CASE 2735: Application of AMERADA PETROLEUM CORP. for authority to complete State BT "G" Well No. 2.

phatin, Transcript,

mill Exhibits, Etc.

APPLICATION OF AMERADA PETROLEUM CORPORATION FOR AN ORDER PERMITTING THE DISPOSAL OF SALT WATER INTO THE PENNSYLVANIAN FORMATION THROUGH ITS STATE BT "G" NO. 2, HIGHTOWER POOL, LEA COUNTY, NEW MEXICO.

CASE NO. 2135

APPLICATION

Applicant, Amerada Petroleum Corpovation states that

- 1. Applicant is the owner and operator of the State BT "G" No. 2 located in Unit P, Section 27-T128-R33E, Hightower Field, Lea County, New Mexico.
- 2. Subject well was completed in the Hightower Pennsylvanian Pool in March, 1952 through perforations 8740° to 8772°. Cumulative production to December 1, 1962 was 122,000 barrels of oil. The well is currently unaconomical to operate and has not responded to stimulation treatments. It is proposed that the present perforated interval be converted to a salt water disposal zone.
- 3. Casing program in subject well is as follows:
 - 13 3/8" at 298' with 225 ax Cement
 - 8 5/8" at 3818' with 1500 sx Cement
 - 5 1/2" at \$850° with 500 sx Cement

Cement Circulated. Top of Cmt @ 640'

Top of Cut @ 6630'

- 4. Injected water would amount to about 1100 barrels of brine per day produced from the Hightower Devonian and Pennsylvanian Pools.
- 5. An electric log of the well and a plat showing the proposed injection well and all other wells in the area are attached.

Applicant requests that this matter be set for hearing, that notice of the hearing be given as required by law and that upon completion of the hearing, the Commission issue its order authorizing the above proposal.

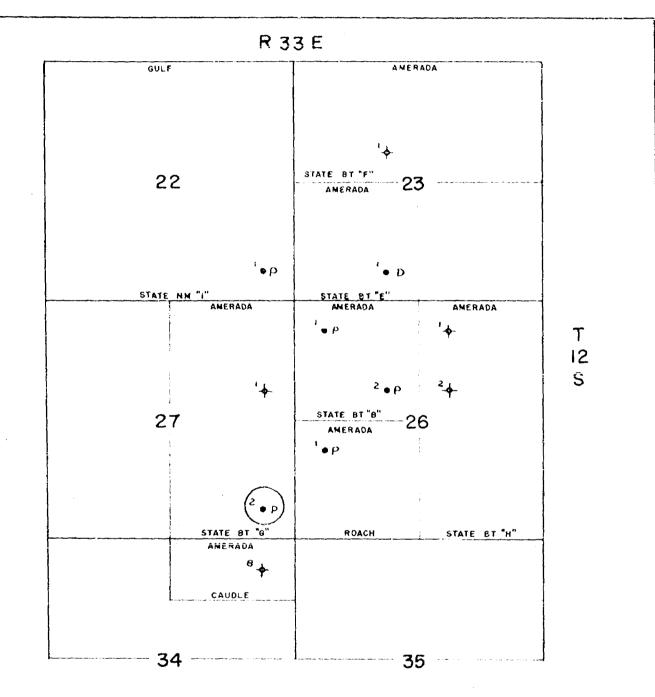
Respectfully Submitted

AMERADA PETROLEUM CORPORATION

RELLAHIN & POR P.O. Box 1713

Santa Fe, New Mexico

Attorneys for Applicant



HIGHTOWER LEA COUNTY, N.M.

- P Penn Well
- D Devonian Well

Care 2735 Keard 1-23-63 Rec. 1-25-63.

1. Shout amenadass request for an 5 WD well for their State "137" & # 2. Highton Perm. Oit Port., P 27-125-335.

2. The water shall be injected them 2 % internally packer could taking a packer shall be set in the 5'2" casing at approve 8706'. An inert fluid shall the fill the annulus, with a pressure of ange on the cumulus as the suface to detect pressure changes also to dealers pressure changes also to leaking into the annulus.

