111-A.

N. M. Oil Conservation Commission - 2

By this application the Wilson Oil Company seeks an order granting permission to amend the casing program as set out in Order R-111-A, pertaining to this proposed exploratory well to be drilled in the NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 21, Township 20 South, Range 34 East, Lea County, New Mexico, N.M.P.M.

The casing program of the applicant for this well is briefly as follows:

13- $\frac{3}{8}$  inch casing in top of the red bed to approximately 70 feet;

10- $\frac{3}{4}$  inch casing as cave string to about 700 feet;

8- $\frac{5}{8}$  inch casing, this being the water shutoff string to about 1300 feet, but in any event below the water;

7 or 5 $\frac{1}{2}$  inch string to be set and cemented at a point selected by the operator above pay zone.

The well will be drilled with cable tools. The top of the first producing horizon is expected to be 3,605 feet.

In applicant's opinion the above indicated casing program will adequately protect any possible potash zones at this particular location. If unusual conditions are encountered, adequate provisions will be made to meet such conditions for the protection of possible potash zones.

It is requested that this matter be set down for a hearing before an examiner designated by the Commission.

Respectfully submitted,

WILSON OIL COMPANY

By N. Raymond Lant

No. 7-57

DOCKET EXAMINER HEARING FEBRUARY 27, 1957

New Mexico Oil Conservation Commission 10:00 a.m. Hobbs, New Mexico  
Oil Conservation Commission Office 1000 W. Broadway, Hobbs, New Mexico.

The following cases will be heard before Warren W. Mankin, Examiner:

- CASE 1212: Application of Humble Oil & Refining Company for approval of its proposed Kinebeto Unit Agreement located in San Juan County, New Mexico, in accordance with Rule 507 of the New Mexico Oil Conservation Commission Statewide Rules and Regulations. Applicant, in the above-styled cause, seeks an order granting approval of its proposed Kinebeto Unit Agreement embracing 46,062.94 acres, more or less, of federal, Indian, state and fee lands situated in Townships 22 and 23 North, Range 10 West, San Juan County, New Mexico.
- CASE 1213: Application of Humble Oil & Refining Company for approval of its proposed Tanner Unit Agreement located in San Juan County, New Mexico, in accordance with Rule 507 of the New Mexico Oil Conservation Commission Statewide Rules and Regulations. Applicant, in the above-styled cause, seeks an order granting approval of its proposed Tanner Unit Agreement embracing 35,751.16 acres, more or less, of federal, Indian and state lands located in Townships 23 and 24 North, Range 12 West, San Juan County, New Mexico.
- CASE 1214: Application of Great Western Drilling Company for a non-standard drilling and production unit in the South Carter-San Andres Oil Pool, Lea County, New Mexico, in exception to Rule 104 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order creating a 40 acre non-standard drilling and production unit in the South Carter-San Andres Oil Pool consisting of Lot 1 and the East 13.66 acres of the NE/4 NW/4 of Section 8, Township 18 South, Range 29 East, Lea County, New Mexico.
- CASE 1215: Application of Wilson Oil Company for an exception from the casing requirements in the Pecos Oil Area as established by Order R-111-A. Applicant, in the above-styled cause, seeks an order authorizing the following casing program, in lieu of the shallow zone casing requirements established by Order R-111-A, for its proposed well in the NW/4 NE/4 of Section 21, Township 20 South, Range 34 East, Lea County, New Mexico: 13-5/8 inch casing in top of the red bed to approximately 70 feet; 10-3/4 inch casing in zone extending to about 700 feet; 8-5/8 inch casing, this being the last casing string to about 1300 feet but in any event below the water; 7 or 5 1/2 inch string to be set and cemented at a point selected by the operator above pay zone. The well is to be drilled to a depth of 1400 feet and is to be drilled with casing that is of a size and type that is expected

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Docket No. 7-57

CASE 1216:

Application of Continental Oil Company for a 320-acre non-standard gas proration unit in the Jalmat Gas Pool in exception to Rule 5 (a) of the Special Rules and Regulations for said pool. Applicant, in the above-styled cause, seeks an order approving a 320-acre non-standard gas proration unit in the Jalmat Gas Pool consisting of the N/2 of Section 17, Township 24 South, Range 37 East, Lea County, New Mexico. Said unit to be dedicated to applicant's Jack "B-17" Well No. 3 located 990 feet from the North and East lines of said Section 17.

FEDERAL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Date 3/1/57

CASE 1215

Hearing Date Common 2/27 @ Hobbs before C.W.M.

My recommendations for an order in the above numbered cases are as follows:

OK to approve exception to order R-1111A  
on casing program for shallow zone.

Exception is only for this one  
Federal well in center of NE 1/4 NE 1/4 of Sec. 21,  
(and for program only requested.) T. 55S, R. 34E  
San Juan County  
for Wilson Oil Co.

W. A. Williams  
Staff Member  
Examiner



BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE NO. 278  
Order No. R-111-A

THE APPLICATION OF THE OIL  
CONSERVATION COMMISSION UPON  
ITS OWN MOTION FOR AN ORDER  
REVISING ORDER R-111 ISSUED IN  
CASE 278, PERTAINING TO THE  
POTASH-OIL AREAS OF EDDY AND  
LEA COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 14, 1955, August 17, 1955 and September 15, 1955, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this 13th., day of October, 1955, the Commission, a quorum being present, having considered the records and testimony adduced, and being fully advised in the premises;

FINDS:

(1) That due notice of the time and place of hearing and the purpose thereof having been given as required by law, the Commission has jurisdiction of this case and the subject matter thereof.

(2) That the delineation of an area including and containing potential oil and gas reserves, within which are commercial potash deposits, and the promulgation of rules and regulations for the orderly development of oil and gas resources in such area known to be productive of potash is within the authority of the Commission for the protection of correlative rights, the promotion of conservation, and the prevention of waste.

