CASE 3350: Application of INTER-NATIONAL OIL & GAS CORP. for the creation of new oil pool & Rules.

Sand broker Gliff

ASE MO. 3350

PP/ICATION,

YANSCY: PTS,

MA// Exh. bits

ETC.

DRAFT
GMH/esr
June 7, 1967

BEFORE THE CIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL COMSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING: Records Center & Law Library

CASE No. 3350

Order No. R-3021-C

BUR

APPLICATION OF INTERNATIONAL OIL & GAS CORPORATION FOR THE CREATION OF A NEW OIL POOL AND FOR SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 6 , 1967 at Santa Fe, New Mexico, before Examiner Daniel S. Nutter

MON, on this day of June , 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

PINDS:

- (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 by Order No. R-3021-A, dated January 13, 1966, temporary Special Rules and Regulations were promulgated for the Young-Bone Spring Pool, Lea County, New Mexico.
- (3) That pursuant to the provisions of Order No. R-3021-A, this case was reopened to allow the operators in the subject pool to appear and show cause why the Young-Bone Spring Pool should not be developed on 40-acre spacing units.
- (4) That no operator in the subject pool appeared to show cause why the Young-Bone Spring Pool should not be developed on 40-acre spacing units.

- (5) That no wells are currently producing from the subject pool.
- (6) That the operators in the subject pool have not established that one well can efficiently and economically drain and develop 80 acres.
- (7) That no necessity exists for the continuation of the Special Rules and Regulations promulgated by Order No. R-3021-A and that said rules should therefore be abolished.

IT IS THEREFORE ORDERED:

- (1) That the Special Rules and Regulations governing the Young-Bone Spring Pool, promulgated by Order No. R-3021-A, are hereby abolished.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem .ecessary.

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

DRAFT

GMH/esr June 7, 1967

BRFORE 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:

CF	Subj.				·	
						
Re	cords	Center	&	Law	Libra	۲ì

KMA

CASE No. 3350 Order No. R+ 3021-B

APPLICATION OF INTERNATIONAL OIL & GAS CORPORATION FOR THE CREATION OF A NEW OIL POOL AND FOR SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE CONTRACTOR

by will comitation:

This cause came on for hearing at 9 a.m. on June 6 , 1967 at Santa Fe, New Mexico, before Examiner Daniel S. Nutter

mow, on this day of June, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 by Order No. R-3021, dated December 22, 1965, temporary Special Rules and Regulations were promulgated for the Young-Wolfcamp Pool, Lea County, New Mexico.
- (3) That pursuant to the provisions of Order No. R-3021, this case was reopened to allow the operators in the subject pool to appear and show cause why the Young-Wolfcamp Pool should not be developed on 40-acre spacing units.
- (4) That no operator in the subject pool appeared to show cause why the Young-Wolfcamp Pool should not be developed on 40-acre spacing units.

-2-CASE No. 3350 Order No. R-3021-B

- (5) That only one well is presently producing from the subject pool.
- (6) That it is not anticipated that additional wells will be drilled in the subject pool.
- (7) That the operators in the subject pool have not established that one well can efficiently and economically drain and develop 80 acres.
- (8) That no necessity exists for the continuation of the Special Rules and Regulations promulgated by Order No. R-3021 and that said rules should therefore be abolished.

IT IS THEREFORE ORDERED:

- (1) That the Special Rules and Regulations governing the Young-Wolfcamp Pool, promulgated by Order No. R-3021, are hereby abolished.
- (2) 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 hereinabove designated.

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico January 5, 1966

EXAMINER

HEARING

IN THE MATTER OF: Application of International Oil and Gas Corporation for the creation of two new oil pools and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Bone Spring production and a new oil pool) for Wolfcamp production in Section 21, Township 18 South, Range 32 East, Lea County, New Mexico, and for the establishment of special rules for each of said pools including provision for 80-acre proration units.

3350 Case No.

Before:

Daniel S. Nutter, Chief Engineer J. D. Ramey, Supervisor and Oil and Gas Inspector

TRANSCRIPT OF HEARING



MR. NUTTER: The hearing will come to order, please. The first case this afternoon will be Case 3350 continued and readvertised.

MR. DURRETT: Application of International Oil and Gas Corporation for the creation of two new oil pools and for special pool rules, Lea County, New Mexico.

MR. LOSEE: Mr. Examiner, A. J. Losee of Losee and Stewart, appearing on behalf of the applicant, and I would like to move that the testimony in the December Hearing on this Case, 3350, be incorporated herein.

MR. NUTTER: Mr. Losee, as I understand it, the Case, Number 3350, which was heard in December had been advertised for the creation of one pool?

MR. LOSEE: Yes, that was the Wolfcamp.

MR. NUTTER: But testimony was offered to support the spacing case on Bone Spring and Wolfcamp, both, so now, we readvertised it and we're opening it as far as the Bone Spring is concerned.

MR. LOSEE: Yes, sir.

MR. NUTTER: Are there any appearances in Case 3350 so far as the Bone Spring and Wolfcamp are concerned for the creation of two new oil pools and promulgation of rules? The case is taken under advisement and we'll call Case 3362.



SPECIALIZING IN: DEPOSITIONS, HEARINGS STATEMENTS, EXPERT TESTIMONY, DAILT COPY, CON 1120 SHAMS ELDG. • P.C., BOX 1052 • PHONE 243-C. : • ALGUGUERQUE, NEW MEXICO 1213 FHIST NATIONAL BANK EAST • PHONE 256-1294. • ALBUQUERQUE, NEW MEXICO

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO)

I, BOBBY J. DAVIS, 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; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

SS

Witnes, my Hand and Seal this 10th day of January, 1966.

B. O. Dames
MOTARY PUBLIC

My Commission Expires: March 13, 1969.



I do hereby certify that the foregoing is a complete record of the proceedings in the Exeriner hearing of Case to 2350, hours by me on 1,5, 1966

New Moxico Oil Conservation Commission

JMD/esr

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

	Cr.	subj
IN THE MATTER OF THE HEARING		
CALLED BY THE OIL CONSERVATION		
COMMISSION OF NEW MEXICO FOR	,	
THE DUDDOSE OF CONSIDERING.		

Delpar

CASE No. 3350

Order No. R-

APPLICATION OF INTERNATIONAL OIL & GAS CORPORATION FOR THE CREATION OF A NEW OIL POOL AND FOR SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on <u>January 5</u>, 1966, at Santa Fe, New Mexico, before Examiner <u>Daniel S. Nutter</u>.

NOW, on this ____day of <u>January</u>, 1966, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, International Oil & Gas Corporation, seeks the creation of a new oil pool for Bone Spring production in Lea County, New Mexico, and the promulgation of special rules and regulations governing said pool, including a provision for 80-acre spacing units.
- (3) That the International Oil & Gas Corporation Linam

 Federal Well No. 1 located in Unit I of Section 21, Township 18

 South, Range 32 East, NMPM, Lea County, New Mexico, has discovered a separate common source of supply which should be designated the Young-Bone Spring Pool; that the vertical limits of said pool should be the Bone Spring formation; and that the horizontal limits

nda ev

of said pool should be the SW/4 of Section 15, the SE/4 of Section 16, and the E/2 of Section 21, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico.

- the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an axcessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the Young-Bone Spring Pool.
- (5) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.
- (6) That the temporary special rules and regulations should be established for an 18-month poried in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.
- (7) That this case should be reopened at an examiner hearing in June, 1967, at which time the operators in the subject pool
 should be prepared to appear and show cause why the Young-Bone
 Spring Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as an oil pool for Bone Spring production, is hereby created and designated the Young-Bone Spring Pool, with vertical limits comprising the Bone Spring formation, and horizontal limits comprising the SW/4 of Section 15, the SE/4 of Section 16, and the E/2 of Section 21, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico.

(2) That temporary Special Rules and Regulations for the Young-Bone Spring Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE YOUNG-BONE SPRING POOL

- RULE 1. Each well completed or recompleted in the Young-Bone Spring Pool or in the Bone Spring formation within one mile thereof, and not nearer to or within the limits of another designated Bone Spring oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.
- RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.
- RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot.

 All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.
- RULE 4. The first well drilled on every standard or non-standard unit shall be located within 200 feet of the center of

either the NE/4 or the SW/4 of a governmental quarter section.

All wells shall be located within 200 feet of the center of a governmental quarter-quarter section.

RULE 5. The Secretary-Director may grant an exception to the footage requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon, provided the well will be located no nearer than 330 feet to the outer boundary of the unit. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 mays after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres)

(1,00)

shall be assigned an 80-acre proportional factor of 5.67 for

allowable purposes, and in the event there is more than one well

on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any

proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 cres.

IT IS FURTHER ORDERED:

(1) That the effective date of this order shall be <u>February 1</u>, 1966.

- (2) That the locations of all wells presently drilling to or completed in the Young-Bone Spring Pool on in the Bone Spring formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before Authority, 1966.
- (3) That each well presently drilling to or completed in the Young-Bone Spring Pool or in the Bone Spring formation within one mile thereof shall receive a 40-acre allowable until a Form C-102 dedicating 80 acres to the well has been filed with the Commission.
- (4) That this case shall be reopened at an examiner hearing in June, 1967, at which time the operators in the subject pool may appear and show cause why the Young-Bone Spring Pool should not be developed on 40-acre spacing units.
- (5) 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 hereinabove designated. ■ P. O. BOX 1092 ■ PHONE 243-6691

dearnley-meier reporting service, inc.