Thur a. M.

DRAFT

JMD/esr January 28, 1963

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:

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CASE No. 2735

Order No. R- 24/8

APPLICATION OF AMERADA PETROLEUM CORPORATION FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

Am

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 23, 1963, at Santa Pc, New Mexico, before Elvis A. Utz 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 day of January, 1961, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz , 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, Amerada Petroleum Corporation, is the owner and operator of the State BT "G" Well No. 2, located in Unit P of Section 27, Township 12 South, Range 33 East, NMPM, Hightower Field, Lea County, New Mexico.
- (3) That the applicant proposes to utilize the said State
 BT "G" Well No. 2 to dispose of produced salt water into the
 Pennsylvanian formation, with the injection interval from 27% feet
 to 2772 feet.
- (4) That the injection should be accomplished through 2 7/8-inch internally plastic-coated tubing installed in a permanent type packer set at approximately 8706 feet; that the annulus should be filled with an inert fluid; and that a pressure

gauge should be attached to the annulus in order to determine leakage in the tubing or packer.

(5) That approval of the subject application will not impair formation.

impair formation fill, gas, or fresh water, and will neither cause waste nor impair correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Amerada Petroleum Corporation, is hereby authorized to dispose of produced salt water into the Pennsylvanian formation through its State BT "G" Well No. 2, located in Unit P of Section 27, Township 12 South, Range 33 East, NMPM, Hightower Field, Lea County, New Mexico, injection to be accomplished through 2 7/8-inch internally plastic-coated tubing installed in a permanent type packer set at approximately 8706 feet, with injection interval from 8740 feet to 8772 feet.

PROVIDED HOWEVER, That the annulus shall be filled with inert fluid, and that a pressure gauge shall be attached to the annulus in order to determine leakage in the tubing or packer.

- (2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1119 of the Commission Rules and Regulations.
- (3) That jurisidiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

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

BOVERNOR JACK M. CAMPDELL DHAIRMAN

State of New Mexico

Bil Conserbation Commission

LAND COMMISSIONER E. S. JOHNNY WALKER MEMBER



SANTA FE

February 1, 1963

STATE DEDLOGIST A. L. PORTER, JR. SECRETARY - DIRECTOR

Mr. Jason Kellahin Kellahin & Fox Attorneys at Law Box 1713 Santa Fe, New Mexico Re: Case No. 2735
Order No. R-2418
Applicant:
Amerada

Dear Sire

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

Carbon copy of order also sent to:

Hobbs OCC ____X

Artesia OCC____

Antec OCC___
OTHER

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 23, 1963

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, as alternate examiner:

CASE 2729: (Continued)

Application of Scanlon-Shepard for a waterflood project, Chaco Wash Oil Pool, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks authority to inject water into the Mesaverde formation through certain wells in Sections 21, 22, 27 and 28, Township 20 North, Range 9 West, McKinley County, New Mexico.

- CASE 2731: Application of Texaco, Inc., for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to complete its State of New Mexico "O" NCT-1 Well No.12, located in Unit J of Section 36, Township 17 South, Range 34 East, as a dual completion (tubingless) to produce oil from the Glorieta and Blinebry formations, Lea County, New Mexico.
- CASE 2732: Application of Sinclair Oil & Gas Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Mahaffey-Federal (ARC) Well No. 1 located in Unit C of Section 14; Township 20 South, Range 33 East, Lea County, New Mexico, to produce Bone Springs oil and Pennsylvanian gas through parallel strings of tubing.
- CASE 2733: Application of Charles B. Read for a non-standard oil proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a 48.99-acre non-standard oil proration unit in an undesignated Delaware pool consisting of Lots 4 and 5 of Section 31, Township 26 South, Range 32 East, Lea County, New Mexico.
- CASE 2734: Application of Aztec Oil & Gas Company for approval of a unit agreement, Lea and Eddy Counties, New Mexico. Applicant, in the above-styled cause, seeks approval of the Aztec-Robinson Waterflood Unit, comprising approximately 682 acres of State and Federal Lands in the E/2 SE/4 and SW/4 SE/4 of Section 36, Township 16 South, Range 31 East, the SW/4 SE/4 of Section 30, the W/2, W/2 E/2 and SE/4 SE/4 of Section 31, Township 16 South, Range 32 East Lea and Eddy Counties, New Mexico.
- CASE 2735: Application of Amerada Petroleum Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to complete its State BT "G" Well No. 2 located in Unit P, Section 27, Township 12 South, Range 33 East, Hightower Field, Lea County, New Mexico, in such a manner as to dispose of produced salt water into the Pennsylvanian formation.

