

CASE NO. 5386: YATES PETR. CORP.
FOR FOUR DUAL COMPLETIONS AND ONE
UNORTHODOX LOCATION, EDDY COUNTY

CASE No.

5386

Application,

Transcripts,

Small Exhibits

ETC.

I N D E X

	<u>PAGE</u>
EDDIE MAHFOOD	
Direct Examination by Mr. Losee	3
Cross Examination by Mr. Stamets	12
Redirect Examination by Mr. Losee	17

E X H I B I T S

	<u>Marked</u>	<u>Admitted</u>
Yates' Exhibits 1 through 9		12

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MR. STAMETS: Call the next case, Case 5386.

MR. CARR: Case 5386. Application of Yates Petroleum Corporation for four dual completions and one unorthodox gas well location, Eddy County, New Mexico.

MR. LOSEE: A.J. Losee, Losee & Carson, appearing for the Applicant. I have one witness, Mr. Mahfood.

MR. STAMETS: Any other appearances in this Case? Let the record show that this Witness has previously been sworn and is sworn in this Case.

(Witness previously sworn.)

EDDIE MAHFOOD

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

DIRECT EXAMINATION

BY MR. LOSEE:

Q State your name, residence, and occupation?

A Eddie Mahfood, Artesia, New Mexico, Chief Engineer for Yates Petroleum.

Q You are the same Witness whose qualifications are accepted in the preceding case as a Petroleum Engineer, are you not?

A Yes, I am.

Q Would you explain the purpose of this Application

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in Case 5386?

A We have several dual completions in this area. We would to set up a field designation and to be able to dual complete these wells and other wells in the future.

Q Do you also have four wells in which you are seeking conventional dual completion in?

A Yes.

Q And you have one orthodox location to be approved, your Federal "CR" Com?

A Yes.

Q Please refer to what has been marked as Exhibit 1 and explain what is shown by this Exhibit?

A This is an ownership map of the area showing the locations of the four wells to be heard in this Case plus additional wells completed in the Cisco Canyon in this area. The four wells circled in red are the four wells to be heard in this case and in green are three additional wells which are single completion in the Cisco Formation.

Q Give the names of the wells in red and the Section in which they are located in, would you please?

A In Section 29 is the Federal "CR" Well No. 1, in Section 32 is State "CY" No. 1, in Section 8 is Federal

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"CZ" No. 1, and in Section 35 is the Powell "DG" No. 1 Com.

Q Does this map also show the offset operators and the production in the area?

A Yes, this map shows the offset operators and other wells in the area.

Q Now, your "CR" Well in Section 29 of 17, 25, is 660 feet from the southwest line?

A Yes.

Q And was that well originally drilled as a gas well?

A No. It was intended to be a Devonian oil test.

Q Did the well reach the Devonian?

A No. We confronted so much gas while drilling that it became imperative to terminate drilling and case the hole.

Q Please refer to what has been marked as Exhibit 2 and explain what is portrayed by this Exhibit.

A Exhibit 2 is a diagrammatic sketch of the proposed drill completion of the Federal "CR" No. 1 Com. It is a conventional completion with one packer; both the Canyon pay and Atoka pay are dry gas so we saw no need to view (sic) the strings for cross-over assembly.

Q In the event that the Atoka loaded up, how would you perform the operation of unloading the fluid?

A The Atoka is all ready in tubing so it would be just a matter of swabbing it in.

Q All right, now, what about the Canyon?

A The Canyon would be in casing annulus but we have a sliding sleeve set at 7213, which is down below -- a little below the Canyon pay and above the packer. This sliding sleeve can be opened and in doing so would block off the Atoka pay. We can swab the Canyon in and go back and close the sleeve and put back in the casing annulus and open the Atoka back to the tubing.

Q What's your packer? What kind of packer is it?

A We're using a hook wall packer .

Q Does this sketch also show all the casing strings and their diameter and the depth at which they're set?

A Yes, it does.

Q It shows the cement and the quantity and the tops of the cement?

A That's right.

Q It shows the tubing, the diameter and the depth ?

A This is correct.

Q Do you have an opinion as to whether with this type of completion hydrocarbons can be produced from the Canyon and Atoka safely and efficiently?

A Yes.

Q Will your packer prevent communication between these two producing intervals?

A Yes.

Q Please refer to what has been marked as Exhibit 3 and explain what is shown by this?

A Exhibit 3 is the neutron density log showing the Canyon pay in Exhibit 3A and the Atoka pay in Exhibit 3B.

Q Well, actually the one Exhibit has been marked Exhibit 3 and it is simply a continuation of this same log?

A This is correct.

Q Okay. You said the west half of the Section has been dedicated to the well?

A Yes.

Q Do you have an opinion as to whether your Federal "CR" at its 660 location can efficiently and economically drain the west half of Section 29?

A Yes, I'm pretty sure it can.

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Q Please refer to what has been marked as Exhibit 4?

A Exhibit 4 is a diagrammatic sketch of the proposed dual completion of State "CY" No. 1, and again we have Cisco pay and Atoka pay. We'll be using two packers in this well since the Cisco does have oil associated with it. We'll have a cross-over assembly in the top packer.

Q Otherwise this is a casing tubing annulus and tubing completion?

A Correct. It is a conventional completion.

Q Please refer to what has been marked as Exhibit 5 and explain what is shown by this Exhibit?

A Exhibit 5 is the neutron density log of the State "CY" No. 1 Well. Again, we see the Cisco perforations, Cisco pay in 5A and the Atoka pay in 5B, in the same log.