IT IS THEREFORE ORDERED:

That this order shall be known as The Rules and Regulations Governing the Exploration of Oil and Gas in Certain Areas Herein Defined, which are Known to contain Potash Reserves.

I.

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.

II.

THE POTASH-OIL AREA

(1) The Potash-Oil Area, as outlined in Exhibit A attached hereto and made a part hereof, represents the area in various part of which potash mining operations are now in progress, or in which core tests indicate commercial potash reserves.

(2) The Potash-Oil Area, as outlined herein, may be revised by the Commission after due notice and hearing.

III.

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 will be drilled for oil or gas at a location which, in the opinion of the Commission or its duly authorized representative, would result in undue waste of potash deposits or constitute a hazard to or interfere unduly with potash deposits.

No mining operations will be conducted in the Potash Area that would, in the opinion of the Commission 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 Commission shall promulgate pool rules for the affected area after due notice and hearing.

IV.

DRILLING AND CASING PROGRAM

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

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

(b) The deep zone shall include all formations below the base of the Delaware sand or below a depth of 5,000 feet, whichever is the lesser.

(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 shall be cemented with not less than one hundred and fifty percent (150) percent of calculated volume necessary to circulate cement to the ground 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 shall be displaced with water and a hydraulic pressure of six hundred (600) 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.

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

(3) Salt Protection String:

(a) A salt protection string of new or used oil field casing in good condition shall 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 shall not be set below the top of the highest known oil or gas zone.

(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 IV (5), (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; however, where the base of the Delaware Mountain Group is definable the casing rules in (IV) (3b) (i) shall apply even if the depth of the bottom of the Delaware Mountain Group is greater than 5,000 feet. For the purpose of identification, the base of the Delaware Mountain Group is hereby identified as the equivalent of the base of such formation as 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, Lea County, New Mexico, immediately overlying the Bone Springs formation.

(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 or gamma ray survey and additional cementing shall be done until the cement is brought to the point required.

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

(4) Intermediate String:

(a) In the drilling of oil and gas exploratory test wells to the deep zone, the operator shall have the option of running an intermediate string of pipe, unless the Commission requires an intermediate string.

(b) Cementing procedures and casing tests for the intermediate string shall be the same as provided under sub-sections IV (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.

(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 IV (3), (c), (e) and (f) for the salt protection string; however if high pressure oil or gas production is discovered in any area, the Commission shall promulgate the necessary rules to prevent the charging of the salt section.

V.

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.

VI.

PLUGGING 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 field rules established by the Commission 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.

VII.

LOCATION FOR WELLS

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 Commission, the well operator shall send one copy by registered mail to all potash operators holding potash leases within a radius of one mile of the proposed well, as reflected by the plats submitted under paragraph IX (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 Commission.

The Commission, or its authorized representative, may approve such Notice of Intention to Drill if no objection to the location of the proposed well is made by a potash operator within ten days after receipt. If the location of the proposed well is objected to by the potash operator, the matter shall be referred to the Secretary-Director of the Commission for arbitration. If a satisfactory settlement cannot be reached, the Secretary-Director of the Commission shall refer the matter to a hearing before the Commission after due notice and a decision either approving or denying the operator's plans to drill shall be entered by the Commission.

#### VIII.

#### INSPECTION OF DRILLING AND MINING OPERATIONS

A representative of the potash operator may be present during drilling, cementing, casing, and plugging of all oil or gas wells within a radius of one mile of the well location 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.

#### IX.

#### FILING OF WELL SURVEYS, MINE SURVEYS AND POTASH DEVELOPMENT PLANS

##### (1) Directional Surveys:

The Commission may require an operator to file a certified directional survey from the surface to a point below the lowest known potash bearing horizon on all wells drilled within the Potash Area. These surveys may be required where, in the Commission's judgment, the exact location of the well-bore must be determined in order to aid mining operations.

##### (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 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.

(3) Potash Development Plan:

Within 30 days after adoption of this order and thereafter on or before January 31st of each year, each potash operator shall furnish two copies of a projection of development plans in the form of a plat, which plat shall be for the confidential use of the Commission and for inspection by any affected oil or gas operator. The projection shall cover not less than 3 nor more than a 5 year development program.

X.

APPLICABILITY OF STATEWIDE RULES AND REGULATIONS

All general statewide rules and regulations of the Oil Conservation Commission governing the development, operation, and production of oil and gas in the State of New Mexico not inconsistent or in conflict herewith, are hereby adopted and made applicable to the areas described herein.

EXHIBIT "A"

POTASH-OIL AREA

TOWNSHIP 18 SOUTH, RANGE 30 EAST

Section 13: SW/4  
Section 14: S/2, NW/4, W/2 NE/4  
Section 15: SE/4  
Section 22: E/2, E/2 W/2  
Section 23: All  
Section 24: NW/4  
Section 26: N/2  
Section 27: N/2 NE/4

TOWNSHIP 19 SOUTH, RANGE 29 EAST

Section 11: SE/4  
Section 12: S/2, S/2 NE/4  
Section 13: N/2, N/2 S/2, S/2 SW/4  
Section 14: E/2, E/2 W/2  
Section 23: N/2 NE/4

TOWNSHIP 19 SOUTH, RANGE 30 EAST

Section 3: S/2  
Section 4: S/2, NW/4, SW/4 NE/4  
Section 5: E/2, E/2 W/2, SW/4 SW/4



EXHIBIT "A" (Continued)

TOWNSHIP 19 SOUTH, RANGE 30 EAST (continued)

Section 7: S/2, S/2 N/2, N/2 NE/4  
Section 8: All  
Section 9: All  
Section 10: All  
Section 11: SW/4, W/2 SE/4  
Section 14: W/2, W/2 SE/4  
Section 15: All  
Section 16: All  
Section 17: All  
Section 18: E/2, NW/4  
Section 19: NE/4  
Section 20: N/2, SE/4 SE/4  
Section 21: All  
Section 22: All  
Section 23: W/2  
Section 26: W/2, SE/4  
Section 27: All  
Section 28: All  
Section 29: E/2  
Section 32: SE/4, NE/4 NE/4  
Section 33: All  
Section 34: All  
Section 35: All  
Section 36: SW/4, S/2 NW/4, S/2 SE/4

