

Case No.

1543

Application, Transcript,
Small Exhibits, Etc.

CASE 1962-7 Mining & Exploration Co.
 10000 Highway 100, Box 100, Breckenridge, Colorado
 80424

**BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO**

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

**CASE NO. 1543
Order No. R-1282**

**APPLICATION OF DRILLING & EXPLORATION
COMPANY, INC., FOR AN EXCEPTION TO THE
SHALLOW ZONE CASING REQUIREMENTS IN THE
POTASH-OIL AREA AS ESTABLISHED BY ORDER
NO. R-111-A.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on November 8, 1958, at Santa Fe, New Mexico, before Daniel S. Nutter, 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 6th day of November, 1958, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Drilling & Exploration, Inc., proposes to drill an exploratory well with cable tools to an approximate depth of 3700 feet at a point 1980 feet from the North line and 1980 feet from the West line of Section 27, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, to be known as applicant's Ballard No. 1 Well, and that said location is within the Potash-Oil Area as defined by Commission Order R-111-A.

(3) That the applicant proposes to case the above-described well as follows rather than in the manner prescribed by Order No. R-111-A:

- a. 13 3/8-inch casing to be landed at approximately 70 feet and cemented to the surface.
- b. 10 3/4-inch casing to be landed at approximately 700 feet.

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Case No. 1543

Order No. R-1282

- c. 8 5/8-inch casing to be landed at approximately 1250 feet.
- d. 5 1/2-inch casing to be cemented at the top of the producing formation with no less than 50 sacks cement for testing purposes.
- e. In the event commercial production is obtained 10 3/4-inch casing and 8 5/8-inch casing to be pulled and 5 1/2-inch casing to be perforated and cemented to the surface.

(4) 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, and that the proposed casing program will result in a considerable economic savings to the applicant.

(5) That the subject application should be approved.

(6) That the applicant should be required to comply with all of the provisions of Order No. R-111-A not specifically excepted by this order.

IT IS THEREFORE ORDERED:

1. That the applicant, Drilling & Exploration, Inc., be and the same is hereby authorized to drill its proposed Ballard No. 1 Well with cable tools at a point 1980 feet from the North line and 1980 feet from the West line of Section 27, Township 20 South, Range 34 East, NMPN, Lea County, New Mexico, and to case said well in the following-described manner:

- a. 13 3/8-inch casing to be landed at approximately 70 feet and cemented to the surface.
- b. 10 3/4-inch casing to be landed at approximately 700 feet.
- c. 8 5/8-inch casing to be landed at approximately 1250 feet.
- d. 5 1/2-inch casing to be cemented at the top of the producing formation with no less than 50 sacks of cement for testing purposes.

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Case No. 1543
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- e. In the event commercial production is obtained 10 3/4-inch casing and 8 5/8-inch casing may be pulled provided 5 1/2-inch casing is perforated and cemented to the surface.

2. That the applicant shall comply strictly with all the provisions of Order R-111-A not specifically excepted herein.

3. That, notwithstanding the foregoing, the applicant shall make adequate provisions for the protection of all potash-bearing strata in the area 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

E. L. Mechem

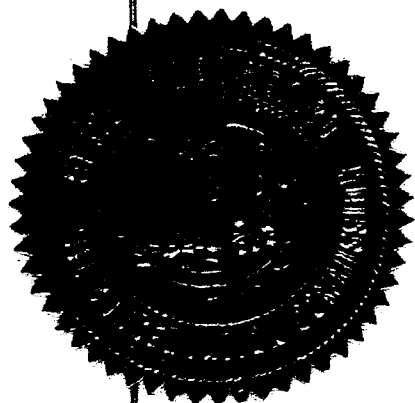
EDWIN L. MECHEM, Chairman

Murray E. Morgan

MURRAY E. MORGAN, Member

A. L. Porter, Jr.

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



ir/

APPROVED

SEP 5 1958
A. P. KLEMAN
DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Budget Form No. 50-523A
Approval expires 12-31-58

Land Office **Las Alamos**

Lease No. **H U 682**

Unit **Las Alamos**

*Subject is approved by The Conservation Commission
and approved by Order No. R-111-A.
from Secretary of Order No. R-111-A.*

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO RIGST OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO FILL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Wing I. Ballard

September 2 19 **58**

Well No. **1** is located **1000** ft. from **[N]** line and **1000** ft. from **[W]** line of sec. **27**

NE 1/4 Section 27
(of sec. and sec. No.)

20 S
(Range)

24 E
(Range)

Range
(Location)

Land
(Tract)

Land
(County or subdivision)

New Mexico
(State or Territory)

The elevation of the derrick floor above sea level is ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; clay zone, weights, and lengths of proposed casings; indicate casing joints, cementing points, and all other important proposed work)

We propose to drill at the above location with cable tools to an approximate depth of 1500 feet in the Santa-Sofia River. Contingent upon approval by the Conservation Commission for an exception to Order R-111-A (see application attached) we propose the following casing program: 15 1/8" casing to be cemented at approximately 70 feet with 120 sacks cement; 10 3/4" casing to be cemented at approximately 100 feet; 8 1/8" casing to be cemented at approximately 1200 feet; 5 1/8" oil string to be landed at top of producing formation and tested with 50 sacks; 20 1/4" casing and 8 5/8" casing to be pulled; 5 1/2" casing to be cemented to surface if commercial production is obtained. The well to be tested initially and if necessary to be treated with regular acid and sandfire.

A previous application to drill a Ballard No. 1 was filed and approved November 12, 1957 and remained under the 90 day rule.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company **Drilling & Exploration Company, Inc.**

Address **Box 2075**

Albuquerque, New Mexico

By **D. C. Nutter**

Title **Division Prod. Superintendent**

GPO 916307

BEFORE EXAMINER NUTTER
OF CONSERVATION COMMISSION
Q & E EXHIBIT NO. **2**
CASE NO. **1543**

NEW MEXICO OIL CONSERVATION COMMISSION
Well Location and Acreage Dedication Plat

RECEIVED
Revised 7/1/58
U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

Section A.

