CASE 3593: Application of AMERADA PETROLEUM CORP. for DOWNHOLE COMMINGLING, LEA COUNTY, N.M.

APPliCATION,
TYANSCHIPTS,
SMALLEX h. b. ts
ETC.

dearnley-meier reporting service, inc.

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

EXAMINER HEARING

IN THE MATTER OF:

Application of Amerada Petroleum Corporation for down-hole co-mingling, Lea County, New Mexico.

Case 3593

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING



MR. NUTTER: Case 3593.

MR. HATCH: Case 3593, application of Amerada

Petroleum Corporation for down-hole co-mingling, Lea County,

New Mexico.

MR. KELLAHIN: If the Exmminer please, Jason Kellahin, Kellahin and Fox, Santa Fe, appearing for the Applicant in association with Mr. Thomas W. Lynch, who will present the case.

MR. LYNCH: Mr. Examiner, we will have one witness, Mr. R. L. Hocker, Chief Proration Engineer, from Tulsa.

#### (Witness sworn.)

R. L. HOCKER, called as a witness on behalf of the Applicant, first having been duly sworn, was examined and testified as follows:

#### DIRECT EXAMINATION

#### BY MR. LYNCH:

Q Mr. Hocker, would you state your name and your occupation and by whom you are employed, for the record?

A My name is R. L. Hocker, I am employed by Amerada Petroleum Corporation as a Petroleum Engineer.

Q Have you testified previously before this Commission?

A Yes.

MR. LYNCH: Are his qualifications acceptable?

MR. NUTTER: Yes, they are.

(Whereupon, Applicant's Exhibits 1 through 8 were marked for identification.)

(By Mr. Lynch) Mr. Hocker, would you turn to Q what have been marked as Exhibits 1, 2 and 3 and briefly describe those exhibits?

Exhibits 1, 2 and 3 are schematics of Amerada's L. M. Lambert Well Number 8, in Section 620 South, 37 East, Lea County, New Mexico. The schematic Number 1, Exhibit Number 1, is a schematic of the well when it was a dual completion in the Monument-Paddock and the Monument-Blinebry. I call your attention to the fact that there is a five inch liner, which greatly restricts the size of the dual completion tubing that is available and I will show and indicate that we had trouble pumping the Blinebry below this packer, due to gas locking and production has declined to a point where it is unable to produce.

About the first of the year, we installed what would be called a schematic for Exhibit Number 2, and produced the paddock zone only above the packer. In early May of this year, we tested the well as proposed by Exhibit Number 3, which is a co-mingled installation and I have some results to show you from the testing and different methods, here.

Q All right, now going back to Exhibit Number 1,

Mr. Hocker, when you stated you had some gas problems in the Blinebry, part of the dual completion, what are the alternatives that were available to Amerada? You pointed out with Exhibits 2 and 3 that Amerada did change the completion in the well. What alternatives, possible alternatives, were available to Amerada at that point?

A Well, of course, we could drill another well to the Blinebry, but I think the production we have shown, that this would be an unattractive economic venture. The other method is shown by Exhibit 3, which would be the co-mingled and the problem, of course, is to be able to cause an incompressible, more incompressible fluid, so that it can be pumped from the Blinebry by allowing the gas to segregate from the oil.

Q Just for the record, approximately how much would it cost to drill a Blinebry single completion?

A Well, I believe it is over a hundred thousand dollars.
This is a pretty expensive area, or it used to be.

Q All right, would you return to Exhibits 4 and 5 and tell us what those show?

A Exhibit 4 is a plat, showing the Monument-Paddock completions and I have indicated by each well, each red well has an allowable on the May pro-ration schedule. I have indicated the May allowable, daily allowable and underneath the

line the daily March production and barrels of water for each of the same wells. I have indicated the location of the subject well, with a green arrow and I call your attention to the fact that Amerada Lambert Number 8 is on the extreme north extremity of the Monument-Paddock Pool.

All right, now, I note that the May allowable was ten barrels a day for the Lambert 8 and the March production was twenty-four barrels of oil per day?

Well, I would like to call your attention to the Exhibit 5 which is a plat of the Monument Paddock production from the Amerada Lambert Number 8 only. The production had declined to, in the neighborhood of a hundred barrels a month at about the first of the year. About the first of the year, then, we went to producing it as shown in Exhibit 2. In other words, the Monument-Paddock only. We changed out the pump and installed only one string of tubing and had the Blinebry packed off.

MR. NUTTER: Mr. Hocker, at this point, I would like to ask you, how did you produce the Paddock only in this installation shown on Exhibit Number 2. Is there a plug in the bottom of the tubing?

THE WITNESS: Yes, that is a dual plugged tubing. MR. NUTTER: There is a sliding door choke there that you can open up or a sliding sleeve?

PHONE 243-6691

THE WITNESS: No, sir, it is just a set perforation.

MR. NUTTER: I see.

THE WITNESS: And, this accounts for the increase in production.

MR. NUTTER: And, the Blinebry was completely shut in while you were producing here?

THE WINTESS: Yes, sir. And, then, in early May then, we lifted the tubing so it could be co-mingled for tests and, none of the production is shown as Blinebry, it is shown all as Paddock during that small period of time that it was tested.

I would like to say, right now, that the well is completed as Exhibit 2 shows, with the Blinebry packed off.

