

CASE 4116: Application of TESORO
FOR AMENDMENT OF R-2797 AND FOR
EXTENSION OF S. HOSPAH-UPPER SAND

Case Number.

4/16

Application

Transcripts.

Small Exhibits

ETC.



dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 23, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of Tesoro Petroleum
Corporation for the amendment of
Order No. R-2797 and for the
extension of the South Hospah-
Upper Sand Pool, McKinley County,
New Mexico.

)
)
)
)
) Case No. 4116
)
)
)
)

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: The hearing will come to order, please. Case 4116.

MR. FATCH: Case 4116. Application of Tesoro Petroleum Corporation for the amendment of Order No. R-2797 and for the extension of the South Hespah-Upper Sand Pool, McKinley County, New Mexico.

MR. MORRIS: Mr. Examiner, I'm Richard Morris of Montgomery, Federici, Andrews, Hannah's and Morris, Santa Fe, appearing for the applicant. We have one witness, Mr. Denman.

(Witness sworn.)

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

RICHARD DENMAN

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. MORRIS:

Q Mr. Denman, please state your name and where you reside.

A My name is Richard Denman. I reside in San Antonio, Texas.

Q By whom are you employed and in what capacity?

A My employer is Tesoro Petroleum Corporation and I'm petroleum engineer with them.

Q Please state briefly your education and experience in the petroleum industry.

A I hold a Bachelor of Science degree from the University of Pittsburgh, class of 1942. I worked for the old Stanley Company now known as Pan American until 1951 as petroleum engineer; also, roustabout, roughneck, junior engineer and engineering trainee. 1951 to 1965 I worked for Southern Minerals Corporation in Corpus Christi, Texas, as petroleum engineer, reservoir engineer and since 1965 have been petroleum engineer with Tesoro.

Q Are you familiar with the application of Tesoro in this case and familiar with the Hespah field area of New Mexico?

A I am.

MR. MORRIS: Are the witness' qualifications acceptable?

MR. UTZ: Yes, sir, they are.

Q (By Mr. Morris) Mr. Denman, will you please

refer to what's been marked as Exhibit No. 1 and referring to that exhibit orient me with respect to the Hospah pool, the Hospah unit and the south Hospah area, as shown on this exhibit?

A Well, the original Hospah unit, unit itself involved Section 36, parts of the other section to the east there; I'm not sure what the number was on that, and all of Section 1 and that's Township 17 North, 9 West, and this was the Hospah unit. This was the Hospah unit. The southerly units of the Hospah sand pool were generally considered to be what is shown on this map as fault C and because of well number 46 in the southeast of the southwest being a dry hole and being downthrown from the rest of the reservoir to the north, it was generally conceded that all acreage south and east of fault C was not productive. However, at the time, just as a matter of convenience the entire Section 1 was included.

Q Now, let me stop you right there. At the time the Hospah pool itself was created in addition to other acreage what we are concerned with here in this hearing is this Section 1. At the time the Hospah pool itself was

created all of Section 1 was put into the Hospah pool because at that time there had been no development to the south and it was assumed that that well 46 that you referred to affectively condemned all the acreage south and east of fault C as you have shown it on here?

A That is correct.

Q And when the Hospah unit was formed it also included all of Section 1 even though that well 46 was in existence at that time?

A That is correct.

Q Okay. Continue your discussion if you will with respect to the subsequent development of the area.

A In late 1965 Tesoro put into effect a water injection program in the Hospah sand pool and at about the same time Wiggam Drilling Company in Section 12 began a development program in the upper Hospah in Section 12 to the south. Subsequent to this Walker Prothers in Section 6 and 7 to the east did some development work in the upper Hospah. While Walker Prothers were developing the upper Hospah they discovered that the lower Hospah was also productive. In the meantime, Wiggam Drilling Company had

sold Section 12 to Tenneco and Tenneco immediately began development of the lower Hospah. Then, Tenneco subsequent to that went back in and at the present time is developing the upper Hospah for flooding purposes, waterflood.

Q Now, you have two faults running through Section 1, this fault C and fault A as you have them shown on your map. Are these faults well defined; do you have a lot of control to pin them down?

A Yes, sir, fault A is cut by no less than 7 or 8 wells and is very well defined. Fault C is cut by at least 4 wells and is equally well defined.

Q So, as a result of the definition of these faults at the present time what is your opinion with respect to the situation, with respect to wells producing, let's say, in the three different distinct categories here of north of fault C and between fault C and fault A and south and east of fault A?

A Acreage north of fault C is producing from the Hospah sand pool but because of the faults is completely separated from any production to the south.

MR. UTZ: Excuse me, now, is that the upper sand?

THE WITNESS: Yes, we are speaking of the upper sand. We are speaking of all sands, really. It effectively separates upper - lower. Production south of fault A is also from a common source of supply in the upper sand in a common source of supply in the lower sand. In the area between fault A and fault C is a no man's land. It should be separated from either the north part of the field or from the south part of the field, if and when production is found. We have reason to believe that this area between the two faults could be productive. We don't feel at this time that number 46 necessarily condemns that acreage between the two faults.

Q (By Mr. Morris) Do you have plans for testing this intermediate area here between the two faults?

A We do. It's indicated there as well number 57, circled in red.

Q I take it from what you said that if production is established in that well number 57 that it will be producing from a reservoir that would be distinct and separated from the reservoir north of fault C and the

reservoir south of fault A?

A That is correct.

Q Now, at this point, just for clarification, Mr. Examiner, I would like to refer you to the nomenclature orders that have been entered by the Commission with respect to this area. Order No. R-13 define the Hospah pool and included in the Hospah pool all of Section 1; then, by Order No. R-3170, which was an application of Tenneco, the south half of the southeast quarter of Section 1 was deleted from the Hospah pool and the southeast quarter of the southeast quarter of Section 1 was placed in the south Hospah upper sand pool and that is the present situation with respect -- here, I am dealing with the situation with respect to Section 1. I'm not --

MR. UTZ: You say the south half of the southeast quarter?