Date 8-30-58

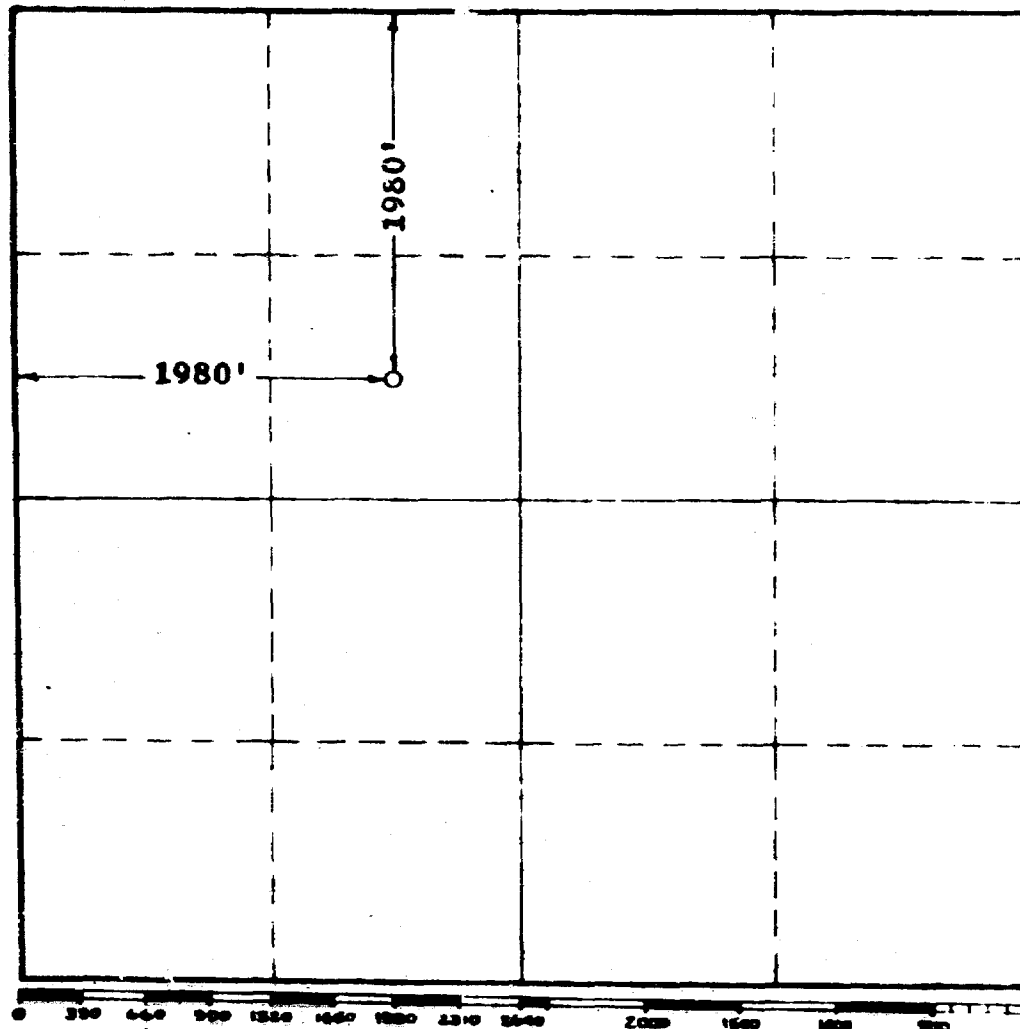
Operator Drilling & Exploration Co Inc Mary I Ballard
Well No. 1 Unit Letter P Section 27 Township 20 S Range 34 E 136M
Located 1980 Feet From North Line, 1980 Feet From West Line
County Lea C. L. Elevation 3695.55 Dedicated Acreage 40 Acres
Name of Producing Formation Yates Pool Lynch

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below?
Yes x No
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes No . If answer is "yes," Type of Consolidation
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner

Land Description

Section B



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

Drilling & Exploration Co., Inc.

(Operator)

D. C. Smith
(Representative)

Box 2075 Hobbs, New Mexico
Address

This is to certify that the well location shown on the plat in Section B was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed 8-29-58

J. G. Watt
Registered Professional
Engineer and/or Land Surveyor.

Certificate No. 676

(See instructions for completing this form on the reverse side)

PLEASE READ BEFORE STARTING OPERATIONS

Attention is called to the following requirements for operators on Federal, Indian and Acquired land oil and gas leases. The District Engineer may require suspension of operations for your failure to comply with the "Oil & Gas Operating Regulations", and these requirements. A copy of the "Operating Regulations" will be furnished you upon request.

GENERAL

1. All drilling and producing wells must be permanently marked by a well sign in a conspicuous place showing the name of operator, lease name, serial number of lease, well number, and location. Well signs must be maintained in legible condition.

2. Any change in the proposed plan or condition of approval must have approval of the District Engineer BEFORE the change is made.

3. Approval of a notice of intention to drill or abandon any well will be recinded without further notice if drilling or abandonment is not started within 90 days.

4. A Subsequent Report of Operations on form 9-331a (9-331b Indian), in triplicate, must be submitted to the District Engineer giving complete information, including dates the work was done, covering:

A. On new wells

a. Cementing casing and method and results of water shut off tests. (Show spud date on first report submitted.)

B. On work-overs

a. Deepening or plugging back.

b. Perforating, acidizing, fracturing, shooting, casing alterations.

c. Drill stem and other production tests.

5. Log, in quadruplicate, on form 9-330, must be submitted to the District Engineer within 15 days of completion, abandonment, or suspension unless operator is otherwise instructed by the District Engineer. The log should include a complete driller's log, descriptions and intervals of all cores, formation tops identified, results of all drill stem tests, perforating, fracturing, acidizing, shooting, production tests, and all other well information not previously reported. Duplicate copies of all electrical logs, sample logs, drilling time logs, temperature, deviation, and other well surveys also must be filed.

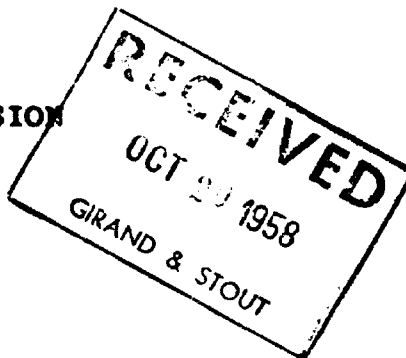
6. Monthly report of operations for each lease, in duplicate on form 9-329 (9-329A-Indian), must be submitted promptly each month to U.S. Geological Survey, Box 6721, Roswell, New Mexico, beginning with spudding of the first well on a lease and continuing until abandonment of all drilling and producing operations is approved.