EXAMINER HEARING

IN THE MATTER OF:

Application of International Oil & Gas Corporation for the creation of a new oil pool and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, weeks the creation of a new oil pool for Wolfcamp production in Section 21,) Case No. 3350 Township 18 South, Range 32 East, Lea County, New Mexico, and the establishment of special rules therefor, including a provision for 80-acre proration units.

BEFORE: Elvis A. Utz, Examinor.

TRANSCRIPT OF HEARING



MR. UTZ: The Hearing will come to order.

Case 3350 in the matter of the application of International Oil Corporation for the creation of a new pool and special rules.

MR. LOSEE: A. J. Losee of Los e and Stewart, Artesia, New Mexico. I have one witness: Mr. Conrad Appledorn.

MR. PORTER: Let the record show that the witness was sworn in the previous case and is still under oath.

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

MR. LOSEE: Mr. Examiner, the notice of hearing was limited to the establishment of the oil pool for Wolfcamp production with a request for special rules for the pool with 80-acre spacing. The counsel for the company didn't obtain the correct information and the application actually as submitted to the Commission covers both the separate Wolfcamp Pool and a separate Bone Springs Pool with the request for 80-acre spacing in each pool.

We realize that the notice will have to cover the Bone Springs portion of the application. We understood from your counsel that this could be accomplished in your January Examiner Hearing.

MR. UTZ: Mr. Losee, we can hear the case now as to what you have to offer or we can readvertise properly and call



the case at the January 5th, 1966 Hearing. You stated in your letter that this might save you an additional trip. You don't plan to be here January 5th I take it?

MR. LOSEE: Well, we'll make arrangements to be here if there are any appearances to the contrary on January 5th.

MR. UTZ: If there are any appearances then I would think it would be essential that you would be here.

MR. LOSEE: Yes, sir, we appreciate that.

MR. UTZ: You may proceed on that basis.

(Whereupon, Applicant's Exhibits 1, 2, 3, 4, and 5 marked for identification.)

CONRAD R. APPLEDORN, a witness, having been previously sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. LOSEE:

- Q You are the same Conrad Appledorn who testified in the previous case?
 - A Yes.
 - Q And your qualifications were accepted in that case?
 - A Yes.
 - Q Will you briefly explain the nature of this application?
- A We are requesting establishment of 80-acre spacing and establishment of new pools for Wolfcamp and Bone Springs production for discoveries in our Linam Federal Number 1,



Section 21, Township 18 South, Range 32 East in Lea County, New Mexico.

- Q Please refer to what has been marked as Exhibit Number 1 and explain what is shown by this exhibit?
- A Exhibit 1 is a plat showing the Linam Federal lease in the east half and east half of the southwest quarter of Section 21, 18 South, 32 East, and also the neighboring pools, offsetting leases, lease owners and wells.
- Q I believe you previously testified that this Linam
 Number 1 Well was completed in November of this year?
- A Yes, November 13th in the Wolfcamp formation.

 Completion in the Bone Springs formation is depending Commission approval of our obligation for dual completion.
- Q And I believe you also testified that you anticipate that both Bone Springs and Wolfcamp will flow?
 - A Yes, both completions will be flowing when completed.
- Q Please refer to what has been marked as Exhibit 2 and explain what is shown by this structure map?
- A Exhibit Number 2 is a structure map and it's based on five points or five wells which have penetrated the Wolfcamp formation. It's contoured on top of the Wolfcamp with contouring of 100 feet. Because of the scattered nature of the points, it is of necessity very generalized.
 - Q Would you, to the extent possible, correlate the other



wells that have penetrated both the Bone Springs and the Wolfcamp sections that are shown on this structure map?

A I have indicated by a color code here. The wells circled in red are those which have penetrated the Wolfcamp formation. Those having green circles are those that are completed in the Bone Springs interval or formation. And those circled in blue have perforations in the Wolfcamp formation.

Now, as we will show later, not all of these zones are correlative. The Linam Federal Number 1 is completed in the Bone Springs interval which is below the first Bone Springs in the Querecho Plains Unit Number 2 in Section 31. It's about a mile and a half east of the Linam Federal. It's completed also in the Bone Springs but their completion is in the upper part of the first Bone Springs sand and on a correlative basis is about 300 feet higher than the completion in the Linam Federal. The Wolfcamp completion in the John Trigg's McCurdy Number 1 which is in Section 29 is about a mile and a half southwest of the Linam Federal well. It is completed in a zone that is correlative to a zone that is dolomite 100 feet above the lower completion in the Linam Federal. The two then in those zones are not correlative.

MR. UTZ: One hundred feet higher?

THE WITNESS: One hundred feet higher, yes, than the lower interval.



The John Trigg well, Federal Number 1, which is one mile north and slightly east of the Linam Federal is completed in the identical Wolfcamp interval as the Linam Federal.

- Q (By Mr. Losee) When was the last mentioned John : Trigg well completed?
- A They are testing now. They were completed and they will be testing Saturday morning.
- Q Now, let me stop you if I may. You said the Querecho Plains, I believe, was in Section 31 and isn't it actually in Section 27?
 - A Twenty-seven, yes.
 - Q In the same township and range?
 - A Yes
- Q Did you mention in your testimony the two Bone Springs completions?
 - A Yes.
- Q Please refer to what has been marked Exhibit 3, the reservoir characteristics and explain what is shown by this exhibit?
- A This Exhibit Number 3 details the characteristics as we know them now in the two producing intervals.

In the Linam Federal Number 1, the Bone Springs reservoir is a dolomite, quite clean, its medium to coarsely crystalline, vuggy and intracrystalline porosity and is also



dearnley-meier reporting service, inc.

1) SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • AIBUQUERQUE, NEW MEXICO 3 FIRST NATIONAL AANE EAST • PHONE 256-1294 • AIBUQUERQUE, NEW MEXICO probably somewhat fractured. We have a gross pay showing there of approximately 10 feet. A porosity of 9.6 per cent. We're estimating water saturation at 20 per cent. Reservoir volume factor at 1.54 from the Standard Correlations and a recovery factor estimated for solution gas drive of 15 per cent. That well has been tested and the gas/oil ratio on a test of about 200 barrels of oil per day was 1,222 cubic feet per barrel. Productivity Index was measured at .618 barrels of oil per day per psi drawdown and the bottom hole pressure taken in the last week of November was 2,570 psi.

The wolfcamp reservoir is a limestone a fairly clean limestone again. It has shale or shaly fusions. Its finely crystaline to chalky. The matrix is guite tight. It has both fracture and vugular porosity. The gamma ray sonic log porosity shows about 5.9 per cent porosity and we are estimating the water saturation again at 20 per cent. The reservoir volume factor at 1.53 and a recovery factor of 15 per cent. The gas/oil ratio is measured at 1,074 cubic feet per barrel and the productivity index is measured at .396 barrels of oil per day per psi drawdown and a bottom hole pressure, static, at 4,999 psi.

The ultimate recoveries are shown here that we are estimating based on these data. The oil recovery from Bone Springs is estimated at 580 barrels per acre and from the



Wolfcamp at 1,508 barrels per acre and the comparable solution gas: 709 MCF per acre from the Bone Springs and 1,620 MCF per acre from the Wolfcamp.

Q Please refer to what has been marked as Exhibit 4 which is the electrolog of this Linam well and explain what is portrayed by that log?

A I've marked on this log all of the mechanical features of the dual completion also the tops of the formations, the perforated intervals are shown here and also is the treatment that was accorded each interval and the total number of shots and also the setting depths of the tubing.

Q Please refer to Exhibit 5 and explain what is shown by this economic analysis portrayal?

A In this economic analysis we have try to show the ethical spacing assuming that the well will drain the spacing as indicated.

For an 80-acre spacing, using the data given in Exhibit Number 3, we have a recoverable oil from the Bone Springs of 46,400 barrels and from the Wolfcamp 120,600 barrels a total gas recovery based upon colution gas/oil ratio of 186,200 MCF making a total net income for the working interests of approximately \$404,500. Total investment and total operating costs will be \$227,700, leaving a net profit to the working interests of \$176,800. This is, of course, before income taxes



depletion, and so forth. The total investment, \$203,900, includes the cost of the well, which I have estimated at \$167,500 and the cost of the pumping unit and installation at a later date which will be or at this time we are anticipating installing a subsurface hydraulic pump in each zone.

For 40-acre provision the oils are cut in half as is the

For 40-acre provision the oils are cut in half as is the gas and the net income to working interest is, of course, also cut in half. The operating cost is reduced because of the reduced life of the well. Total investment remains the same and the net profit to working interest becomes a net loss of \$11,200.

- Q Now, this analysis, of course, is based on the assumption that there will be a dual completion of the well?
- A Yes, that's right. Single zones will not carry the well by themselves.
- Q In summary: On 80 acre spacing with a dual completion, the return would be about 1-7/8 times the investment?
 - A Yes, sir.
- Q And on 40-acre spacing, it would not return the investment?
 - A No, it would not return the investment.
- Q Will this well produce an 80 acre allowable in the Bone Springs at this time?
 - A Yes. The well, of course, has not been potentialled;



• P.O. 80X 1092 • PHONE 243-6491 • ALBUQUERQUE, NEW MEXICO AL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO however, we have tested the well and our indicated gross potential on that well is about 450 barrels of oil per day. Now, our maximum test on that well has been 200 barrels of oil in 21 hours on a 12/64" choke.

