

CASE 4447: Application of MORRIS  
R. ANTWEIL FOR A DUAL COMPLETION,  
EDDY COUNTY, NEW MEXICO.

Case. Number.

4447

Application,  
Transcripts.

Sm all Exhibts.

ETC.

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

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO

October 28, 1970

EXAMINER HEARING

IN THE MATTER OF:

Application of Morris R. Antweil for  
a dual completion, Eddy County,  
New Mexico.

Case No. 4447

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: This is Case No. 4447.

MR. HATCH: This is the application of Morris R. Antweil for a dual completion, Eddy County, New Mexico.

MR. STEVENS: I have five exhibits.

(Whereupon Applicant's Exhibits 1 through 5 were marked for identification.)

MR. STEVENS: Mr. Examiner, I am Don Stevens with the firm of McDermott, Conley and Stevens. We have one witness for the applicant.

ROBERT M. WILLIAMS,

a witness, having been first duly sworn according to law, upon his oath, testified as follows:

MR. UTZ: Any appearances in this case?

You may proceed.

DIRECT EXAMINATION

BY MR. STEVENS:

Q Mr. Williams, could you tell us by whom you are employed and in what location?

A I am employed as an engineer with Morris R. Antweil in Hobbs, New Mexico.

Q Have you previously testified before the Commission and had your qualifications accepted?

A Yes. I have.

MR. STEVENS: Are the witness' qualifications acceptable?

MR. UTZ: Yes, sir. They are.

Q Referring to Exhibit No. 1, will you briefly describe what it contains and what the applicant seeks in this case?

A Exhibit No. 1 is the form C-107, the application for multiple completion of the Morris R. Antweil No. 1 Allen well located in Unit J, Section 31, 22 South, 27 East of Eddy County, New Mexico -- wells located in the South Carlsbad Field. The application is for a gas gas dual to produce from the Strawn and the Morrow formations -- both zones, of course, flowing.

Q Referring to Exhibit No. 2, which would be a location plat, would you describe what it contains, for the Commission?

A Yes. Exhibit No. 2 is a plat of the area. It shows in Section 31 the location of our No. 1 Allen well in Unit J. It shows the dedicated acreage to the proposed dual completion being the east half of Section 31. Also on the plat is shown the other completions in the South Carlsbad Field. I would like to refer to those in Section 6. In Unit 0 of Section 6 is our Morris R. Antweil Missouri No. 1 which is completed from the

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Morrow formation, a single completion. In Section 1 is our two completions. Superior Oil Company has their No. 1 Collett in Unit J. It is completed as a Strawn producer and also in Unit J of Section 1 Pennzoil has their Gulf Federal No. 1 completed as a Morrow completion. South of these two wells in Unit or Section 12, Unit B, Pennzoil has their Mobil Federal No. 1 and it is completed as an Atoka Morrow dual. This is a previous dual completion in the field, although it involves a different zone than our application. Also on the plat I think you can pick up the names of the offset operators to our well. These are the offset acreages operated by Morris R. Antweil, partial; Superior Oil Company; Cities Service Oil Company; Mobil Oil Company; Pennzoil United and Atlantic Richfield Company.

Q Were all of these operators notified of your request for this dual completion?

A Yes. They were all furnished a copy of the C-107 and the attachments by mail on the 5th of October.

Q Referring to Exhibit No. 3, would you explain its relevance to the Commission?

A Exhibit No. 3 is a tabulation of the significant drillstem test data of the two drillstem tests that we took in the

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Strawn formation and the one drillstem test we took in the Morrow formation. I think the significant points of the information here is that the reservoir pressure shut-in, final shut-in pressure shown from the Strawn drillstem test information would indicate the Strawn formation of a reservoir pressure of fifty-four hundred eighty-six pounds and the Morrow formation shut-in pressure there would indicate reservoir pressure of forty-seven hundred ninety-six pounds -- a significant difference in the reservoir pressures. Also the recoveries indicated the Strawn gas production to be accompanied by condensate where the Morrow gas production was dry gas.

Q Is it usual for the upper formation to have a higher pressure than the lower formation?

A The normal situation would be to have increase in pressures with depth.

Q Would this indicate to you separation of the pays both in the formation and in the wellbore?

A Yes.

Q Referring to Exhibit No. 4, would you discuss it?

A Exhibit No. 4 is a sonic gamma ray log of the No. 1 Allen well. In the detailed section of the log I have

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marked the top of the Strawn formation at ten thousand one hundred eighty-six feet. I have indicated the perforations in the Strawn formation, perforated with twenty-five holes between the depths of ten thousand two hundred thirty-eight feet and ten thousand three hundred seventy-five feet. Looking on down the log then I have indicated the top of the Atoka formation. This is the formation that the previous dual in the field was approved for. The Atoka formation is located in our well at ten thousand five hundred thirty-eight feet.

Q Did you find any hydrocarbons in that formation?