MR. MORRIS: The south half of the southeast quarter was deleted from the Hospah pool but only the southeast of the southeast was put into the south Hospah upper sand pool. In other words, at the present time the present pool situation is that all of Section 1, except the south

half of the southeast quarter is in the Hospah pool and then the southeast quarter of the southeast quarter is in the south Hospah upper sand pool, but the southwest quarter of the southeast quarter is not in any pool.

Q (By Mr. Morris) Now, Mr. Denman, you have three wells circled in red in the south half of the southeast quarter of Section 1. What does that indicate?

A These are wells which we proposed to drill to the upper Hospah sand, the south Hospah upper sand pool as offset obligations as a result of Tenneco drilling their number 24, number 25 and number 26 along the north side of Section 12.

Q Now, these wells would be drilled into the upper sand. Does that create any problem with respect to the existing pool definitions or the existing definitions of the Hospah unit?

A The number 70 well as indicated in the southwest of the southwest would have to be put into the south Hospah upper sand pool. As it stands now that acreage as you just pointed out is not assigned to any pool.

Q Does the drilling of these wells create any

problem with respect to the Hospah unit itself?

A This acreage as included in the original unit, yes, would have to be included in a redetermination of participation factors in the unit, if it's not deleted from the unit.

Q All right. Now, how is your participation factor in the Hospah unit determined?

A Based solely on acre feet, acre feet of the gross sand, of net sand above water, underlying the lease.

Q Now, if you would analyze the situation with respect to correlative rights as to what would happen if these wells are good wells and if these wells should be poor wells.

A We feel the correlative rights would be badly mismanaged if we take the case that we drill three wells down there and they come in making only maybe two or three barrels apiece; that acreage would then participate in the unit based on the acre feet above water. Under this situation the Santa Fe acreage or the acreage in that south half of the southeast quarter would benefit greater than the amount of production that they were providing to the unit. If these were extremely good wells and participation

would be on the same basis -- it would have to be -- they would not be getting their fair share of the production contributed to the unit.

Q Now, would this make any particular difference if this was all one common reservoir so that this acreage was connected geologically to the reservoir that constitutes the bulk of the Hospah unit?

A We feel that the original intent of the Hospah unit was to limit participation to acreage north and west of fault C. Had the subsequent development indicated for instance a nose, nosing clear to the southeast of the southeast of Section 1, then I could see where it would be included in the unit but this was merely a step out, but with faulting in between, there is a very definite separation.

Q In other words, what you really have here are wells producing, even though they are not from the same sand, they are in effect from two separate reservoirs because of this graben area in between?

A That is correct.

Q Now, does Tesoro stand to benefit or lose from the segregation of this area into two separate reservoirs or a contraction of the unit area to coincide with the

line shown by fault C?

A Tesoro's participation in the unit at the present time under the most recent determination participation factors is a .823205 of the gross production. Our net income from the acreage in the south half of the southeast quarter of Section 1 underlying the Santa Fe A lease would be a .835 fraction, virtually less than two percent; slightly more than one percent different is all that we would gain.

Q When you say it would be a gain, you are assuming that well 77, 78 and 79 would be very good producing wells?

A Yes, right.

Q If they turned out to be poor wells you would actually stand to lose something like two percent?

A We could very well lose.

Q What is your proposal to the Commission with respect to what it should do, what kind of an order it should enter with respect to cleaning up the situation, with respect to the nomenclature of these two pools and contraction of the unit area?

A We feel that the Hospah sand pool should be contracted to include only that reservoir lying north and west of fault C and we feel that the -- we would like

to request that the south Hospah upper sand pool be extended to include the south half of the southwest -- no, the south half of the southwest of the southeast quarter of Section 1, leaving the area between fault A and fault C as undesignated for the time being.

Q Is your proposal actually shown by the red lines that you have drawn along fault A and fault C on your Exhibit 1?

A That is correct.

MR. MORRIS: If I may spell this out a little further, Mr. Examiner. Our actual proposal is that the Hospah pool be contracted so that the only portion of the Hospah pool in Section 1 be the following: In the northwest quarter of the Section all of that should be in the pool; in the northeast quarter of the Section, all except the southeast quarter of lot 7 and the south half of lot 6; those are actually lots rather than quarter quarter sections there and they are so indicated: in the southwest quarter all of the southwest quarter, except the northeast quarter of the southeast quarter of the southwest quarter and the south half of the southeast quarter of the southwest quarter;

then in the southeast quarter of the Section only the extreme northwest ten acres there which is the northwest of the northwest of that southeast quarter should be in the Hospah pool; that would make the south boundary of the pool conform to that red line that is drawn on Exhibit 1 along fault C there.

MR. UTZ: I wasn't listening very close or you misstated this last statement in regard to the northeast quarter of the southeast quarter. I thought you said that you wanted it all in, instead of out, except the northwest of the northwest of the southeast?

MR. MORRIS: What I intended to say was that red line that is drawn along quarter quarter quarter Section lines along fault C should become the south boundary of the Hospah pool. That's the effect of what I have said.

MR. UTZ: As shown on Exhibit 1?

MR. MORRIS: As shown on Exhibit 1. Then, the red boundary that is shown along fault A there should be the north boundary of the south Hospah upper sand pool and then the acreage in between should be left as an undesignated area at the present time, in the hopes that it might be even created as a middle Hospah pool by subsequent development.

Then, it's our further recommendation that if the Commission adopts our proposal with respect to the limits of the Hospah pool itself, along fault C that it also amend Order No. R-2797 which created the Hospah unit to contract the unit so that only that portion of Section 1 that is in the Hospah pool be in the Hospah unit.

MR. UTZ: Is this unit for both sides, upper and lower, both?

THE WITNESS: No, only the upper is unitized.

MR. UTZ: One more clarifying question before we proceed from this point. Are both the upper and lower sands defined in your unit? I mean in the unit area, do we have an upper pool and lower pool?

THE WITNESS: We do not have any production from the lower pool at this time. We have hopes of creating some production soon. If you will notice there is a well number 56 proposed in the northwest to the southwest of the northeast; well number 56, that is a proposed well which we hope to drill.

MR. UTZ: Give me that again.