- CASE 2736: Application of Gulf Oil Corporation for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a 120-acre non-standard gas proration unit in the Blinebry Gas Pool, comprising the N/2 SW/4 and SE/4 NW/4 of Section 31, Township 22 South, Range 38 East, Lea County, New Mexico, said unit to be dedicated to the Scarborough Estate Well No. 4 located in Unit F of Section 31.
- CASE 2737: Application of Gulf Oil Corporation for special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of special pool rules for the White City-Pennsylvanian Gas Pool, Eddy County, New Mexico, including provisions for 640-acre spacing therein.
- CASE 2738: Application of BCO, Inc. for a no-flare exception, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the no-flare provisions of Order No. R-2267 for its Campos Well No. 1-10 located in Unit J of Section 10, Township 23 North, Range 7 West, Lybrook-Gallup Pool, Rio Arriba County, New Mexico.
- CASE 2739: Application of Socony Mobil Oil Company, Inc., to create a new pool for Abo production, and for special pool rules, Lea County, New Mexico, Applicant, in the above-styled cause, seeks the creation of a new pool for Abo production in Section 26, Township 17 South, Range 34 East, Lea County, New Mexico, and the establishment of temporary special pool rules therefor, including a provision for 80-acre spacing units.
- CASE 2740: Application of Socony Mobil Oil Company, Inc., for temporary special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of temporary special pool rules for the Vacuum-Wolfcamp Pool in Section 26, Township 17 South, Range 34 East, Lea County, New Mexico, including a provision for 80-acre spacing units.
- CASE 2741: Application of Socony Mobil Oil Company, Inc., for temporary special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of temporary special pool rules for the Vacuum-Devonian Pool in Section 26, Township 17 South, Range 34 East, Lea County, New Mexico, including a provision for 80-acre spacing units.
- CASE 2742: Application of Pan American Petroleum Corporation for special temporary pool rules, Lea County, New Mexico. Applicant, in the above styled cause, seeks the establishment of temporary special pool rules for the Fowler-Blinebry Oil Pool, Lea County, New Mexico, including a provision for 86-acre proration units.
- CASE 2743: Application of Pan American Petroleum Corporation for the creation of a Tubb Gas Pool, for approval of a non-standard gas unit, and for special temporary pool rules. Applicant, in the above-styled cause, seeks the creation of a new Tubb gas pool, and the establishment of temporary special pool rules therefor, Lea County, New Mexico, including a provision for 320-acre spacing units. Applicant further seeks establishment of a non-standard unit in said pool, comprising the NE/4, E/2 NW/4, and the N/2 SE/4 of Section 22, Township 24 South, Range 37 East.

CASE 2744: Application of Pan American Petroleum Corporation for special pool rules and approval of a non-standard gas unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of temporary special pool rules for the Fowler-Paddock Gas Pool, Lea County, New Mexico, including a provision for 320-acre spacing units. Applicant further seeks establishment of a non-standard unit in said pool, comprising the NE/4, E/2 NW/4,

and the N/2 SE/4 of Section 22, Township 24 South, Range 37 East.

EEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE No. 2735 Order No. R-2418

APPLICATION OF AMERADA PETROLEUM CORPORATION FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MCXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 23, 1963, at Santa Fe, New Mexico, before Elvis A. Utz, 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 1st day of February, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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, Amerada Petroleum Corporation, is the owner and operator of the State ET "G" Wall No. 2, located in Unit P of Section 27, Township 12 South, Range 33 East, NMPM, Hightower Field, Lea County, New Mexico.
- (3) That the applicant proposes to utilize the said State BT "G" Well No. 2 to dispose of produced salt water into the Pennsylvanian formation, with the injection interval from 8740 to 8772 feet.
- (4) That the injection should be accomplished through 2 7/8-inch internally plastic-coated tubing installed in a permanent type packer set at approximately 8706 feet; that the annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus in order to determine leakage in the tubing or packer.
- (5) That approval of the subject application will not impair the producing formations, and will neither cause waste nor impair correlative rights.

-2-CASE No. 2735 Order No. R-2418

IT IS THEREFORE ORDERED:

(1) That the applicant, Amerada Petroleum Corporation, is hereby authorized to dispose of produced salt water into the Pennsylvanian formation through its State BT "G" Well No. 2, located in Unit P of Section 27, Township 12 South, Range 33 East, NMPM, Hightower Field, Lea County, New Mexico, injection to be accomplished through 2 7/8-inch internally plastic-coated tubing installed in a permanent type packer set at approximately 8706 feet, with the injection interval from 8740 to 8772 feet.

PROVIDED HOWEVER, That the annulus shall be filled with inert fluid, and that a pressure gauge shall be attached to the annulus in order to determine leakage in the tubing or packer.

- (2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1119 of the Commission Rules and Regulations.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

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

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

March 15, 1963

Mr. A. E. Snyder Amerada Petroleum Corporation P. O. Box 312 Midland, Texas

Re: Case 2735, Order
No. R-2418 Hightower
Pool, Salt Water Disposal

Dear Mr. Snyder:

Reference is made to your letter of March 11, 1963.

The Baker Type A-45 Tension Packer which you have installed in your State BT "G" #2, P, 27-12S-35E, will be acceptable to the Commission in this particular installation. We will require that the inert fluid column be maintained in the annulus with a gauge connected to this column at the surface which will show any pressure change in the annulus static column. A Commission representative will check the column pressure periodically, therefore, the pressure gauge should be kept in working order at all times.

Very truly yours,

E. A. UTZ Engineer

ZAU/ig

cc: Mr. Joe Ramey Oil Conservation Commission Hobbs, New Mexico

AMERADA PETROLEUM CORPORATION P. O. BOX 317 MIDLAND, TEXAS

35 March 11, 1963

PHONE MU 4-5533

Mr. A. L. Porter, Secretary Director New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

Re: Order No. R-2418
Hightower Pool
Salt Water Disposal

Dear Mr. Porter:

Commission Order No. R-2418, dated February 1, 1963, granted Amerada Petroleum Corporation permission to dispose of salt water into its State BT"G" Well No. 2, located in Unit P of Section 27, T-12-S, R 33E, Hightower Field, Lea County, New Mexico. One of the previsions of subject order was that a permanent type packer be set at approximately 8706 feet. The packer actually used was a Baker Model A-45 Tension Packer, which is equally satisfactory for salt water disposal service. If this packer is not satisfactory with the commission, please let us know and it will be changed at the earliest convenience.

Yours very truly,

4. E. Snyder

AES/jb

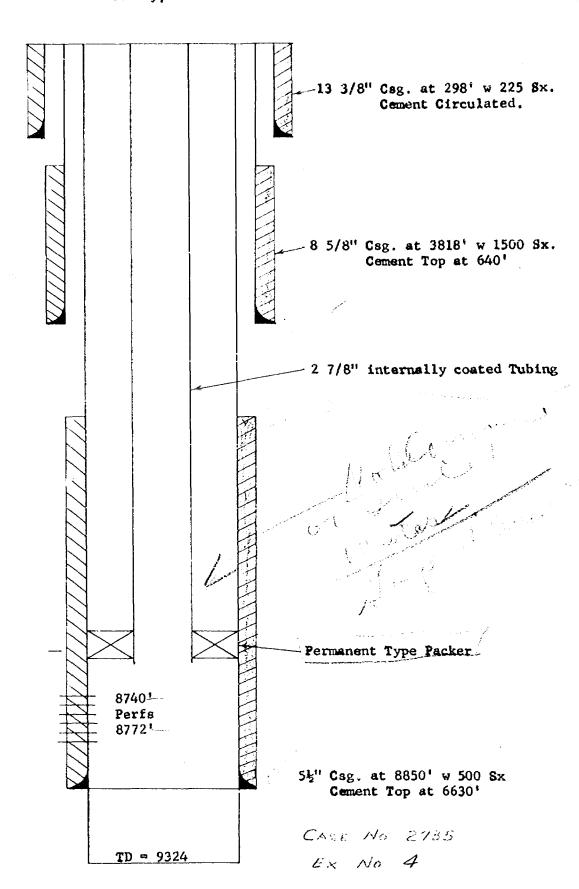
cc: Oil Conservation Commission P. O. Box 2045 Hobbs, New Mexico