- Q Is that in the Bole Springs?
- A Yes, that's from the Bone Springs.
- Q Do you have an opinion on whether the Wolfcamp will make an 80-acre allowable?
- A Very definitely. The Wolfcamp has a gross potential of 750 barrels of oil per day indicated and tested at that rate on a 1" choke and every evidence now of holding at that rate for quite a period of time. We're producing that regularly: the top allowable now for 40=acre spacing and we have produced it on a daily basis for as high as 230 barrels of oil a day.
- Q Do you have an opinion as to whether this well in the Bone Springs will drain 80 acres?
- zones, both the Wolfcamp and the Bone Springs will drain 80 acres. Now, we have no direct information such as interference tests or anything to base this on. It's based more or less on an opinion, indicated productive indices, the fracturing, the comparison with comparable zones both in New Mexico and in bordering area of Texas where we have Wolfcamp and Bone Springs production. Also, on our productive index tests our bottom hole



pressure index test, we had permeabilities indicated as high as 750 milidarcies based upon Van Everding's method of pressure buildup and this type of permeability, of course, I believe would carry an 80-acre allowable with no difficulty.

MR. UTZ: This was in which zone?

THE WITNESS: In the Wolfcamp. Now, the Bone Springs is very close to that.

- (Ey Mr. Losee) Do you feel that the establishment of separate pools for the Bone Springs and the Wolfcamp with 80-acre spacing will protect correlative rights.
 - Yes. A
- Do you feel that such rules will prevent waste and permit the recovery of oil that would not otherwise be recovered?
 - Yes. A
- Now, attached to your application were a proposed set of rules for each of these pools with 80-acre spacing. Q٠ Would you generally state to the Examiner what is desirable and why with respect to these rules?
- The main intent here is to make a regular spacing pattern. We are starting it naturally with our well which is in the northeast of the southeast quarter. This will permit regular development. We're asking that the wells be limited to the northeast or the southwest quarters, quarter-quarter section.



P.O. BOX 1092 • PHCNE 243-6691 • ALBUQUERQUE, NEW MEXICO SANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO That spacing will be such that the wells will be approximately in the center of those quarter-quarter sections.

- Q Mr. Appledorn, you mean the northeast and the southwest?
 - A Yes, northeast and southwest quarter.
- Q Now, that is not actually set up in the rules submitted to the Examiner but I understand that is the desire of International in connection with the application?
 - A Yes.
- Q And the location of your wells in the proposed rules would be 457 feet from the quarter-quarter section line?
- A Yes, and as I say, the intent there is to get a well approximately in the center of each quarter-quarter making room for adjustment if there is a second well and so forth.

MR. UTZ: By "approximately" would you say, "within 200 feet"?

THE WITNESS: Yes. This particular rule has 193 feet
I believe the Kemnitz rules have 150 feet set out.

MR. UTZ: Some others have 200.

THE WITNESS: Yes, and some others have 200.

- Q (By Mr. Losee) Although not shown on the application, it's my understanding that the request is for temporary rules probably 18 months in duration?
 - A Yes. It would be our intention that with additional



ALEJOUEROUE, NEW MEXICO ALBUQUERQUE, NEW MEXICO BOX 1

development in the pool that interference tests, additional data, would be gained so that we could come back and get permanent rules established and actually show with direct evidence that 80-acre drainage is feasible.

- Now, you propose to have an 80-acre allowable for each of these pools?
 - Yes.
- So that the depth at which the Bone Springs is located it would four times Southeast New Mexico allowable?

 - And as to the Wolfcamp?
 - 5.67 times normal unit allowable.
- Were Exhibits 1 through 5 prepared by you or under your direction?
 - Yes.

MR. LOSEE: We offer at this time Applicant's Exhibits 1 through 5.

MR. UTZ: Without objection, Exhibits 1 through 5 will be entered into the record of this case.

> (Whereupon, Applicant's Exhibits 1 through 5 were offered and admitted into evidence.)

MR. LOSEE: That's all I have.

CROSS EXAMINATION

BY MR. UTZ:





- Q I suddenly realize that I don't know which one of these pools is the new pool. Is it the Bone Springs?
- A They will both be new. Now, we have potentialled the Wolfcamp on November 13th.
 - Q So they are both new pools?
- A Yes, sir. The potential on the Bone Springs, of course, will have to await Commission approval on our dual completion application.
- Q Is it your request that it be called the "Young-Bone Springs"?
- A Yes. The Young pool is a shallow pool. However, it is within a half a mile of our well. This would keep the nomenclature separate.
- Q Did you have any recommendations as to horizontal limits?
- A At the time application was made, we had just the east half of Section 21. However, with the testing now going on in John Trigg's well which is in the west half of the southwest quarter of Section 15, it would appear that that will also be within the limits of the pool.
- Q What was the information regarding the wells circled in red in Section 22?
- A That well is a Strong completion, Shell Oil,
 Querecho Plains Number 1. They did not have any indication of

oil in the Bone Springs and I believe they drill stem tested the Wolfcamp. However, I don't think the zone was exactly correlative to the zone that we are now producing from.

- Q Well then, it wouldn't seem that you should include that well in the horizontal limits of the pool?
- A No, sir. I believe the eastern limit, the pool will probably turn northeast and south, southwest. That's our indication at this time.
- Q As a matter of record then, would you say that reasonable horizontal limits would be east half of 31 and the southeast quarter of 6 and the southwest quarter of 5.
- A I believe the southwest quarter probably is Section 15. The southeast quarter of Section 16. The east half of Section 21 and the northeast quarter of Section 28.
 - Q The 5 and 6 I referred to are actually 15 and 16?
 - A Yes, sir.
- Q You are coming down south of your well now, aren't you?
 - A Yes, sir.
- Q I thought that your information was that the well in Section 27 was not in the same zone, Bone Springs?
 - A No, sir. The well in Section 27 is not.
 - Q Well then, why would you want to go south?
 - A Well, we're looking at the possibility of the Wolfcamp



and the Bone Springs does not appear or probably will not have the same aerial extent that the Wolfcamp zone does. I believe that the northeast quarter of Section 28 will probably be productive in the Wolfcamp.

There's no particular reason why we can't wait and see? Ą

No, sir.

Now, referring to your Exhibit Number 5, what did you say your well cost was under your total investment figure?

In this case for this economic analysis I have used a well cost for a well that would go to the Wolfcamp only and be dually completed. I mean in the Bone Springs and the Wolfcamp and I used \$167.500. The Linam Federal Number 1 was drilled to the Strong and with extensive testing and some calling they had somewhat greater costs.

Your well cost \$23,800 would give you what? was the added cost?

The pumping cost or proposed pumping installation which would be subsurface hydraulic and that is \$36,400.

That was not included in the completion costs of the well? A

No, sir.

MR. LOSEE: I think the operating cost is pulled out separate, really.

- Q Now note, this is not unusual. I might say that you have used twice the reserves on 80-acres as 40-acres. Do you really think that this is a practical assumption?
- A With the information that we have now and using the assumption that I have, that's what it came out.
- Q Have you studied any other 80-acre pool rules that would be close to or exactly like you recommend here?
- A The Kemnitz Pool rules were the ones that I looked at because it had a Wolfcamp formation involved and they involved spacing very similar to this one and I don't recall, I believe they have the northeast-southwest limitation. I'm not too sure about that. The rules for Kemnitz specify within 150 feet of the center of the quarter-quarter section.
 - Q You wouldn't object to 200?
 - A No, sir.
 - MR. UTZ: Are there any other questions of the witness?
- Q (By Mr. Utz) Is it your intention to perform some interference tests during the interim period or temporary period?
- A Well, we will have to have another well within 80-acre spacing in order to do it. Now, we will probably take interference tests after the drilling of another well, yes.
 - Q Do you have any plans to drill another well?
- A Right at this time, I can't say. We're just waiting on this well and watching it.



Q In the absence of interference tests, what would you propose to bring in to show 80-acre drainage a year from now?

A If we drill another well, of course, the zones would be cored. Also, we can take additional bottom hole pressure tests to show how the pressure is holding up and correlate that with accumulative or the ultimate recovery that we're now forecasting and by these means I believe that we can arrive at some reasonable idea as to how much acreage is being drained.

MR. UTZ: Any other questions?

The witness may be excused.

(Witness excused.)

Are there any other statements in this case? If there are no further statements, the case will be taken under advisement.

(Whereupon, Case Number 3350 was continued.)



PAGE

3

14

dearnley-meier reporting service, inc.

1120 SIMMS BLDG. • P.C. BOX 1092 • PHONE 243-6491 • ALBUQUERQUE, NEW MEXICO 12:3 FIRST NATIONAL BANK EAST • PHONE 236-1294 • ALBUQUERQUE, NEW MEXICO

EXHIBITS

INDEX

Direct Examination by Mr. Losee

Cross Examination by Mr. Utz

WITNESS

CONRAD R. APPLEDORN

	HULNUU LUL			
Exhibit	Identification	Offered	Admitted	
App's. 1	3	13	13	
App's. 2	3	13	. 13	
App's. 3	3	13	13	
App's. 4	3	13	13	
	3	13	77	



dearnley-meier reporting service, inc.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I. DEAN A. ROBINSON.

I, DEAN A. ROBINSON, 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; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 1st day of January,

1966.