A No. When we drilled the Atoka formation in our well there was no porosity development, no indication of hydrocarbon accumulation. Looking on down the log then at the depth of eleven thousand seventy-six feet is our top of the Morrow formation and then I have marked the Morrow perforations in the interval eleven thousand four hundred forty feet to eleven thousand four hundred sixty-three feet -- our ten perforations in that interval. I think the log adequately indicates that there is approximately a thousand feet of non-porous, non-productive formation between the two producing intervals that we wish to dual complete.



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Q Could you give us the composition of the formation completed in each pay?

A Yes. The Strawn formation is a hydrocarbon -- I am sorry -- carbonite bank and possibly a reef bank. The Morrow formation is a sand, medium grain sand formation.

Q Would you discuss Exhibit No. 5 with the Commission?

A Exhibit No. 5 is a diagrammatic sketch of the proposed physical condition of the dual completion. I have shown here the twelve and three-quarters inch casing, fifty-one pounds casing set at three hundred sixty-two feet. The casing was cemented with four hundred sacks of cement and cement was circulated. The eight and five-eighths inch casing, twenty-four pounds and thirty-two pound casing set at twenty-six hundred feet and cemented with eight hundred fifty sacks of cement. The top of the cement measured was thirteen hundred feet. The five and a half inch casing design consisted of seventeen pound, twenty pound and twenty-three pound casing. It was cemented at eleven thousand eight hundred twenty-five feet with twelve hundred forty-five sacks of cement in two stages, bring the top of the cement to four thousand twenty-five feet as measured by temperature survey. I have indicated on the diagrammatic sketch the

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Strawn perforations in the interval ten thousand two hundred thirty-eight feet to ten thousand three hundred seventy-five feet and the Morrow perforations in the eleven thousand four hundred forty feet to eleven thousand four hundred sixty-three feet. The Baker Model D retainer production packer, this is a permanent packer to separate the two zones; is set at eleven thousand three hundred seventy feet. A proposed completion will be through parallel strings of tubing. This is a two and one sixteenth inch interval joint tubing. The long string to produce the Morrow is seated in the Model D packer, has a Baker Model E anchor tubing assembly immediately above the packer to permit disengagement of this tubing in the event any work is required on the well. The long string of tubing is an eighty tubing. The short string of tubing to produce the Strawn production is two and one sixteenths interval joint J55 tubing and is set at ten thousand one hundred seventy-five feet, latched in the parallel string anchor at that depth.

Q Are there any non-producing formations in the area between the interval at the base of your eighty-five at twenty-six hundred feet and the top of the cement at four thousand twenty-five feet?

A No. There are not. The reason we have brought the cement back to four thousand twenty-five feet, on the drilling of the well we encountered a gas show at forty-eight hundred feet and so we designed our cementing program to bring the cement back over that interval.

Q There is also an interval between three hundred sixty-two feet, the base of the surface casing, and the top of the cement at thirteen hundred feet. Are there any non-pays in the area?

A No non-pays in that interval.

Q Is this sweet or sour gas in both cases?

A A gas analysis that we have at this time did indicate no hydrogen sulphide content in either gas string.

Q You do not expect any significant amount of corrosion problems?

A No. We do not.

Q From an engineering standpoint is this installation in accordance with good engineering practices and in accordance with Conservation practices of the New Mexico Oil Conservation Commission?

A Yes.

MR. STEVENS: We have no further questions, Mr. Examiner, at this time. We'd like to move the introduction of

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Exhibits 1 through 5.

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

Are there any questions of the witness?

You may be excused.

The case will be taken under advisement.

I do hereby certify that the foregoing is  
a complete record of the proceedings  
the day and date of the proceedings 4947  
10-28-70  
New Mexico Oil Conservation Commission

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

I, PETER A. LUMIA, a Court Reporter 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.

Peter A. Lumia  
Peter A. Lumia, C.S.R.

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I N D E X

WITNESS

PAGE

ROBERT M. WILLIAMS

Direct Examination by Mr. Stevens

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E X H I B I T S

APPLICANT'S

MARKED

OFFERED AND  
ADMITTED

Nos. 1 through 5

2

10



# OIL CONSERVATION COMMISSION

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

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMJO  
MEMBER

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

November 6, 1970

Mr. Donald S. Stevens  
McDermott, Connelly & Stevens  
Attorneys at Law  
Post Office Box 1904  
Santa Fe, New Mexico

Re: Case No. 4447  
Order No. R-4056  
Applicant:  
Morris R. Antweil

Dear Sir:

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

Very truly yours,

G. L. Parker, Jr.

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC      x

Artesia OCC    x

Aztec OCC

Other \_\_\_\_\_

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. 4447  
Order No. R-4056

APPLICATION OF MORRIS R. ANTWEIL  
FOR A DUAL COMPLETION, EDDY COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 28, 1970,  
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 6th day of November, 1970, 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, Morris R. Antweil, seeks authority to  
complete his Allen Well No. 1, located in Unit J of Section 31, Town-  
ship 22 South, Range 27 East, NMPM, Eddy County, New Mexico, as a dual  
completion (conventional) to produce gas from the South Carlsbad-  
Strawn and the South Carlsbad-Morrow Gas Pools through parallel strings  
of 2 1/16-inch tubing, with separation of the zones by a packer set  
at approximately 11,370 feet.

