CASE 2439: Application of SUNRAY MID-CONT. for non-standard oil unit & unorthodox well location.

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GOVERNOR EDWIN L. MECHEM CHAIRMAN

State of New Mexico Oil Conservation Commission

LAND COMMISSIONER E. S. JOHNNY WALKER MEMBER



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

P.O. BOX 871 SANTA FE

December 14, 1961

	Re:	CASE NO	2439
Mr. Norbert E. Proctor Division Attorney Sunray Mid-Continent Oil Company		ORDER NO	R-2137
		APPLICANT: Sunray Mid-Continent Oil Co.	
101 University Boulevard Denver 6, Colorado			

Dear Sir:

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

A. L. PORTER, Jr.
Secretary-Director

Carbon copy of order also sent to:

Hobbs OCC___X
Artesia OCC__X
OTHER____Nr. Burns Errebo

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. 2439 Order No. R-2137

APPLICATION OF SUNRAY MID-CONTINENT OIL COMPANY FOR A 67.04-ACRE HON-STANDARD OIL PRORATION UNIT AND AN UNORTHODOX WELL LOCATION, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on November 29, 1961, at Santa Pe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 13th day of December, 1961, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Sunray Mid-Continent Oil Company, proposes the establishment of a 67.04-acre non-standard oil proration unit in the Totah-Gallup Oil Pool, comprising Lots 2, 3, and 4 of Section 14, Township 29 North, Range 14 West, HMPM, San Juan County, New Mexico.
- (3) That the applicant further proposes to dedicate said unit to a well to be drilled at an unorthodox location 330 feet from the West line of said section 14.
- (4) That the area of the San Juan River Channel lying North of the mid-channel and adjacent to the above-described 67.04-acre non-standard oil progation unit and consisting of 7.84 acres is unlessed Federal land which should be eligible for communitization with the said 67.04-acre non-standard oil progation unit at such time as it is lossed.

-2-CASE No. 2439 Order No. R-2137

- (5) That the entire 67.04-acre tract can reasonably be presumed to be productive of oil from the Totah-Gallup Oil Pool.
- (6) That approval of the subject application will neither cause waste nor impair correlative rights.

IT IS THEREFORE COMME

(1) That a 67.04-acre non-standard oil proration unit in the Totah-Gallup Oil Pool comprising Lots 2, 3, and 4 of Section 14, Township 29 North, Range 14 West, NMPM, San Juan County, New Mexico, is hereby established.

PROVIDED HOWEVER, That the area of the San Juan River Channel lying North of the mid-channel and adjacent to the above-described 67.04-acre non-standard oil proration unit and consisting of 7.84 acres shall be eligible for communitization with the said 67.04-acre non-standard oil proration unit at such time as it is leased.

- (2) That the applicant, Sunray Mid-Continent Oil Company, is hereby authorized to dedicate said 67.04-acre non-standard oil proration unit to a well to be drilled at an unorthodox location 330 feet from the North line and 2510 feet from the West line of said Section 14.
- (3) That the allowable assigned to the above-described 67.04-acre non-standard oil proration unit shall bear the same ratio to a standard allowable in the Totah-Gallup Oil Pool as the acreage in said unit bears to 80.
- (4) That in the event it is determined by an official resurvey, or otherwise, that the acreage in said proration unit is greater or smaller than 67.04 acres, the acreage to be allocated to said unit shall correspond to the change.
- (5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DOME at Santa Pe, New Mexico, on the day and year bereinabove designated.

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

B. S. WALKER, Nember

L. PORTER, Jr., Member & Secretary

OIL CONSERVATION COMMISSION P. O. BOX 871

SANTA FE. NEW MEXICO

Can 2439

October 26, 2501

Mr. Morbert E. Proctor Sunray Mid-Continent Oil Company Division Attorney Western Division 101 University Boulevard Denver 6, Colorado

Dear Mr. Proctor:

Your application, dated October 24, 1961, for administrative approval of a non-standard oil provation unit and for approval of an unorthodox oil well location in the Total-Gallum Oil Pool. San Them County Here Marico. the Totah-Gallup Oil Pool, San Than County, New Mexico, is being set for hearing before a Commission Examiner on November 29, 1961.

edministrative approval under the Commission Rules and Regulations, it is being set for hearing due to the nature of the problems involved.

RICHARD S. MORRIS Attorney

MEN/OST

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 29, 1961

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, as alternate examiner:

Cases listed on this docket after Case 2444 will not be heard before 1 P.M.