- (By Mr. Lynch) All right, would you return to Exhibits 6 and 7 and tell us what those show?
- Exhibit 6 and 7 shows similar type information for the Monument-Blinebry Pool. With the well, with the allowable colored brown and the graph of production being the Monument Blinebry Pool only from the Amerada Lambert Number Eight. Amerada Lambert Number Eight is presently off of schedule in the Monument-Blinebry Pool.
- Now, Mr. Hocker, going back now and comparing Exhibits 4 and 6, the two maps, is there any discernable difference in the quality of the reservoir or either reservoir,

Well, I call your attention to Exhibit Number 4, with the exception of the two, of Amerada Lambert Number Nine and Ten, nearly all of the top allowable wells in this field are in the south part of the field, such that the wells offsetting Amerada's lease, Texaco, Marathon leases, are poor wells.

- All right, sir, and how about in the Blinebry Pool?
- In the Blinebry Pool, we are surrounded by Blinebry wells, however, there are, with the exception of Amerada Lambert Number Six, the highest well, then, is shown to have a production of about ten barrels a day.
- All right, so, for the most part, the wells in the northwest part of both pools, near the Amerada Lambert Number Eight, are at or near the stripper stage of production?
- In this vicinity, yes. I call your attention that the same condition exists in the Monument-Blinebry that the better wells are to the south, on Exhibit 6.
- Q All right, sir, Mr. Hocker have you prepared an exhibit to show how Amerada proposes to keep fluids from moving from one zone into another in this co-mingled installation?
- Well, the installation we desire is Exhibit Number 3. I call your attention to Exhibit Number 8, which has some tests reported, which shows that the Monument-Paddock, tested under conditions of Exhibit Number 2, with the Monument-Paddock

only, producing, produced twenty-seven barrels of oil and twenty-one barrels of water in April of this year.

In early May, we went to conditions of Exhibit Number 3, co-mingled and tested both the co-mingled Paddock and the Blinebry at a rate of thirty-six and forty barrels of oil per day. During this test, an echo meter was run and the working fluid level was determined to be 5,420 feet, this is fiftyseven feet above the pump. In order to do the calculations, I have shown that the working fluid level is 204 feet below the base of the Paddock's perforations, and 163 feet above the top of the Blinebry perforations, with the well producing less than one top allowable for both zones and with the fluid level being at this point, it would seem that there couldn't be any oil moving from the Blinebry to the Paddock, because the fluid level is beneath the Paddock and that there couldn't be any movement from the Paddock to the Blinebry, because of the fact that there would be eighty to a hundred pounds of fluid head on the Blinebry.

- Q What is the latest reservoir pressure you have on the Blinebry?
- A The latest one I saw was in March of 1965 and the pressure in the Blinebry was in the nature of a thousand pounds, bottom-hole pressure. I imagine it has declined some since then, but, I don't have a newer figure.

- Yes, sir.
- Which is what? Q
- Sixty-three barrels of oil per day.
- Top allowable? O
- Α Top allowable.

Should the Commission require, it would be possible for Amerada to periodically test the Paddock and by subtraction determine the production from the Blinebry, is that correct?

Yes, sir. An allocation could be made of the oil Α produced on that basis.

Mr. Hocker, looking at Exhibit 3, which is the proposed installation, why wouldn't it be possible to use some kind of downhole co-mingling device, an Otis selector tool, or a multiple choke assembly or some other similar kind of installation?

Well, we have thought about this and considered it and still don't believe that that type of installation would get rid of the problem of gas locking in the Blinebry.

SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 97108

#### Q You still have the packer, there?

A We still have the packer there and if you maintain it to be segregated still, why, then, you will still have the same problem. With the five inch liner, why we are unable to run two large strings of pipe, so we are faced with using small tubing and the way the well has been producing in the Blinebry, it would indicate that probably the Blinebry ought to be packed off, if we are unable to co-mingle it.

Q Mr. Hocker, based on what we know about the producing characteristics of these two pools, and the water production from each pool, is there any reason at all why the co-mingling, as you propose, might cause problems of production in one zone that wouldn't exist if unco-mingling didn't exist?

A I'm not sure I got all of that statement, but I don't believe that there would be any adverse affect on either formation by co-mingling.

Q All right, sir, Mr. Hocker were Exhibits 1 through 8 prepared by you or under your supervision and direction,

A Yes, they were.

MR. LYNCH: We move that Exhibits 1 through 8 be admitted in evidence.

MR. NUTTER: Amerada's Exhibits 1 through 8 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 8 were admitted in evidence.)

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

#### CROSS EXAMINATION

#### BY MR. NUTTER:

Q Mr. Hocker, the main problem, I presume, as far as producing the Blinebry is the fact that you don't have any means of venting the gas from that zone and it vaporlocks or gaslocks?

A Yes, sir, that's correct. That can be shown real good with this Exhibit Number 7, which shows how the production has come on off.

Q Is it possible to run concentric macaroni string inside that two and one-sixteenth inch tubing that you have got going down there?

A Well, we have got to pump them both and this causes quite a bit of pumping problem trying to do that. I don't believe it would be advisable.

Q Is there room to run a one inch macaroni string on the outside of the tubing string?

A Well, as shown by Exhibit 1, you are thinking of putting a one inch macaroni string through the packer.

Q Through the packer. I realize you have got a big Model 'D' there. However, you realize, also, Mr. Hocker, that

HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTION

this Commission for many years resisted the dual completion of oil wells as being a possible cause of waste of oil, but, we were assured by the industry when we first approved the first fi oil, oil dual completion in this state in 1956, that these wells could be completed and efficiently produced to depletion by efficient dual completion methods. It appears here that you have worked yourself into a hole by running a small liner down inside of a well and dually completing a well that maybe shouldn't have been dually completed?