7. All wells and lease premises shall be maintained in a workman like manner with due regard to safety, conservation, and appearance.

Revised October 1957

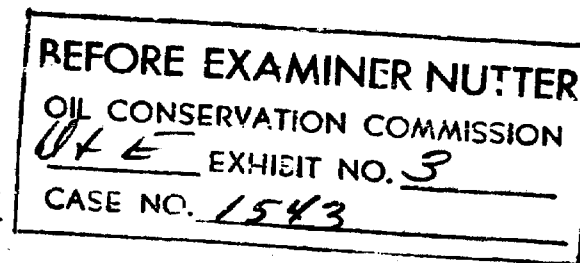
BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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 22nd 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, NMPM, 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 5/8 inch casing (water shut-off string) to about 1300
feet, but in any event below the water;

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Case No. 1215
Order No. R-968

7 or 5 1/2 inch casing (production string) to be set and 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 5/8 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.

-3-

Case No. 1215
Order No. R-968

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

S E A L

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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:

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
604 E	EXHIBIT NO. 4
CASE NO. 1543	

CASE NO. 1249
Order No. R-999

APPLICATION OF HUDSON AND HUDSON,
INCORPORATED 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 April 26, 1957, at Santa Fe, New Mexico, before Daniel S. Nutter, 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 10th. day of May, 1957, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Hudson & Hudson, Incorporated, proposes to drill an exploratory well with cable tools, said well to be known as the Hover-Federal No. 1 Well, located 1980 feet from the South line and 660 feet from the East line of Section 28, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, which location is in the Potash-Oil Area, as defined by Commission Order R-111-A.

(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" casing to a depth of approximately 60 feet;

10 3/4" casing to the top of the Santa Rosa formation
at approximately 800 feet;

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Case No. 1249
Order No. R-999

8 5/8" casing to the shale immediately above
the anhydrite at approximately 1250 feet;

5 1/2" casing to the top of the Yates formation
prior to drilling into said formation;

(4) That the applicant should be permitted to pull all casing
except the 5 1/2-inch 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, and that the
proposed casing program will result in a considerable economic savings to
the applicant.

(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.

(9) That the applicant should be required to comply with all of
the provisions of Order R-111-A, not specifically excepted by this order.

IT IS THEREFORE ORDERED:

1. That the applicant, Hudson & Hudson, Incorporated, he and
the same is hereby authorized to drill its Hover-Federal Well No. 1 with
cable tools in the potash-oil area at a point 1980 feet from the South
line and 660 feet from the East line of Section 28, Township 20 South,
Range 34 East, NMPM, Lea County, New Mexico, and to case said well in the
following manner:

13 3/8" casing to a depth of approximately 60 feet;

10 3/4" casing to the top of the Santa Rosa formation,
at approximately 800 feet;

8 5/8" casing to the shale immediately above the
anhydrite at approximately 1250 feet;

5 1/2" casing to the top of the Yates formation
prior to drilling into said formation;

2. That in the event commercial oil or gas production is found,
the 5 1/2-inch production string shall be cemented throughout its entire
length in which case the applicant may pull all other strings of casing.

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Case No. 1249
Order No. R-999

3. That the applicant shall comply strictly with all the provisions of Order R-111-A not specifically excepted herein.

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

S E A L

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Case 1543

POTASH COMPANY OF AMERICA

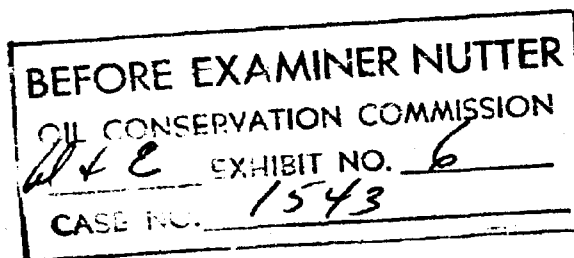
GENERAL SALES OFFICES · 1625 EYE STREET · N. W. · WASHINGTON 6 · D. C.
SOUTHERN SALES OFFICE · 408 · 9 CANDLER BLDG · ATLANTA · GA.
MIDWESTERN SALES OFFICE · FIRST NATIONAL BANK BLDG · PEORIA · ILL.



R. HAWORTH
VICE PRESIDENT
IN CHARGE OF PRODUCTION
AND RESIDENT MANAGER

REPLY TO: EXECUTIVE OFFICES
MINES AND REFINERY
CARLSBAD · NEW MEXICO
October 29, 1958

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico



Attention: Mr. A. L. Porter, Jr., Secretary

Re: Drilling and Exploration Company, Inc. (Appl. 10/8/58)

Dear Sirs:

The above application is by Drilling and Exploration Company, Inc., for an exception to the casing requirements of Order No. R-111-A for its Ballard No. 1 well to be located 1980' from the North and West lines of Section 27, T. 20 S., R. 34 E., Lea County, New Mexico.

Potash Company of America, under normal circumstances, would object to any deviation from OCC Order R-111-A. However, since the subject well is but a short distance inside our potash lease area, and located where exploratory drilling has indicated the absence of potash mineralization in sufficient concentration to be of economic value, we do not feel that objection to the casing program outlined in the application defined under Case No. 1513 is justified.

We wish to stress that our decision not to offer protest in this case, is not to be construed as indicating that the casing program outlined by Drilling and Exploration Company, Inc., is acceptable in known or potential potash areas.

Very truly yours,

R. Hawthorth

RH/b
cc:JBC:RHB:RRK:ECJ

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 11/6/58

CASE NO. 1543

HEARING DATE 9am DSN SF
11/6/58

My recommendations for an order in the above numbered case(s) are
as follows:

*Enter an order authorizing the casing
program sought by applicant.
Specify that surface csq is to be
cemented to the surface.*

Samuel D. [Signature]
Staff Member
Etc.