Mr. D. C. Capps
W. C. Henderson
File

SCHEMATIC DIAGRAM OF SWD INSTALLATION

AMERADA PETROLEUM CORPORATION STATE BT "G" NO. 2

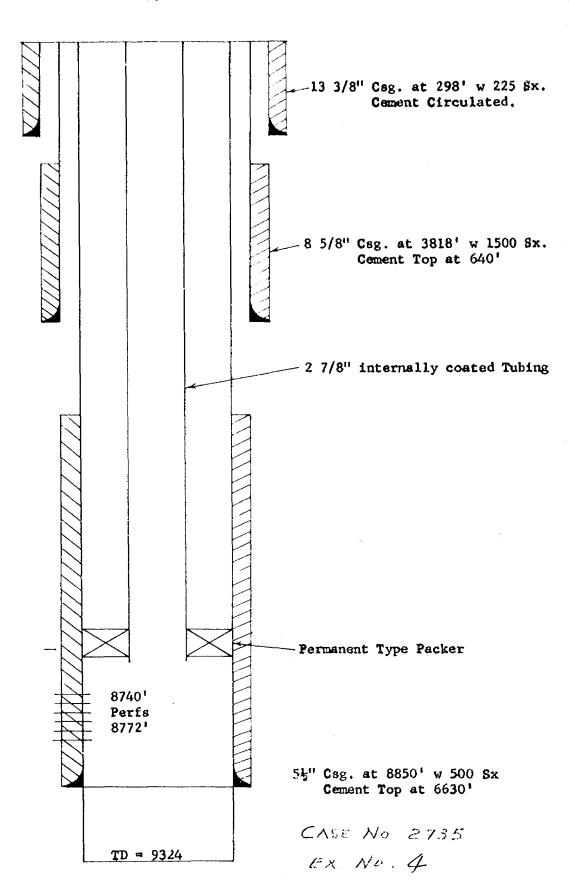
Hightower Field Lea County, New Mexico



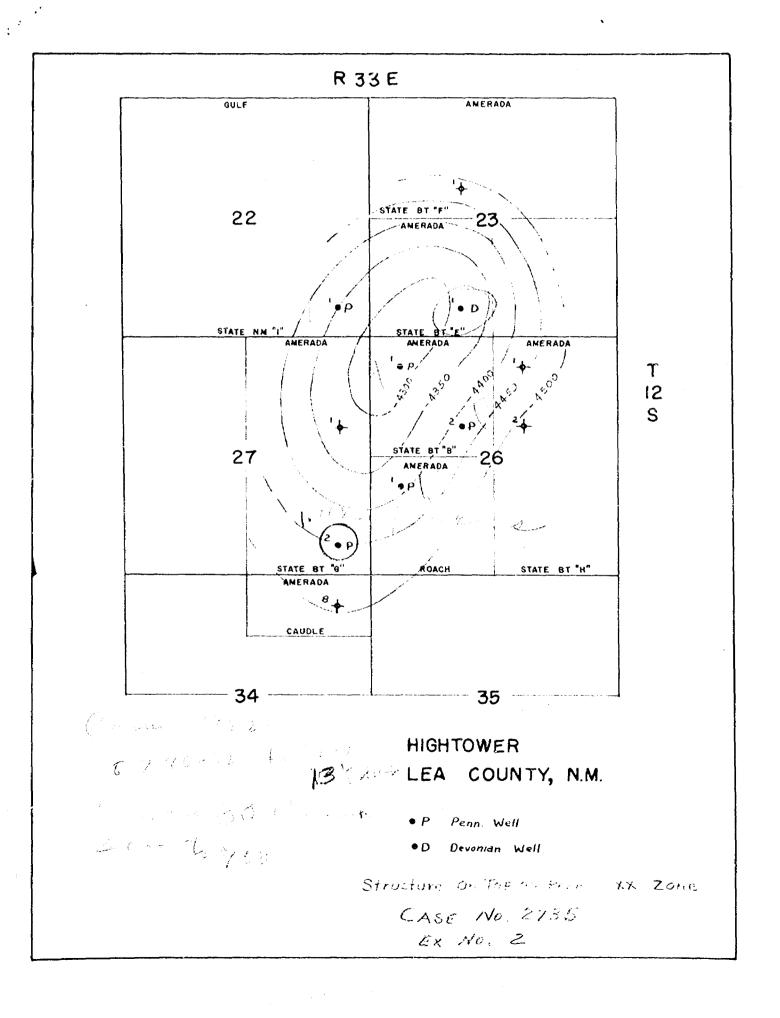
Top of Penn XX Zone at 8706

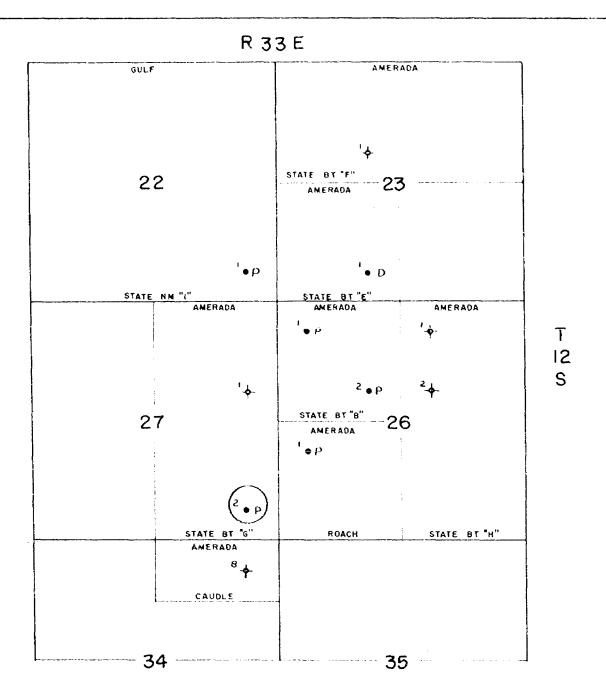
SCHEMATIC DIAGRAM OF SWD INSTALLATION AMERADA PETROLEUM CORPORATION STATE BT "G" NO. 2

Hightower Field Lea County, New Mexico



Top of Penn XX Zone at 8706'





HIGHTOWER LEA COUNTY, N.M.

- P Penn Well
- •D Devonian Weil

CASE No 2735 Ex. No. 1

BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico January 23, 1963

EXAMINER HEARING

IN THE MATTER OF:

Application of Amerada Petroleum Corpora-) tion for salt water disposal, Lea County, New) Mexico. Applicant, in the above-styled cause) seeks authority to complete its State BT "G") Well No. 2 located in Unit P, Section 27, Township 12 South, Range 33 East, Hightower Field, Lea County, New Mexico, in such a manner as to dispose of produced salt water into the Pennsylvanian formation.

Case 2735

BEFORE:

Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: The next case is Case 2735.

MR. DURRETT: Application of Amerada Petroleum Corporation for salt water disposal, Lea County, New Mexico.

MR. KELLAHIN: Jason Kellahin, of Kellahin, Kellahin and Fox, appearing for the Applicant. We have one witness I would like to have sworn.

(Witness sworn.)

MR. UTZ: Are there any other appearances in this case? You may proceed.