(3) That the mechanics of the proposed dual completion are  
feasible and in accord with good conservation practices.

(4) That approval of the subject application will prevent waste  
and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Morris R. Antweil, is hereby authorized  
to complete his Allen Well No. 1, located in Unit J of Section 31,  
Township 22 South, Range 27 East, NMPM, Eddy County, New Mexico, as a



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CASE No. 4447  
Order No. R-4056

dual completion (conventional) to produce gas from the South Carlsbad-Strawn and the South Carlsbad-Morrow Gas Pools through parallel strings of 2 1/16-inch tubing, with separation of the zones by a packer set at approximately 11,370 feet;

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Shut-In Pressure Test Period for the South Carlsbad-Morrow Gas Pool.

(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



ALEX J. ARMIJO, Member



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



esr/

Case 4447

Recd 10-28-70

Rec. 11-3-70

Grant Monistrentwell permission  
to dual complete his Allen #1-S  
31 22-27 Eddy, in the ~~So.~~ So.  
Carlsbad-Strawn & So. Carlsbad-Morris.  
Completion will be conventional. Operator  
will use 2 1/2" tubing  
& packer set at depth 11,300.

Thos D. [Signature]

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 28, 1970

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 4443: Application of Pan American Petroleum Corporation for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the BS Mesa-Gallup and Basin-Dakota Gas Pools in the wellbores of its Jicarilla Apache 102 Wells Nos. 7, 9, 11, and 12, located respectively in Sections 3, 4, 10, and 9, Township 26 North, Range 4 West, Rio Arriba County, New Mexico. Applicant further seeks a procedure whereby other wells on said Jicarilla Apache 102 lease now dually completed in said pools may be approved administratively for downhole commingling.

CASE 4444: Application of Tenneco Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the rules governing the Allison-Pennsylvanian Pool to permit the completion of an oil well at an unorthodox location 1830 feet from the North line and 660 feet from the West line of Section 10, Township 9 South, Range 36 East, Lea County, New Mexico.

CASE 4445: Application of Byron McKnight for an exception to Order No. R-111-A, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the potash-oil area casing and cementing rules as set forth in Commission Order No. R-111-A. Applicant proposes to drill two exploratory wells in the NW/4 NW/4 of Section 35 and the NE/4 NE/4 of Section 34, both in Township 19 South, Range 33 East, Lea County, New Mexico, in such a manner as to eliminate the necessity of running the salt protection string required by said Order No. R-111-A, provided the production string would be cemented to the surface.

CASE 4446: Application of Ford Chapman for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in the open-hole interval from 2899 feet to 2905 feet in his Gulf Pipkin Federal Well No. 1 located 330 feet from the South line and 605 feet from the East line of Section 34, Township 26 South, Range 29 East, Pecos-Delaware Pool, Eddy County, New Mexico.

CASE 4447: Application of Morris R. Antweil for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of his Allen Well No. 1 located in Unit J of Section 31, Township 22 South, Range 27 East, Eddy County, New Mexico, in such a manner as to permit the production of gas from the South Carlsbad-Strawn and South Carlsbad-Morrow Gas Pools through parallel strings of tubing.

CASE 4173: Reopened - (Continued from the September 30, 1970 Examiner Hearing)

In the matter of Case 4173 being reopened pursuant to the provisions of Order No. R-3811-A, which order extended 80-acre spacing units and a limiting gas-oil ratio of 4000 cubic feet of gas per barrel of oil for the Hobbs-Drinkard Pool, Lea County, New Mexico, for a period of 90 days. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing, why the limiting gas-oil ratio should not revert to 2000 to one, and/or why all casinghead gas produced by wells in the pool should not be reinjected.

CASE 4448: Application of MWJ Producing Company for pool redelineation and the creation of a new pool and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the redelineation of the Mescalero Permo-Pennsylvanian Pool by the deletion of all lands in Sections 28 and 33, Township 10 South, Range 32 East, Lea County, New Mexico, from said pool. Applicant further seeks the creation of a new pool for the production of oil from the Permo-Pennsylvanian formation for its Huber State Well No. 1 located in Unit K of said Section 33, and for the promulgation of special rules therefor including a provision for 160-acre spacing units and the assignment of 80-acre allowables.

CASE 4449: Application of Petro-Thermo Corporation for authority to operate an oil treating plant, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to install and operate a water-bath and heat-treatment type oil treating plant in the SW/4 NW/4 of Section 31, Township 18 South, Range 37 East, Lea County, New Mexico, for the reclamation of sediment oil.