CASE 2434:

Application of Amerada Petroleum Corporation for a dual completion and a 150-acre non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its State DA Well No. 1 located in Unit L, Section 16, Township 21 South, Range 37 East, Lea County, New Mexico, as a dual completion (conventional) in the Eumont Gas Pool and the Drinkard Pool, with the production of oil from the Drinkard zone to be through a string of 2 3/8-inch tubing and the production of gas from the Eumont zone to be through the tubing-casing annulus. Applicant further seeks the establishment of a 160-acre non-standard gas proration unit in the Eumont Gas Pool, comprising the N/2 S/2 of said Section 16, said unit to be dedicated to said State DA Well No. 1.

CASE 2435:

Application of Cities Service Oil Company for a triple completion, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks permission to complete its flodges "B" Well No. 3, located in Unit L of Section 1, Township 25 South, Range 37 East, Lea County, New Mexico, as a triple completion (conventional) in undesignated Blinebry and Drinkard pools and in the Fusselman formation adjacent to the North Justis-Fusselman pool, with the production of oil from the Blinebry and Drinkard zones to be through parallel strings of 2 1/16-inch tubing and the production of oil from the Fusselman zone to be through a parallel string of 2 3/8-inch tubing.

CASE 2436:

Application of Hudson & Hudson for two unorthodox oil well locations, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of two unorthodox oil well locations in the Maljamar Pool, one well to be located within 100 feet and not less than 25 feet of the Southeast corner of Unit J, Section 24, Township 17 South, Range 31 East, Eddy County, New Mexico, and one well to be located within 100 feet and not less than 25 feet of the Northwest corner of Unit O in said Section 24.

 $\frac{-2}{\text{Docket No. } 32-61} = \frac{163.62}{67.04} = \frac{232.16}{7.84}$

CASE 2437:

Application of J. C. Williamson for a daul completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Westates-Federal Well No. 6, located in Unit D of Section 1, Township 25 South, Range 37 East, Lea County, New Mexico, as a dual completion (conventional) in the McKee and Ellenburger formations with the production of oil from both zones to be through parallel strings of 2 3/8-inch tubing.

CASE 2438:

Application of Texaco Inc. for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its V. M. Henderson Well No. 6, located in Unit C of Section 30, Township 21 South, Range 37 East, Lea County, New Mexico, as a triple completion in the Paddock, Blinebry Gas, and Drinkard Pools with the production of oil from the Drinkard formation to be through a tapered string of tubing of 2 1/16-inch and 1 1/4-inch diameter and from the Paddock formation to be through a parallel string of 2 1/16-inch tubing and the production of gas from the Blinebry formation to be through the tubing-casing annulus.

CASE 2421:

(Cont.)

Application of Texaco Inc. for approval of a unit agreement and for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Northeast Caprock (Queen) Unit Agreement, covering 1360 acres, more or less, in Township 12 South, Range 32 East, Caprock Queen Pool, Lea County, New Mexico. Applicant further seeks authority to institute a unit-wide waterflood by the injection of water into the Queen formation through 19 wells located within said unit.

CASE 2439:

Application of Sunray Mid-Continent Oil Company for a 67.04-acre non-standard oil proration unit and an unorthodox well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of 67.04-acre non-standard oil proration unit in the Totah-Gallup Oil Pool, comprising Lots 2, 3 and 4 of Section 14, Township 29 North Range 14 West, San Juan County, New Mexico, said unit to be dedicated to a well to be located at an unorthodox location 330 feet from the North line and 2510 feet from the West line of said Section 14.

Docket No. 32-61

CASE 2440:

Application of Socony Mobil Oil Company for permission to transfer allowables, Ric Arriba County. New Mexico. Applicant, in the above-styled cause, seeks permission to shut-in the Boulder-Apache Well No. 12-14, located in Section 14, Township 28 North, Range 1 West, Boulder-Mancos Oil Pool, Rio Arriba County, New Mexico, and transfer its allowable to the Boulder-Apache Well No. 23-14 located in said Section 14 for the purpose of conducting interference tests.

CASE 2441:

Application of Water Flood Associated, Inc., for a waterflood project in the Maljamar and Robinson Pools, Lea County, New Mexico. Applicant, in the above styled cause, seeks permission to institute a waterflood project in the Maljamar and Robinson Pools in portions of Sections 5,6 and 7, all in Township 17 South, Range 32 East, Lea County, New Mexico.

CASE 2442:

Application of El Paso Natural Gas Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Mescalero Ridge Unit Well No. 1. located in Unit D of Section 21, Township 19 South, Range 34 East, Lea County, New Mexico, as a dual completion (conventional) in the Bone Springs and Morrow formations, with the production of oil from the Bone Springs zone to be through a string of 2 3/8-inch tubing and the production of gas from the Morrow zone to be through a parallel string of 2 1/16-inch tubing.