A Well, we are not asking the Commission to adopt a different policy. We are just asking them to examine the facts in this one particular well and it seems to me that there is very little, if any, chance that there can be any adverse affect from one formation to the other, particularly when the well produced less than one allowable and the fluid level is as low as it is in this well.

Well, when we have a low fluid level like we have here, it might be acceptable, but, then, a slightly higher fluid level might not be undesirable, but, still not quite so desirable as this one would be and the next case, the third one, might be slightly higher than that, and where do we draw the line?

I didn't say it was easy to draw the line. I realize there is a great issue between black and white and in

this one, we feel like we are white, that there couldn't be any chance, probably, in my opinion, for an adverse affect.

MR. LYNCH: The Commission, as the Examiner knows, the Commission has already drawn a line at one point. It is not the same kind of line at all and we recognize the difference and that line is that, when you have two reservoirs, that are completely, or very near depleted, and the economics are such that you can't operate either zone singly but, you have to operate both zones, co-mingle them in order to keep the well producing. The Commission has granted co-mingling authority in those cases. We don't say that this is the same kind of situation. It is less a matter of economics, except for the drilling of the additional well, which would be necessary because of the mechanical problem, it is primarily that mechanical problem, the gaslock.

MR. NUTTER: We realize that this stage of depletion of these reservoirs, the drilling of another well would be uneconomical in this case, I am sure.

MR. LYNCH: Yes, sir and the alternative, then, to drilling an uneconomical well, which cannot be done, would be to shut in one of the two zones and it would probably be the Blinebry, being the less productive zone, which probably would result in either drainage or oil left unrecovered, one or the other. Neither alternative is very attractive and we

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

think that in view of the difference in the quality of the reservoir in the apparent stage of depletion, in one part of the reservoir as opposed to another, and the alternatives that we face, that it would be much the better, the lesser of the two evils, to allow co-mingling than to require one zone to be plugged off.

MR. NUTTER: Another alternative might be to combine two essentially depleted reservoirs into one reservoir.

MR. LYNCH: If both reservoirs were that way, uniformly throughout, I think that would be a feasible solution.

THE WITNESS: However, I imagine some of the people with top allowables --

MR. NUTTER: In essence, what you are doing here is combining reservoirs.

MR. LYNCH: Yes, sir.

MR. NUTTER: In one part of the pool and leaving them separated in the other part of the pool.

MR. LYNCH: Right, taking one allowable from the co-mingled production. Mr. Hocker has conferred with a number of people, those who own in the south end would rather not do this, now, down there, but, those who own in the north end don't seem to have any particular concern one way or the other. It would appear our chief engineer -- This is off-the-record.

PECIALIZING IN, DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

## (Whereupon, an off-the-record discussion was held.)

- Q (By Mr. Nutter) Mr. Hocker, when was this well originally completed, as far as the zone of production is concerned?
- A The well was originally completed in 1952 and had a total depth of 5715, so it was drilled to total depth, initially.
  - Q When was the liner run, on initial completion?
  - A Yes, sir, it was.
  - Q I presume it was originally a Blinebry well?
- A Yes, sir, I'm trying to establish that it was also a dual Paddock well at the same time, is what I was trying to establish.
  - Q Well, it couldn't have been in 1952?
  - A It couldn't have been?
- A Not if there was oil in both zones, because we didn't approve the first oil,oil dual until 1956.
  - A 1956. Well, it was originally a Blinebry oil well.
- Q I suppose the Commission's records will reflect the date of the dual completion and the order number?
- A Yes, just a minute. Here it is. It is August, 1962.
  - Q Do you have the order number there by chance?

A No, I don't have the order number. This just happens to be a drawing of a portable well. It shows it was re-completed in August of 1962 as a dual completion.

MR. LYNCH: We look at this, Mr. Examiner, from the policy standpoint, much the same way as spacing, that the adoption of 160 acre spacing for an oil field does not indicate to the Commission propensity to adopt 160 acre spacing for all oil fields, but each field is judged on its own merits and we would suppose that each of these wells would have to be judged on their own merits. To approve one would not be opening the door to another and we have no objection, of course, to that kind of language in the order itself, to put people on notice that you are not opening the door.

Q (By Mr. Nutter) Mr. Hocker, what was the reason you rejected the possible use of some of the selective zone equipment, such as Otis --

A We didn't believe that would get rid of our pumping problem for gas.

Q You still wouldn't be able to vent the gas of the annulus?

A That's right.

MR. NUTTER: Are there further questions of Mr. Hocker? He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Lynch?

MR. LYNCH:

MR. NUTTER: Does anyone have anything they wish to offer in Case 3593?

MR. HATCH: I have a letter from Texaco addressed to the Oil Commission, dated June the 2nd, 1967, concurring the application and a letter from Sinclair Oil and Gas Company, dated May the 31st, 1967, addressed to the Commission, that I would like to read into the record: "Sinclair Oil and Gas Company has no objection to the granting of Amerada's application to co-mingling in the well bore of the L. M. Lambert Well Number 8, Monument-Blinebry and Paddock reservoir.

Said matter is scheduled for hearing on June 6, 1967. Case Number 3593. However, since our B. J. Barber lease is located about one mile south of Amerada's well and is in the top allowable area of both reservoirs, we will object to any similar applications if located near our lease lines. R. M. Anderson, President of Sinclair Oil Company."