TOWNSHIP 19 SOUTH, RANGE 31 EAST

Section 36: SE/4

TOWNSHIP 19 SOUTH, RANGE 32 EAST

Section 31: W/2 SW/4  
Section 33: SE/4, E/2 SW/4  
Section 34: S/2  
Section 35: S/2  
Section 36: SW/4, SE/4 SE/4

TOWNSHIP 19 SOUTH, RANGE 33 EAST

Section 22: SE/4 SE/4  
Section 23: SW/4  
Section 25: SW/4  
Section 26: All  
Section 27: E/2  
Section 31: S/2  
Section 32: SW/4  
Section 34: NE/4 NE/4  
Section 35: All  
Section 36: S/2, NW/4 W/2 NE/4

EXHIBIT "A" (continued)

TOWNSHIP 19 SOUTH, RANGE 34 EAST

Section 31: SW/4 SW/4

TOWNSHIP 20 SOUTH, RANGE 29 EAST

Section 13: SW/4 SW/4

Section 14: SE/4 SE/4

Section 22: SE/4, S/2 NE/4

Section 23: S/2, NE/4

Section 24: W/2, W/2 SE/4

Section 25: N/2, N/2 S/2

Section 26: All

Section 27: E/2

Section 34: NE/4, N/2 SE/4

Section 35: NW/4

TOWNSHIP 20 SOUTH, RANGE 30 EAST

Section 1: All

Section 2: All

Section 3: All

Section 4: All

Section 5: S/2, NE/4

Section 6: S/2, S/2 NE/4

Section 7: NW/4, E/2

Section 8: All

Section 9: All

Section 10: All

Section 11: All

Section 12: All

Section 13: All

Section 14: All

Section 15: All

Section 16: All

Section 17: All

Section 18: E/2

Section 19: E/2

Section 20: All

Section 21: All

Section 22: All

Section 23: All

Section 24: All

Section 25: All

Section 26: All

Section 27: All

Section 28: All

Section 29: All

Section 30: All

EXHIBIT "A" (continued)

TOWNSHIP 20 SOUTH, RANGE 30 EAST (continued)

|             |     |
|-------------|-----|
| Section 31: | E/2 |
| Section 32: | All |
| Section 33: | All |
| Section 34: | All |
| Section 35: | All |
| Section 36: | All |

TOWNSHIP 20 SOUTH, RANGE 31 EAST

|             |                          |
|-------------|--------------------------|
| Section 1:  | E/2, E/2 W/2             |
| Section 6:  | SW/4, S/2 NW/4, W/2 SE/4 |
| Section 7:  | W/2, SE/4, W/2 NE/4      |
| Section 8:  | S/2, S/2 N/2             |
| Section 9:  | SW/4, S/2 NW/4           |
| Section 11: | SE/4, E/2 SW/4           |
| Section 12: | All                      |
| Section 13: | All                      |
| Section 14: | E/2, SW/4, E/2 NW/4      |
| Section 16: | W/2                      |
| Section 17: | All                      |
| Section 18: | All                      |
| Section 19: | All                      |
| Section 20: | All                      |
| Section 21: | NW/4, S/2                |
| Section 22: | S/2, S/2 NE/4            |
| Section 23: | All                      |
| Section 24: | All                      |
| Section 25: | All                      |
| Section 26: | All                      |
| Section 27: | All                      |
| Section 28: | All                      |
| Section 29: | All                      |
| Section 30: | All                      |
| Section 31: | All                      |
| Section 32: | All                      |
| Section 33: | All                      |
| Section 34: | All                      |
| Section 35: | All                      |
| Section 36: | All                      |

TOWNSHIP 20 SOUTH, RANGE 32 EAST

|            |                     |
|------------|---------------------|
| Section 1: | All                 |
| Section 2: | All                 |
| Section 3: | All                 |
| Section 4: | E/2, SW/4, E/2 NW/4 |

EXHIBIT "A" (continued)

TOWNSHIP 20 SOUTH, RANGE 32 EAST, (Continued)

|             |                |
|-------------|----------------|
| Section 5:  | S/2 SE/4       |
| Section 6:  | W/2, SW/4 SE/4 |
| Section 7:  | All            |
| Section 8:  | All            |
| Section 9:  | All            |
| Section 10: | All            |
| Section 11: | All            |
| Section 12: | All            |
| Section 13: | All            |
| Section 14: | All            |
| Section 15: | All            |
| Section 16: | All            |
| Section 17: | All            |
| Section 18: | All            |
| Section 19: | All            |
| Section 20: | All            |
| Section 21: | All            |
| Section 22: | All            |
| Section 23: | All            |
| Section 24: | All            |
| Section 25: | All            |
| Section 26: | All            |
| Section 27: | All            |
| Section 28: | All            |
| Section 29: | All            |
| Section 30: | All            |
| Section 31: | All            |
| Section 32: | All            |
| Section 33: | All            |
| Section 34: | All            |
| Section 35: | All            |
| Section 36: | All            |

TOWNSHIP 20 SOUTH, RANGE 33 EAST

|             |                      |
|-------------|----------------------|
| Section 1:  | All                  |
| Section 2:  | E/2, E/2 W/2         |
| Section 5:  | W/2                  |
| Section 6:  | All                  |
| Section 7:  | All                  |
| Section 8:  | W/2, SW/4 NE/4, SE/4 |
| Section 9:  | S/2 S/2, NW/4 SW/4   |
| Section 10: | S/2                  |
| Section 11: | E/2, E/2 NW/4, SW/4  |
| Section 12: | All                  |
| Section 13: | All                  |
| Section 14: | All                  |

EXHIBIT "A" (continued)