542
10-1-58

POTASH COMPANY OF AMERICA

GENERAL SALES OFFICES 1623 EYE STREET N. W. WASHINGTON 6 D. C.
SOUTHERN SALES OFFICE 408 9 Candler Blvd ATLANTA GA
MIDWESTERN SALES OFFICE FIRST NATIONAL BANK BLDG PEORIA ILL



EXECUTIVE OFFICES
MINES AND REFINERY
CARLSBAD NEW MEXICO

October 1, 1958

RECEIVED
OCT 2-5-58

R. HAWORTH
VICE PRESIDENT
IN CHARGE OF PRODUCTION
AND RESIDENT MANAGER

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr., Secretary

Re: Case No. 1513, Drilling and Exploration Company, Inc.

Dear Sirs:

Further to my letter of September 24th, relative to an application by Drilling and Exploration Company, Inc., referred to as Case No. 1513, to be heard before Mr. Elvis A. Uta, Examiner, at Santa Fe, on October 3, 1958, I wish to add the following comments.

Potash Company of America, under normal circumstances, would object to any deviation from OCC Order E-111A. However, since the subject well is but a short distance inside our potash lease area, and located where exploratory drilling has indicated the absence of potash mineralization in sufficient concentration to be of economic value, we do not feel that objection to the casing program outlined in the application defined under Case No. 1513 is justified.

We wish to stress that our decision not to offer protest in this case, is not to be construed as indicating that the casing program outlined by Drilling and Exploration Company, Inc., is acceptable in known or potential potash areas.

Very truly yours,

RH/r

cc:JBC:RHB:RHK:ECJ

DOCKET: EXAMINER HEARING NOVEMBER 6, 1958

Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe

The following cases will be heard before Daniel S. Nutter, Examiner:

CASE 1541: Application of Continental Oil Company for a 320-acre non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 320-acre non-standard gas proration unit in the Jalmat Gas Pool consisting of the S/2 of Section 33, Township 22 South, Range 36 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Meyer B-33 No. 1 Well, located 660 feet from the South and West lines of said Section 33.

CASE 1542: Application of Atlantic Refining Company for an exception to Rule 309 (a) of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from all wells now completed or hereafter drilled in the Horseshoe-Gallup Oil Pool on the following described lands in San Juan County, New Mexico:

TOWNSHIP 31 NORTH, RANGE 16 WEST
All of Sections 29, 30, 31 and 32,
and all of those portions of Sections
28 and 33 lying within the Navajo
Indian Reservation.

CASE 1543: Application of Drilling and Exploration Company, Inc. for an exception to the casing requirements for the potash-oil area in Lea and Eddy Counties, New Mexico. Applicant, in the above-styled cause, seeks an order authorizing an exception to the shallow-zone casing requirements for the potash-oil area as set forth in Order No. R-111-A for its Ballard No. 1 Well located 1980 feet from the North and West lines of Section 27, Township 20 South, Range 34 East, Lea County, New Mexico. Applicant proposes to drill with cable tools to an approximate depth of 3,700 feet adjacent to the Lynch Pool.

It is proposed to use the following casing program in lieu of the program prescribed for cable tool holes by Order R-111-A:

1. 13 3/8 inch casing to be cemented at approximately 70 feet.
2. 10 3/4 inch casing to be landed at approximately 700 feet.
3. 8 5/8 inch casing to be landed at approximately 1250 feet.
4. 5 1/2 inch casing to be cemented at the top of the producing formation with 50 sacks cement for testing purposes.
5. 10 3/4 inch casing and 8 5/8 inch casing to be pulled.
6. In the event commercial production is obtained, 5 1/2 inch casing to be perforated and cement circulated to surface.

ir/

Case 1543

GIRAND & STOUT
LAWYERS
204 LEA COUNTY STATE BANK BUILDING
HOBBS, NEW MEXICO

W. D. GIRAND
LOWELL STOUT

MAIN OFFICE OCC

TELEPHONE:
EXPRESS 2-9116
POST OFFICE BOX 1448

October 10, 1958.

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

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

Gentlemen:

Enclosed you will find, in triplicate, Application of Drilling and Exploration Company, Inc., Box 2075, Hobbs, New Mexico, for an exception to the shallow zone casing requirements established by Order R-111-A covering this company's proposed well located and designated as Drilling and Exploration Company, Inc. Ballard No. 1.

For your information, this is basically the same application as was previously filed by this company and heard under your Case No. 1513 in which the Commission denied the application on the grounds that the applicant presented no testimony in this case and that the documentary evidence that was presented was insufficient to justify the granting of the application.

I can assure you that upon the advertising of this new case, the applicant will be represented by counsel and testimony will be presented in support of the Application.

A copy of this Application is being forwarded, along with a copy of this letter, to the Potash Company of America to the attention of Mr. R. H. Blackman, Jr.

Very truly yours,

GIRAND & STOUT,

BY: *[Signature]*

G/bc
Encls.

cc: Drilling & Exploration, Inc., Box 35366, Dallas 35, Texas.
Drilling & Exploration, Inc., Box 2075, Hobbs, New Mexico.
Potash Company of America, Carlsbad, New Mexico. (Attn:
Mr. R. H. Blackman, Jr.)

*Docket Mailed
10-23-58 R*

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. 1277
Order No. R-1039

APPLICATION OF THE OIL CONSERVATION
COMMISSION OF NEW MEXICO AT THE
REQUEST OF WILSON OIL COMPANY FOR
AN ORDER ESTABLISHING A NEW OIL POOL
WITH SPECIAL RULES AND REGULATIONS IN
TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM,
IN THE POTASH-OIL AREA OF LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 17, 1957, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 26th., day of August, 1957, the Commission, a quorum being present, having considered the application and the evidence adduced and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this case and the subject matter thereof.
- (2) That a new pool productive of oil from the Yates formation was discovered by the Wilson Oil Company, Muse Well No. 1, located in the NE/4 NE/4 of Section 21, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Said well was completed on May 10, 1957, with the top of the perforations at 3513 feet.
- (3) That the available geological information indicates that the probable productive limits of the common source of supply discovered by the said Muse Well No. 1 is as follows:

TOWNSHIP 20 SOUTH, RANGE 34 EAST, N.M.P.M.
Section 15: W/2 of SW/4
Section 16: SE/4

TOWNSHIP 20 SOUTH, RANGE 34 EAST, N. M. P. M.