MR. NUTTER: If there is nothing further in Case 3593, we will take the case under advisement.

STATE OF NEW MEXICO ) SS COUNTY OF BERNALILLO )

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

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

Notary Public-Court Reporter

My Commission Expires:

7-10-70

I do hereby vertify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case to 35 73, beard by we on 10 63

New Merico Oil Conservation Commission

GOVERNOR DÁVIÐ F. CARGO CHAIRMAN

-15

## State of New Mexico Bil Conservation Commission

LAND COMMISSIONER GUYTON B. HAYS MEMBER



P. O. BOX 2088 SANTA FE STATE GEOLOGIST A. L. PORTER, JR. SECRETARY - DIRECTOR

July 18, 1967

Mr. Jason Kellahin Kellahin & Fox Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico Re: Case No. 3593
Order No. R-3276
Applicant:
AMERADA PETROLEUM CORP.

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

Carbon copy of drder also sent to:

Hobbs OCC\_\_X

Artesia OCC\_\_\_
Aztec OCC\_\_\_
Other\_\_\_ Mr. Tom W. Lynch

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

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

> CASE No. 3593 Order No. R-3276

APPLICATION OF AMERADA PETROLEUM CORPORATION FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

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

NOW, on this 18th day of July, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Amerada Petroleum Corporation, is the operator of the L. M. Lambert Well No. 8, located in Unit G of Section 6, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) That by Order No. R-2355, dated October 31, 1962, issued in Case No. 2669, the applicant was authorized to complete the subject well as a dual completion to produce oil from the Monument-Paddock Oil Pool through a 2 3/8 x 1 1/4-inch tapered tubing string and to produce oil from the Monument-Blinebry Oil Pool through a parallel 2 3/8 x 2 1/16-inch tapered tubing string separated by a permanent type packer set at approximately 5550 feet.
- (4) That as part of the evidence presented in Case No. 2669 to secure Commission approval of the aforementioned dual completion,

-2-CASE No. 3593 Order No. R-3276

the applicant in said Case No. 2669 presented evidence that the aforementioned installation could be satisfactorily utilized to artificially lift both zones to depletion should such artificial lifting become necessary.

- (5) That the applicant has replaced the aforesaid strings of tubing with a single string of 2 3/8-inch tubing and proposes to commingle in the well bore and produce therefrom by means of said single string of tubing the cil production from the aforementioned pools.
- (6) That the applicant would allocate production to the pools on the basis of annual well tests.
- (7) That changes in fluid properties or reservoir pressures in either or both reservoirs may occur and render allocation of oil production on the basis of annual tests inaccurate.
- (8) That the applicant has failed to prove that the requested downhole commingling is necessary to efficiently and economically deplete the subject reservoirs.
  - (9) That the subject application should be denied.

#### IT IS THEREFORE ORDERED:

- (1) That the subject application is hereby denied.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. MAYS, Member

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

#### Case 3578 continued

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

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

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

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

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

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

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

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

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

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

CASE 3593:

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

#### DOCKET: EXAMINER HEARING - TUESDAY - JUNE 6, 1967

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

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

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

#### CASE 3584: (Continued and Readvertised)

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

#### CASE 3578: (Continued and Readvertised)

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

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

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

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

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

CASE 3594: Application of Amerada Petroleum Corporation for an Ogallala oil proration unit, special rules for said unit and authority for fresh water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of the SE/4 NW/4 of Section 30, Township 18 South, Range 38 East, Lea County, New Mexico, as a 40-acre proration unit for production of oil from the Ogallala formation. Applicant also seeks the establishment of special rules governing said 40-acre tract including a maximum density of one well per 0.625-acre with a provision that wells should be drilled no nearer than 82.5 to the outer boundary of the unit and no nearer than 165 feet to another well producing from the same formation, provided that an exception should be made for existing wells on said 40-acre tract which are not located in conformance with said spacing rules. Applicant also seeks a temperary exception to Rule 307 for each well to permit utilization of a vacuum-type drilling unit during the drilling and completion operations. Applicant also seeks authority to produce the wells at capacity even though the aggregate production from said wells exceeds the 40-acre normal unit allowable. Applicant further seeks authority to dispose of fresh water produced with the oil back into the Ogallala formation through an injection well or wells located no nearer than 330 feet to the outer boundaries of the 40-acre tract.

CASE 3595:

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

#### CASE 3350: (Reopened)

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

CASE 3596:

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

Docket No. 17-67

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

Application of Cima Capitan, Inc. for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formations through one well located in Unit C of Section 3, Township 17 South, Range 32 East, Maljamar Pool, Lea County, New Mexico.

AH So

## APHERADA PETROLEUM CORPORATION

P. O. BOX 2040

Tulsa, Oklahodam 14102

LEGAL DEPARTMENT

May 15, 1967

Case 3593

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico

#### Gentlemen:

Enclosed in triplicate is Amerada's application for commingling in its L. M. Lambert Well No. 8. Please set it for hearing before an Examiner on June 6, 1967.