THE WITNESS: It's in the northwest of the southwest of the northeast of Section 1.

MR. MORRIS: The one circled in red there?

THE WITNESS: Yes, sir. Number 56, but at the present time there is no lower sand production under what we would call the Hospah unit; it's all upper.

MR. UTZ: So we are only dealing with one pool here?

THE WITNESS: At this point, that's right.

MR. HATCH: What was the unitization agreement there?

MR. MORRIS: I am referring to the unit agreement and the unitized formation as defined in the unit agreement refers to the 7 lakes and Hospah Gallup formations as encountered at depths of 313 feet and 1533 feet respectively in a certain well which is a well located in the center of the northwest of the northeast of Section 1 --

THE WITNESS: Which would have to be well number 51.

MR. MORRIS: -- which would be well number 51 as shown on this exhibit.

Q (By Mr. Morris) Now, Mr. Denman, in that connection, is there any production from the 7 lakes

formation?

A No, not at this time.

Q So as far as the effect of the unitization agreement is concerned, it is this formation that's referred to as encountered at 1533 feet in this well number 51 is the upper Hospah sand?

A That is correct.

Q All right. If there be lower Hospah sand present it was not unitized by this unit agreement?

A No, sir, that's correct.

Q Mr. Denman, we are not really talking in this hearing today about the lower sand. We are just talking about contracting what is defined as the Hospah pool and also contracting the Hospah unit to conform to the redefined Hospah pool?

A That is correct.

Q Now, in your opinion, will this be necessary in order to protect the correlative rights of the owners of interest in the Hospah pool and in the south Hospah upper sand pool in Section 1?

A Yes, that's my opinion.

MR. MORRIS: At this time, Mr. Examiner, we would offer Exhibit No. 1 into evidence.

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

(Whereupon, Applicant's Exhibit 1 was entered into the record.)

MR. MORRIS: That's all I have at this time.

CROSS EXAMINATION

BY MR. UTZ:

Q Will it be necessary for you to recirculate this unit agreement to everybody in order to contract it?

A Actually, no provision --

MR. MORRIS: If I may again make a comment, Mr. Examiner, there is provision in the unit agreement for expanding the unit area, but there is no provision in it for contracting the unit area and we are somewhat at a loss to know exactly how to proceed because of that omission. However, we feel that the proper procedure would be as follows: That first, just as a matter of correlative rights, we think the Commission should enter its order redefining these two pools and contracting the unit agreement. We

believe the Commission has the authority under its general authority to protect correlative rights to enter an order contracting the unit area. Then, in all probability, we will take further action with respect to our unit participants to redefine our relative contractual rights.

MR. UTZ: I presume you would argue then that one of the reasons for contracting this unit would be because it's in two different structures.

MR. MORRIS: Yes, sir. We don't believe there is any question at all, any room for geologic interpretation here with respect to these two faults; they are so clearly defined.

Q (By Mr. Utz) Mr. Denman, how many wells did you say you had cut fault A?

A At least 7.

Q And four wells you said had cut fault G?

A Yes, at least 4.

Q I think it might be well if you would state the names and locations of those four wells.

A All right. Number 45 -- starting down at the

southwest corner there 45, 39, 8 and 9. I'm not positive; I believe that number 67 -- going on around to the east there, I believe 67 cut it also, but I'm not positive about that.

Q Well, that would then pretty well establish the location of the faults with the possible exception of the southwest where it goes through the southeast of the northeast quarter and lot 6 -- lot 6 and 7, really, isn't it?

A Yes, lot 6 and lot 7.

Q In your opinion, then, that would be the only questionable part as far as the location of the faults are concerned?

A Yes. This is what makes me think that it did cut 67 because I did this work myself originally and Mr. Charles Bankhead consultant out of Dallas duplicated the work at a later date and came up with virtually the same things; there was just so little difference in his interpretation and mine that there's -- in my opinion, there is no room for any question.

MR. UTZ: Are there other questions of the witness?

MR. ARNOLD: Did you make a recommendation what we call this old Hospah pool or were you going to still just call it the Hospah Gallup?

THE WITNESS: I see no reason to change the nomenclature on that.

MR. ARNOLD: The only thing I can think of I think you stated you were going to drill a lower sand pool and then there were 56 and if we get production there we will have the same problem in the north part that we had in the south where we had to differentiate between the lower sand the upper sand.

THE WITNESS: Yes, I assumed that at such time that we get production that something like that would have to be done.

MR. ARNOLD: Well, I thought this might be a good time to call it the north Hospah upper sand pool; at least, that would identify that.

THE WITNESS: I see. I would have no objection to that.

MR. LONG: I didn't quite get clear what explanation you gave there of the affect on royalty.

MR. MOPPIS: Malcolm, Mr. Denman's explanation, if I can paraphrase it and this will serve as my closing statement, is that if these wells 77, 78 and 79 come in as real good wells, then the amount of production that they contribute to the unit if they are left in the unit, the amount of production they would contribute to the unit would be far more than that acreage would receive under the unit agreement and since we are talking really about two separate reservoirs, it just doesn't make any sense to, in effect, penalize those wells when they are producing from a reservoir that's separate from the reservoir that up to now is contributing all of the production to the Hospah unit. Conversely, if these wells come in as poor wells so that the amount of production that they contribute to the unit is less than what they would receive under the participation factor, then this acreage would be receiving more than its fair share and under either alternative somebody is getting hurt because you are talking about production from two separate reservoirs.

MR. HATCH: Mr. Denman, does your unit agreement have any general provision for amendment of the unit agreement?

MR. MORRIS: I don't believe so.

MR. HATCH: No attempt has been made to amend the unit agreement itself, then?

THE WITNESS: Not as of this time, no, sir.

MR. HATCH: On your fault C you said it was well defined or well established that it exist. In your opinion, when was it first established?

THE WITNESS: These wells number 45, 39, 8 and 9 were some of the earliest wells drilled in the field and the fault can be seen in them so --

MR. HATCH: Before or after the unit agreement?

THE WITNESS: No, this would be prior to the unit agreement.

MR. HATCH: Prior to the unit agreement?