• PHONE 2

P.O. BOX 10 L BANI; EAST

1120 SIMMS BLDG. .

Dean a Robinson NOTARY PULLIC

My Commission Expires: October 16, 1969.



the heredy certify that the foregoing is a complete resund of the presendings in the Exerciser hearing of Case No. Additionable hered by as on the control of the present that the present in the Exercise results of the present that the present in the present that the present in the present that the foregoing is a complete that the present that the foregoing is a complete that the present that the present

New Mexico Oil Conservation Commission.

ail + gas Corp

Onternatorial A Smal +

E/2 5E/4 Pac 2/ 195 32E, lea

80 Dc. Officing

walghamp

Create paal

Close to young

new pool will be lookeng & Some Spring

Med 3

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:	CF Subj			
Aff. Sou	CASE No. 3350 Order No. R-302/ NOMENCLATURE			
APPLICATION OF INTERNATIONAL OIL & CORPORATION FOR THE CREATION OF A OIL POOL AND FOR SPECIAL POOL RULE LEA COUNTY, NEW MEXICO.	NEW			
ORDER OF THE	COMMISSION			
BY THE COMMISSION:				
This cause came on for heari <u>December 14</u> , 1965, at Santa Fe, <u>Elvis A. Utz</u>				
NOW, on this <u>day of Dec</u> quorum being present, having consi and the recommendations of the Exa in the premises,				
FINDS:				
(1) That due public notice law, the Commission has jurisdicti matter thereof.	having been given as required by on of this cause and the subject			
(2) That the applicant, Int	ernational Oil & Gas Corporation			
seeks the creation of a new oil po	ol for Wolfcamp production in			
Lea County, New Mexico, and the pr				
rules and regulations, including a	provision for 80-acre spacing			
units.				
(3) That the International	Oil & Gas Corporation Linam			
Federal Well No. 1 located in Unit	I of Section 21, Township 18			
South, Range 32 East, NMPM, Lea Co	unty, New Mexico, has dis-			
covered a separate common source of supply which should be				
designated the Young-Wolfcamp	Pool ; that the vertical			
limits of said pool should be the	Wolfcamp formation ;			

and that the horizontal limits of said pool should be SW/4 of Section 15, the SE/4 of Section 16, and the E/2 of Section 21, Township 18 South, Range 32 East, NMPM, Lea County, Mew Mexico.

- (4) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the Young-Wolfcamp Pool
- (5) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.
- (6) That the temporary special rules and regulations should be established for an 18-month period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production, is hereby created and designated the Young-Wolfcamp Pool , with vertical limits comprising the Wolfcamp formation , and horizon-the SW/4 of Section 15, the SE/4 of Section tal limits comprising it and the E/2 of Section 21.

Township 18 South, Range 32 East, NMPM, Lea County, New Mexico.

(2) That temporary Special Rules and Regulations for the

Young-Wolfcamp Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE YOUNG-WOLFCAMP POOL

RULE 1. Each well completed or recompleted in the

Young-Wolfcamp Pool or in the Wolfcamp formation

within one mile thereof, and not nearer to or within the limits

of another designated Wolfcamp oil pool, shall be spaced, drilled,

operated, and produced in accordance with the Special Rules and

Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

RUL.: 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot.

All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

Standard and shall be located within 200 feet of the center of either the NE/4 of the says of a governmental quarter section. all wells shall be located within 200 feet of the kenter of a governmental quarter of a governmental quarter of a governmental quarter or and section.

-4-CASE No. 3350

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) shall be assigned an 80-acre proportional factor of 5.67 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

TT IS FURTHER ORDERED: Calcapthin are placed be facusary, 1946.

(1) That the infective delegation are presently drilling to or completed in the Young-Wolfcamp Pool or in the Wolfcamp formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before (3) That each well presently drilling to or completed in Young-Wolfcamp Pool or in the Wolfcamp formation



within one mile thereof shall receive a 40-acre allowable until a Form C-102 dedicating 80 acres to the well has been filed with the Commission.

in _______, 1966, at which time the operators in the subject pool may appear and show cause why the ______Young-Wolfcamp Pool should not be developed on 40-acre spacing units.

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 hereinabove designated.



3350 Hominlatin Heard 12-14-65 Rec. 12-16-65 Should International ail Bang Coup. Special temperary pool rule for The young- Bone thrings & young-Woefe cemp. pools. used an a model order for therapools. except. Rule & should be 200' from center of the NE+ 5w 14/4. of each 14 sec. Rule 6 should give factor of 5.67 to the Wolfrange and 4.00 to the Bone-Spings. any well dulled or dilling should be given om exception to Rule 4. Each pool should be created to include the following hougontal cimits. 185-32E. sec. 15 5W/4 ·5E/4 E/2

18 mo tempony order,

Thuo at

Grant an



BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF INTERNATIONAL:
OIL & GAS CORPORATION FOR THE CREATION OF A NEW:
OIL POOL FOR WOLFCAMP PRODUCTION AND FOR THE:
CREATION OF A NEW OIL POOL FOR BONE SPRING PRO-:
DUCTION, LEA COUNTY, NEW MEXICO, AND THE ESTABLISH-:
MENT OF SPECIAL RULES FOR EACH POOL, INCLUDING A:
PROVISION FOR 80-ACRE PRORATION UNITS:

No. 3350

AFPLICATION

COMES INTERNATIONAL OIL & GAS CORFORATION by its attorneys, Losee and Stewart, and states:

- 1. That two common sources of supply of oil were discovered by applicant in its Linam #1 well located 660 feet from the east line and 1980 feet from the south line of Section 21, Township 18 South, Range 32 East, N.M.P.M., Lea County, New Mexico.
- 2. A common source of supply of oil was discovered in the above mentioned well in the Bone Spring formation at depths between 8708 and 8716 feet below the surface and such source of supply should be designated as the Young Bone Spring Oil Pool and should at least include the E/2 SE/4 of said Section 21.
- 3. Also, a second common source of supply of oil was discovered in the above mentioned well in the Wolfcamp formation at depths between 10,502 and 10,712 feet below the surface and such source of supply should be designated as the Young Wolfcamp Oil Pool and should at least include the E/2 SE/4 of said Section 21.
 - 4. That the geological and engineering data known

to applicant indicates that each of these common sources of supply can be efficiently and economically drained on 80-acre oil proration units with an allowable factor for the Young Bone Spring Pool equal to four times the normal unit allowable and with an allowable factor for the Young Wolfcamp Pool equal to 5.67 times the normal unit allowable.

- 5. The applicant requests the promulgation of special rules and regulations for the Young Rone Spring Oil Pool and for the Young Wolfcamp Oil Pool; and a copy of the proposed rules and regulations identical for each pool is hereto attached and by reference made a part hereof.
- 6. The names and addresses of all operators, directly or diagonally offsetting the proposed Young Bone

 Spring and Young Wolfcamp Oil Pools are as follows:

Shell Oil Company P. O. Box 1509 Midland, Texas

The Atlantic Refining Company P. O. Box 1978
Roswell, New Mexico

Redfern Development Company Box 1747 Midland, Texas

Sinclair Oil & Gas Company P. O. Box 1470 Midland, Texas

Superior Oil Compary P. O. Box 1900 Midland, Texas

7. That the creation of the Young Bone Spring Oil Pool and the creation of the Young Wolfcamp Oil Pool and the establishment of 80-acre spacing units for each such common source of oil supply will be in the interest of conservation, prevent waste and correlative rights will be protected.

WHEREFORE, applicant prays the order of the Commission as follows:

- 1. That this matter be set for hearing before an examiner duly appointed by the Commission and that due notice be given thereof as required by law.
- 2. That after such hearing an order be entered creating the Young Bone Spring Oil Pool and the Young Wolfcamp Oil Pool, establishing 80-acre spacing units for each oil pool with the 80-acre proportional factor for pools from 8,000 to 9,000 feet for the Young Bone Spring Pool and from 10,000 to 11,000 feet for the Young Wolfcamp Pool and promulgating special rules and regulations for each pool.
- 3. And for such other relief as may be just in the premises.

INTERNATIONAL OIL & GAS CORPORATION

A. J. Losee Losee and Stewart Attorneys at Law P. O. Drawer 239

Artesia, New Mexico

Attorneys for Applicant

SPECIAL RULES AND REGULATIONS FOR THE YOUNG BONE SPRING OIL POOL AND THE YOUNG WOLFCAMP OIL POOL

RULE 1. Each well completed or recompleted in the Young Bone Spring Oil Pool and/or the Young Wolfcamp Oil Pool or in the Bone Spring formation or Wolfcamp formation within one mile of the Young Bone Spring or Young Wolfcamp Oil Pools, and not nearer to nor within the limits of another designated Bone Spring or Wolfcamp Pool, shall be spaced, drilled, operated and prorated in accordance with the Special Rules and Regulations hereinafter set forth.

RULE ?. Each well completed or recompleted in the Young Bone Spring Oil Pool and the Young Wolfcamp Oil Pool shall be located on a unit containing 80 acres, more or less.

RULE 3. Each well completed or recompleted in said pools shall not be drilled closer than 467 feet to any quarter-quarter section line. Any well which was drilling to or recompleted in the Young Bone Spring or Young Wolfcamp Oil Pools prior to October 14, 1965, is granted an exception to the well location requirements of this Rule.