CASE 2443:

Application of Gulf Oil Corporation for an 80-acre non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of an 80-acre non-standard gas proration unit in the Eumont Gas Pool, comprising the E/2 NE/4 of Section 34, Township 19 South, Range 36 East, Lea County, New Mexico, said unit to be dedicated to the J. W. Smith Well No. 2, located 660 feet from the North and East lines of said Section 34.

The following cases will not be heard before 1 P.M.

CASE 2444:

Application of Aztec Oil & Gas Company for an exception to Rule 309-A, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 309-A to permit the Totah-Gallup oil production from three wells on

-4-Docket No. 32-61

applicant's Hagood Federal Lease, located in Section 12, Township 29 North, Range 13 West, San Juan County, New Mexico, to be transported prior to measurement on said lease to applicant's Smith "C" Lease, located in Section 18, Township 29 North, Range 13 West.

CASE 2445:

Application of Southwest Production Company for an order extending the Flora Vista-Mesaverde Pool, San Juan County, New Mexico, and establishing special rules and regulations in said pool. Applicant, in the above-sigled cause, sacks an order extending the Flora Vista-Mesaverde Pool to include Sections 22, 23, 26 and 27, all in Township 30 North, Range 12 West, San Juan County, New Mexico, and establishing special rules and regulations including a provision for 320-acre spacing units in said pool.

CASE 2446:

Application of Southwest Production Company for an order pooling all mineral interests in the Basin-Dakota Gas Pool in the E/2 of Section 22, Township 30 North, Range 12 West, San Juan County, New Mexico. Interested parties include Roy Rector and O. G. Shelby, both of Flora Vista, New Mexico, and Myron T. Dale, address unknown.

CASE 2416:

(Cont.)

Application of Southwest Production Company for an order pooling all mineral interests in an undesignated Mesaverde gas pool in the E/2 of Section 22, Township 30 North, Range 12 West, San Juan County, New Mexico.

CASE 2447:

Application of Humble Oil & Refining Company for approval of a pressure maintenance project in the Cha Cha-Gallup Oil Pool, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks permission to institute a pressure maintenance project in the Cha Cha-Gallup Oil Pool by the injection of water into certain wells located on the Navajo Indian Reservation in Sections 13 through 29 and 33 through 36, Township 29 North, Range 14 West, San Juan County, New Mexico. Applicant further seeks the promulgation of specail rules and regulations governing said project.

CASE 2448:

Application of Pan American Petroleum Corporation for a pressure maintenance project. San Juan County, New Mexico. Applicant, in the above-styled cause, seeks permission to institute a pressure maintenance project on its C. J. Holder,

-5-Bocket No. 32-61

State Holder Oil Unit, State "CA", State Oil Unit and Gallegos Canyon Unit Leases, San Juan County. New Mexico, in the Cha Cha-Gallup Oil Poul with water injection initially to be through five wells located in Sections 8 and 16, Township 28 North, Range 13 West, and Section 23, Township 28 North, Range 12 West, and requests adoption of special rules to govern the operation of said project.

CASE 2449:

Application of Pan American Petroleum Corporation for a pressure maintenance project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks permission to institute a pressure maintenance project on its Navajo Tribal "H" and Gallegos Canyon Unit Leases, San Juan County, New Mexico, in the Totah-Gallup Oil Pool with water injection initially to be through five wells located in Section 35, Township 29 North, Range 13 West, Section 12, Township 28 North, Range 13 West, and Sections 13 and 24, Township 29 North, Range 14 West, and requests adoption of specail rules to govern the operation of said project.



Western Division

October 24, 1961

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

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

Gentlemen:

Re: Application for administrative approval of a nonstandard oil proration unit and for approval of unorthodox location of well dedicated to such unit

Sunray Mid-Continent Oil Company, as the owner of a valid and subsisting Federal Oil and Gas Lease covering among other lands Lots 2, 3, and 4, Section 14, Township 29 North, Range 14 West, San Juan County, New Mexico, hereby makes application for administrative approval for the establishment of a nonstandard oil proration unit in the Totah-Gallup Oil Pool as hereinafter specifically described, and for approval to dedicate said unit to a well to be drilled at a location described as follows:

330 feet from the North line and 2510 feet from the West line of Section 14, Township 29 North, Range 14 West, San Juan County, New Mexico.

The proposed oil proration unit comprises 67.04 acres consisting of Lots 2, 3, and 4 of Section 14, Township 29 North, Range 14 West, San Juan County, New Mexico, as shown by the official survey depicted on U.S.G.L.O. Survey Map approved by the Surveyor General August 31, 1882, which said oil proration unit is shown on the plat attached hereto marked Exhibit "A".