THE WITNESS: Yes.

MR. HATCH: What about fault A?

THE WITNESS: Fault A, of course, is a result of all the recent development since what, 1966?

MR. HATCH: Would have been established? --

THE WITNESS: Subsequent to this.

MR. HATCH: -- subsequent to the unit agreement?

THE WITNESS: Right.

MR. UTZ: But, you weren't concerned about the location of fault C at that time because you thought everything was dry south of the fault?

THE WITNESS: Number 46 certainly was downthrown and they never made a completion in it so that everything -- all acreage south and east of that point was considered dry.

MR. UTZ: As I understand, all of Section 1 is Santa Fe Railroad land, is it?

THE WITNESS: I believe that's right, yes.

MR. UTZ: Section 36 is state land?

THE WITNESS: It varies; some of it is state land, not all of it.

MR. UTZ: How about Section 31?

THE WITNESS: We used to carry the ownership on the map, but once it was unitized we stopped doing it. It is Santa Fe Railroad land.

MR. UTZ: How about state land, is there any over-riding royalty on that?

MR. MORRIS: Mr. Examiner, for your reference, there is an attachment to the unit agreement itself that sets forth all of the ownership at that time by tract number and there appear to be over-riding royalty interest under all of the tracts but they are not common from tract to tract.

MR. UTZ: What I am getting at is that the deletion of this production in the south part of the southeast quarter of Section 1 will affect the other interest in the unit.

MR. MORRIS: Yes, sir, that's the very reason we think that there will be a violation of someone's correlative rights, depending on whether these are good or bad wells.

MR. UTZ: Is there any participating area set out in this unit or is it all participating?

THE WITNESS: It's all participating as originally set out, yes. However, participation factors were never figured, of course, on anything except the acreage north of fault C because that was all that was productive in the upper sand.

MR. UTZ: Are there other questions?

The witness may be excused.

Statements? The case will be taken under
advisement.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
RICHARD DENMAN	
Direct Examination by Mr. Morris	2
Cross Examination by Mr. Utz	18

<u>EXHIBIT</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's 1	2	18

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, GLENDA BURKS, 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 2nd day of May, 1969.

Glenda Buick
NOTARY PUBLIC

My Commission Expires:

March 12, 1973.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 4116
heard by me on 12/11/69.
1969
Examiner
New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

May 8, 1969

Mr. Richard S. Morris
Montgomery, Federici, Andrews,
Hannahs & Morris
Attorneys at Law
Post Office Box 2307
Santa Fe, New Mexico

Re: Case No. 4116
Order No. R-2797-A
Applicant:
Tesoro Petroleum Corporation

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

Copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC x

Other Unit Division - State Land Office

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 4116
Order No. R-2797-A
NOMENCLATURE

APPLICATION OF TESORO PETROLEUM CORPORATION
FOR THE AMENDMENT OF ORDER NO. R-2797 AND FOR
THE EXTENSION OF THE SOUTH HOSPAN UPPER SAND
POOL, MCKINLEY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 23, 1969,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 8th day of May, 1969, 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, Tesoro Petroleum Corporation, seeks
the contraction of the horizontal limits of the Hospah Pool,
McKinley County, New Mexico, by deleting the following area:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM

Section 1: S/2 of Lot 6, SE/4 of Lot 7,
Lot 8, Lot 9, S/2 NW/4 SE/4,
NE/4 NW/4 SE/4, S/2 SE/4 SW/4,
and NE/4 SE/4 SW/4

(3) That the applicant seeks the extension of the horizontal
limits of the South Hospah Upper Sand Oil Pool, McKinley County,

-2-

CASE No. 4116
Order No. R-2797-A

New Mexico, to include the following area:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM
Section 1: S/2 SW/4 SE/4

(4) That the applicant also seeks the contraction of the Hospah Unit Area, approved by Order No. R-2797, by deleting therefrom the following area:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM
Section 1: S/2 of Lot 6, SE/4 of Lot 7,
Lot 8, Lot 9, Lot 10, Lot 11,
SW/4 SE/4, S/2 NW/4 SE/4,
NE/4 NW/4 SE/4, S/2 SE/4 SW/4,
and the NE/4 SE/4 SW/4

(5) That information presently available establishes that the area described above in Finding No. (2) is separated from the rest of the Hospah Pool by a fault and that the horizontal limits of said pool should, in order to prevent waste and protect correlative rights, be contracted by deleting said acreage.

(6) That said Hospah Pool should be redesignated the Hospah Upper Sand Oil Pool.

(7) That information presently available establishes that the area described above in Finding No. (3) should be included in the South Hospah Upper Sand Oil Pool.

(8) That the proposed contraction of said Hospah Unit Area should promote the prevention of waste and the protection of correlative rights.

IT IS THEREFORE ORDERED:

(1) That the Hospah Pool, McKinley County, New Mexico, is hereby redesignated the Hospah Upper Sand Oil Pool.

(2) That the horizontal limits of said Hospah Pool, as redesignated the Hospah Upper Sand Oil Pool, are hereby contracted by the deletion therefrom of the following-described area:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM
Section 1: S/2 of Lot 6, SE/4 of Lot 7,
Lot 8, Lot 9, S/2 NW/4 SE/4,
NE/4 NW/4 SE/4, S/2 SE/4 SW/4,
and NE/4 SE/4 SW/4

-3-

CASE No. 4116

Order No. R-2797-A

(3) That the horizontal limits of the South Hospah Upper Sand Oil Pool, McKinley County, New Mexico, are hereby extended to include the following-described area:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM
Section 1: S/2 SW/4 SE/4

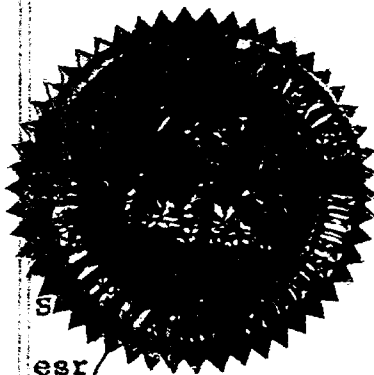
(4) That the proposed plan of contraction of the Hospah Unit Area, as described above in Finding No. (4), is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions in the Hospah Unit Agreement, as amended to delete therefrom the area described in Finding No. (4), this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement, as amended to delete therefrom the area described in Finding No. (4), within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement, as amended, reflecting the subscription of those interests having joined or ratified.