RULE 4. For good cause shown, the Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when the application is for a non-standard unit comprising less than 80 acres. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail and the application shall state that such notice has been furnished. The Secretary-Director of the Commission may approve the application if, after a period of 30 days, no offset operator has entered an objection to the formation of

such non-standard unit.

The allowable assigned to any such non-standard unit shall bear the same ratio to a standard allowable in the Young Bone Spring Pool and Young Wolfcamp Pool as the acreage in such non-standard unit bears to 80 acres.

RULE 5. An 80-acre proration unit (78 through 82 acres) in the Young Bone Spring Pool or Young Wolfcamp Pool shall be assigned an 80-acre proportional factor for allowable purposes and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit in any proportion.

DOCKET: EXAMINER HEARING - TUESDAY - DECEMBER 14, 1965

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, Alternate Examiner:

- CASE 3348: Application of Joseph I. O'Neill, Jr. for special rules for the South Prairie-San Andres Pool, Roosevelt County, New Mexico, Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the South Prairie-San Andres Pool, Roosevelt County, New Mexico, including a provision for 80-acre proration units. Applicant further seeks the extension of said pool to include portions of Sections 16, 17, 20 and 21, Township 8 South, Range 36 East.
- CASE 3349: Application of International Oil & Gas Corroration for a dual completion Lea County, New Mexico. Applicant, in the above-styled cause, seeks the approval of the dual completion (conventional) of its Linam Federal Well No. 1 located in Unit I of Section 21, Township 18 South, Range 32 East, Lea County, New Mexico, to produce oil from the Bone Springs and Wolfcamp formations (both undesignated) through parallel strings of tubing.

CASE 3350:

- Application of International Oil & Gas Corporation for the creation of a new oil pool and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Wolfcamp production in Section 21, Township 18 South, Range 32 East, Lea County, New Mexico, and the establishment of special rules therefor, including a provision for 80-acre proration units.
- CASE 3351: Application of Pan American Petroleum Corporation for special pool rules for the Dos Hermanos Morrow Gas Pool, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of temporary special pool rules for the Dos Hermanos Morrow Gas Pool in Section 28, Township 20 South, Range 30 East, Eddy County, New Mexico, including a provision for 640-acre proration units and fixed well locations.
- CASE 3352: Application of Bass Brothers Enterprises, Inc. for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North Custer Mountain Unit Area comprising 2560 acres, more or less, of State land in Township 23 South, Range 35 East, Lea County, New Mexico.
- CASE 3353: Application of Tesoro Petroleum Corporation to amend Order No. R-2807, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks an amendment to Order No. R-2807, which authorized a waterflood project in the Hospah Unit Area, to permit the production of oil from previously designated water injection wells, to approve unorthodox locations for additional producing wells, and to authorize additional injection wells, all in Section 36, Township 18 North, Range 9 West, McKinley County, New Mexico.

- 2 December 14, 1965, Examiner Hearing
- CASE 3354: Application of Shell Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North Antelope Ridge Unit Area comprising 4,480 acres, more or less, of Federal, State, and Fee lands in Township 23 South, Range 34 East, Lea County, New Mexico.
- CASE 3355: Application of Shell Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North Square Lake Premier Unit Area comprising 1,080 acres, more or less, of Federal, State and Fee lands in Township 16 South, Range 31 East, Eddy County, New Mexico.
- CASE 3356: Application of Shell Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its North Square Lake Premier Unit Area by the injection of water into the Premier Sand of the Grayburg formation through thirteen wells located in Sections 5, 6, and 8, Township 16 South, Range 31 East, Eddy County, New Mexico.
- CASE 3357: Application of Skelly Oil Company for an oil well-salt water disposal dual completion, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Hobbs "T" Well No. 11, located in Unit P of Section 33, Township 7 South, Range 33 East, Roosevelt County, New Mexico, to produce oil from the Upper San Andres formation, Chaveroo San Andres Pool, and to dispose of produced salt water in the Lower San Andres formation in the interval from approximately 4700 feet to 4780 feet, utilizing parallel strings of tubing.

A. J. LOSEE EOWARD B. STEWAR'T

LOSEE AND STEWART CARPER BUILDING - P.O. DRAWER 239 ARTESIA, NEW MEXICO

746-3508

10 December 1965

DEC 13,069

Mr. J. M. Durrett, Jr.

General Counsel

New Mexico Oil Conservation Commission

P. O. Box 2088

Santa Fe. New Mexico

Re: Oil Conservation Commission Case No. 3350

Dear Mr. Durrett:

Enclosed herewith you will please find triplicate copies of Application of International Oil & Gas Corporation for the creation of a new oil pool for Wolfcamp production and for the creation of a new oil pool for Bone Spring production, Lea County, New Mexico, and the establishment of special rules for each pool, including a provision for 80-acre proration units. This application has been enlarged to include a request for establishment of a new oil pool for Bone Pring production with a provision for 80-acre proration units for both Bone Spring and Wolfcamp production.

In accordance with our telephone conversation of this date, I understand that we will be permitted to put on testimony supporting the creation of the Wolfcamp Oil Pool and the Bone Spring Oil Pool even though the notice of this hearing was limited to Wolfcamp Oil Pool. I also understand that it will be necessary to republish the notice of our hearing before any order may be entered in the case. As stated in our telephone conversation, this procedure will save us the inconvenience of an additional trip to Santa Fe.

Very truly yours

A. J. Losee

Enclosures AJL:rh

DOCKET MAILED

Sol Jan 5 d Leaving.

J

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 5, 1966

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

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

- Application of General American Oil Company of Texas for a waterflood expansion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Burch-Keely Waterflood Project, authorized by Order No. R-2327 in the Grayburg-Jackson Pool, by the conversion to water injection, in stages, of from 10 to 15 wells in Sections 23 and 26, Township 17 South, Range 20 Cast, Eddy County, New Mexico.
- CASE 3359: Application of Sinclair Oil & Gas Company for a dual completion, non-standard location, non-standard gas proration unit, and an exception to Rule 104 C I Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Fren Oil Company Well No. 21 to produce oil from the Cedar Lake-Abo Pool and to produce gas from an undesignated Morrow gas pool through parallel strings of tubing. Applicant further seeks approval of a 200-acre non-standard gas proration unit for said well comprising the E/2 SW/4, SW/4 SE/4, and E/2 SE/4 of Section 19, Township 17 South, Range 31 East, for said well which is located at an unorthodox gas well location 560 feet from the South line and 3350 feet from the East line of said Section 19. Applicant further seeks an exception to Commission Rule 104 C I for said well which is located closer than 660 feet to another well producing from the Abo formation on the same 40-acre tract.
- CASE 3360: Application of L. R. French, Jr. for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Aztec Uncle Well No. 1 located in Unit C of Section 28, Township 18 South, Range 33 East, Lea County, New Mexico, to produce oil from the Strawn formation through the casing-tubing annulus and to produce gas from the Morrow formation through tubing. In the alternative, applicant seeks authority to dually complete the well with a single string of tubing and to commingle the Strawn oil and Morrow gas in the wellbore by means of a dual-flow choke-assembly.

CASE 3152 (Reopened)

In the matter of Case No. 3152 being reopened pursuant to the provisions of Order No. R-2821, which order established 80-acre spacing units for the Osudo-Wolfcamp Pool, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 3153 (Reopened)

In the matter of Case No. 3153 being reopened pursuant to the provisions of Order No. R-2822, which order established 80-acre spacing units for the Osudo-Strawn Pool, Lea County, New Mexico,

January 5, 1966 Examiner Hearing

for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 3246 (Reopened)

In the matter of Case No. 3246 being reopened pursuant to the provisions of Order No. R-2935, which order established special rules for the Mesa-Queen Pool, Lea County, New Mexico, for production of oil and gas wells in said pool, including classification of oil wells and gas wells, spacing units for oil wells and gas wells, and the establishment of a gas-liquid ratio limitation of 5,000 cubic feet of gas per barrel of oil. All interested parties may appear and show cause why the special rules should be continued in effect.

CASE 2720 (Reopened)

In the matter of Case No. 2720 being reopened pursuant to the provisions of Order No. R-2397-B which continued the original order for an additional year, establishing special rules governing the production of oil and gas wells in the Double-X Delaware Pool, Lea County, New Mexico, including classification of wells as gas wells when the gas-liquid hydrocarbon ratio exceeds 30,000 to one.

- CASE 3361: Application of Tidewater Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in its A. B. Coates "C" Well No. 15 located in Unit O of Section 24, Township 23 South, Range 37 East, Justis Field, Lea County, New Mexico, through a perforated interval below 8,000 feet.
- CASE 3353: Application of Tesoro Petroleum Corporation to amend Order No. R-2807, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks an amendment to Order No. R-2807, which authorized a waterflood project in the Hospah Unit Area, to permit the production of oil from previously designated water injection wells, to approve unorthodox locations for additional producing wells, and to authorize additional injection wells, all in Section 36, Township 18 North, Range 9 West, McKinley County, New Mexico.

CASE 2945 (Reopened)

In the matter of Case No. 2945 being reopened pursuant to the provisions of Order No. R-2623, which order established 640-acre spacing units for the Antelope Ridge-Devonian Gas Pool, Lea County, New Mexico, for a period of two years. All interested parties may appear and show cause why said pool should not be developed on 160-acre or 320-acre spacing units.