TOWNSHIP 20 SOUTH, RANGE 33 EAST (continued)

|             |                                |
|-------------|--------------------------------|
| Section 15: | All                            |
| Section 16: | All                            |
| Section 17: | All                            |
| Section 18: | All                            |
| Section 19: | All                            |
| Section 20: | All                            |
| Section 21: | W/2 SW/4, NW/4, N/2 NE/4       |
| Section 22: | N/2 N/2                        |
| Section 23: | N/2 N/2, SE/4 NE/4             |
| Section 24: | N/2, N/2 SE/4, SE/4 SE/4       |
| Section 29: | W/2, NE/4, N/2 SE/4, SW/4 SE/4 |
| Section 30: | All                            |
| Section 31: | N/2, W/2 SW/4                  |

TOWNSHIP 20 SOUTH, RANGE 34 EAST

|             |                                |
|-------------|--------------------------------|
| Section 6:  | W/2, W/2 SE/4                  |
| Section 7:  | All                            |
| Section 8:  | SW/4                           |
| Section 16: | SW/4, SW/4 NW/4, SW/4 SE/4     |
| Section 17: | All                            |
| Section 18: | All                            |
| Section 19: | All                            |
| Section 20: | All                            |
| Section 21: | All                            |
| Section 22: | SW/4                           |
| Section 27: | W/2                            |
| Section 28: | All                            |
| Section 29: | N/2, SE/4, NE/4 SW/4           |
| Section 30: | NE/4 NW/4, N/2 NE/4, SE/4 NE/4 |
| Section 32: | N/2 NE/4, SE/4 NE/4            |
| Section 33: | N/2, SE/4, N/2 SW/4, SE/4 SW/4 |
| Section 34: | W/2                            |

TOWNSHIP 21 SOUTH, RANGE 29 EAST

|             |                                    |
|-------------|------------------------------------|
| Section 1:  | All                                |
| Section 2:  | Lots 1-16, incls., SE/4, NE/4 SW/4 |
| Section 3:  | Lots 1-9, incl.                    |
| Section 4:  | Lots 1-8 incl., Lots 10 and 11     |
| Section 11: | E/2, E/2 SW/4                      |
| Section 12: | All                                |
| Section 13: | All                                |
| Section 14: | E/2, E/2 W/2, SW/4 NW/4, NW/4 SW/4 |
| Section 15: | SE/4 NE/4, NE/4 SE/4               |
| Section 23: | N/2 NE/4                           |

EXHIBIT "A" (continued)

TOWNSHIP 21 SOUTH, RANGE 29 EAST (continued)

Section 24: NE/4, NE/4 SE/4, N/2 NW/4, SE/4 NW/4  
Section 35: S/2 NE/4, SE/4, E/2 SW/4  
Section 36: S/2 SW/4, SE/4, S/2 NE/4, NE/4 NE/4

TOWNSHIP 21 SOUTH, RANGE 30 EAST

Section 1: All  
Section 2: All  
Section 3: All  
Section 4: All  
Section 5: All  
Section 6: All  
Section 7: All  
Section 8: All  
Section 9: N/2, SW/4  
Section 10: N/2, SE/4, N/2 SW/4, SE/4 SW/4  
Section 11: All  
Section 12: All  
Section 13: All  
Section 14: All  
Section 15: NE/4, NE/4 NW/4, N/2 SE/4, SE/4 SE/4  
Section 16: NW/4 NW/4  
Section 17: All  
Section 18: All  
Section 19: All  
Section 20: NW/4, N/2 NE/4  
Section 22: E/2 E/2  
Section 23: All  
Section 24: All  
Section 25: N/2, SE/4, N/2 SW/4, SE/4 SW/4  
Section 26: N/2, N/2 S/2  
Section 27: NE/4, N/2 SE/4, SE/4 SE/4  
Section 29: NW/4, N/2 SW/4  
Section 30: E/2, E/2 W/2  
Section 31: All  
Section 32: S/2, NW/4, NW/4 NE/4, S/2 NE/4  
Section 36: E/2

TOWNSHIP 21 SOUTH, RANGE 31 EAST

Section 1: All  
Section 2: All  
Section 3: All  
Section 4: All  
Section 5: All  
Section 6: All  
Section 7: All  
Section 8: All

EXHIBIT "A" (continued)

TOWNSHIP 21 SOUTH, RANGE 31 EAST (continued)

Section 9: All  
Section 10: W/2  
Section 12: N/2, SE/4, N/2 SW/4, SE/4 SW/4  
Section 13: N/2 NE/4  
Section 15: W/2  
Section 16: E/2, NW/4, E/2 SW/4  
Section 18: NW/4, W/2 NE/4, NE/4 NE/4, W/2 SW/4  
NE/4 SW/4  
Section 21: E/2, NE/4 NW/4  
Section 22: W/2  
Section 27: W/2, SW/4 NE/4, W/2 SE/4  
Section 28: E/2  
Section 30: SW/4, W/2 NW/4, SE/4 NW/4  
Section 31: W/2  
Section 33: NE/4 NE/4  
Section 34: NW/4, NW/4 NE/4

TOWNSHIP 21 SOUTH, RANGE 32 EAST

Section 6: Lots 1-7 incls., Lots 10-15, incls., SW/4  
Section 7: W/2  
Section 22: E/2  
Section 23: All  
Section 24: All

TOWNSHIP 21 SOUTH, RANGE 33 EAST

Section 3: Lots 1, 2, 3  
Section 17: S/2 S/2  
Section 18: SE/4 SE/4  
Section 19: All  
Section 20: All  
Section 21: W/2, SE/4, S/2 NE/4  
Section 22: S/2, S/2 N/2  
Section 23: S/2, S/2 N/2, NE/4 NE/4  
Section 24: All  
Section 25: NW/4, N/2 NE/4, SW/4 NE/4, N/2 SW/4  
Section 26: W/2, NE/4, N/2 SE/4, SW/4 SE/4  
Section 27: All  
Section 28: All  
Section 29: N/2, SE/4, NE/4 SW/4  
Section 30: N/2 NE/4, SE/4 NE/4  
Section 33: N/2 N/2  
Section 34: N/2 N/2