Section 21: E/2 and E/2 of NW/4

Section 22: W/2 of W/2

all in Lea County, New Mexico.

(4) That an oil pool should be created for the aforementioned common source of supply with horizontal limits as described above and that said pool should be known as the "Middle Lynch-Yates Pool."

(5) That certain portions of the Middle Lynch-Yates Pool lie within the boundaries of the Potash-Oil Area as defined by Order R-111-A.

(6) That all wells commenced in that portion of the Middle Lynch-Yates Pool which lies within the boundaries of the Potash-Oil Area as defined by Order R-111-A should be drilled and operated in accordance with the provisions of Order R-111-A; provided, however, that the operator of any such well should have the option of following either of the casing programs hereinafter set forth in lieu of the shallow-zone casing program prescribed by Order R-111-A:

ROTARY TOOLS CASING PROGRAM

Surface Casing to the top of the "Red Beds."

Cemented to surface.

Production Casing to be set below the base of the Tansill formation and tacked until it has been determined that commercial production has been obtained, in which event said production casing shall be cemented to the surface.

CABLE TOOLS CASING PROGRAM

Surface Casing to the top of the "Red Beds."

Upper Water Shut-Off Casing to be set in the Chinle formation.

Lower Water Shut-Off Casing to be set through the Santa Rosa formation and into the Dewey Lake formation.

Production Casing to be set below the base of the Tansill formation and tacked until it has been determined that commercial production

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CASE NO. 1277
Order No. R-1039

has been obtained in which event said production casing shall be cemented to the surface; whereupon, all other strings of casing may be pulled.

(7) That all wells commenced in that portion of the Middle Lynch-Yates Pool which lies outside the Potash -Oil Area should be drilled and operated in accordance with the Commission Statewide Rules and Regulations.

IT IS THEREFORE ORDERED:

1. That a new pool in Lea County, New Mexico, classified as an oil pool for Yates production, be and the same is hereby created and designated as the Middle Lynch-Yates Pool, consisting of the following described area:

TOWNSHIP 20 SOUTH, RANGE 34 EAST, N. M. P. M.

Section 15: W/2 of SW/4

Section 16: SE/4

Section 21: E/2 and E/2 of NW/4

Section 22: W/2 of W/2

2. That Special Rules and Regulations for the Middle Lynch-Yates Pool be and the same are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS OF THE MIDDLE LYNCH-YATES POOL

RULE 1. All wells commenced in that portion of the Middle Lynch-Yates Pool which lies within the boundaries of the Potash-Oil Area, as defined by Order R-111-A shall be drilled and operated in accordance with the provisions of Order R-111-A; provided, however, that the operator of any such well shall have the option of following either of the casing programs hereinafter set forth in lieu of the shallow-zone casing program prescribed by Order R-111-A;

ROTARY TOOLS CASING PROGRAM

Surface Casing to the top of the "Red Beds."

Cemented to surface.

Production Casing to be set below the base of the Tansill formation and tacked until it has been determined that commercial production has been obtained, in which event said production casing shall be cemented to the surface.

CABLE TOOLS CASING PROGRAM

Surface Casing to the top of the "Red Beds"

Upper Water Shut-Off Casing to be set in the
Chinle formation.

Lower Water Shut-Off Casing to be set through the
Santa Rosa formation and into the Dewey Lake
formation.

Production Casing to be set below the base of the
Tansill formation and tacked until it has been
determined that commercial production has been
obtained, in which event said production casing
shall be cemented to the surface, whereupon,
all other strings of casing may be pulled.

RULE 2. All wells commenced in that portion of the Middle Lynch-Yates Pool which lies outside the Potash-Oil Area shall be drilled and operated in accordance with the Commission Statewide Rules and Regulations.

RULE 3. The provision of paragraph (a) of Rule 104 of the Commission Statewide Rules and Regulations which requires wells located within one mile of a defined pool to be spaced, drilled, operated, and prorated in accordance with the regulation in effect in said pool shall not apply to the Middle Lynch-Yates Pool.

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

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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-969

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 22nd 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, NMPM, 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 5/8 inch casing (water shut-off string) to about 1300
feet, but in any event below the water;

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Case No. 1215
Order No. R-968

7 or 5 1/2 inch casing (production string) to be set and 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 5/8 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.

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Case No. 1215
Order No. R-968

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

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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. 1249
Order No. R-999

APPLICATION OF HUDSON AND HUDSON,
INCORPORATED 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 April 26, 1957, at Santa Fe, New Mexico, before Daniel S. Nutter, 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 10th. day of May, 1957, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Hudson & Hudson, Incorporated, proposes to drill an exploratory well with cable tools, said well to be known as the Hover-Federal No. 1 Well, located 1980 feet from the South line and 660 feet from the East line of Section 28, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, which location is in the Potash-Oil Area, as defined by Commission Order R-111-A.

(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" casing to a depth of approximately 60 feet;

10 3/4" casing to the top of the Santa Rosa formation
at approximately 800 feet;

8 5/8" casing to the shale immediately above
the anhydrite at approximately 1250 feet;

5 1/2" casing to the top of the Yates formation
prior to drilling into said formation;

(4) That the applicant should be permitted to pull all casing
except the 5 1/2-inch 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, and that the
proposed casing program will result in a considerable economic savings to
the applicant.

(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.

(9) That the applicant should be required to comply with all of
the provisions of Order R-111-A, not specifically excepted by this order.

IT IS THEREFORE ORDERED:

1. That the applicant, Hudson & Hudson, Incorporated, be and
the same is hereby authorized to drill its Hover-Federal Well No. 1 with
cable tools in the potash-oil area at a point 1980 feet from the South
line and 660 feet from the East line of Section 28, Township 20 South,
Range 34 East, NMPM, Lea County, New Mexico, and to case said well in the
following manner:

13 3/8" casing to a depth of approximately 60 feet;

10 3/4" casing to the top of the Santa Rosa formation,
at approximately 800 feet;

8 5/8" casing to the shale immediately above the
anhydrite at approximately 1250 feet;

5 1/2" casing to the top of the Yates formation
prior to drilling into said formation;

2. That in the event commercial oil or gas production is found,
the 5 1/2-inch production string shall be cemented throughout its entire
length in which case the applicant may pull all other strings of casing.