CASE 4450: Application of Anderson Oil and Gas Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete the New Mexico State B. T. (Q) Well No. 1 located 660 feet from the South and East lines of Section 33, Township 11 South, Range 33 East, Lea County, New Mexico, in such a manner as to permit the production of oil through tubing from the Bagley-Pennsylvanian Pool and the disposal of produced salt water through tubing into the Devonian formation, Bagley-Siluro-Devonian Pool at a depth of approximately 11,075 feet.

CASE 4451: Application of Union Oil Company of California for a non-standard oil proration unit, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for an 80-acre non-standard oil proration unit comprising the SW/4 SE/4 of Section 17 and the NW/4 NE/4 of Section 20, Township 8 South, Range 38 East, Bluit-San Andres Associated Pool, Roosevelt County, New Mexico, to be dedicated to a well to be drilled at a standard location in the SW/4 SE/4 of said Section 17.

CASE 4423: Continued from the September 30, 1970 Examiner Hearing

Application of Union Oil Company of California for compulsory pooling, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down to and including the San Andres formation underlying the N/2 NE/4 of Section 20, Township 8 South, Range 38 East, Bluit-San Andres Associated Pool, Roosevelt County, New Mexico. Said acreage to be dedicated to a well to be drilled at an orthodox location in the NW/4 NE/4 of said Section 20. Also to be considered will be the cost 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 4434: (Continued from the September 30, 1970, Examiner Hearing)

Application of Union Oil Company of California for the creation of a new gas pool and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new gas pool for its Pipeline Federal Well No. 1 located in Section 4, Township 19 South, Range 34 East, Lea County, New Mexico. Applicant further seeks the promulgation of special rules therefor, including a provision for 640-acre spacing and proration units and fixed well location requirements.

CASE 4452: Application of David C. Collier for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by injection into the Queen formation through 4 wells located in Sections 1 and 12 of Township 19 South, Range 29 East, and Section 6 of Township 19 South, Range 30 East, East Turkey Track-Queen Pool, Eddy County, New Mexico.

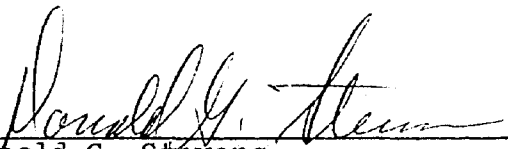
NEW MEXICO OIL CONSERVATION COMMISSION

Application of Morris R. Antweil       )  
for a dual completion (conventional)   )  
Allen Well No. 1, located in Unit J     )  
of Section 31, Township 22 South,       )  
Range 27 East, Eddy County, New       )  
Mexico.                                    )

Case 4447

ENTRY OF APPEARANCE

DONALD G. STEVENS hereby enters his appearance as  
attorney for Applicant in the above-entitled case.

  
\_\_\_\_\_  
Donald G. Stevens  
Attorney for Applicant  
P. O. Box 1904  
Santa Fe, New Mexico 87501

NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
APPLICATION FOR MULTIPLE COMPLETION

Form C-107  
5-1-61

Operator <b>Morris R. Antweil</b>		County <b>Eddy</b>	Date <b>2 October 1970</b>
Address <b>Box 2010, Hobbs, New Mexico 88240</b>		Lessee <b>Allen</b>	Well No. <b>1</b>
Location of Well <b>J</b>	Unit <b>31</b>	Township <b>22-S</b>	Range <b>27-E</b>

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES \_\_\_\_\_ NO X
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_ Operator Lease, and Well No. \_\_\_\_\_

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	<b>South Carlsbad (Strawn)</b>		<b>South Carlsbad (Morrow)</b>
b. Top and Bottom of Pay Section (Perforations)	<b>10238' - 10375'</b>		<b>11440' - 11463'</b>
c. Type of production (Oil or Gas)	<b>Gas</b>		<b>Gas</b>
d. Method of Production (Flowing or Artificial Lift)	<b>Flow</b>		<b>Flow</b>

4. The following are attached. (Please check YES or NO)

Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

<b>Morris R. Antweil</b>	<b>Box 2010</b>	<b>Hobbs, New Mex. 88240</b>
<b>Superior Oil Company</b>	<b>Box 1900</b>	<b>Midland, Texas 79701</b>
<b>Cities Service Oil Company</b>	<b>800 Vaughn Bldg.</b>	<b>Midland, Texas 79701</b>
<b>Mobil Oil Corporation</b>	<b>Box 633</b>	<b>Midland, Texas 79701</b>
<b>Pennzoil United, Inc.</b>	<b>Box 1828</b>	<b>Midland, Texas 79701</b>
<b>Atlantic Richfield Company</b>	<b>Box 1978</b>	<b>Roswell, New Mex 88201</b>