Very truly yours,

Thomas w. Lyna

THOMAS W. LYNCH

TWL:dd Enclosure

cc: Mr. Jason W. Kellahin (w/attach.)
Kellahin and Fox
P. O. Box 1769
Santa Fe, New Mexico 87501

DOCKET MAILED

Date 5-25-61

N

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF AMERADA PETROLEUM CORPORATION FOR AN EXCEPTION TO RULE 303 TO PERMIT COMMINGLING OF OIL PRODUCTION FROM THE MONUMENT-PADDOCK AND MONUMENT-BLINEBRY POOLS IN THE WELLBORE OF ITS L. M. LAMBERT WELL NO. 8 LOCATED IN THE SW/4 NE/4 SECTION 6, TOWNSHIP 20 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW

case no. 3593

#### APPLICATION

Applicant Amerada Petroleum Corporation states that:

- 1. Applicant owns and operates the L. M. Lambert Well No. 8 located in the SW/4 NE/4 Section 6, Township 20 South, Range 37 East, Lea County, New Mexico, hereinafter called the subject well.
- 2. The subject well has heretofore been dually completed in the Monument-Paddock and Monument-Blinebry Oil Pools, but the necessity of installing a 5-inch liner inside the 7-inch oil string precludes efficient operation of the well as a conventional dual completion.
- 3. Applicant proposes to commingle production from the Monument-Paddock and Monument-Blinebry Oil Pools in the wellbore of the subject well, with the following completion:
  - (a) Casing and Cement:

13-3/8 inch surface casing set at 259' with cement circulated;
9-5/8 inch casing set at 2300' with cement circulated;
7 inch casing set at 3700' with cement circulated;
5 inch liner set between 3693-5665' with 160 sacks;

(b) Completion Intervals:

Paddock Zone: Perf. 5198-5216 ft.
Blinebry Zone: Perf. 5583-5615 ft. and open hole from 5665-5679 ft. (TD).

4. On test, the subject well produced 27 bond from the Paddock Zone (measured) and 16 bond from the Blinebry Zone (by subtraction), for a total of 43 bond. Applicant requests only a single allowable for the requested commingled completion.

Applicant therefore requests that this matter be set for hearing before an Examiner, that notice of hearing be given as required by law, and that upon such hearing an order be entered granting this application.

AMERADA PETROLEUM CORPORATION

Thomas W. Lynch, Attorney
P. O. Box 2040
Tulsa, Oklahoma 74102

Resident Counsel:

Jason W. Kellahin Kellahin & Fox P. O. Box 1769 Santa Fe, New Mexico 87501  $\omega$ 

DOMESTIC PRODUCING DEPARTMENT MIDLAND DIVISION

J. H. MARKLEY, DIVISION MANAGER

P. O. BOX 3109 Q Q MIDLAND, TEXAS

June 2, 1967

CASE NO. 3593 6/6/67
WELL BORE COMMINGLING
MONUMENT (PADDOCK) AND
(BLINEBRY) POOLS
LEA COUNTY, NEW MEXICO

Oil Conservation Commission Box 2088 Santa Fe, New Mexico

Gentlemen:

Texaco Inc. concurs with the application by Amerada Petroleum Corporation to commingle in the well bore oil and gas production from the Monument (Paddock) reservoir and the Monument (Blinebry) reservoir in their L. M. Lambert Well No. 8 located in the SW/4 NE/4 of Section 6, T-20-S, R-37-E, Lea County, New Mexico. Texaco Inc. is the leasee and operator of the 160 acre J. R. Phillips Lease immediately west of the applicant is I. M. Lambert Lease. immediately west of the applicant's L. M. Lembert Lease. Texaco Inc. concurs with Amerada Petroleum Corporation that the approval of this request for downhole commingling will have no adverse effect upon either of the two reservoirs nor the ultimate recovery obtained therefrom and is in the interest of conservation of natural resources. Texaco Inc. urges approval by the Oil Conservation Commission of New Mexico of this application for well bore commingling by Amerada Petroleum Corporation.

Yours very truly,

J. H. Markley not

CLW: jl

Sinclair

SINCLAIR OIL & GAS COMPANY
P. O. Box 1470
MIDLAND, TEXAS 79701
May \$1, 1997

WEST TEXAS REGION

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico

Attention: Mr. D. S. Nutter Chief Engineer

Gentlemen:

Sinclair Oil & Gas Company has no objection to the granting of Amerada's application to commingle in the well bore of its L. M. Lambert Well No. 8, the Monument Blinebry and Monument Paddock reservoirs. Said matter is scheduled for hearing on June 6, 1967, Case No. 3593.

However, since our B. J. Barber Lease is located about one mile south of Amerada's well and is in the top allowable area of both reservoirs, we will object to any similar applications if located near our lease lines.

Yours very truly,

R. M. Anderson

Region Regulatory Engineer

RMA/hl

cc: Amerada Petroleum Corporation P. O. Box 2040 Tulsa, Oklahoma

	<b>~</b> ]
OIL CONSERVATION COMMISSION EXHIBIT NO.	e e e e e e e e e e e e e e e e e e e
CASE NO. 3593	Lea County, New Mexico
GASE NO.	
	3643' 3620' of circulated w/200 Sx. 23/8" 0.D. 0.D.
	9 5/8"O.D. Casing @ 2300" Circulated w/1500 Sx.
	Brown Oil Tool 5"O.D. Hanger @ 3693'
	1562' 51 01 114"0.D. 1911 01 Circulated w/325 Sx. 01 2 1/15"0.D
Monument-Paddock Perfis =	
5198' to 5216'	10152151
	Baker Model D Packer set @ 5550'
Monument-Blinebry Perf's = 55831 to 56181 =	
&	
5665' to 5679'	5"0.D. Liner set © 5665' Circulated w/160 Sx.
	PBD 56791

PRESENT INSTALLATION

AMERADA PETROLEUM CORP.