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Case No. 1249
Order No. R-999

3. That the applicant shall comply strictly with all the provisions of Order R-111-A not specifically excepted herein.

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

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Case 1543

DRILLING AND EXPLORATION COMPANY, INC.

P. O. BOX 2075

HOBBS, NEW MEXICO

October 8, 1958

Oil Conservation Commission
Box 871
Santa Fe, New Mexico

Gentlemen:

Drilling & Exploration Company, Inc. herewith makes application for an exception to the shallow zone casing requirements in the Potash-Oil area as established by Order R-111-A, for a well to be located 1980 feet from the North line and 1980 feet from the West line of Section 27, Township 20 South, Range 34 East, Lea County, New Mexico to be known as Drilling & Exploration Company, Inc. Ballard No. 1. Said well to be drilled with cable tools to an approximate depth of 3700 feet as a North extension to the Lynch field.

It is proposed to use the following casing program in lieu of the program prescribed for cable tool holes by Order R-111-A:

1. 13 3/8 inch casing to be cemented at approximately 70 feet.
2. 10 3/4 inch casing to be landed at approximately 700 feet.
3. 8 5/8 inch casing to be landed at approximately 1250 feet.
4. 5 1/2 inch casing to be cemented at the top of the producing formation with 50 sacks cement for testing purposes.
5. 10 3/4 inch casing and 8 5/8 inch casing to be pulled.
6. In the event commercial production is obtained, 5 1/2 inch casing to be perforated and cement circulated to surface.

In support of the above described casing program we wish to point out:

1. That the above location is 660 feet North of the defined limits of the Lynch field in which numerous wells have been drilled and completed with casing programs similar to that proposed above.
2. That the Oil Conservation Commission has indicated in their Orders No. R-968 and R-997 that such a casing program affords adequate protection for all potash deposits.

Oil Conservation Commission
Santa Fe, New Mexico

Page No. 2

3. That a Notice of Intention to Drill specifying the above casing program on the proposed location has been approved by the United States Geological Survey, pending approval of the Oil Conservation Commission for an exception to Order R-111-A.

A copy of this application has been furnished the Potash Company of America, Box 31, Carlsbad, New Mexico, as the only potash operator holding a lease within a radius of one mile of the proposed location.

Therefore, Drilling & Exploration Company, Inc. respectfully requests that this application be set for hearing as prescribed by law.

Yours very truly,

DRILLING & EXPLORATION COMPANY, INC.

D. C. Webb
D. C. Webb
Division Production Superintendent

DH

cc: Potash Company of America
Box 31
Carlsbad, New Mexico

Drilling & Exploration Co., Inc.
Box 35366
Dallas 35, Texas

Case 1513

POTASH COMPANY OF AMERICA

GENERAL SALES OFFICES 1625 EYE STREET N.W. WASHINGTON 6 D.C.
SOUTHERN SALES OFFICE 408 9 Candler Bldg. ATLANTA GA.
MIDWESTERN SALES OFFICE 1111 NATIONAL BANK BLDG. CHICAGO ILL.



R. HAWORTH
VICE PRESIDENT
IN CHARGE OF PRODUCTION
AND RESIDENT MANAGER

REPLY TO:

EXECUTIVE OFFICES
MINES AND REFINERY
CARLSBAD NEW MEXICO
September 24, 1958

The State of New Mexico
Oil Conservation Commission
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.,
Secretary

Re: Case No. 1513, Drilling and
Exploration Company, Inc.

Dear Mr. Porter:

The above case is an application by Drilling and Exploration Company, Inc. for an exception to the casing requirements for the potash-oil area as set forth in Order No. R-111-A for its Ballard No. 1 well which is to be located 1980 feet from the north and west lines of Section 27 S., R. 34 E., Lea County.

Since the proposed location is approximately 2200 feet from the calculated boundary of commercial ore, as defined by the U. S. Geological Service, Potash Company of America makes no objection to the location of the Ballard No. 1 well as above set forth.

The drilling and casing program proposed for the well, as set forth in the notification sent to Potash Company of America, is the same casing program as has been heretofore approved by the Commission in Case No. 1215, Order No. R-968. Potash Company of America enters no objection to said drilling and casing program for the well and location described above.

Very truly yours.

R. Haworth

RH/dmb

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

Case No. 1543

TRANSCRIPT OF HEARING

November 6, 1958

DEARNLEY - MEIER & ASSOCIATES
GENERAL LAW REPORTERS
ALBUQUERQUE NEW MEXICO
Phone CHapel 3-6091

Application of Drilling and Exploration Company, Inc. for an exception to the casing requirements for the potash-oil area in Lea and Eddy Counties, New Mexico. Applicant, in the above-styled cause, seeks an order authorizing an exception to the shallow-zone casing requirements for the potash-oil area as set forth in Order No. R-111-A for its Ballard No. 1 Well located 1980 feet from the North and West lines of Section 27, Township 20 South, Range 34 East, Lea County, New Mexico. Applicant proposes to drill with cable tools to an approximate depth of 3,700 feet adjacent to the Lynch Pool.

BEFORE:

Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: The hearing will come to order, please.
The first case on the docket this morning will be Case 1543.

MR. PAYNE: Case 1543, "Application of Drilling and Exploration Company, Inc. for an exception to the casing requirements for the potash-oil area in Lea and Eddy Counties, New Mexico."

MR. DURAND: If the Commission please, I would like for the record to show that Durand and Stewart, attorneys-at-law, Hobbs, New Mexico, represent the applicant, Drilling and Exploration Company, Box 445, Grants, New Mexico.

I would like to call Mr. Peterson.

(Witness sworn.)

KARL ANDREW PETERSON

called as a witness, having been first duly sworn, testifies as follows:

DIRECT EXAMINATION

BY MR. DURAND:

Q State your name, please, sir.

A Karl Andrew Peterson.

Q Where do you live, Mr. Peterson?

A 600 Nottingham Drive, Dallas, Texas.

Q And by whom are you employed?