EXHIBIT "A" (continued)

TOWNSHIP 21 SOUTH, RANGE 34 EAST

Section 19: W/2

TOWNSHIP 22 SOUTH, RANGE 29 EAST

Section 1: All  
Section 2: E/2, E/2 NW/4, SW/4  
Section 3: S/2 SE/4, NE/4 SE/4  
Section 10: E/2, E/2 W/2, SW/4 SW/4  
Section 11: All  
Section 12: All  
Section 13: All  
Section 14: All  
Section 15: All  
Section 16: SE/4, SE/4 NE/4, SE/4 SW/4  
Section 20: E/2 E/2  
Section 21: All  
Section 22: All  
Section 23: All  
Section 24: All  
Section 25: All  
Section 26: All  
Section 27: All  
Section 28: NE/4, N/2 NW/4, SE/4 NW/4, SE/4  
Section 33: NE/4 NE/4  
Section 34: NW/4, W/2 E/2, N/2 SW/4, SE/4 SW/4  
Section 35: E/2, SW/4, SE/4 NW/4  
Section 36: All

TOWNSHIP 22 SOUTH, RANGE 30 EAST

Section 1: E/2  
Section 5: N/2, N/2 S/2, SW/4 SW/4  
Section 6: All  
Section 7: W/2, W/2 E/2, SE/4 SE/4  
Section 8: S/2 SW/4  
Section 12: NE/4 NE/4  
Section 13: NW/4, N/2 SW/4, SW/4 SW/4  
Section 14: SE/4, S/2 NE/4, E/2 SW/4, SW/4 SW/4  
Section 17: NW/4  
Section 18: All  
Section 19: All  
Section 20: All  
Section 21: S/2, SW/4 NW/4  
Section 22: S/2, S/2 N/2, NE/4 NE/4  
Section 23: W/2, W/2 NE/4, NE/4 NE/4  
Section 26: W/2 W/2  
Section 27: All



-17-  
Order No. R-111-A

EXHIBIT "A" (continued)

TOWNSHIP 22 SOUTH, RANGE 30 EAST (continued)

Section 28: All  
Section 29: All  
Section 30: All  
Section 31: All  
Section 32: All  
Section 33: All  
Section 34: All  
Section 35: W/2

TOWNSHIP 22 SOUTH, RANGE 31 EAST

Section 6: W/2, W/2 NE/4, NW/4 SE/4  
Section 7: N/2 NW/4

TOWNSHIP 23 SOUTH, RANGE 29 EAST

Section 1: All  
Section 2: E/2, NW/4, NE/4 SW/4  
Section 11: NE/4 NE/4  
Section 12: N/2 N/2

TOWNSHIP 23 SOUTH, RANGE 30 EAST

Section 2: NW/4  
Section 3: All  
Section 4: All  
Section 5: All  
Section 6: All  
Section 7: NE/4, N/2 NW/4, SE/4 NW/4  
Section 8: N/2 N/2, S/2 NE/4  
Section 9: N/2, NE/4 SW/4, N/2 SE/4  
Section 10: N/2, SW/4