In support of said application, applicant states as follows:

The unorthodox size and shape of the proposed oil proration unit is due to variations in the legal subdivisions of the United States Public Lands Survey.

2. The nonstandard location of the proposed well is occasioned by variations in the legal sub-

DX SUNRAY OIL COMPANY IS A WHOLLY OWNED REFINING & MARKETING SUBSIDIARY

per leaven

on topographical conditions in that a well located within 150 feet of the Center of Lot 3 would be situated in a canyon and the drilling of such well at such location would occasion substantial additional costs and risk. The ownership of all oil and gas leases and lands within a radius of in excess of 790 feet of the proposed location is common with the ownership of the oil and gas lease under the proposed location with the exception of Navajo Tribal lease or leases owned by Pan American Petroleum Corporation covering that part of the North Half of Section 14, Township 29 North, Range 14 West, lying South of the mid-channel of San Juan River and with the possible exception of unleased rederal lands underlying the San Juan River North of the mid-channel thereof, which river bounds the proposed oil provation unit on the South.

- 3. The expedient consideration of this application for establishment of the above described oil proration unit and for permission to drill at the location above set forth is respectfully urged in view of the completion by Pan American Petroleum Corporation of its Navajo Tribal "H" well #ll and its Navajo Tribal "H" well #l2 situated on units comprising that portion of the North Half of Section 14, Township 29 North, Range 14 West, San Juan County, New Mexico, lying South of the mid-channel of the San Juan River, which wells are currently producing their respective allowables.
- 4. The proposed oil proration unit is consistent with the units heretofore established by Order No. R-2050 of the Oil Conservation Commission of the State of New Mexico covering that part of the North Half of Section 14, Township 29 North, Range 14 West, San Juan County, New Mexico, lying South of the mid-channel of the San Juan River.
- 5. It is believed that administrative approval of this application is authorized by Rule 4 of Order No. R-1882 of the Oil Conservation Commission of New Mexico pertaining to the Totah-Gallup Oil Pool and state-wide Rule 104-F promulgated by the

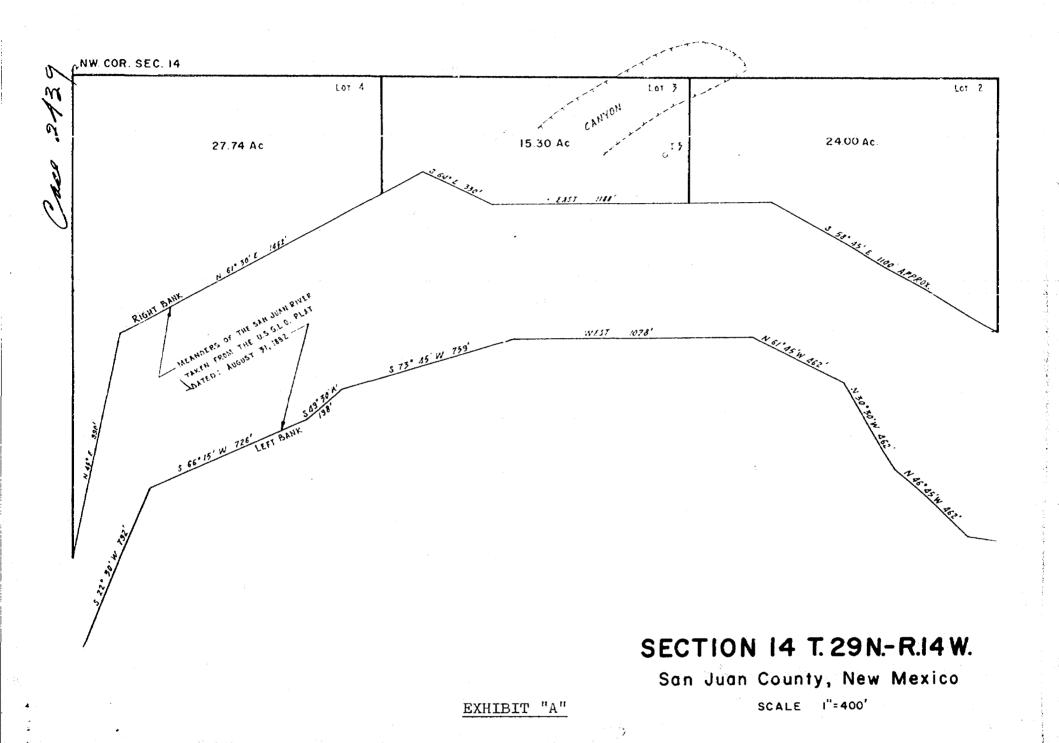
Oil Conservation Commission of the State of