(6) That this order shall become effective upon the approval of said unit agreement, as amended, by the Commissioner of Public Lands for the State of New Mexico; that this order shall terminate ipso facto upon the termination of said unit agreement, as amended, and that the last unit operator shall notify the Commission immediately in writing of such termination.

(7) 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 CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

ALEX J. ARRIJO, Member

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

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 3131
Order No. R-2797

APPLICATION OF TEXSTAR PETROLEUM
COMPANY FOR APPROVAL OF THE HOSPAN
UNIT AGREEMENT, MCKINLEY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 28, 1964, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 10th day of November, 1964, 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, Texstar Petroleum Company, seeks approval of the Hospah Unit Agreement covering 1437.27 acres, more or less, of State and Fee lands described as follows:

MCKINLEY COUNTY, NEW MEXICO
TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM
Section 1: All

TOWNSHIP 18 NORTH, RANGE 8 WEST, NMPM
Section 31: Lots 2, 3, and 4 and
E/2 SW/4

TOWNSHIP 18 NORTH, RANGE 9 WEST, NMPM
Section 36: NE/4 NW/4, S/2 NW/4, NW/4 NE/4,
S/2 NE/4, and S/2

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

-2-

CASE No. 3131

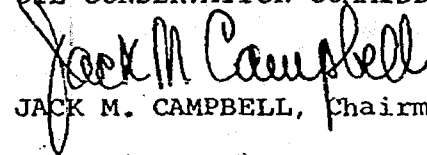
Order No. R-2797

IT IS THEREFORE ORDERED:

- (1) That the Hospah Unit Agreement is hereby approved.
- (2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.
- (3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.
- (4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.
- (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 MEXICO
OIL CONSERVATION COMMISSION


JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

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

esr/

Docket No. 12-69

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 23, 1969

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 4079: (Continued from the March 26, 1969, Examiner Hearing)
Application of Robert B. Holt for the creation of a new pool, assignment of a discovery allowable, and the promulgation of special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Middle Pennsylvanian oil pool for his Aztec State Well No. 2 located in Unit A of Section 26, Township 13 South, Range 32 East, Lea County, New Mexico, and for the assignment of an oil discovery allowable in the amount of approximately 48,715 barrels to said well. Applicant further seeks the promulgation of special pool rules for said pool, including a provision for 160-acre proration units and the assignment of 80-acre allowables.
- CASE 4106: Application of Southland Royalty Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Permo-Pennsylvanian formation in the perforated interval from approximately 9485 feet to 9713 feet in its Guye Well No. 4 located in Unit F of Section 12, Township 11 South, Range 33 East, Inbe Permo-Pennsylvanian Pool, Lea County, New Mexico.
- CASE 4107: Application of Coastal States Gas Producing Company for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the West Sawyer-San Andres Pool, Lea County, New Mexico, including a provision for 80-acre spacing and proration units.
- CASE 4108: Application of Humble Oil & Refining Company for the rededication of acreage, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to recomplete its New Mexico "V" State Well No. 5, a non-commercial Wantz-Abo oil producer, to a Tubb gas producer and to consolidate the 40 acres presently dedicated to said well with the 120 acres presently dedicated to its New Mexico "V" State Well No. 11, a Tubb gas producer, to form a standard 160-acre proration unit comprising the SW/4 of Section 10, Township 21 South, Range 37 East, Tubb Gas Pool, Lea County, New Mexico. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in any proportion.
- CASE 4109: Application of Humble Oil & Refining Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the South Lea Unit Area comprising 8,324.16 acres, more or less, of State, Federal, and Fee lands in Township 26 South, Range 36 East, Lea County, New Mexico.

- CASE 4110: Application of Atlantic-Richfield Company for a waterflood project and unorthodox injection well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pilot waterflood project by the injection of water into the Queen formation through one well to be drilled at an unorthodox location 100 feet from the North and West lines of Section 23, Township 18 South, Range 31 East, Shugart Pool, Eddy County, New Mexico.
- CASE 4111: Application of Tenneco Oil Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Morton Federal Well No. 1, located in Unit A of Section 12, Township 9 South, Range 35 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Vada-Pennsylvanian Pool and the disposal of produced salt water through the intermediate casing-production casing annulus into the San Andres, Abo and possibly other formations in the open-hole interval from approximately 4050 feet to 8120 feet.
- CASE 4112: Application of P-M Drilling Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in the perforated interval from approximately 5062 feet to 5100 feet in its James Federal Well No. 1 located in Unit A of Section 35, Township 23 South, Range 32 East, Triste Draw-Delaware Pool, Lea County, New Mexico.
- CASE 4113: Application of Texas Pacific Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to substitute its State "D" A/c-1 Well No. 1 located in Unit A of Section 2, Township 12 South, Range 33 East, in lieu of its State "C" A/c-1 Well No. 1 located in Unit B of said Section 2 as the producing well for the proration unit comprising the N/2 NE/4 of said Section 2, Bagley-Siluro-Devonian Pool, Lea County, New Mexico.
- CASE 4114: Application of Gulf Oil Corporation for two unorthodox oil well locations and amendment to Order No. R-2729, Lea County, New Mexico. Applicant in the above-styled cause, seeks authority to drill two producing oil wells at unorthodox locations in Township 19 South, Range 35 East, as infill wells in the West Pearl Queen Unit Waterflood Project, Pearl Queen Pool, Lea County, New Mexico, said wells to be located as follows:

West Pearl Queen Unit Well No. 164 to be located 1325 feet from the North line and 2635 feet from the West line of Section 32;

West Pearl Queen Unit Waterflood Well No. 165 to be located 1420 feet from the South line and 1325 feet from the West line of Section 29;

(Case 4114 continued)

Applicant also seeks the amendment of Order No. R-2729, which order authorized the aforesaid waterflood project, to establish a procedure whereby additional injection wells and producing wells at unorthodox infill locations, as may be necessary to complete an efficient injection and producing pattern, may be approved administratively.