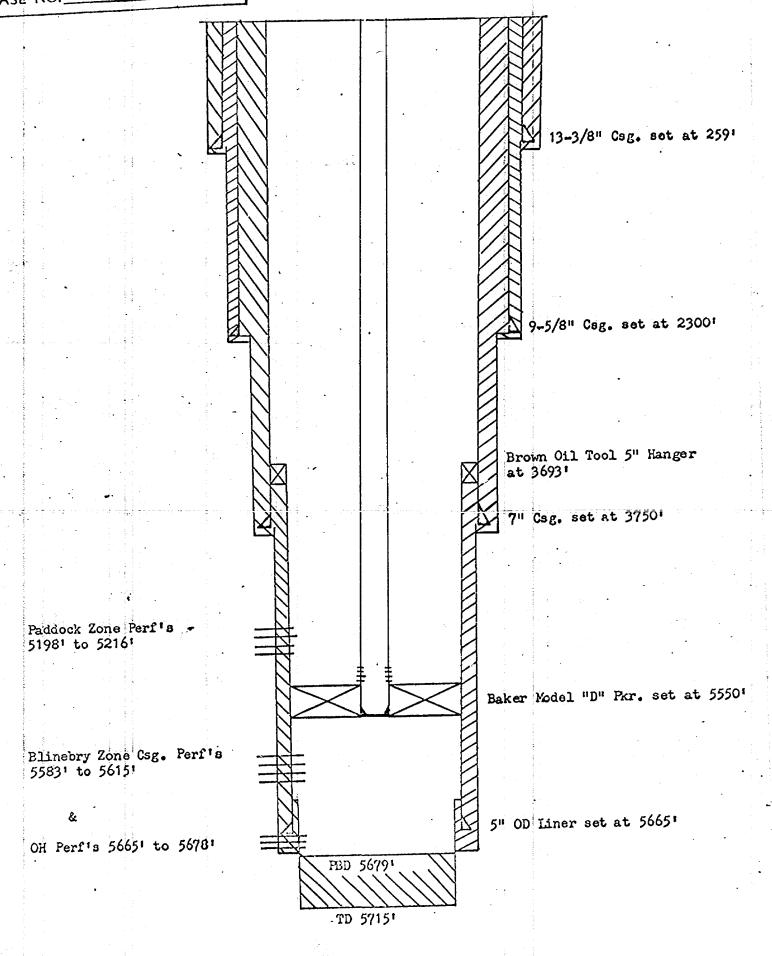
EXHIBIT /

NO. 3593

DATE 6-6-67

# OII: CONSERVATION COMMISSION EXHIBIT NO. \_\_\_\_\_\_ CASE NO. \_\_\_\_\_ 3593

L. M. Lembert #8
Unit B, Sec. 6, T20S, R37E
Lea County, New Mexico



PROPOSED INSTALLATION - PADDOCK TEST

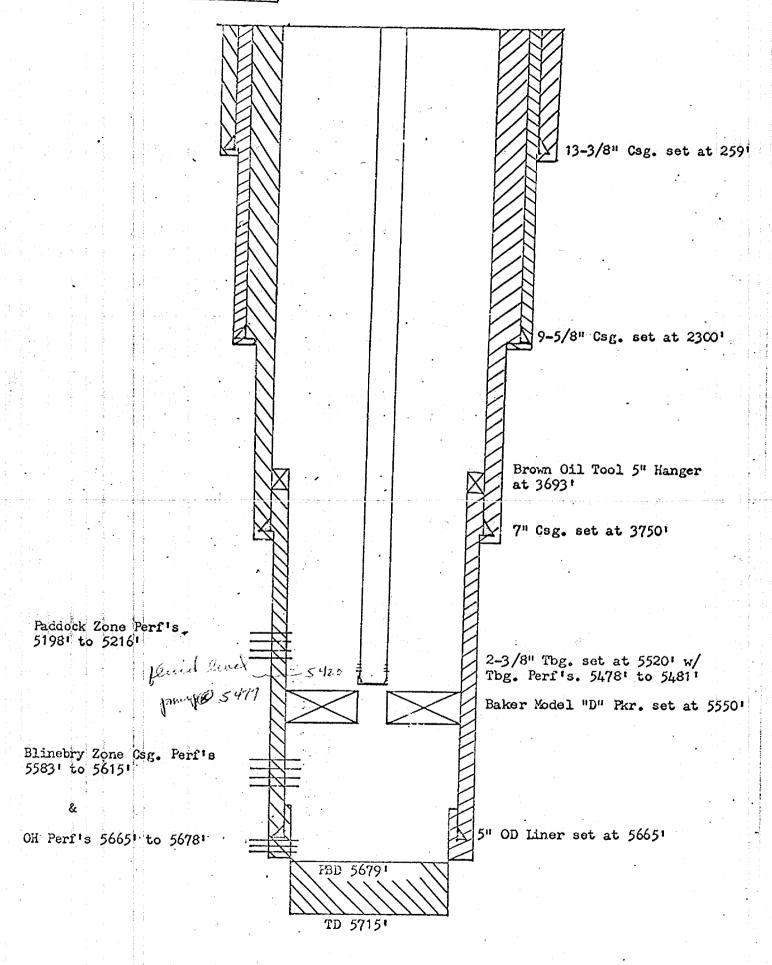
EXHIBIT 2

NO. 3593

DATE 6-6-67