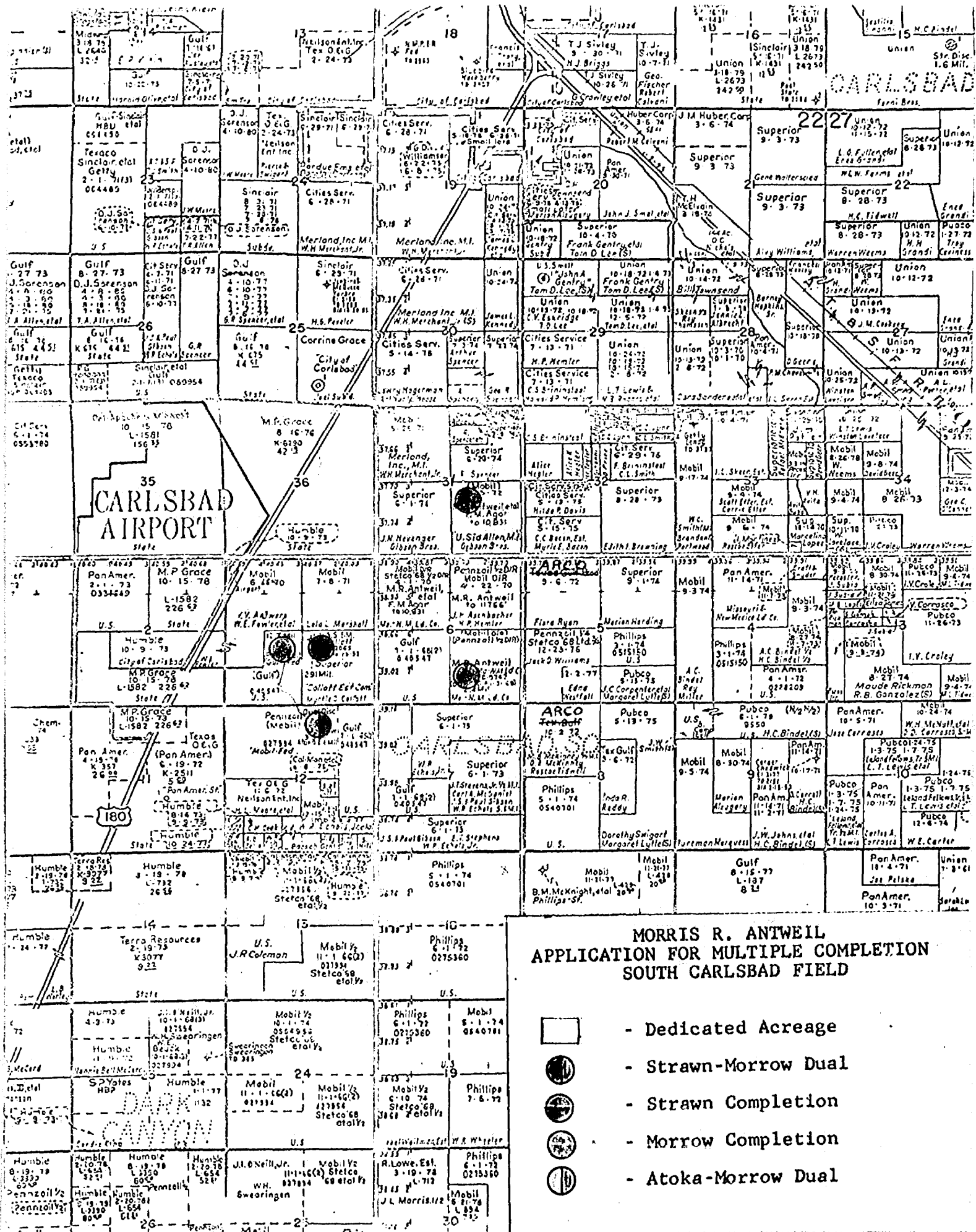
6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO \_\_\_\_\_. If answer is yes, give date of such notification 5 Oct. 1970-by mail.

CERTIFICATE: I, the undersigned, state that I am the Agent of XX Morris R. Antweil (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

*C. M. Williams*  
Signature

\*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.