CASE 4115: Application of Southern Union Production Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the W/2 of Section 16, Township 29 North, Range 9 West, Basin-Dakota Pool, San Juan County, New Mexico. Said acreage to be dedicated to a well to be drilled at a standard location in the W/2 of said Section 16. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4116: Application of Tesoro Petroleum Corporation for the amendment of Order No. R-2797 and for the extension of the South Hospah-Upper Sand Pool, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-2797, which order approved the Hospah Unit Agreement, to delete from said unit agreement 233.87 acres in the Southeast portion of Section 1, Township 17 North, Range 9 West, McKinley County, New Mexico. Applicant also seeks the extension of the South Hospah-Upper Sand Pool to include a portion of the Southeast quarter of said Section 1.

CASE 4117: Application of Eastern Petroleum Company for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Rattlesnake-Dakota Pool, San Juan County, New Mexico, permitting the drilling of wells on 2½-acre spacing provided that no well be located nearer than 50 feet to the outer boundary of the quarter-quarter section and no nearer than 165 feet to another well producing from the same pool, and provided further, that a 40-acre proration unit would be subject to a 40-acre allowable regardless of the number of wells on the unit.

CASE 4118: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle gas production from undesignated Fruitland and Pictured Cliffs gas pools in the well-bore of its Federal "I" Well No. 4, located in the NE/4 NW/4 of Section 1, Township 29 North, Range 14 West, San Juan County, New Mexico.

CASE 4096: (Continued from the April 5, 1969, Examiner Hearing)

Application of Kersey & Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority

-4- Examiner Hearing - April 23, 1969

Docket No. 12-69

to institute a waterflood project by the injection of water into the Seven Rivers formation through four wells located in Units C, D, and F of Section 25, Township 17 South, Range 28 East, Aid (Yates-Seven Rivers) Pool, Eddy County, New Mexico.

CASE 4078: (Continued from the April 9, 1969, Examiner Hearing)

Application of J. Gregory Merrion for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Devils Fork-Gallup Pool and an undesignated Mesaverde oil pool in the well-bore of his NCRA State Well No. 3 located in Unit L of Section 16, Township 24 North, Range 6 West, Rio Arriba County, New Mexico.

Case 4116
Heard 4-23-69
Rec. 4-29-69

Grant Tenoro the following:

1. Delete the Hoopah Unit
as follows: 17N-9W- Sec. 1
S/2 lot 6, SE/4 lot 7, lots
8, 9, 10, 11, SW/4 SE/4, S/2
NE/4 SE/4, NE/4 NW/4 SE/4,
S/2 SE/4 SW/4, NE/4 SE/4
SW/4.
2. Delete Hoopah Oil Pool
as follows:
17N-9W- Sec. 1.
S/2 lot 6, SE/4 lot 7,
Lots 8+9, S/2 NW/4 SE/4,
NE/4 NW/4 SE/4, S/2 SE/4
SW/4, NE/4 SE/4 SW/4.
3. Expand So. Hoopah - Upper
Sand Pool as follows:
17N-9W- Sec. 1
S/2 SE/4
4. Change Name of Hoopah Pool
to: Hoopah - Upper Sand
Oil Pool.