## OIL CONSERVATION CCAMISSION EXHIBIT NO. \_\_\_\_\_ CASE NO. \_\_\_\_\_ 3573

L. M. Lambert #8
Unit B, Sec. 6, T20S, R37E
Lea County, New Mexico



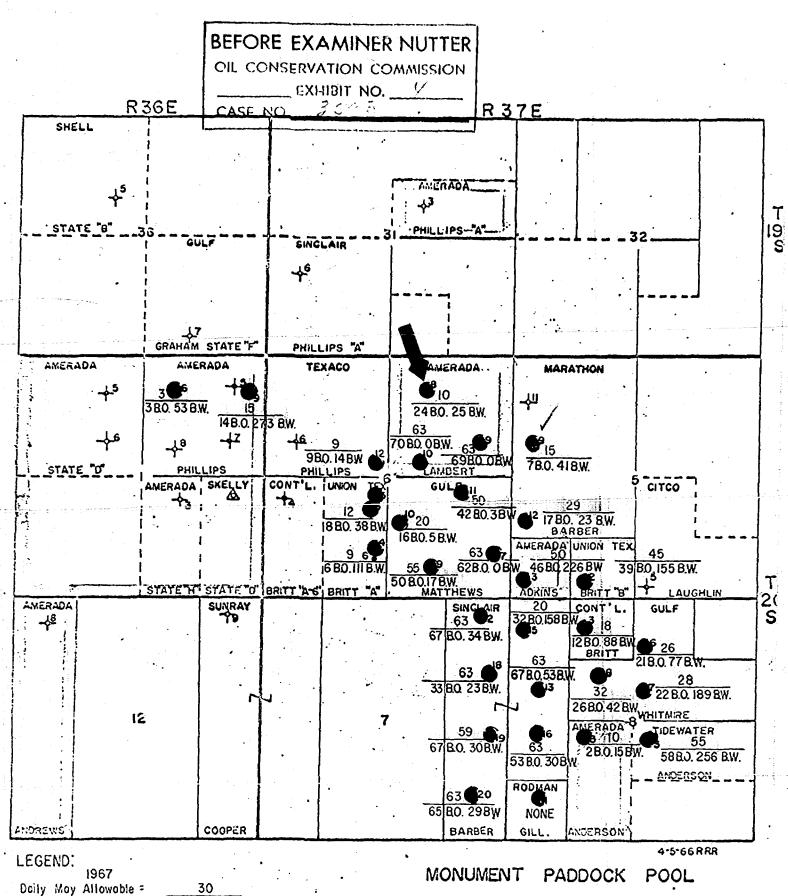
PROPOSED INSTALLATION - COMMINGLED PRODUCTION

AMERADA PETROLEUM CORP.

EXHIBIT 3

NO. 3593

DATE 6-6-67



Daily May Allowable = 30
Daily March Production = 25 8.0. 68.W.