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

JOHN F. SIMMS, Chairman

E. S. WALKER, Member

W. B. MACEY, Member & Secretary

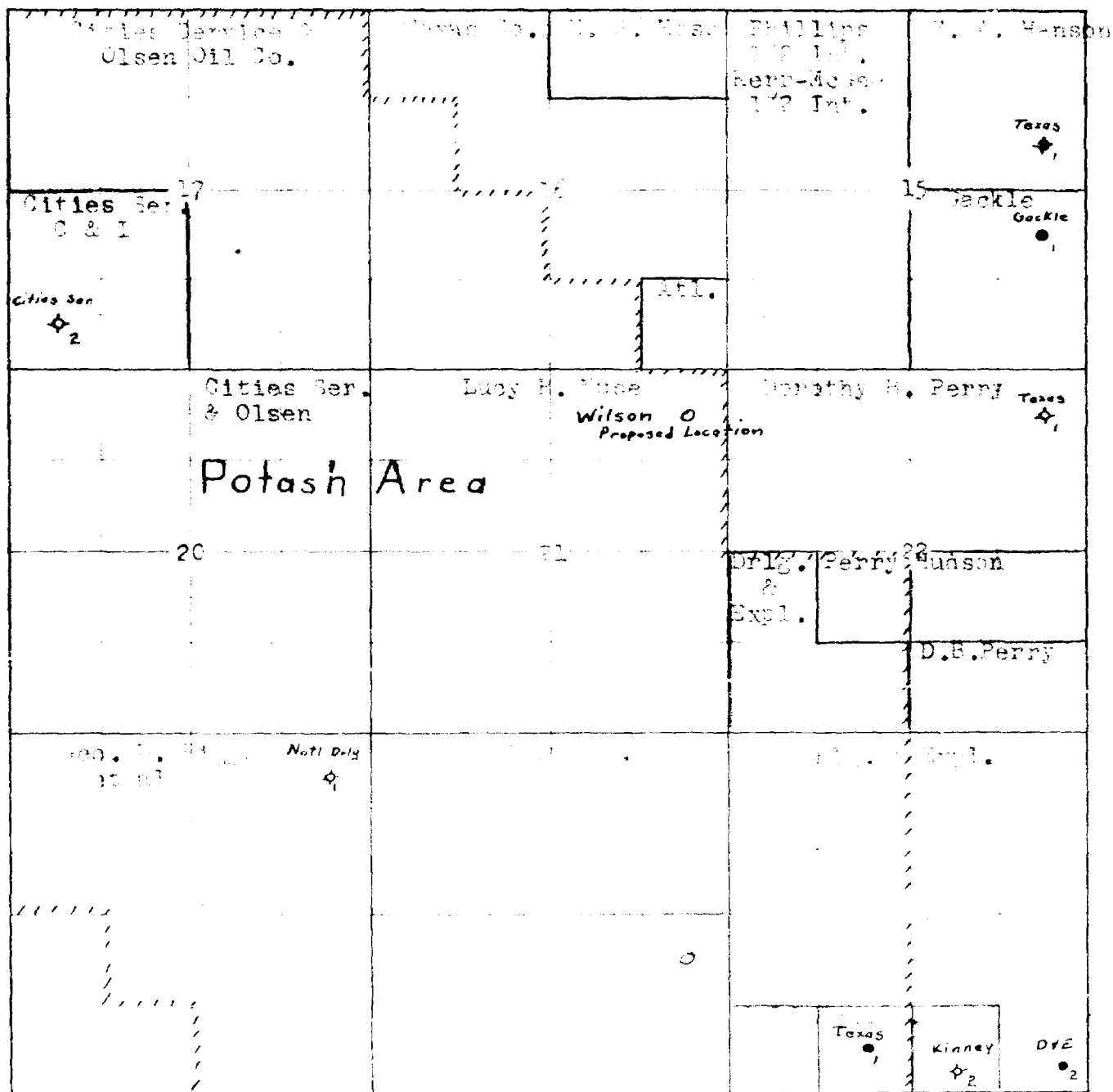
S E A L

jh

Exhibit

OWNERSHIP AND WELL PLAT ON PORTION OF TOWNSHIP.

TOWNSHIP 20S RANGE 34E COUNTY Lea STATE New Mexico



POB:34 01 01 1911 -

Potash 1.000 1.000

file 100-442887-100

Potash 2000

2-5-57 J. L.

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1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

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| Well Name                             | Section | Completion Date | Total Depth | Casing | 126 | Set | 10-3/4 | 747 | Set | 8      | 1300 | Set | 5-1/4 | 3174 | Set |
|---------------------------------------|---------|-----------------|-------------|--------|-----|-----|--------|-----|-----|--------|------|-----|-------|------|-----|
| Lang & Schlachter #1 Federal          | 3       | 5-2-56          | 3759        | 13-3/8 | 126 | Set | 10-3/4 | 747 | Set | 8      | 1300 | Set | 5-1/4 | 3174 | Set |
| Texas Production Co. #1 Jackson       | 4       | 10-6-27         | 4031        | 15-1/2 | 430 | Set | 12-1/2 | 552 | Set | 8-1/4  | 1527 | Set | 7     | 3528 | Set |
| The Texas Company #1 Sweetwater       | 8       | 1-31-35         | 3909        | 15-1/2 | 304 | Set | 10     | 775 | Set | 7-5/8  | 1550 | Set | 7     | 4426 | Set |
| The Texas Company #1 Sweetwater       | 9       | 12-4-44         | 4769        | 13     | 300 | 300 | 10-3/4 | 735 | Set | 10-3/4 | 1668 | Set | 7-5/8 | 3577 | Set |
| The Texas Company #1 L. L. Elliott    | 11      | 6-18-40         | 3861        | 15-1/2 | 240 | 200 |        |     |     |        |      |     |       |      |     |
| Albert Beckle #1 Hanson Fed.          | 14      | 1-7-57          | 4145        | 8-5/8  | 375 | 225 |        |     |     | 10     | 1573 | Set | 6-1/4 | 3536 | Set |
| The Texas Company #1 J. L. Lea        | 14      | 7-10-34         | 3638        |        |     |     |        |     |     | 8-1/8  | 1561 | Set | 7     | 3529 | Set |
| The Texas Company #3 J. L. Lea        | 14      | 8-10-38         | 3807        | 13     | 221 | 200 |        |     |     | 8-5/8  | 1665 | Set | 7     | 3339 | Set |
| The Texas Company #2 J. L. Lea        | 15      | 8-2-37          | 3703        | 13     | 206 | 200 |        |     |     |        |      |     | 6-1/2 | 3766 | Set |
| Albert Beckle #1 L. L. Hanson Fed.    | 15      | 1-25-57         | 3768        | 8-5/8  | 342 | 250 |        |     |     | 8-1/4  | 1568 | Set | 6-1/2 | 3366 | Set |
| Cities Service #2 Jewett McDonald AA  | 17      | 3-3-42          | 3633        | 13     | 560 | Set | 10     | 915 | Set |        |      |     | 7-1/4 | 3160 | Set |
| Henderson & Dexter #1 McDonald Jewett | 18      | 7-11-29         | 3612        |        |     |     | 10     | 825 | Set |        |      |     |       |      |     |