A. E. SNYDER,

called as a witness, having been first duly sworn, testified as



follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Will you state your name, please?
- A A. E. Snyder.
- Q By whom are you employed?
- A Employed by Amerada Petroleum Corporation as a District Engineer, in Hobbs, New Mexico.
- Q Mr. Snyder, have you appeared before the Oil Conservation Commission and made your qualifications as an engineer a matter of record?
 - A Yes, sir.

MR. KELLAHIN: Are the witness's qualifications acceptable to the Examiner?

MR. UTZ: Yes, sir, they are.

- Q (By Mr. Kellahin) Mr. Snyder, are you familiar with the Amerada Petroleum Corporations proposal in Case Number 2735?
 - A Yes, sir.
 - Q Will you state briefly what is proposed by Amerada?
- A Briefly Amerada proposes to dispose of salt water into the Pennsylvanian formation from wells producing in the Hightower Devonian and Pennsylvanian Pools in Lea County, New Mexico.

(Whereupon Applicant's Exhibit Number
1 was marked for identification.)

Q Referring to what has been marked as Exhibit Number 1,



would you identify that exhibit and state what is shown thereon?

A Exhibit Number 1 is a plat of the Hightower field in Lea County, New Mexico. The subject well of this application is Amerada's State BT "G" Number 2, located in Unit P, Section 27, Township 12 South, Range 33 East, Lea County, New Mexico. The other producing wells and the dry holes in the adjacent area are also shown on this plat.

Q Are the wells shown on the plat all producing from the formation involved in this application?

A No, sir, there is one well producing from the Devonian formation.

- Q The other wells on this exhibit are Pennsylvanian wells?
- A Yes, sir.
- Q Does the plat also show the overriding ownership?
- A Yes, sir.

(Whereupon, Applicant's Exhibit No. 2 was marked for identification.)

Now, directing your attention to what has been marked as Exhibit Number 2, would you identify that exhibit and discuss the information shown on that?

A Exhibit Number 2 is the same ownership with the well location; and on this plat I have imposed the structural configuration on the Pennsylvanian "XX" zone, that is a correlation zone near the top of the Pennsylvanian. The well we are talking about is circled in red. You can readily see its structural position

1:

with other producing wells in the pool.

- What is the present status of this well?
- The well is presently producing. I might give you a general history of the well. It was completed in 1952 in the Pennsylvanian zone with perforations 8740 to 8772, and at that time it was acidized with 500 gallons acid and the initial potential showed 121 barrels of oil in thirteen and a half hours. By January, 1953 the well had declined considerably. It was reacidized with 2,000 gallons acid without getting a response to it. We continued producing it. In May of 1952 it was again reacidized with 4,000 gallons of acid without getting any significant increase in production. The production in the year 1962 averaged 3.8 barrels per day. The cumulative production from the well has been about a hundred twenty one barrels of oil. It is now to the point it is uneconomical to operate. There is no stimulation treatment or anything we could do to make it into a fourth oil producing well. Bottom hole pressure is on the order from 3,000 pounds it had and is currently declined to about 700 pounds. We are producing the well by gas lift and it does require a rather large amount of gas to lift the small amount of oil and this bit of water.
- In your opinion has this well reached its economic limit?
 - Yes, sir. Α
 - What is the nature of the ownership of the land involved



DEARNLEY-MEIER

here?

The land is State land, which, when production ceases from this well, Amerada will lose the lease on this 320 acre State lease. In view of that we have made arrangement with the State Land Office and have bought a business lease of about, let's see, the exact acreage is 1.9976 acres around this well.

And that lease is for the purpose of the operation of the salt water disposal well?

Yes, sir. Α

> (Whereupon, Applicant's Exhibit No. 3 was marked for identification.)

Q Now, Exhibit Number 3, is that a log of the subject well?

Yes, sir. On that log I have shown the top of the "XX" correlation zone and the perforated interval of the well, and the casing depth.

> (Whereupon, Applicant's Exhibit No. 4 was marked for identification.)

Q Now, referring to what has been marked as Exhibit Number 4, would you identify that exhibit and discuss the method of the completion of this well for salt water disposal?