SUMMARY

DRILL STEM TEST DATA  
MORRIS R. ANTWEIL NO. 1 ALLEN  
SEC. 31-22S-27E, EDDY COUNTY

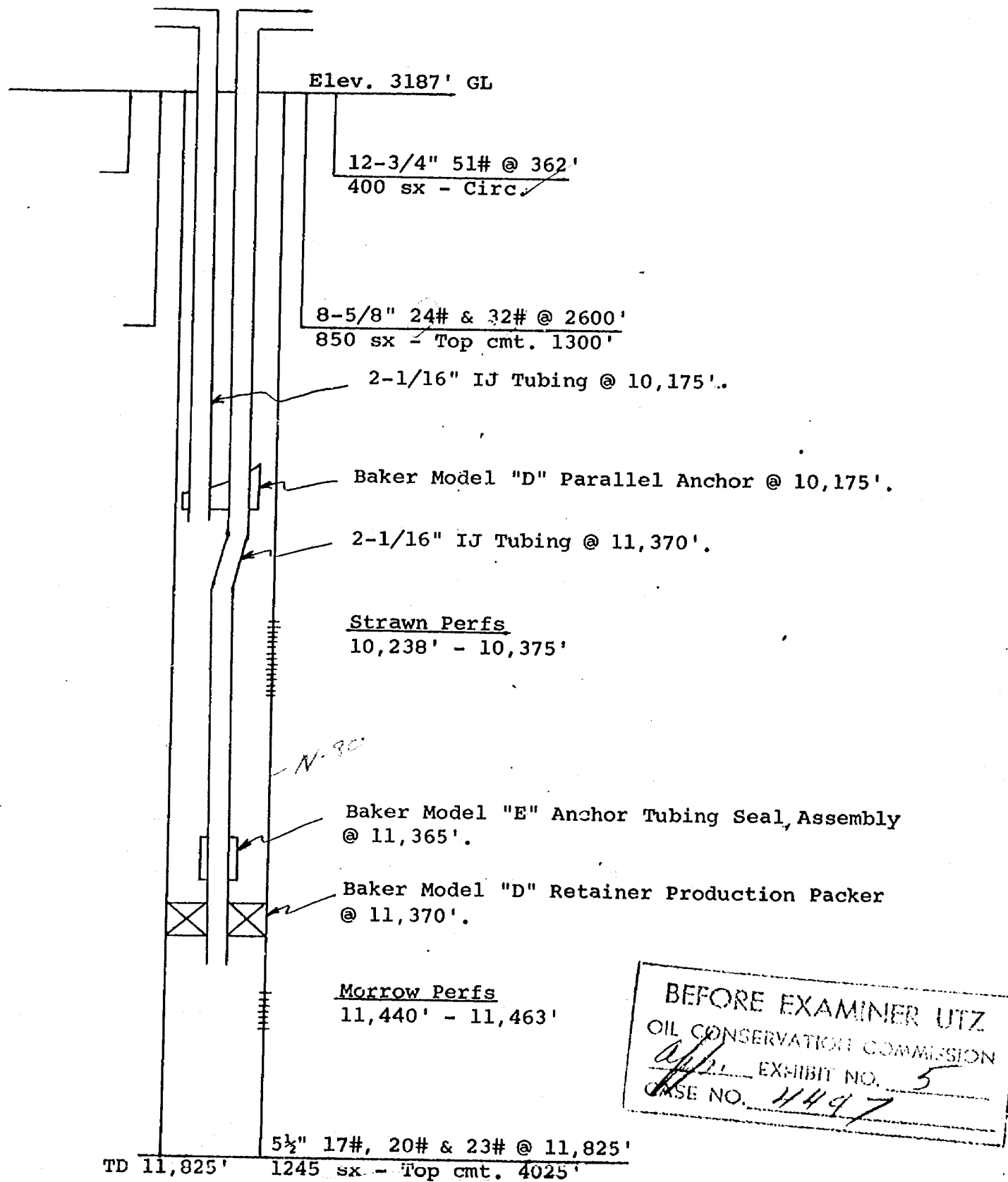
DST 10,175'-10,320' (Strawn) - Tool open 3 hrs. GTS 4 mins.  
Flowed at rate of 2040 MCFPD. Recovered 250' 53° API  
condensate, 313' mud cut condensate, and 270' drilling fluid.  
30 min. ISIP 5188 psi, IFP 573 psi, FFP 1054 psi, 4 hr. FSIP  
4615 psi (still building up).

DST 10,320'-10,523' (Strawn) - Tool open 3 hrs. GTS 4 mins.  
Flowed at rate of 2800 MCFPD. Recovered 568' 48° API *Condensate*  
condensate and 300' drilling fluid. 30 min. ISIP 5486 psi,  
IFP 2000 psi, FFP 4835 psi, 4 hr. FSIP 5466 psi.

DST 11,430'-11,474' (Morrow) - Tool open 1½ hrs. GTS 3½ mins.  
Flowed at rate of 2960 MCFPD. Recovered 300' drilling fluid.  
30 min. ISIP 4796 psi, IFP 1653 psi, FFP 4601 psi, 3 hr FSIP  
4796 psi.

5466  
4796  
660

DIAGRAMMATIC SKETCH  
MORRIS R. ANTWEIL NO. 1 ALLEN  
STRAWN-MORROW DUAL



Morris R. Antweil

OIL OPERATOR  
P. O. Box 2010  
HOBBS, NEW MEXICO 88240

October 2, 1970

Mr. A. L. Porter, Jr., Secretary-Director  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

REFERENCE: Application for Approval of Multiple Completion,  
South Carlsbad Field, Eddy County.

Dear Sir:

27 Morris R. Antweil respectfully requests approval of a multiple completion in the South Carlsbad Field, Eddy County, to permit the completion of our No. 1 Allen, located in Section 31-22S-37E, as a gas-gas, Strawn-Morrow dual completion. Commission Form C-107, Application for Multiple Completion, accompanied by the required supplemental information, is enclosed.