|   |    |          |      |              |            |            |        |     |     |       |                        |
|---|----|----------|------|--------------|------------|------------|--------|-----|-----|-------|------------------------|
| J. Don Hughes, Inc.<br>#1 Federal         | 18 | 8-1-54   | 3825 | 9-5/8        | 60         | Set        |        |     | 7   | 3490  | 9.08                   |
| Cities Service<br>#2 Jewett - Federal     | 19 | 9-24-44  | 3655 | 13           | 591        | Set        | 10     | 800 | Set | 1-5/8 | 1060 150               |
| The Texas Company<br>#1 #111 - Federal    | 22 | 1-15-35  | 3815 | 12           | 74         | Set        |        |     |     | 1-1/4 | 1600 60 7 3490 60      |
| Drillco<br>#1 Norman                      | 25 | 5-21-45  | 3825 | 16<br>13     | 190<br>564 | Set<br>Set | 10-3/4 | 907 | Set | 1-1/4 | 1700 100               |
| Drilling Exploration<br>#2 #100 - Federal | 27 | 1-21-57  | 3699 | 13-3/8       | 70         | Set        | 10     | 736 | Set | 1-3/8 | 18 3 60 5-1/8 350 1700 |
| Drilling Exploration<br>#3 #100 - Federal | 27 | 10-18-54 | 3341 | 13-3/8       | 100        | 50         |        |     |     | 1-5/8 | 1700 60                |
| Drilling Exploration<br>#4 #100 - Federal | 27 |          |      | 13-3/8       | 70         | 50         | 10-3/4 | 716 | Set | 1-3/4 | 1700 60                |
| Drilling Exploration<br>#5 #100 - Federal | 27 | 8-1-34   | 3750 | 12-1/2       | 148        | Set        |        |     |     | 1-1/4 | 1600 110               |
| Continental Oil Co.<br>#1 #111 - Federal  | 28 | 3-22-29  | 3840 | 20<br>15-1/2 | 25<br>585  | Set<br>Set | 12     | 945 | Set | 1-1/4 | 1600 60 1-1/4 3450 60  |
| National Oil Corp.<br>#1 #111 - Federal   | 29 | 7-27-43  | 3772 | 12-1/2       | 291        | Set        |        |     |     | 1-1/4 | 1600 100 1-3/8 3450 60 |
| Drilling<br>#1 #111 - Federal             | 29 | 6-1-40   | 3368 |              |            |            |        |     |     | 1-3/8 | 1570 50                |
| Drilling<br>#2 #111 - Federal             | 30 | 7-1-45   | 3600 | 13-3/8       | 75         | Set        | 10-3/4 | 625 | Set | 1-5/8 | 1600 60                |
| Langdon<br>#1 #111 - Federal              | 30 | 9-27-56  | 3192 |              |            |            |        |     |     | 1-5/8 | 1600 600               |
| Drilling<br>#1 #111 - Federal             | 30 | 7-26-45  | 3547 | 13           | 550        | Set        | 10     | 382 | Set |       | 1550 60                |
| Drilling<br>#2 #111 - Federal             | 34 | 5-21-54  | 3771 |              |            |            | 10     | 710 | Set | 1-5/8 | 1775 60                |

|                                       |    |      |        |     |     |        |     |     |                                |
|---------------------------------------|----|------|--------|-----|-----|--------|-----|-----|--------------------------------|
| Texas Company<br>#1 Lynch A           | 34 | 3731 | 16     | 132 | Set | 10     | 875 | Set | 6-5/8 3575 705x                |
| Texas Company<br>#3 Lynch A           | 34 | 3745 | 12-1/2 | 515 | Set |        |     |     | 5-1/2 3705 1650                |
| Texas Company<br>#5 Lynch A           | 34 | 3798 | 13-3/8 | 138 | 50  |        |     |     |                                |
| Texas Company<br>#8 Lynch             | 34 | 3768 | 13-3/8 | 124 | Set | 10-3/4 | 733 | Set | 5-1/2 3639 900                 |
| Texas Company<br>#9 Lynch Fed. A      | 34 | 3735 |        |     |     | 10-3/4 | 720 | Set | 5-1/2 3635 1100                |
| Texas Company<br>#10 Lynch-Fed. A     | 34 | 3726 | 13-3/8 | 85  | Set | 10-3/4 | 475 | Set | 5-1/2 3715 1200                |
| Texas Company<br>#11 Lynch-Fed. A     | 34 | 3720 |        |     |     | 10-3/4 | 690 | 200 | 5-1/2 3715 1200                |
| Drilling & Exploration<br>#1 Fletcher | 35 | 3725 | 13-3/8 | 70  | Set | 10-3/4 | 754 | Set | 5-5/8 1772 Set 5-1/2 3715 1200 |
| J. H. Elder<br>#1 Elder               | 35 | 3757 | 13-3/8 | 154 | 125 |        |     |     | 8-5/8 1300 Set 5-1/2 3700 1200 |
| J. H. Elder<br>#2 Federal             | 35 | 3747 | 13-3/8 | 123 | 125 |        |     |     | 8-5/8 1350 Set 5-1/2 3715 1200 |
| J. H. Elder<br>#3 Federal             | 35 | 3736 | 13-3/8 | 95  | 125 |        |     |     | 8-5/8 1300 Set 5-1/2 3715 1200 |
| J. H. Elder<br>#4 Federal             | 35 | 3736 | 13     | 143 | Set | 10-3/4 | 761 | Set | 8-5/8 1775 Set 5-1/2 3715 1200 |
| Phillips Retr. Co.<br>#1 Retr.        | 35 | 3734 | 13-3/8 | 80  | Set |        |     |     | 8-5/8 2030 Set 5-1/2 3715 1200 |
| Phillips Retr. Co.<br>#2 Retr.        | 35 | 3775 | 8-5/8  | 145 | 175 |        |     |     | 5-1/2 3750 375                 |

|    |        |      |        |     |     |        |     |     |       |      |     |       |      |      |    |
|----|--------|------|--------|-----|-----|--------|-----|-----|-------|------|-----|-------|------|------|----|
| 35 | 8-1-52 | 3726 | 13-3/8 | 132 | set | 10-3/4 | 782 | set | 8-5/8 | 1311 | set | 5-1/2 | 3666 | 2700 | ex |
|----|--------|------|--------|-----|-----|--------|-----|-----|-------|------|-----|-------|------|------|----|

|    |          |      |    |     |     |        |     |     |       |      |     |       |      |      |
|----|----------|------|----|-----|-----|--------|-----|-----|-------|------|-----|-------|------|------|
| 35 | 12-19-52 | 3707 | 13 | 105 | Set | 10-3/4 | 764 | Set | 8-5/8 | 1303 | Set | 5-1/2 | 3570 | 1300 |
|----|----------|------|----|-----|-----|--------|-----|-----|-------|------|-----|-------|------|------|

DIAGRAM OF CASING PROGRAM  
Proposed well NE $\frac{1}{4}$ NE $\frac{1}{4}$ ,  
Sec. 21-T20S-R34E  
Lea County, New Mexico