- That the entire 57.04 nere tract comprising the proposed oil proration unit in proposed to be productive of oil from the Totah-Gallup
- Pursuant to Rule 4 (5) of Order No. R-1882 and state-wide Rule 104-F of the New Mexico Oil Conservation Commission, copies of this application are as of the date hereof being application are as of the date hereof being sent by registered mail to Pan American Petroleum Corporation, Texaco Inc., the Land Office, Bureau of Land Management at Santa Fe, New Bureau of Land Management at Supervisor, U. S. Mexico, and the Off and Gas Supervisor, U. S. Geological Survey at Roswell, New Mexico.

In view of the premises, it is respectfully requested that administrative approval be granted to applicant for the establishment of the oil proration unit hereinabove described and the dedication of the acreage comprising said unit to a well to be drilled at the location also hereinabove described.

SUNRAY MID-CONTINENT OIL COMPANY

NEP:JD Enclosure Norbert E. Proctor Division Attorney



BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico

November 29, 1961

EXAMINER HEARING

IN THE MATTER OF:

Application of Sunray Mid-Continent Oil Company for a 67.04-acre non-standard oil proration unit and an unorthodox well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of 67.04-acre non-standard oil proration unit in the Totah-Gallup Oil Pool, comprising Lots 2, 3 and 4 of Section 14, Township 29 North, Range 14 West, San Juan County, New Mexico, said unit to be dedicated to a well to be located at an unorthodox location 330 feet from the North line and 2510 feet from the West line of said Section 14.

CASE NO. 2439

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

EXAMINER NUTTER: We will call Case No. 2439.

MR. ERREBO: I am Burns H. Errebo with the law firm of Modrall, Seymour, Sperling, Roehl and Harris of Albuquerque appearing on behalf of the Applicant, Sunray Mid-Continent Oil Company. Associated with me today is Mr. Proctor of Denver who is a member of the Oklahoma bar who will conduct the examina-We have two witnesses.



GUEROUE, N. M. NE 243-6691 (Witnesses sworm.)

H. M. PEASE,

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

DIRECT EXAMINATION

BY MR. PROCTOR:

Q Mr. Pease, would you state your full name, by whom you are employed, and in what capacity, please?

A My name is Everett W. Pease, I am employed by Sunray Mid-Continent Oil Company in Denver, Colorado. My position is that of division exploitation geologist. My residence is 6180 Elizabeth Way in Littleton, Colorado.

- Q Mr. Pease, have you previously testified at a Commission ers' Hearing?
 - A I have not.
- Q Would you state for the record your qualifications from the standpoint of education and experience, please.
- A I was graduated from the University of California at Los Angeles in 1941 with an A.B. degree in Geology. I have practiced petroleum geology during the twenty-year period since that time except for three years in which I was in the military service. My experience has been with Amerada Petroleum Corporation, with Barnsdahl Oil Company, and now with Sunray Mid-Continent Oil Company.

MR. PROCTOR: Are the witness's qualifications accept-



able?

EXAMINER NUTTER: Yes, sir, please proceed.

(Auplicant's Exhibit No. 1

marked.)

Q (by Mr. Proctor) Mr. Pease, would you refer to the exhibit marked Sunray's Exhibit 1 and state what that exhibit shows and discuss briefly the recent well drilled in the area in Sunray's acreage which is concerned in this hearing.

A This is a large map showing the Northwest portion of the Totah-Gallup Oil Field and in yellow you will see Sunray's acreage and holdings pertaining to the problem at hand. It is the leaseholder of 2555 acres.

- Q That's a Federal lease?
- A That is a Federal lease.

Now, on this map we have shown -- first, in Section 14 of Township 29 North, 14 West, we have shown two Pan American wells in the South half of the North half of Section 14. The Tribal No. 11 H, Tribal No. 12 H in the section to the west, which would be Section 15, we have shown our Federal I No. 6 well. This well was originally completed from the Gallup sand and fractured shale. IP was 140 barrels per day. You will see diagonally to the northeast in the Southwest Section 11 our Federal I No. 7. This well is presently being completed. You will also see, referring back to Section 14, the three lots which we proposed to put into proration units, Lots number 2, 3, and 4.



These lots are situated in the north half of Section 14 lying north of the San Juan River. I should like to point out on this map this land grid and it includes a plot of the river controlled by the 1882 General Land Office Survey. Going further, the map also shows with a red circle at the easterly portion of Lot 3 our proposed Well I-5. This is a proposed 5,000-foot Gallup test. This well is necessary to our purposes in order to protect us against drainage from the Pan American well which is off-set directly to us. I refer to Pan American's Well No. 11-H.