The Commission has previously authorized a multiple completion in the South Carlsbad Field; however, that dual completion is not in the same common sources of supply as those involved in the No. 1 Allen. The Pennzoil United No. 1 Mobil-Federal in Section 12-23S-26E is completed and currently producing as an Atoka-Morrow (10,840'-10,870' and 11,450'-11,550') dual completion. The Atoka interval is located stratigraphically between the Strawn and Morrow intervals requested for multiple completion approval in the No. 1 Allen.

The gamma ray-sonic log accompanying the enclosed Form C-107 clearly shows the separate completion intervals in the Strawn and Morrow formations to be distinct reservoir developments separated by more than 1000 feet of nonporous formation. The Strawn reservoir development is in a limestone formation; while the Morrow is a sandstone. The enclosed summary of drill stem test information obtained while drilling the No. 1 Allen indicates the two reservoirs to have different reservoir pressures. The reservoir pressure in the Strawn is indicated to be 5486 psi; while the Morrow pressure is indicated to be 4796 psi. In addition, the drill stem test information indicates the Strawn gas production to be accompanied by condensate; while the Morrow gas is dry.

DOCKET MAILED

Date 10-14-70

Mr. A. L. Porter, Jr.

- 2 -

October 2, 1970

In view of the previous authorization of a multiple completion in the South Carlsbad Field involving an interposing interval, and the distinctly separate reservoir developments in the Strawn and Morrow formations, Morris R. Antweil requests administrative approval of the multiple completion of the No. 1 Allen as a Strawn-Morrow dual. If administrative approval cannot be granted, we request that our application be set for public hearing at the earliest available date. Your favorable consideration of our application will be appreciated.

Respectfully,

MORRIS R. ANTWEIL



R. M. Williams

RMW/lm

Enclosures

NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
APPLICATION FOR MULTIPLE COMPLETION

Form C-107  
5-1-61

*Case 4447*

Operator <b>Morris R. Antweil</b>		County <b>Eddy</b>	Date <b>2 October 1970</b>
Address <b>Box 2010, Hobbs, New Mexico 88240</b>		Lease <b>Allen</b>	Well No. <b>1</b>
Location of Well <b>J</b>	Unit <b>31</b>	Township <b>22-S</b>	Range <b>27-E</b>

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES \_\_\_\_\_ NO X
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_ ; Operator Lease, and Well No.: \_\_\_\_\_

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	South Carlsbad (Strawn)		South Carlsbad (Morrow)
b. Top and Bottom of Pay Section (Perforations)	10238' - 10375'		11440' - 11463'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flow		Flow

4. The following are attached. (Please check YES or NO)

- |                                     |                                     |   |
|-------------------------------------|-------------------------------------|---|
| Yes                                 | No                                  |   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)   |

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Morris R. Antweil	Box 2010	Hobbs, New Mex. 88240
Superior Oil Company	Box 1900	Midland, Texas 79701
Cities Service Oil Company	800 Vaughn Bldg.	Midland, Texas 79701
Mobil Oil Corporation	Box 633	Midland, Texas 79701
Pennzoil United, Inc.	Box 1828	Midland, Texas 79701
Atlantic Richfield Company	Box 1978	Roswell, New Mex 88201

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO \_\_\_\_\_. If answer is yes, give date of such notification 5 Oct. 1970-by mail.