- 3 -January 5, 1966 Examiner Hearing

CASE 3350 (Continued and readvertised)

Application of International Oil & Gas Corporation for the creation of two new oil pools and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Bone Spring production and a new oil pool for Wolfcamp production in Section 21, Township 18 South, Range 32 East, Lea County, New Mexico, and for the establishment of special rules for each of said pools including provision for 80-acre proration units.

CASE 3362:

Application of Carter Foundation Production Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Queen formation through five wells located at unorthodox locations in Sections 34 and 35, Township 23 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico.

DOCKET: EXAMINER HEARING - TUESDAY - JUNE 6, 1967

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

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

CASE 3592: Application of Anne Burnett Windfohr, dba Windfohr Oil Company, for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the San Andres formation through eight wells in Sections 13, 14 and 24, Township 17 South, Range 30 East, Grayburg-Jackson Pool, Eddy County, New Mexico. Applicant further seeks an administrative procedure for future expansion of said project.

CASE 3584: (Continued and Readvertised)

Application of Gulf Oil Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the abovestyled cause, seeks authority to drill its Eddy "BD" State Well No. 1 at an unorthodox location 660 feet from the South line and 990 feet from the East line of Section 32, Township 20 South, Range 30 East, in an undesignated Strawn gas pool, Eddy County, New Mexico.

CASE 3578: (Continued and Readvertised)

Application of Texas Pacific Oil Company for several non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the dedication and rededication of certain acreage and the establishment of the following non-standard gas proration units in Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico.

A 120-acre non-standard gas proration unit comprising the N/2 NE/4 and the SE/4 NE/4 of Section 7, to be dedicated to the State "A" A/c-2 Well No. 5, located in Unit A of said Section 7, and also to the State "A" A/c-2 Well No. 6 located in Unit B of said Section 7;

A 160-acre non-standard gas proration unit comprising the W/2 W/2 of Section 5, to be dedicated to the State "A" A/c-2 Well No. 41, located in Unit M of said Section 5;

An 80-acre non-standard gas proration unit comprising the E/2 NW/4 of Section 5, to be dedicated to the State "A" A/c-2 Well No. 44, located in Unit F of said Section 5;

A 160-acre non-standard gas proration unit comprising the N/2 SE/4 and the E/2 SW/4 Section 5, to be dedicated to the State "A" A/c-2 Well No. 28, located in Unit I of said Section 5;

Case 3578 continued

An 80-acre non-standard gas proration unit comprising the S/2 SE/4 of Section 5, to be dedicated to the State "A" A/c-2 Well No. 27, located in Unit P of said Section 5;

A 160-acre non-standard gas provation unit comprising the W/2 SW/4, SE/4 SW/4, and SW/4 SE/4 Section 8, to be dedicated to the State "A" A/c-2 Well No. 54, located in Unit O of said Section 8;

A 160-acre non-standard gas proration unit comprising the S/2 NW/4, NE/4 SW/4, and NW/4 SE/4 Section 8, to be dedicated to the State "A" A/c-2 Well No. 56, located in Unit J of said Section 8;

An 80-acre non-standard gas proration unit comprising the S/2 NE/4 Section 8, to be dedicated to the State "A" A/c-2 Well No. 43, located in Unit H of said Section 8;

An 80-acre non-standard gas proration unit comprising the N/2 NW/4 Section 8, to be dedicated to the State "A" \(\Lambda/c-2\) Well No. 49, located in Unit C of said Section 8;

A 240-acre non-standard gas proration unit comprising the NE/4 and E/2 NW/4 Section 9, to be dedicated to the State "A" A/c-2 Well No. 40, located in Unit A of said Section 9;

A 240-acre non-standard gas provation unit comprising the E/2 SE/4 Section 8, and the SW/4 Section 9, to be dedicated to the State "A" A/c-2 Well No. 38, located in Unit K of said Section 9;

A 160-acre non-standard gas proration unit comprising the N/2 NE/4 Section 8, and the W/2 NW/4 Section 9, to be dedicated to the State "A" A/c-2 Well No. 29, located in Unit D of said Section 9.

CASE 3579: (Continued from the May 24th Examiner Hearing)

Application of Texas Pacific Oil Company for three dual completions, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its State "A" A/c-2 Wells Nos. 28, 54, and 29, located in Unit I of Section 5, Unit O of Section 8, and Unit D of Section 9, respectively, Township 22 South, Range 36 East, Lea County, New Mexico, in such a manner as to produce gas from the Jalmat Gas Pool and oil from the South Eunice Oil Pool.

CASE 3593: Application of Amerada Petroleum Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Monument Paddock and Monument Blinebry Oil Pools in the wellbore of its L. M. Lambert Well No. 8 located in Unit G of Section 6, Township 20 South, Range 37 East, Lea County, New Mexico, with the assignment of a single allowable to said commingled production.

CASE 3594:

Application of Amerada Petroleum Corporation for an Ogallala oil proration unit, special rules for said unit and authority for fresh water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of the SE/4 NW/4 of Section 30, Township 18 South, Range 38 East, Lea County, New Mexico, as a 40-acre proration unit for production of oil from the Ogallala formation. Applicant also seeks the establishment of special rules governing said 40-acre tract including a maximum density of one well per 0.625-acre with a provision that wells should be drilled no nearer than 82.5 to the outer boundary of the unit and no nearer than 165 feet to another well producing from the same formation, provided that an exception should be made for existing wells on said 40-acre tract which are not located in conformance with said spacing rules. Applicant also seeks a temporary exception to kule 307 for each well to permit utilization of a vacuum-type drilling unit during the drilling and completion operations. Applicant also seeks authority to produce the wells at capacity even though the aggregate production from said wells exceeds the 40-acre normal unit allowable. Applicant further seeks authority to dispose of fresh water produced with the oil back into the Ogallala formation through an injection well or wells located no nearer than 330 feet to the outer boundaries of the 40-acre tract.

CASE 3595:

Application of Ernest A. Hanson for acreage rededication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the rededication of the SE/4 NW/4 of Section 19, Township 22 South, Range 38 East for the production of oil from the Blinebry Oil Pool, said 40-acre unit to be dedicated to applicant's Gutman Well No. 4, formerly the Gulf Oil Corporation's Max Gutman Well No. 3. This acreage is presently dedicated as a part of a 160-acre standard gas proration unit in the Blinebry Gas Pool to Gulf Oil Corporation's Max Gutman Well No. 2 located in Unit C of said Section 19.

CASE 3350: (Reopened)

In the matter of Case No. 3350 being reopened pursuant to the provisions of Orders Nos. R-3021 and R-3021-A, which orders established 80-acre spacing units for the Young-Wolfcamp Pool and the Young-Bone Spring Pool, Lea County, New Mexico, respectively, for a period of one year. All interested parties may appear and show cause why said pools should not be developed on 40-acre spacing units.

CASE 3596:

Application of Tenneco Oil Company for an unorthodox location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for its Jicarilla "B" Well No. 8 at a point 790 feet from the North line and 2510 feet from the East line of Section 15, Township 26 North, Range 5 West, Blanco-Mesaverde Gas Pool, Rio Arriba County, New Mexico.

-4- Examiner Hearing - June 6, 1967

CASE 3574: (Continued from May 24th Examiner Hearing)

Application of Cima Capitan, Inc. for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg-San Andres by the injection of water into the Grayburg-San Andres formations through one well located in Unit C of Section formations through one well located in Unit C of Section 7, Township 17 South, Range 32 East, Maljamar Pool, Lea County, New Mexico.

GOVERNOR JACK M. CAMPBELL CHAIRMAN

State of New Mexico

Bil Conservation Commission

LAND COMMISSIONER GUYTON B. HAYS MEMBER



P. O. BOX 2088 SANTA FE

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

January 13, 1966

) 	Date 5-25
Mr. A. J. Losec Losee & Stewart Attorneys at Law Box 239	Re:	Case No. 3350 Order No. R-3021-A Applicant:
Artesia, New Mexico Dear Sir:	the hour	International Oil & Gas Corp.
wour bir.	10 1	

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

Very truly yours, a. L. Parter, A. L. PORTER, Jr. Secretary-Director

ALP/ir					
Carbon copy	of	order	also	sent	to:
Hobbs OCC	×				
Artesia OCC					
Aztec OCC					
Othon					

BEFORE THE OIL CONSERVATION CONSISSION OF THE STATE OF MEN MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION CONNISSION OF NEW MEXICO FOR THE PURPOSE OF COMSIDERING:

> CASE No. 3350 Order No. R-3021 NOMENCLATURE

APPLICATION OF INTERNATIONAL OIL & GAS CORPORATION FOR THE CREATION OF A NEW OIL POOL AND FOR SPECIAL POOL MULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION

This cause came on for hearing at 9 o'clock a.m. on December 14, 1955, at Santa Fe, New Mexico, before Examiner Slvis A. Uts.

NOW, on this 22nd day of December, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises.

FILES:

- (1) That doe 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, International Oil & Gas Corporation seeks the creation of a new oil pool for Wolfcamp production in Las County, New Maxico, and the promulgation of special rules and regulations governing said pool, including a provision for 80-acre spacing units.
- (3) That the International Oil & Gas Corporation Linam Federal Well No. 1 located in Unit I of Section 21, Township 16 South, Range 32 East, EMPH, Lea County, New Mexico, has discovered a separate common source of supply which should be designated the Young-Wolfcamp Pool; that the vertical limits of said pool should be the Wolfcamp formation; and that the horizontal limits of said

-2-CASE No. 3350 Order No. R-3021

pool should be the SW/4 of Section 15, the SE/4 of Section 16, and the E/2 of Section 21, Township 18 South, Range 32 East, HMPM, Lea County, New Maxico.