Q Are these wells producing their allowable, Mr. Pease, that is, Pan American?

A lt's my understanding both Pan American No. 11 and 12 are producing their allowable at the present time.

(Applicant's Exhibit No. 2 marked.)

Q Would you now refer to Sunray's Exhibit 2 and state , what that exhibit shows.

A This is a more detailed plat of our proposed proration unit which would include Lots 2, 3, and 4. This plat is again controlled from information obtained from the 1882 General Land Office Survey Map. It shows our lots being bounded on the north by the north section line of Section 14 and these three subject lots are bounded on the south by the surveys of the north bank of the San Juan River as shown on the 1882 survey. Our proposed proration unit contains 67.04 acres. We have also shown on the

play circled in red our proposed location for our I No. 5 well, which would be located 330 feet from the north line of Section 14 and 2510 feet from the west line of Section 14. The well is located as shown is due to topographic reasons which will be discussed by the next witness.

- Why is this unit non-standard?
- This unit of necessity would be mentioned due to the irregular shape of the lots as shown here.
 - That is the official Governmental subdivision?
- That is the official Governmental subdivision and the last survey of record.
- Is this proposal which is based upon the official 1882 survey consistent with other units that have been formed in the immediate vicinity?
- It is. It is also my understanding that immediately south of us, again in the north half of Section 14, Pan American has established two proration units, one for the No. 11 well and one for the No. 12 well.
- Is it your opinion, Mr. Pease, that all of the acreage comprising the proposed unit will be productive?
 - I would like to introduce Exhibit No. 3.

(Applicant's Exhibit No. 3

marked.)

(continuing) Exhibit No. 3 is an iso potential map of the Northwest portion of the Totan field. This map was constructed



of using the IP figures as released by the various oil companies and these values have in turn been contoured. You will note that

rels to 200 barrels per day. The brown area values are from 200 to 400 barrels per day, and the pink area is from 400 to 600 barrels per day. In one case, the purple area indicates an IP in excess of 600 barrels per day. This map indicates and shows that all of our proposed proration units comprising Lots 2, 3, and 4 would be productive.

- Were all of these exhibits, Numbers 1, 2, and 3, prepared by you or under your supervision?
 - Yes, they were.
 - Do you have any further testimony to add at this time?
 - No, I have not.

MR. PROCTOR: I believe that's all that we have of this witness.

EXAMINER NUTTER: Are there any other questions of Mr. Pease?

CROSS EXAMINATION

BY MR. MORRIS:

- Mr. Pease, the Pan American unit that has been formed directly south of your proposed unit comprises how many acres?
- Each of the two units comprises slightly in excess of 82 acres; 82 and a fraction acres.
 - And those Pan American units extend to the center of



the San Juan River channel as shown by the 1882 survey?

- That is correct.
- Now, the acreage being claimed by Sunray extends only to the pank of the river?
 - That's the southern limit of our leasehold.
- You believe that to be so because of the fact it's Q. Federal acreage, is that correct?
 - Yes, sir. Α
- This would leave a certain amount of acreage between your proposed unit and the two Pan American units which would not be dedicated to any proration unit, is that correct?
 - That's true. Α
- And that acreage would consist of all of the acreage in the San Juan River channel north of the mid-section of that Q channel and south of Lots 2, 3, and 4?
 - That's correct. Α
- If that land should at some later date be leased either by Sunray or by some other operator, would there be any objection to including it in your proposed unit and adding the acreage to the unit for allowable purposes at that time?
 - There would be no objection that I know of.
 - Mr. Pease, do you believe that Lot 1 in this section is productive?
 - As indicated on Exhibit 3, I'm sure that's correct. The southwesterly diagonal half of Lot 1 is productive.



as shown by the map, our date is rather limited. This is what I consider a conservative interpretation. It could well be that all of Lot 1 is productive. This is about as much as I can say about that. I repeat myself when I say we did draw this interpretation on a conservative basis. Subsequent to the drilling of I.5, when we drill that one, perhaps we can get a more correct interpretation.

- Lot 1 is owned by Texaco? Q
- Yes, sir.
- And also owns the 80 acres immediately north of Lot 1? Q.
- That is Texaco land.
- If Texaco should decide to form a proration unit in this area, they might experience some difficulty in arriving at a large enough unit to make a well economic, might they not?
 - This is possible.
- Unless they could add on to Lot 1 a portion, at least part of the acreage to the north of that lot, then they might be able to form a large enough proration unit in some way to make a well economic?