It is a schematic diagram of the present condition of the well, plus the anticipated equipment that will be situated when it is converted to a salt water disposal well. The casing proposal was 13 3/8 set at 298 feet and cemented with 225 sacks cement and the cement circulated to the surface. The intermedi-



SANTA FE, N. M. PHONE 983-3971

DEARNLEY-WEIER

ate was 8 5/8 inch casing set at 3,818 feet with 1,500 sacks cement and the cement was pumped to the top 640 feet. The oil string, 5 ½ inch casing was set at 8,850 feet with 500 sacks of cement. The top of the cement coming about to 630 feet. When this well is converted to a salt water disposal we'll run a Baker type packer set immediately above the perforations with 2 7/8 inch internally coated tubing.

- Is the fluid involved here corrosive?
- Α Yes, sir.
- Will the type of tubing you are utilizing protect the Q well from leakage?
 - Α Yes, sir.
- In your opinion will the type of completion contemplated for the purpose of salt water disposal in this well fully protect any producing horizon or water zones encountered in this well bore?
 - Yes, sir.
 - What volume of water will be disposed of?
- About 1,100 barrels a day, and essentially it may increase somewhat later on. Initially 1,100 barrels a day.
 - What is the source of the water?
- About 1,000 barrels will come from the one remaining Amerada Devonian "BE" 21, the other one hundred barrels comes from the remaining Pennsylvanian wells.
- Has the amount of water being produced been increasing Q recent months?



1 3

j. 37

13

Yes, sir. Several months ago the Devonian well started making water and it is gradually increasing.

Q Is this area located within the Lea County undergraound water basin?

Yes, sir.

In your opinion will the disposal of salt water as Q proposed by Amerada serve to protect, particularly in the water zones, contamination in this area?

Yes, sir.

Do you anticipate that the well will take water on gravity?

We anticipate it will initially, but probably before very long it will have to be pumped. We designed the pumping equipment so that we may inject at 2,500 pounds pressure.

Q Now, this well is located in the center of the wells producing from the Pennsylvanian formation?

Yes, sir.

What is the closest producing well?

The nearest well is a diagonal offset, the Amerada Α Number 1, located in Unit L of Section 26.

Now, do you anticipate that the disposal of salt water Q in this zone, as proposed by Amerada, will have any adverse affect on the other producing wells in the pool?

Α No, sir.

Were Exhibits 1 through 4 prepared by you, or under

1.3

1 3

your supervision?

A Yes, sir.

MR. KELLAHIN: I would like to offer Exhibits 1, 2, 3 and 4 in evidence.

MR. UTZ: Without objection Exhibits 1, 2, 3 and 4 will be entered in the record of this case.

(Whereupon, Applicant's Exhibits 1, 2, 3 & 4 were admitted in evidence.)

MR. KELLABIN: That completes my direct examination.

MR. UTZ: Any questions of the witness? Do you lave any questions, Er. Irby?

MR. IRBY: No.

CROSS EXAMINATION

BY MR. UTZ:

Q How will you test the packer to be sure that it is properly situated for this well?

A There are no perforations above the packer, so we could pressure up on top of the packer and make sure it is holding.

Q Do you maintain there will be any fluid in a non-corrosive material back in the annulus space? What would that be, oil?

A Oil or treated water, I am not sure at the present time.

Q Will you use any pressure equipment or pressure gauge at the surface to analyze this so that you will be able to detect any corrosion?

A Yes, sir, we will install a pressure gauge there.



MR. UTZ: Are there other questions?

BY MR. LONG:

- What date did you say production ceased? Q
- The well is producing now. We will notify you at the time the well ceases producing. It will probably be a month or six weeks yet before we can get our equipment set.

MR. UTZ: Are there other questions? The witness may be excused.

(Witness excused.)

MR. UTZ: Are there other statements to be made in this case? The case will be taken under advisement.

STATE OF NEW MEXICO SS COUNTY OF BERNALILLO)

I, BILL LANGFORD, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner heading of Case to 2235

New Mexico Oil Conservation