- (4) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the Young-Wolfcamp Pool.
- (5) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.
- (6) That the temporary special rules and regulations should be established for an 18-month period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be afficiently and economically drained and developed by one well.
- (7) That this case should be reopened at an examiner hearing in June, 1967, at which time the operators in the subject pool should be prepared to appear and show cause why the Young-Nolfcemp Pool should not be developed on 40-acre spacing units.

IT IS THEREPORE ORDERED:

- (1) That a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production, is hereby created and designated the Young-Wolfcamp Pool, with vertical limits comprising the Wolfcamp formation, and horizontal limits comprising the 5W/4 of Section 15, the SE/4 of Section 16, and the E/2 of Section 21, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico.
- (2) That temporary Special Rules and Regulations for the Young-Wolfeamp Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE YOUNG-WOLFCAMP POOL

MULE 1. Each well completed or recompleted in the Young-Wolfcamp Pool or in the Wolfcamp formation within one mile thereof,

-3-CASE No. 3350 Order No. R-3021

and not nearer to or within the limits of another designated Wolfcamp oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

- ZME 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the M/2, E/2, E/2, or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.
- MULE 1. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.
- RULE 4. The first well drilled on every standard or nonstandard unit shall be located within 200 feet of the center of either the NE/4 or the SW/4 of a governmental quarter section. All wells shall be located within 200 feet of the center of a governmental quarter-quarter section.
- MULS 5. The Secretary-Director may grant an exception to the footage requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon, provided the well will be located no nearer than 330 feet to the outer boundary of the unit. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

-4-CASE No. 3350 Order No. R-3021

aulk 6. A standard proration unit (79 through 81 acres) shall be assigned an 80-acre proportional factor of 5,67 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

- (1) That the effective date of this order shall be January 1, 1966.
- (2) That the locations of all wells presently drilling to or completed in the Young-Wolfcump Pool or in the Wolfcamp formation within one mile thereof are hereby approved; that the operator of the well having an unorthodox location shall notify the Mobbs District Office of the Commission in writing of the name and location of the well on or before January 15, 1966.
- (3) That each well presently drilling to or completed in the Young-Wolfcamp Fool or in the Wolfcamp formation within one mile thereof shall receive a 40-acre allowable until a Form C-102 dedicating SO acres to the well has been filed with the Commission.
- (4) That this case shall be reopened at an examiner hearing in June, 1967, at which time the operators in the subject pool may appear and show cause why the Young-Wolfcamp Pool should not be developed on 40-acrs spacing units.
- (5) 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 HEXICO

TV CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

GUTTON B. HAYS, Membor

L. PORTER, Jr., Komber & Secretary

BRFORE THE GIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE No. 3350 Order No. R-3021-A NOMESCLATURE

APPLICATION OF INTERNATIONAL OIL 6 GAS CORPORATION FOR THE CREATION OF A NEW OIL POOL AND FOR SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE CONCESSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 5, 1966, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

MOW, on this 13th day of January, 1966, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises.

FIEDS:

- (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, International Oil & Gas Corporation, seeks the creation of a new oil pool for Bone Spring production in Lea County, New Mexico, and the prosulgation of special rules and regulations governing said pool, including a provision for 80-acre spacing units.
- (3) That the International Oil & Gas Corporation Linam Federal Hell No. 1 located in Unit I of Section 21, Township 16 South, Runge 32 East, EMPM, Lea County, New Mexico, has discovered a separate common source of supply which should be designated the Young-Bone Spring Pool; that the vertical limits of said pool should be the Sone Spring formation; and that the horizontal

-2-CASE No. 3350 Order No. R-3021-A

limits of said pool should be the SW/4 of Section 15, the 80/4 of Section 16, and the E/2 of Section 21, Township 18 South, Range 32 Mast, NMPM, Lea County, New Mexico.

- (4) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the Young-Bone Spring Fool.
- (5) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.
- (6) That the temporary special rules and regulations should be established in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.
- (7) That this case should be respende at an examiner hearing in June, 1967, at which time the operators in the subject pool should be prepared to appear and show cause why the Young-Bone Spring Pool should not be developed on 40-acre spacing units.

IT IS TERRETORE CROERED:

- (1) That a new pool in Lea County, New Mexico, classified as an cil pool for Bone Spring production, is hereby created and designated the Young-Bone Spring Pool, with vertical limits comprising the Bone Spring formation, and horisontal limits comprising the SW/4 of Section 15, the SS/4 of Section 16, and the S/2 of Section 21, Township 18 South, Range 32 Rast, EMPM, Lea County, New Nexico.
- (2) That temporary Special Rules and Regulations for the Young-Bone Spring Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE YOUNG-BOME SPRING POOL

Bone Spring Pool or in the Bone Spring formation within one mile

-3-CASE Mo. 3350 Order No. R-3021-A

thereof, and not nearer to or within the limits of another designated Bone Spring oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

- MULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.
- RULE 1. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot. All operators officiting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.
- MILE 4. The first well drilled on every standard or non-standard unit shall be located within 200 feet of the center of either the ME/4 or the 6W/4 of a governmental quarter section. All wells shall be located within 300 feet of the center of a governmental quarter-quarter section.
- MUR 5. The Secretary-Director may grant an exception to the footage requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horison, provided the well will be located no nearer than 330 feet to the outer boundary of the unit. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

-4-CASE No. 3350 Order No. R-3021-A

shall be assigned an 80-acre proportional factor of 4.00 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS PURTER ORDERED:

- (1) That the effective date of this order shall be February 1, 1966.
- (2) That the locations of all wells presently drilling to or completed in the Young-Bone Spring Pool or in the Bone Spring formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Mobbe District Office of the Commission in writing of the name and location of the well on or before Pebruary 1, 1966.
- (3) That each well presently drilling to or completed in the Young-Bone Spring Pool or in the Bone Spring formation within one wile thereof shall receive a 40-acre allowable until a Form C-103 dedicating 80 acres to the well has been filed with the Commission.
- (4) That this case shall be reopened at an examiner hearing in June, 1967, at which time the operators in the subject pool may appear and show cause why the Young-Bone Spring Pool should not be developed on 40-acre spacing units.
- (5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF HEW MEXICO

CK M. CAMPBELL, Chairman

B. HAYB, Member,

A. L. FORTER, Jr., Nember & Secretary

GOVERNOR JACK M. CAMPBELL CHAIRMAN

State of New Mexico

Bil Conservation Commission

LAND COMMISSIONER GUYTON B. HAYS MEMBER



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

P.O.BOX 2088 SANTA FE

December 23, 1965

Mr. A. J. Losee Losee & Stewart Attorneys at Law Post Office Box 239 Artesia, New Mexico

International Oil & Gas Corp.

Dear Sir:

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

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC X
Artesia OCC Aztec OCC

Other

GOVERNOR DAVID F. CARGO CHAIRMAN

State of New Mexico Bil Conservation Commission

LAND COMMISSIONER GIJYTON B. HAYS MEMBER



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

P. O. BOX 2088 SANTA FE

June 8, 1967

Re:	Case No(3350	
Danna Tra	Order No. Applicant:	R-3021-B	<u>&</u>
Depco, Inc. Suite 204 - 1st National Bank Bldg. Artesia, New Mexico 88210	DEPCO,	INC.	
Dear Sir:			

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

ALP/ir	•	
Carbon copy of order also sent to:		
Hobbs OCC ×		
Artesia OCC		
Aztec OCC		
Other		

BEFORE THE GIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE NATTER OF THE HEARING CALLED BY THE OIL CONSERVATION CONGISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 3350 Order No. R-3021-C

APPLICATION OF INTERNATIONAL OIL & GAS CORPORATION FOR THE CREATION OF A NEW OIL FOOL AND FOR SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 6, 1967, at Santa Fe, New Mexico, before Examiner Daniel S. Mutter.

NOW, on this 8th day of June, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 by Order Mo. R-3021-A, dated January 13, 1966, temporary Special Rules and Regulations were promulgated for the Young-Bone Spring Pool, Lea County, New Mexico.
- (3) That pursuant to the provisions of Order Mo. R-3021-A, this case was reopened to allow the operators in the subject pool to appear and show cause why the Young-Bone Spring Fool should not be developed on 40-acre specing units.
- (4) That no operator in the subject pool appeared to show cause why the Young-Bone Spring Pool should not be developed on 40-acre spacing units.

-2-CASE Mo. 3350 Order Mo. R-3021-C

- (5) That no wells are currently producing from the subject pool.
- (6) That the operators in the subject pool have not established that one well can efficiently and economically drain and develop 80 acres.
- (7) That no necessity exists for the continuation of the Special Rules and Regulations promulgated by Order No. R-3021-A and that said rules should therefore be abolished.

IT IS THEREFORE ORDERED:

- (1) That the Special Rules and Regulations governing the Young-Bone Spring Pool, promulgated by Order No. 2-3021-A, are hereby abolished.
- (2) 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 hereinabove designated.

STATE OF HEW MEXICO OIL CONTRAVADES COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYE, Member

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

esz/

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 COMSIDERING:

> CASE No. 3350 Order No. R-3021-B

APPLICATION OF INTERNATIONAL OIL & GAS CORPORATION FOR THE CREATION OF A NEW OIL POOL AND FOR SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 5, 1967, at Santa Fe, New Mexico, before Examiner Daniel S. Sutter.