This is possible. According to our maps, Lot 3 and 4 in Section 13, lying north of the river, are also under lease by Texaco.

It would also be possible to form a unit comprising, say for instance, Lot 1 of Section 14 and Lots 3 and 4 of Section 13?



A This is possible; and again, in looking, referring to my Exhibit No. 3, the iso-potential map, we have narrowed down the productive area due to lack of data. I do not know how wide the field is at this point but certainly it will be no narrower than shown and most probably will be larger than shown.

Q Do you feel that the configuration of your proposed proration unit will deprive Texaco of their opportunity to form a proration unit for exploration in this area?

A It could.

Q Is there any other configuration that could be made of your leaseholdings in this area to form a proration unit of approximately eighty acres that you feel would be productive?

A I don't know how we'd do it. I 7, the well we are presently completing in the Southwest of the Southwest of Section 11, our proration unit is established as an east-west proration unit. Now, that doesn't leave us any other land that we could add to this unit.

Q By east-west proration unit, do you mean the South half of the Southwest quarter of Section 11?

A I do.

Q. What disposition do you intend to make of the Southwest quarter of the Southeast quarter of Section 11?

A We have no plans for that at the present time. Our plans for I 7 are predicated upon permitting us to drill our first wells in a northwest to southeast line staying toward the middle



of the pool and work our way toward the adges of the pool.

Mr. Icase, has any consideration been given to the formation of units in this manner: The Southwest of the Southwest of Section 11 and 12 plus Lot 4 of 14, which would comprise some 58 acres. In other words, I'm thinking of a series of units running in a north-south direction, then a unit directly to the east of that being the Southeast quarter of the Southeast of Section 11 plus Lot 3, which would amount to some 55 acres; and then the Southwest of the Southeast of 11 in Lot 2, which would amount to some 64 acres. Has any consideration been given to the establishment of units in that direction?

We tried the various combinations here at one time or another and in many cases we found it advisable from an economic standpoint to keep our allowable down.

- Your present unit is 67 acres?
- Α That is right.
- If you formed the unit the other way, you'd have one of 67, 65, and 64. My only concern in this line of inquiry, Mr. Pease, is the possible protection of the orderly development within these two sections by Texaco and their ownership in Sections 11 and 14. Possibly, however, that would present no problem if they could form a north-south unit of their own. Would you agree with that statement?

I would think they would have no problem in finding enough land available for their full proration unit.



MR. MORRIS: I believe that's all I have. Thank you. DIRECT EXAMINATION

BY EXAMINER NUTTER:

Mr. Pease, would you re-state what footage location that well is placed at?

330 feet from U.C. 250 Section 14 and 2510 from the west line.

MR. PROCTOR: We'll have further testimony on that location.

(by Mr. Nutter) Mr. Fease, you stated that your I Q Well 7 is now being completed?

A Yes.

Have you seen the logs on the well yet?

Α Yes, I have.

Does it look like it's going to be a good well? Q

It looks very similar to our I 6. In fact, there's a little bit more zone development. We have experienced extreme difficulty in fracking this well. We fracked it three times.

Seven? O.

Yes, sir, and on one zone, and then we have gone to another zone that was of doubtful nature and have just finished fracking it.

You haven't recovered any load oil, no potential?

There was several hundred barrels of load oil recovered as of yesterday. That's why I can't give you an exact figure on the well.

When was the I 6 completed?



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A I don't have the exact date but approximately thirty days ago.

- Q It is a comparatively new well?
- A Yes.

Q You stated that as far at you there would be no objection or difficulty on the part of communitizing the acreage in Lots 2, 3, and 4 with the acreage in the river, to the middle of the river. Has this actually been discussed in Sunray's office, whether Sunray would ever communitize to where it could be leased to combine it with your proposed unit?

A We discussed it. It's my understanding this would be rather normal procedure at such time as that strip of land is taken under lease either by Sunray --

MR. PROCTOR: I wonder -- our lease, as Mr. Pease stated, does not cover land constituting the large volume of the San Juan River north of the mid-channel. At the present time, that's under lease. The mid-stream of the San Juan River constitutes the boundaries between public domain land on the north and tribal Indian lands on the south. In reality, the San Juan River changes its course. The mid-channel has also changed. The question as to whether the movement of the mid-channel of that river will result in changing the ownership will depend on the map to which the river changes course. Consequently, though we have unleased acreage at the present time, there is an uncertainty as to exactly where that unleased acreage is presently. In view of the

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fact we are desirous of drilling the well, we thought the only appropriate approach was to eliminate our -- exclude the bed and bottom of the San Juan River north of the mid-channel until such time as that acreage is leased. We would have no objection to an order making provision for inclusion of land when and if it is leased by Sunray.

manifer And those any further questions of Mr. Pease?