Case 1215

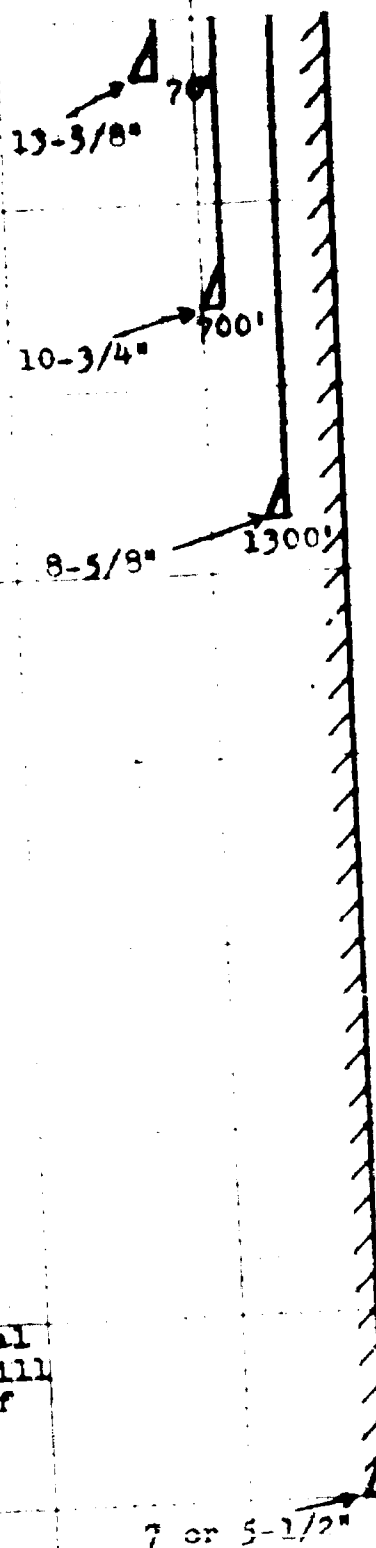
K-E  
2-27-57 NFL

Casing to be set in  
Top Red Beds - shut off  
surface waters.

Casing to be set at about  
700 feet in Chinle - Shut  
"Dry Cave" & Water Zone.

Casing to be set at about  
1300 feet to shut off  
Santa Rosa water zone.

Production string to be set  
above known pay zone, tacked with  
cement if deemed advisable prior  
to drilling pay zone. If commercial  
production is encountered casing will  
be cemented to surface in stages if  
necessary. Other casing to be  
pulled.



RECENT, Caliche &  
Water sands

CHINLE, Red Beds some  
rotten, and  
Water sands

SANTA ROSA, Red Beds  
& Water sand.

DEWEY LAKE, Competent  
silt stone  
and shales.

RUSTLER- Anhydrite

SALADO- Salt, potash  
& Anhydrite

TANSIL- Anhydrite &  
Dolomite

YATES- Dolomite,  
Anhydrite &  
Sand beds

3600  
SEVEN RIVERS-  
Dolomite &  
Sand beds

**INTERNATIONAL** RECEIVED FEB 20 1957  
**MINERALS & CHEMICAL CORPORATION**



GENERAL OFFICES • 20 NORTH WACKER DRIVE • CHICAGO 6

P. O. BOX 71  
CARLSBAD, NEW MEXICO  
February 14, 1957

Wilson Oil Company  
P. O. Box 627  
Santa Fe, New Mexico

Attention: Raymond Lamb

Dear Mr. Lamb:

We have received your letter dated February 14 together with a copy of your application to the Oil Conservation Commission for exception to the casing program set out in the Commission's order R-11. As regards the drilling of your proposed well in the NE 1/4 NE 1/4 of Sec. 22, T-20 S, R-34-E.

The Potash Corporation of America holds potash rights on the area and we understand that your proposal has been discussed with Mr. Don Probst of that company.

International offers no objection to the work provided that your amended drilling program is in full compliance with the approval of the Commission.

Sincerely,  
Adolph W. Mittlen

Adolph W. Mittlen  
Vice President  
International Minerals & Chemicals Corporation

WMM:1

cc: J. D. [unclear]  
General [unclear]

Apr 12/57 D



**FARM CHEMICAL RESOURCES DEVELOPMENT CORPORATION**

**CARLSBAD, NEW MEXICO**

Box 625

February 25, 1957

Request for Exception to  
Order No. Hilli-A pertaining  
to casing program for Location  
NE<sup>1</sup>NE<sup>4</sup> Sec. 21, T20S, R34E.  
H1-15-57

Wilson Oil Company  
Booker Bldg.  
Artesia, New Mexico

Attention: Mr. Raymond Lamb

Dear Raymond:

We will consent to the amended casing program as described in your letter to the Oil Conservation Commission dated February 11, 1957, insofar as it is agreeable with the Commission.

Yours very truly,

FARM CHEMICAL RESOURCES  
DEVELOPMENT CORP.

*C. W. Hicks*

C. W. Hicks

CWH:jz

E  
EPT 1215



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
P. O. Box 1838  
Hobbs, New Mexico

IN REPLY REFER TO:

February 21, 1957

Wilson Oil Company  
P. O. Box 627  
Santa Fe, New Mexico

Attention: Mr. M. Raymond Lamb

Gentlemen:

Reference is made to your letter dated February 13, 1957, enclosing a copy of your February 11 application to the New Mexico Oil Conservation Commission for an exception to Order R-111-A pertaining to a casing program for a proposed well to be located in the NE 1/4 sec. 21, T. 22 S., R. 34 E., Lea County, New Mexico, on land under Federal oil and gas lease Las Cruces 070315. You requested a written expression from the Geological Survey regarding the casing program set out in your application.

With the understanding that the well is to be drilled with cable tools and the 7 or 8 inch production string will be set above any oil or gas bearing zone and cemented throughout its entire length in accordance with the cementing procedure stated under subsections (b) (1), (c), (d) and (e) of Sec. IV (3) of Order R-111-A, this office considers your proposed casing program to be adequate and offers no objection thereto.

In the absence of any objection by the holder of the oil and gas rights or by the New Mexico Oil Conservation Commission, we shall approve a properly filled "Notice of Intention to Drill" at the above location containing the casing program outlined in your February 11 application to the Commission.

Very truly yours,

*H. A. DuPont*

H. A. DuPont  
District Engineer

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