A Drilling and Exploration Company, Incorporated.

Q And in what capacity are you employed with that company?

A Production Engineer.

Q How long have you been so employed?

A Four years.

Q Now, have you ever testified before this Commission, Mr. Peterson?

A No, I haven't.

Q Mr. Peterson, briefly state your educational background and your employment prior to your employment with Drilling and Exploration Company.

A Prior to--I graduated from the Wichita University with a BA in geology, January, '50. I worked for L & L Drilling Company for--until January, '54. At that time, I was employed by Twin Oil Company.

Q With the L & L Oil Company, in what capacity did you serve that company?

A I served as a geologist and tool pusher, driller and various sundry --

Q That was a small company?

A Small company.

Q Proceed, sir.

A Sir?

Q Proceed with your --

A And I went to work for Twin Oil Company January, '54, as Production Engineer, and they merged with the Drilling and Exploration Company in January, '55 and I have held the same position, District Engineer in Pampa and Division Engineer in Dallas.

MR. DURAND: If the Commission please, we submit the witness' qualifications.

MR. NUTTER: The witness is qualified. Please proceed.

Q (By Mr. Durand) Mr. Peterson, the Drilling and Exploration Company has filed an application with this Commission seeking an exception to the casing requirements of Order No. R-111A covering the casing requirements in the potash zone. Are you familiar with that application?

A I am, sir.

Q Have you compared that application with the order granted by the Commission in the Wilson Oil Company case and in the Hudson and Hudson case?

A I have.

Q Can you distinguish briefly the difference between your application and the order granted by the Commissioner to the cases referred to?

A Well, for all practical purposes, they are the same. We wish to cement our original surface string at seventy feet to the surface whereas theirs is merely set, I believe.

Q Now, the purpose of cementing from the bottom on that surface string to the surface is for what reason?

A Well, just for operational reasons, shut off any surface water.

Q Is that a more workable condition--

A Yes.

Q --than having it tacked in?

A Yes.

Q Now, Mr. Peterson, based on your application in which you have stated that you will set the different types of casing and tack them in and in the event of production, you will cement the production string, the five and a half inch, from the production horizon up to the surface and withdraw your intermediate string which you have set out there, which are 10 3/4 and 8 5/8. Bearing in mind your application and what you propose to do if production is encountered, in your opinion as a Production Engineer, do you believe that the casing program will protect any potash zone and salt zones which you encounter?

A I believe it will protect any zone, water, potash, salt, or any other zone as well as any other casing program.

Q Now, in the event production is encountered under

your application and what you proposed to do, will the completion of your well be in conformance with R-111A as to the cementing program and casing program?

A R-111A, Yes.

Q That's a potash-oil --

A Yes sir, and potash and oil.

Q Will it be in conformance with the order of the Commission entered in the case of the Wilson Oil Company for an order establishing new pool rules and special regulations on Township 20 South, Range 34 East, NMPM, being the potash-oil area, Lea County, New Mexico?

A It will be in accordance.

(Whereupon, the documents were marked as D & E's Exhibits One through Six for identification.)

Q (By Mr. Durand) Mr. Peterson, I hand you here what has been marked for identification as D & E's Exhibit Number One and ask you, can you state what that exhibit represents?

A Well, this exhibit in the enclosed area, red dotted enclosed area is a potash area, as defined by that potash order. The closed green area, Section 34, 35, that's the Lynch Field.

Q Now, may I interrupt? Under the rules of the Commission, if your proposed well is located within one mile of a delineated pool, you are subject to the pool rules. I will ask you whether or not your proposed location for which you filed this application for exception for the casing program is within one mile of the delineated area of the pool?

A It is.

Q All right, proceed.

A The Middle Lynch-Yates Field is outlined in black pencil. This is a new Wilson oil field.

Q Is that the one where you referred to the order for the casing program within that new pool?

A Right.

Q All right, sir. Now, the property or the location of the well that you seek to drill is shown on the map, is it not, sir, in Section 27?

A The proposed location for an exception for two casing requirements.

Q Now, that well, how far, approximately how far is that well located from the exterior limits of the delineated potash area?

A Well let's see, that is --

Q Well, roughly, does it appear to be one location?

A One full location away.

Q Now, directing your attention to well locations of the Hudson and Hudson Company in Section 28 there, I will ask you whether or not--what is the comparative distance between your proposed well and the Hudson and Hudson well in Section 28 insofar as the nearest to the exterior limit of the potash area?

A It's one-half mile farther in the potash area.

Q I direct your attention to the Wilson Oil Company well, being Well Number One in Section 21 in the northeast of the northeast and ask you in regard to that well, and its relationship to the exterior limits of the potash area, compare the exterior

limits from the proposed well of the Drilling and Exploration Company, how does that compare?

A It is the same for all practical purposes.

Q Now, Mr. Peterson, notice of intention to drill has been submitted to the USGS, has it not, for approval sought there?

A It has.

Q I hand you here what has been marked for identification as D & E's Exhibit Number Two, consisting of three sheets, and ask you whether or not that is the application together with the notation made by the USGS in regard to the application?

A This is our application.

MR. DURAND: If the Commission please, I have made photostatic copies of the application and I would like to introduce the photostatic copies and withdraw the original. This is the only copy we have for our file.

MR. NUTTER: That will be all right.

Q (By Mr. Durand) Mr. Peterson, I believe that I have asked you this, but in order that the record be clear, I will ask you whether or not in your opinion as Petroleum Engineer and in that capacity with the company, do you believe that a proper casing program of the D & E Company will adequately protect the potash area and all other areas as set out in your application?

A I do.

MR. DURAND: We will pass the witness.

MR. NUTTER: Are there any questions of Mr. Peterson?

MR. DURAND: If the Commission please, we would like

at this time to offer D & E's Exhibit One, One being the plan that was testified to by Mr. Peterson.

MR. NUTTER: And also --

MR. DURAND: And we want to offer D & E's Exhibit Number Two, being a photo copy of the application or notice of intention to drill and the noted reply by the USGS thereon. We also would like to offer in evidence order of the Commission Number R-968, being D & E's Exhibit Number Three and we would also like to offer D & E's Number R-999. I assume the Commission, while they are copies of orders sent to me, they were furnished me at my request, and I assume that they will be accepted to the record.