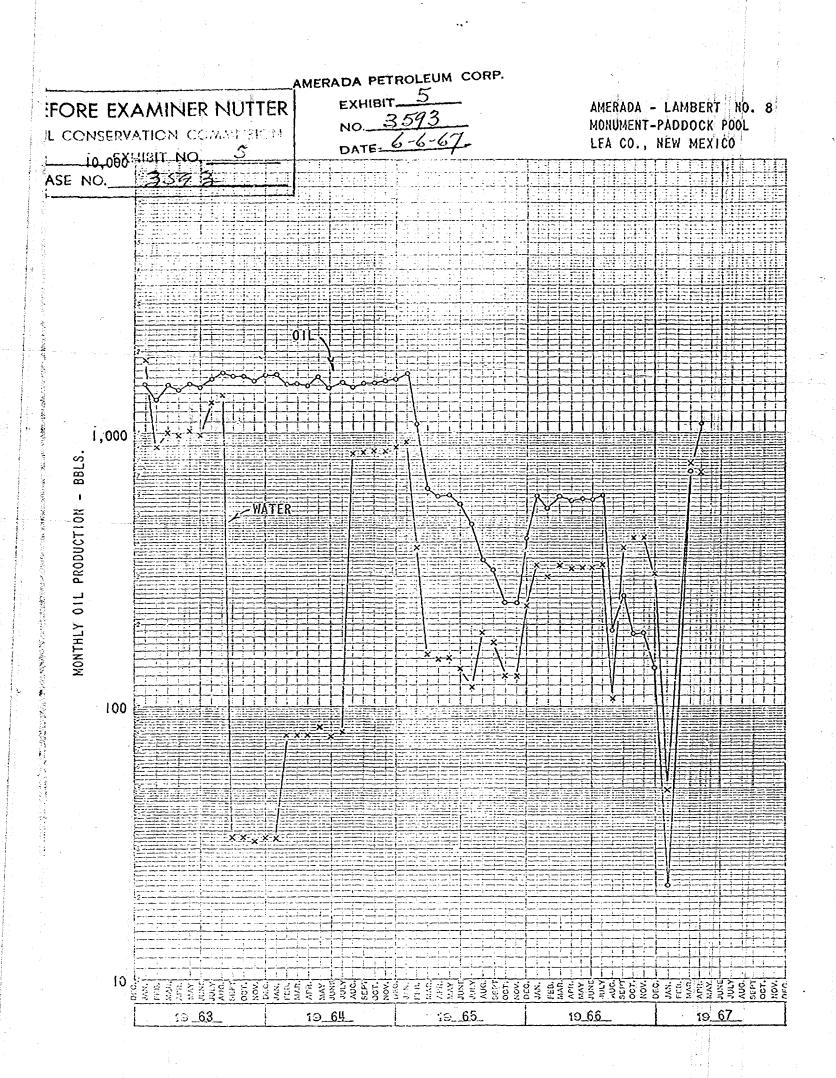
AMERADA PETROLEUM CORP. LEA COUNTY, NEW MEXICO

EXHIBIT 4

NO 3593

SCALE: 1 - 2000

DATE 6-6-67



ICONSERVATION COMMISSION FORE EXAMINER NUTTER MONTHLY OIL PRODUCTION - BBLS. ,000 00 ت پ.متع MARRAMAY JUNE SEPTING AMERADA PETROLEUM CORP. 19 6H ЕХНІВІТ... No. 3593 DATE 6-6-67 19 65 AMERADA - LAMBERT NO. 8
MONUMENT-PADDOCK POOL
LEA CO., NEW MEXICO

BEFORE EXAMINER NUTTER BF OIL CONSERVATION COMMISSION R37E R 36E EXHIBIT NO. CASE N ₫C AMERADA -43 U.R. PHILCIPS " SINCLAIR AMERADA. 8B.O. 93B.W. 6 24 10B.0 3B.W. 480 6 B.W. 22BO .9 BW. CULP J. R. PHILLIPS "A" GRAHAM STATE F MARATHON L AMERADA 0 STATE "F" TEXACO AMERADA ... TOBO QBW. AMERADA 3 € 8 46 6 380.88.W. 10 4680.08.W 680.18.W 2480.58.8.W 68.0.08.W 4 80. IBW. \_46BO 0BW 31 B.O. 2 B.W. 20 L.M. LAMBERT 5 CITCO 16BO 7BW. 19 16 BO 105 BW STATE D 12 BO. 32 B.W. BERTHA BARBER TEXACO 7B.O.142BW. 20 ALERADA UNION TEXAS 1680.78W 14 68 14 0BW 112 MATTHEWS \$₩D LAUGHLIN BRITT "B" 5B.0.9BW. ADKINS". BRITT'A-6'I BRITT "A" 12 SINCLAIR
UNION TEXAS 60
1180. 2078W 568.0 28W STATE E SUNRAY 5680.0BW.7B.0.7B.W. 480 6BW **6**3 51,80,75 BW. 47 BO. 22 B.W. 38.0. 55 B.W. 63 T3 15680.113 B.W. 12 35 15 BO 2 B.W. 4 B.O. 11 B.W RODMAN \_∱50 FEO. BRITT COOPER NOREWS

LEGEND: 1967 Doily May Allowable = 25
Doily March Production = 23 B.O. 10 B.W.

C

MONUMENT BLINEBRY POOL LEA COUNTY, NEW MEXICO

SCALE ! . I . 2000

AMERADA PETROLEUM CORP.

EXHIBIT 6

4-4-66 RRR

AMERADA PETROLEUM CORP. EXHIBIT... AMERADA - LAMBERT NO. 8 MONUMENT-BLINEBRY POOL LEA CO., NEW MEXICO 10,000 BEFORE EXAMINER NUTTER OIL CONSERVATION COMA SIGN EXHIBIT NO. CASE NO. 3593 1,000 MONTHLY PRODUCTION - BBLS. MANY AND SEPT OF SEPT 19\_64 19\_65\_ 19\_66\_ 19\_67\_ 19 \_63\_

MONTHLY PRODUCTION - BBLS. 1,000 DATE OIL CONSERVATION COMMISSION BEFORE EXAMINER NUTTER EXHIBIT NO.

100

MAR. APR. MAY JUNE JULY AUG. SEPT

OCT.
NOV.
DEC.
JAN.
JEE.
MAR.
APR.
MAY
JUNE
JULY
AUG.
SEPT
OCT.
NOV.
JAN.
HEB.
MAY
JUNE
JULY
AUG.
SEPT
OCT.
OCT.

NOV.
DEC.
JAN.
FEB.
MAR.
APR.
MAY
JUNE
JULY
AUG.
SEPT
OCT.
NOV.

DEG.
JAN.
FEB.
MAR.
APR.
MAY
JUNE
JULY
AUG.
SEPT
OCT.
NOV.

:⊚.63

19\_64

19<u>65</u>

19 66

79.61

AMERADA - LAMBERT NO.
MONUMENT-BLINEBRY POOL
LEA CO., NEW MEXICO

AMERADA PETROLEUM CORP.

No. 3593

EXHIBIT ....

DAILY PRODUCTION TESTS

Amerada - LAMBERT No. 8

Sec. 6 - T20S - R37E

Lea County, New Mexico

\* .

Monument-Blinebry (as part of dual)

July, 1966

P + BO + 2 BW

Sept., 1966

P 5.8 BO + 8.7 BW

Monument-Paddock (as part of dual)

April, 1967

P 27 BO + 21 BW

Test of Commingled Paddock and Blinebry

May 8, 1967

P 36 BO + 24 BW GOR 773

May 19, 1967

P 40 BO + 13 BW

Working fluid level by Echometer on 5/19/67

5,420

Seating nipple for pump

5,477

Fump submergence

57 feet

Working fluid level is 204' below base of Paddock perforations Working fluid level is 163' above top of Blinebry perforations

AMERADA PETROLEUM CORP.

EXHIBIT\_E

NO 3593

DATE 6-6-6/

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMITTED

EXHIBIT NO. 8

CASE NO. 3593

Branch Control