MOW, on this 8th day of June, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

PINDS:

- (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 by Order No. R-3021, dated December 22, 1965, temporary Special Rules and Regulations were promulgated for the Young-Wolfcamp Pool, Lea County, New Mexico.
- (3) That pursuant to the provisions of Order Wo. R-3021, this case was reopened to allow the operators in the subject pool to appear and show cause why the Young-Wolfcamp Fool should not be developed on 40-acre spacing units.
- (4) That no operator in the subject pool appeared to show cause why the Young-Wolfcamp Pool should not be developed on 40-acre spacing units.

-2-CASE No. 3350 Order No. R-3021-B

- (5) That only one well is presently producing from the subject pool.
- (6) That it is not anticipated that additional wells will be drilled in the subject pool.
- (7) That the operators in the subject pool have not established that one wall can efficiently and economically drain and develop 80 acres.
- (8) That no necessity exists for the continuation of the Special Rules and Regulations promulgated by Order No. R-3021 and that said rules should therefore be abolished.

IT IS THEREFORE ORDERED:

- (1) That the Special Rules and Regulations governing the Young-Wolfcamp Poul, promulgated by Order No. R-3021, are hereby abolished.
- (2) 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 hereinabove designated.

STATE OF NEW MEXICO OIL CONGERVATION COMMISSION

DAVID F. CARGO, Ch

GUITURE B. HAIR, PRINCER

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

enr/

(\$ 11,200) Net lcss

\$203,900

\$ 9,600

\$202,300

93,100

60,300

23,200

40 acres

30 acres

46,400

120,600

186,200

\$404,500

\$23,800

BONE SPRING

WOLFCAMP

TOTAL GAS

NET INCOME TO WORKING INTEREST

TOTAL OPERATING

TOTAL INVESTMENT

WOLFCAMP - BONE SPRING DUAL COMPLETIONS

- ECONOMIC ANALYSIS -

SPACING

OIL CONSERVATION COMMISSION

BEFORE EXAMINER UTZ

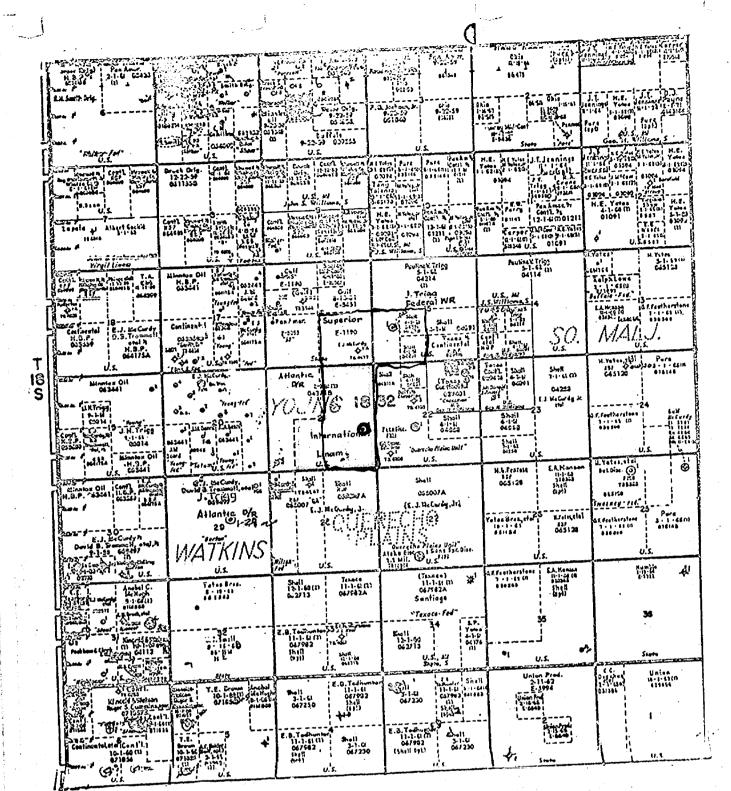
SIF

\$176,800

NET PROFIT
TO WORKING INTEREST

CASE NO. 33,50 BEFORE EXAMINER UTZ

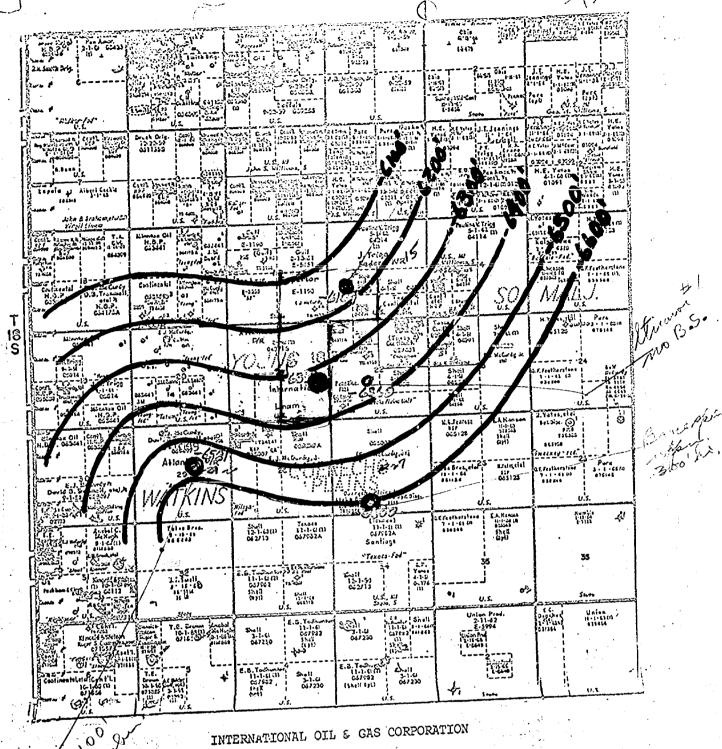
	BONE SPRING RESERVOIR	WOLFCAMP RESERVOIR
Gross Pay	10 feet.	42 feet
Lithology	Dolomite, Medium to coarsely crystalline, vuggy and intracrystalline porosity.	Limestone, fine crystalline to chalky, fractured, vuggy.
Porosity (Sonic Log)	9.6%	5.9%
Water Saturation (Est)	20%	20%
Reservoir Volume Factor (from Standard Cornelations)	1.54	1.53
Recovery Factor (Est. for solution Cas Drive)	15%/	15%~
Gas Oil Ratio (Measured)	1222 cu. ft/ bbl.	1074 cu. ft./bb1.
<pre>Productivity Index(measured)</pre>	0.618 BOPD/psi	0.396 BOPD/psi
Bottom Hole Pressure	2570 psi.	4999 psi 🌑
Ultimate Recovery: Oil Gas	580 bbls./acre 709 MCF / acre	150% bbls./ acre



INTERNATIONAL OIL & GAS CORPORATION

LINAM FEDERAL LEASE
Et & EtSW4, Sec. 21, T18S, R32E
Lea County, New Mexico

BEFORE EXAMINER	UTZ
OIL CONSERVATION COMA	NISSION
CASE NO. 3350	
CASE NO. 2320	



LINAM FEDERAL LEASE
E½ & E½SW¼, Sec. 21, T18S, R32E
Lea County, New Mexico

STRUCTURE MAP - TOP OF WOLFCAMP Contour Interval: 100 ft.

BEFORE EXAMINER UTZ OIL CONSERVATION COMMISSION 6 EXHIBIT NO. 2-NO. 3350

1120 SIAMS BLDG. . P. O. BOX 1092 . PHONE 243-6691 . AIBUGUER, UEW MEXICO

NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico June 6, 1967

EXAMINER HEARING

IN THE MATTER OF:

In the matter of Case 3350 being re-opened pursuant to the provisions of Orders Numbers R-3021 and R-3021A, which orders established 80 acre spacing units for the Young-Wolfcamp Pool and the Young-Bone Spring Pool, Lea County, New Mexico.

Case 3350

BEFORE: Daniel S. Nutter, Examiner



TRANSCRIPT OF HEARING

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS 1120 SIMME BLDG. • P.O. BOX 1092 • PHONE 243-6491 • ALBUQUERQUE, NEW MEXICO 87101 1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87106 MR. NUTTER: Case 3350.

MR. HATCH: Case 3350 re-opened. In the matter of Case Number 3350 being re-opened pursuant to the provisions of Orders Numbers R-3021 and R-3021A, which orders established 80 acre spacing units for the Young-Wolfcamp pool and the Young-Bone Spring pool, Lea County, New Mexico, respectively for a period of one year.

MR. NUTTER: Let the record in Case 3350 show that a representative of Depco, called the Examiner the other day, and advised that they would not make an appearance in this case and did not object if the pools reverted to the forty-acre spacing. Therefore, we will take Case 3350 under advisement and, in the absence of testimony to the contrary, the special orders will be rescinded. The pools will revert to the statewide rules.

STATE OF NEW MEXICO)
) SS.
COUNTY OF BERNALILLO)

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

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 30 day of June, 1967.

Notary Public - Court Reporter

My Commission Expires:

7-10-70

I do hereby sartify that the foregoing is a companion of the proceedings in the decrease hearing of Case No. 3350 heard by so on 19.67

New Mexico Oil Conservation Commission