Grant, Mf

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
CASE NO. 4117

NORTH CENTR

CENTRAL BLO

T. 18N.
T. 17N.

SOUTH CENTR

SOUTH BLOCK

THICKNESS
OIL COLUMN
UPPER HOSPAP
HOSPAP FIELD

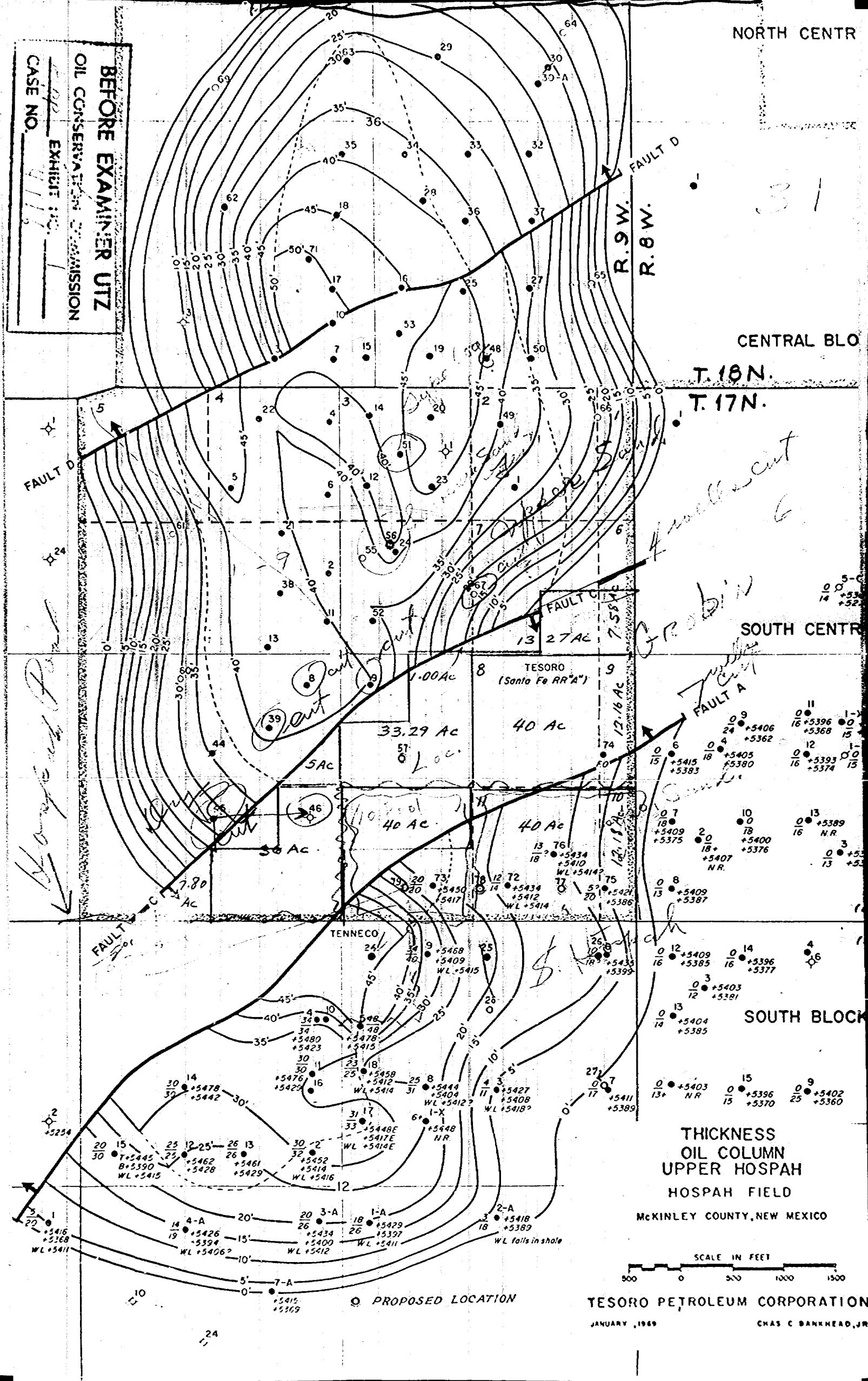
McKINLEY COUNTY, NEW MEXICO

SCALE IN FEET
500 0 500 1000 1500

TESORO PETROLEUM CORPORATION

JANUARY, 1969

CHAS C BANKHEAD, JR



BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION OF TESORO PETROLEUM
CORPORATION FOR AMENDMENT OF
ORDER NUMBER R-2797 TO CONTRACT
THE HOSPAH UNIT AND FOR EXTEN-
SION OF THE SOUTH HOSPAH-UPPER
SAND POOL, MCKINLEY COUNTY, NEW
MEXICO

Case No. 4116

A P P L I C A T I O N

Comes now Tesoro Petroleum Corporation by its attor-
neys and applies to the New Mexico Oil Conservation Commission
for amendment of Order No. R-2797 to contract the Hospah Unit
and for extension of the South Hospah-Upper Sand Pool, McKinley
County, New Mexico, and in support of its application states:

1. By Order No. R-2797 entered in Case Number 3131
on November 10, 1964, the Commission approved the Hospah Unit
Agreement which covered, among other lands, all of Section 1,
T. 17 N., R. 9 W., McKinley County, New Mexico.

2. Subsequent to the approval of the Hospah Unit
by Order No. R-2797, extensive development occurred in the
Unit and on lands offsetting the said Unit, and at the pre-
sent time, and it presently appears, that the said Section 1
is cut by two faults, designated as Faults A and C on the
porosity map which is attached to this application. Due to
the existence of these faults, applicant believes that the
acreage in the said Section 1, lying south and east of Fault C
should be deleted from the Hospah Unit. Accordingly, appli-
cant requests that the Commission enter its order amending
Order No. R-2797 to contract the Hospah Unit to include in
the said Section 1 only that acreage lying north and west
of the line depicted by Fault C on the attached porosity map.

DOCKET MAILED

4-10-69

2. Due to the location of Fault A, the South Hospah-Upper Sand Pool as established by Order No. R-3170, and amended by Order No. R-3403, should be extended so as to include all of that portion of the said Section 1, lying south and east of Fault A as depicted upon the porosity map attached to this application.

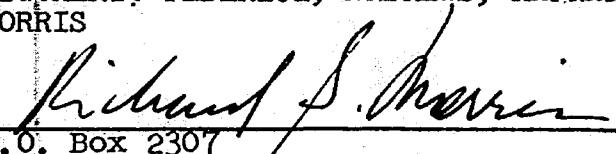
3. Applicant is of the opinion that the acreage lying between Faults A and C in the said Section 1 is productive from the Upper Hospah Sand but should not be included in the Hospah Unit or the South Hospah-Upper Sand Pool.