In connection with that, we would like to adopt the record in Case Number 1513, I believe it was, which was a prior hearing in this matter, for whatever it is worth and --

MR. NUTTER: That's Case 1513?

MR. DURAND: Yes sir, we adopt everything in regard to that case except the order of the Commission.

MR. NUTTER: Is there objection to the introduction?

MR. DURAND: I have one more exhibit I would like to introduce and offer, the letter of the Potash Company of America, being D & E's Exhibit Number Six, being a letter dated October 29, 1958, which is in reply to the Drilling and Exploration Company, Incorporated, letter dated October 8, 1958.

"Dear Sir: The above application by drilling and Exploration Company for an exception to the casing requirements of Order R-111A for its Ballard Number One Well to be located

1980 feet from the north line and west lines of Section 27, Township 20 South, Range 34 East, Lea County, New Mexico. Potash Company of America, under normal circumstances, would object to any deviation from OCC Order R-111A. However, since the subject well is but a short distance inside our potash lease area, and located where exploratory drilling has indicated the absence of potash mineralization in sufficient concentration to be of economic value, we do not feel that objection to the casing program outlined in the application defined under Case Number 1513 is justified."

Incidentally, both applications were identical with the exception of the addition of the USGS statement as an approved application.

"We wish to stress that our decision not to offer protest in this case is not to be construed as indicating that the casing program outlined by Drilling and Exploration Company is acceptable in known or potential potash areas."

If the Commission please, that's the Applicant's case.

MR. NUTTER: Are there any questions of Mr. Peterson, or first, is there objection to the introduction of the Drilling and Exploration Company's Exhibits One through Six inclusive?

If not, they will be admitted in evidence.

Is there objection to the introduction into the record of this case the record in Case 1513?

If not, the record will be consolidated.

Does anyone have any questions of Mr. Peterson?

MR. PAYNE: Mr. Peterson, is the purpose of your application economic saving?

A It's an economic saving.

MR. PAYNE: Approximately how much economic saving will result if the application is approved?

A In the neighborhood of twelve, fifteen thousand dollars.

MR. PAYNE: Thank you.

MR. NUTTER: Any further questions?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Peterson, as I understand it, you propose in the drilling of this well to actually run different strengths of casing?

A Correct.

Q This first string of 13 3/8 inch casing will be cemented at approximately seventy feet?

A Correct.

Q And the cement on that string will be circulated to the surface?

A Yes, it will be circulated to the surface.

Q The second string will be ten and three quarters inch casing to be landed at approximately seven hundred feet. Could you tell me what formation you expect to cut that it would be bottomed in?

A I couldn't offhand without checking, but it will be your water shut-off string, it will set below your water, I believe.

Q Now, the requirements of Rule 111A call for a surface casing string of new or used filed casing in good condition to be set in the redbeds. Would that be the string that you are proposing to call the seven hundred foot string?

A I believe it would.

Q Your next proposed casing string is 8 5/8 inches to be landed at approximately 1250 feet. Do you have any idea where that will be bottomed as far as formation is concerned?

A I don't know the name, that would be your protection string there.

Q The next string of casing called for in Order 111A is a salt protection string to be set not less than one hundred feet nor more than six hundred feet below the base of the salt. Do you think that the 1250 feet would fall one hundred to six hundred feet below the base of the salt?

A I believe that's correct.

Q And then your five--this ten and three quarters and eight and five eights are both to be landed and cement used?

A They will be mudded.

Q They will be mudded in?

A And checked for water shut-off and a good set.

Q I see. Then your five and a half inch casing is going to be tacked in when you --

A It will be cemented with at least fifty sacks of cement for testing.

Q What formation do you anticipate that this well will be completed at?

A Well, it will be probably the Seven Rivers.

Q So the five and a half inch is going to be cemented at the top of the Seven Rivers or down in the Seven Rivers?

A In the Seven Rivers with production below it.

Q Where will the production be, in the middle or on the Seven Rivers?

A It will be probably in the middle of the Seven Rivers.

Q I see. And how many sacks of cement would you use for tacking the five and a half inch?

A Approximately fifty sacks.

Q Would the fillup then come up above the top of the Seven Rivers?

A It certainly would, yes.

Q Do you anticipate that there will be any gas pressure or other pressures encountered in the Seven Rivers formation in this well?

A Very low pressures.

Q Have other wells been drilled to that same formation in the nearby area?

A We have four producing wells in the nearby area.

Q Have gas pressures or other pressures been encountered in any of the wells of any magnitude?

A Not of any magnitude.

Q You would know, would you not, Mr. Peterson; whether there would be any pressure or any high pressure gas or oil in the Seven Rivers formation, and you would know whether they

existed or not prior to the time that you would pull the ten and three quarter or the eight and five eights inch pipe?

A Yes, we would.

Q Are there any other potash operators who own potash leases within one mile of this proposed location other than Potash Company of America?

A No, I believe not.

Q So that you have notified the only --

A Correct.

Q -- owner of a potash lease within one mile?

A Yes, sir.

Q Mr. Peterson, you are aware that although your well is within one mile of the Middle Lynch-Yates Pool for which special rules and regulations regarding casing programs have been promulgated, that Rule 3 of those rules states that the provision of Paragraph A of 104 of the Commission statewide rules and regulations which requires that a well located within one mile of the defined pool to be spaced, drilled, operated, prorated in accordance with the regulations in effect in said pool shall not apply to the Middle Lynch-Yates Pool?

A Yes, sir.

Q You were aware of that provision?

A I was aware, we are there in the Lynch Pool.

MR. NUTTER: Are there any further questions of Mr. Peterson?

If Not, the witness may be excused.

(Witness excused.)

MR. NUTTER: Does anyone have anything further they wish to offer?

We will take the case under advisement.

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

I, JERRY MARTINEZ, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing 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; that the same is a true and correct record, to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this 10th day of November, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Jerry Martinez
NOTARY PUBLIC

I do hereby certify that the foregoing is a correct record of the proceedings in the hearing of Case No. 1543 held by me on 11-6, 1958.

Samuel Martinez, Examiner
New Mexico Oil Conservation Commission

My Commission Expires:
January 24, 1962.