He may be excused.

(Witness excused.)

MR. PROCTOR: We will call Mr. Ramsey.

E. H. RAMSEY,

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

DIRECT EXAMINATION

BY MR. PROCTOR:

Would you state your full name, residence, by whom you are employed, and in what capacity, Mr. Ramsey?

Earl H. Ramsey. I reside in Farmington at 305 Sunset A Avenue. I am employed by Sunray Mid-Continent Oil Company as district production manager in Farmington, New Mexico.

- You are a petroleum engineer, is that right? Q
- That is correct.
- Have you previously testified at a Commission hearing? Q
- No, sir.



Briefly state your qualifications from the standpoint of education and experience.

Yes, sir. I received a degree from the Colorado School of Mines in June, 1950, as geological engineer and was employed following that by Ohio Petroleum Company as a land surveyor. Following that, I went to work for Summay as a junior petroleum engineer and since that date have held different job titles progressing from junior engineer to district engineer in the South Texas Division located in Corpus Christi. In 1959 I was trans ferred to Farmington as district production manager.

- Mr. Ramsey, are you familiar with the exhibits that have been introduced in the proposed cil proration unit application?
 - Α Yes, sir.
- Would you state in which of the three lots, Lots 2, 3, and 4, comprising the unit should a well be located to most effectively drain the proposed proration unit?

The logical location for a well in these three lots would be center lot or Lot 3 as the best location to drain the proration unit. This is true because a well located in Lot 4 would bunch the locations together around the existing Federal T 6 and Federal I 7, and we would, in effect, have 40-acre spacing. Since the field has been developed on a temporary eighty-acre spacing, we wish to continue that and a well located in Lot 3 would essentially be spaced on eighty acres.



(Applicant's Exhibit No. 4 marked.)

I refer you to an exhibit warked Sunray Exhibit 4 and ask you to explain that exhibit, please.

Exhibit 4 is a survey plat of Lot No. 3 which was prepared by James T. Leese, a registered land surveyor, at the request of Sunray Mid-Continent. The purpose of this exhibit is to reflect the surface, topographic condition in Interior show why the particular location was chosen. I would like to point out that the river channel differs from that shown on the 1882 survey, as this Exhibit 4 location of the San Juan River shows the present location. The only spot in Lot 3 which is suitable for a drilling location, based on prohibitive road and location construction costs, is that indicated on the east side at a point 330 feet from the north line and 2510 feet from the west line. At any other point in Lot 3, we would experience extensive construction costs which would influence the economics of drilling the well in this location. The point located in the northeast corner of Lot 3, which is not shown to be a canyon or slope, is inaccessible because of another canyon which hies to the west, and it would require considerable expense to reach that location.

Q Mr. Ramsey, the location is above the location of the river?

Yes, sir. This location is approximately 250 feet above



the river as shown on the map.

MR. PROCTOR: I believe that's all we have of this wit-

EXAMINER NUTTER: Are there any questions of Mr. Ramsey?

CROSS EXAMINATION

BY MR. NUTTER:

ness.

Mr. Ramsey, where will the tank battery for this well િ be?

It will be one that is existing in Section 15, which A was constructed for our New Mexico Federal I No. 6.

- I 7 also produces into that battery? Q.
- It will when it is completed. Α
- The casing head that would be made for this well would also be used for the I 6 and 7?
 - That's true, yes, sir.

EXAMINER NUTTER: Are there any further questions of Mr. Ramsey?

He may be excused.

(Witness excused.)

MR. PROCTOR: That's all we have.

EXAMINER NUTTER: Do you wish to offer these exhibits?

MR. PROCTOR: Yes, one through four into evidence.

EXAMINER NUTTER: Sunray's Exhibits 1 through 4 will

be entered into evidence.



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DEARNLEY-MEIER REPORTING SERVICE, Inc.

Is there anything further in this case? We will take the case under advisement.

* * * *

STATE OF NEW MEXICO)

COUNTY OF SAN JUAN)

I, THOMAS F. HORNE, NOTARY PUBLIC in and for the County of San Juan, State of New Mexico, do hereby certify that the foregoing and attached transcript of hearing was reported by me in stenotype and that the same was reduced to typewritten transcript under my personal supervision and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

Themas H John NOTARY PUBLIC

My Commission Expires:

October 2, 1965

T do hereby certify that the foregoing is a complete ran id of the proceedings in the Exertiser hearing of Case No. 19 heard by he on the Exertise of Case No. 19 heard by he on Examiner Examiner

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