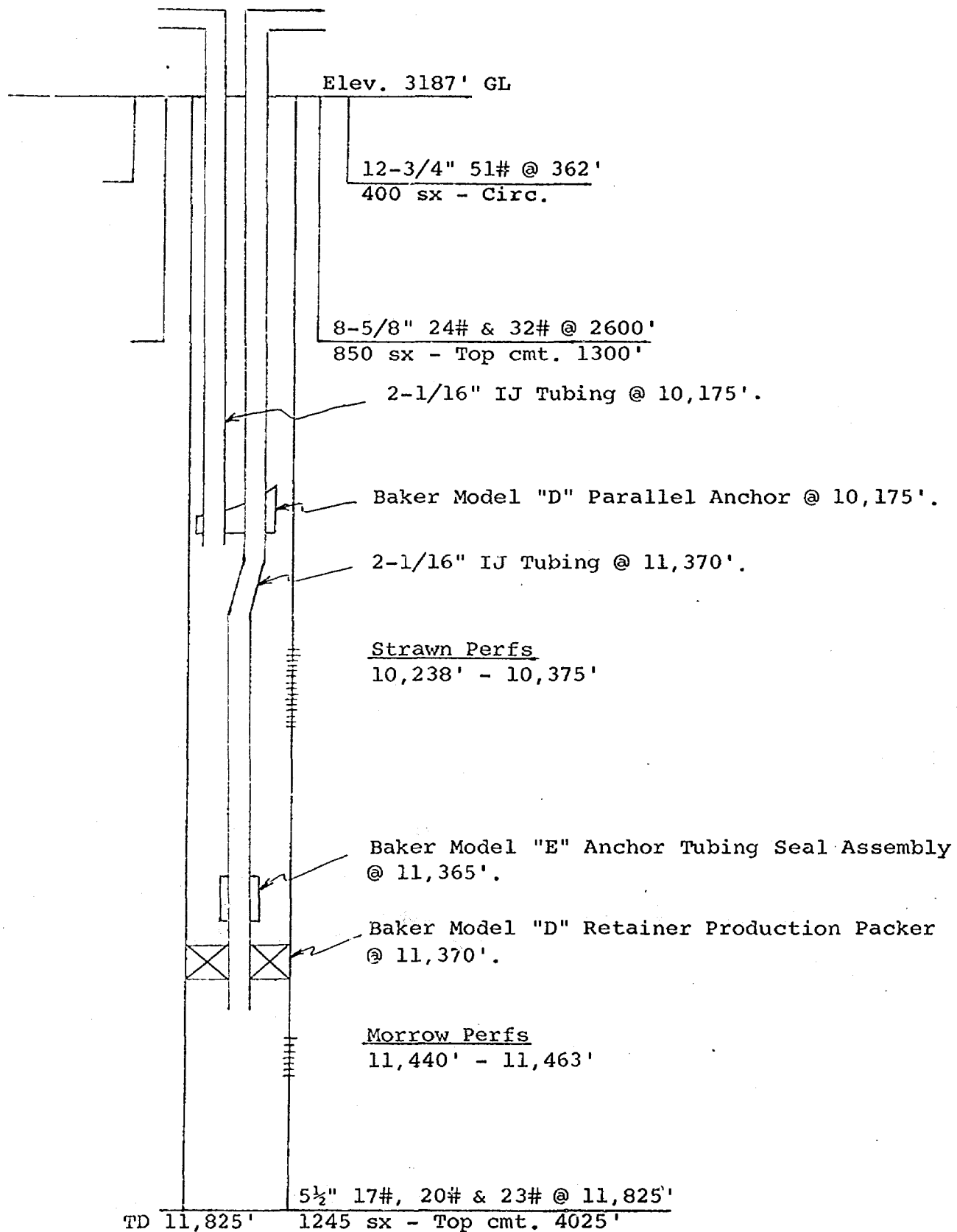
CERTIFICATE: I, the undersigned, state that I am the Agent of XX Morris R. Antweil (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

*E M Williams*  
\_\_\_\_\_  
Signature

\*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

DIAGRAMMATIC SKETCH  
MORRIS R. ANTWEIL NO. 1 ALLEN  
STRAWN-MORROW DUAL





Page 4447

# SUMMARY

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DRAFT

GMH/esr

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. 4447

Order No. R- 4056

APPLICATION OF MORRIS R. ANTWEIL  
FOR A DUAL COMPLETION, EDDY 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, 1970, at Santa Fe, New Mexico, before Examiner  
Elvis A. Utz.

NOW, on this \_\_\_\_\_ day of November, 1970, 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, Morris R. Antweil,  
seeks authority to complete ~~its~~ his Allen  
Well No. 1, located in Unit J of Section 31, Township  
22 ~~North~~ South, Range 27 ~~West~~ East, NMPM, Eddy County, New  
Mexico, as a dual completion ~~(combination)~~ <sup>(conventional)</sup> ~~(tubingless)~~ <sup>=oil=</sup> to produce gas  
from the South Carlsbad Strawn ~~South Carlsbad Strawn~~ and the  
South Carlsbad-Morrow Gas Pools through parallel strings of  
2 1/16 -inch tubing, with separation of the zones by a packer  
set at approximately 11,370 feet.

(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Morris R. Antweil,  
is hereby authorized to complete ~~its~~ his Allen  
Well No. 1, located in Unit J of Section 31, Township  
22 ~~North~~ South, Range 27 ~~West~~ East, NMPM, Eddy County, New  
Mexico, as a dual completion (conventional) ~~oil~~  
~~(combination)~~ to produce gas  
~~(tubingless)~~  
from the South Carlsbad-Strawn ~~Pool~~ ~~through~~ and the  
South Carlsbad-Morrow Gas Pools through parallel strings of  
2 1/6 -inch tubing, with separation of the zones by a packer  
set at approximately 11,370 feet;

PROVIDED HOWEVER, that the applicant shall complete, operate,  
and produce said well in accordance with the provisions of Rule  
112-A of the Commission Rules and Regulations insofar as said rule  
is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage  
tests upon completion and annually thereafter during the Annual  
~~Shut-in Pressure~~  
~~Gas-Oil Ratio~~ Test Period for the South Carlsbad-Morrow Gas Pool.  
~~Deliverability~~

(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 herein-  
above designated.