4. Approval of this application is necessary in order to prevent waste and protect correlative rights.

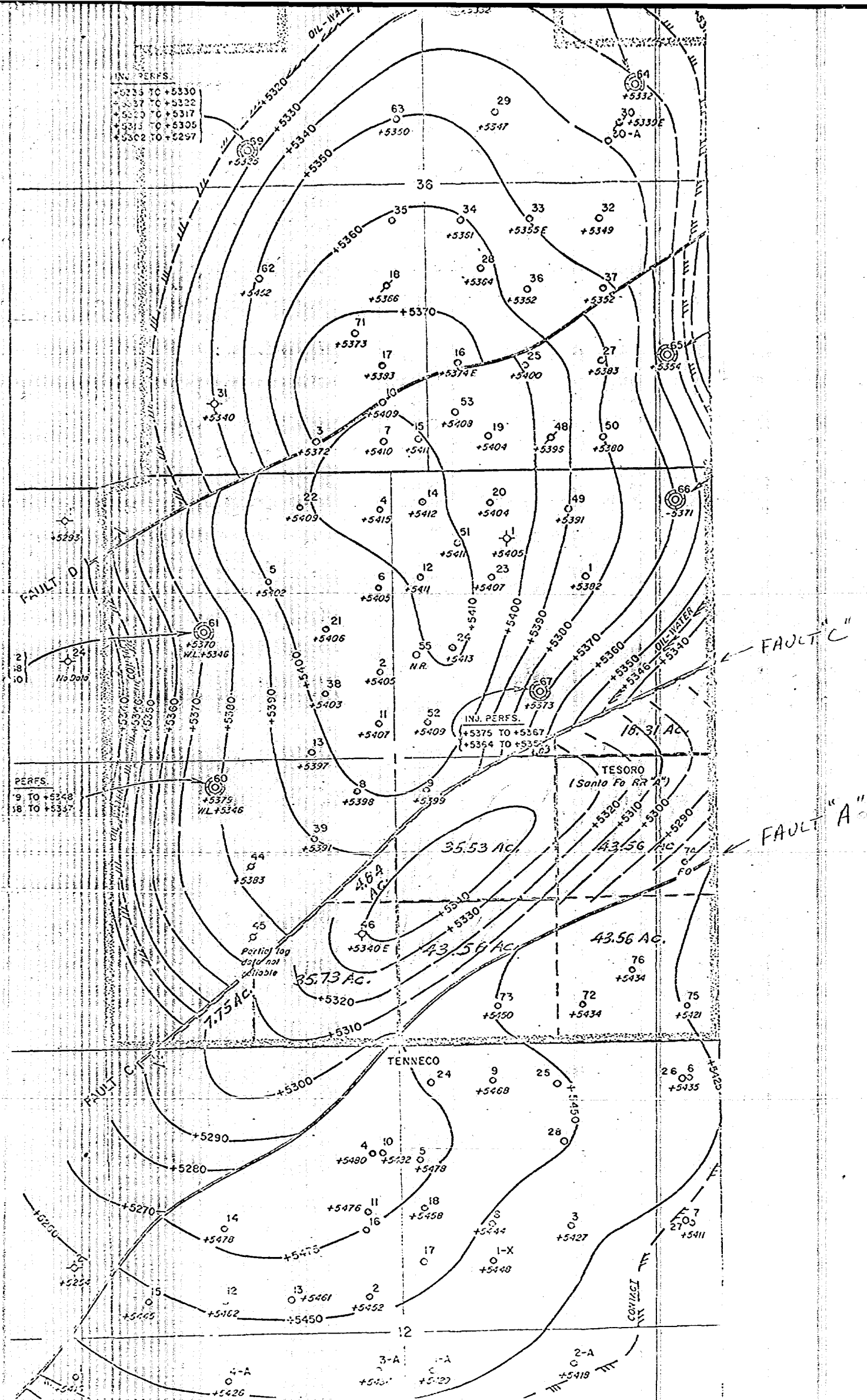
WHEREFORE, Tesoro Petroleum Corporation requests that this application be set for hearing before the Commission, or one of its Examiners, and that the Commission enter its order amending Order No. R-2797 to contract the Hospah Unit and extending the South Hospah-Upper Sand Pool, all as requested by this application.

MONTGOMERY, FEDERICI, ANDREWS, HANNAHS
& MORRIS

By


P.O. Box 2307
Santa Fe, New Mexico 87501

Attorneys for Tesoro Petroleum
Corporation



DRAFT

GMH/esr
May 5, 1969

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:

RECORDS CENTER

CASE No. 4116

Order No. R- 279

NOMENCLATURE

APPLICATION OF TESORO PETROLEUM CORPORATION
FOR THE AMENDMENT OF ORDER NO. R-2797 AND FOR
THE EXTENSION OF THE SOUTH HOSPAH-UPPER SAND
POOL, MCKINLEY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 23, 1969,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this day of May, 1969, 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, Tesoro Petroleum Corporation, seeks
the contraction of the horizontal limits of the Hospah Pool,
McKinley County, New Mexico, by deleting the following area:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM
Section 1: S/2 of Lot 6, SE/4 of Lot 7,
Lot 8, Lot 9, S/2 NW/4 SE/4,
NE/4 NW/4 SE/4, S/2 SE/4 SW/4,
and NE/4 SE/4 SW/4

(3) That the applicant seeks the extension of the horizontal
limits of the South Hospah Upper Sand Oil Pool, McKinley County,
New Mexico, to include the following area:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM
Section 1: S/2 SW/4 SE/4

(4) That the applicant also seeks the contraction of the Hospah Unit Area, approved by Order No. R-2797, by deleting therefrom the following area:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM

Section 1: S/2 of Lot 6, SE/4 of Lot 7,
Lot 8, Lot 9, Lot 10, Lot 11,
SW/4 SE/4, S/2 NW/4 SE/4,
NE/4 NW/4 SE/4, S/2 SE/4 SW/4,
and the NE/4 SE/4 SW/4

(5) That ~~reservoir~~ information presently available establishes that the area described above in Finding No. (2) is separated from the rest of the Hospah Pool by a fault and that the horizontal limits of said pool should, in order to prevent waste and protect correlative rights, be contracted by deleting said acreage.

(6) That said Hospah Pool should be redesignated the Hospah Upper Sand Oil Pool.

(7) That ~~reservoir~~ information presently available establishes that the area described above in Finding No. (3) should be included in the South Hospah Upper Sand Oil Pool.

(8) That the proposed contraction of said Hospah Unit Area should promote the prevention of waste and the protection of correlative rights.

IT IS THEREFORE ORDERED:

(1) That the Hospah Pool, McKinley County, New Mexico, is hereby redesignated the Hospah Upper Sand Oil Pool.

(2) That the horizontal limits of said Hospah Pool, as redesignated the Hospah Upper Sand Oil Pool, are hereby contracted by the deletion therefrom of the following-described area:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM

Section 1: S/2 of Lot 6, SE/4 of Lot 7,
Lot 8, Lot 9, S/2 NW/4 SE/4,
NE/4 NW/4 SE/4, S/2 SE/4 SW/4,
and NE/4 SE/4 SW/4

(3) That the horizontal limits of the South Hospah Upper Sand Oil Pool, McKinley County, New Mexico, are hereby extended to include the following-described area:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM
Section 1: S/2 SW/4 SE/4

(4) That the proposed plan of contraction of the Hospah Unit Area, as described above in Finding No. (4), is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions in the Hospah Unit Agreement, ^{*to delete therefrom the area described in Finding No. (4),*} as amended, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil and gas therefrom.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement, as amended ^{*to delete therefrom the area described in Finding No. (4),*} within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement, as amended, reflecting the subscription of those interests having joined or ratified.

(6) That this order shall become effective upon the approval of said unit agreement, as amended, by the Commissioner of Public Lands for the State of New Mexico; that this order shall terminate ^{*said*} ipso facto upon the termination of unit agreement, as amended, and that the last unit operator shall notify the Commission immediately in writing of such termination.

-4-

CASE No. 4116

(7) 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.