MR. STAMETS: Mr. Mahfood, at this point I would like to clarify something. The Docket, and I believe the ad, the Application, indicates that the Strawn and Atoka Formations are both open in this Section, is that correct?

MR. MAHFOOD: Yes, sir. The Strawn was perforated. From the log you notice there is approximately 4 percent porosity, about 5 percent porosity, and the Strawn

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does occur in this area in a small interval, and we would like to be able to produce the Strawn together with the Atoka.

MR. STAMETS: That's part of the upper Pennsylvanian?

MR. MAHFOOD: Lower Pennsylvanian.

MR. STAMETS: Lower Pennsylvanian I mean. How much of the Strawn do you have open to the hole in this "CY"?

MR. MAHFOOD: We have 4 feet perforated in this well.

MR. STAMETS: And your wells are all ready completed this way with the packer set?

MR. MAHFOOD: Yes, it is.

BY MR. LOSEE:

Q Please refer to what has been marked as Exhibit 6 and explain what is shown by this Exhibit?

A Exhibit 6 is a diagrammatic sketch of the proposed dual completion Powell "DG" No. 1 Com. Again, we have two packers in this well. There were complete in the Cisco and the Morrow in this well. The Cisco is associated with oil and we load up so we need a cross-over assembly.

Q Otherwise -- and this again is identical to your

prior completion?

A This is correct.

Q Please refer to what has been marked as Exhibit 7 and explain what is briefly shown?

A Exhibit 7 is the density neutron log on the Powell "DG" No. 1 Com. 7A would be the Cisco -- the log of the Cisco pay, and 7B would be the log of the Morrow pay.

Q Could you read your Exhibit and tell me what you got on the drill-stem on the Cisco?

A The Cisco tested something like 57 mcf per day, however, we have found from experience that we can go back in and improve this considerably.

Q Please refer to what has been marked as Exhibit 8 and explain what is shown by this Exhibit?

A Exhibit 8 is a diagrammatic sketch of the proposed dual completion of Federal "CZ" No. 1. Again we have a cross-over assembly. We are dualing the Cisco pay with -- associated with oil -- and the Morrow.

Q This sketch like the preceding sketches shows the casing diameter, the depths?

A Yes, sir.

Q The cement and the tops the tubing and its

diameter and depth?

A This is correct.

Q In all cases is your bottom packer the same?

A Yes. Well, I'll take it back -- it will be a hook wall packer. It could either go lock set, or in this case here I have a Model FL. It is a Baker lock set packer.

Q And Exhibit 9 is your log of this Federal "CZ" Well?

A Yes. 9A shows the Cisco pay and 9B shows the Morrow pay.

Q Will the proposed completions in your "CY," "DG," and "CZ" permit hydrocarbons to be safely and efficiently produced?

A Yes, sir.

Q Will the proposed packers in these three wells permit communication between the zones?

A Yes.

Q The only exception to that would be in the "CY" where you have the Strawn, four feet of it open to the Atoka?

A This is true. We would like, however, to combine -- we would like to designate this field for Upper

Penn and Lower Penn.

Q Were Exhibits 1 through 9 prepared by you or under your direction?

A Yes, sir.

MR. LOSEE: I move their introduction, Mr. Examiner.

MR. STAMETS: Without objection these Exhibits will be admitted.

(Whereupon, Yates' Exhibits 1 through 9 were admitted into evidence.)

MR. LOSEE: I have nothing further at this time.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Mahfood, referring, now, to the "CR" and the "CY," these wells offset one another on the ground. As far as the Atoka zone goes they would obviously be in the same pool?

A Yes.

Q What you are proposing is that we create a pool there with both the Strawn and the Atoka as being the vertical limits?

A Yes.

Q Now, what would happen if you would offset one of these wells, say in Section 30 or Section 31, and get very good wells in the Strawn and another very good well in the Atoka? Would you wish to dually complete those wells at that time?

A No, if we had -- no. No, I don't think we would then. All our experience with the Strawn I might say is that it's a very low volume horizon, and we would not anticipate a very good Strawn completion in this area.

Q Looking at your ownership map it seems to own or have the operating authority over most the acreage offsetting the wells in question until you get a mile or so away?

A Very true.

Q Did you seek approval to perforate the Strawn and the Atoka in the same wellbore before doing it or after doing it or before running the tubing?

A No, sir. The Exploration Department recommended we perforate it and test it and I don't know whether they had determined whether it was Strawn or Atoka at the time.

Q Did you have any tests on the Strawn Zone?

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A No, sir.

Q It was not tested after it was perforated?

A It was not tested separately, no.

Q Were you not aware that the Strawn and Atoka and Morrow zones have been considered separate reservoirs by the Commission in the past and no commingling has been allowed except after order of the Commission?

A As I said previously, I'm not sure that that Exploration Department had determined that it was just two different horizons that might have considered all the way Atoka.

Q In operating on this well in that manner was Yates not running the risk that the completion might subsequently not be approved by the Commission?

A Mr. Examiner, I don't know how to answer that question, because as I said, when we completed the well, the Exploration Department informed the Engineering Department to perforate and complete it as one.

Q As far as you know no contact was made with the Commission to try and make the determination what the formations were, whether or not there was any likelihood the Commission would approve such a completion?

A Yes, sir, that is true.

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Q On the Federal "CR" do you have any tests of the Upper Pennsylvanian Section there which indicate that no liquids were being produced?

A Yes. We have flowed it and not recovered any liquid.

Q If sufficient liquids were to be produced, would it be possible to run another string of tubing into the Upper Pennsylvanian in that well?

A It would have to be a very small diameter string of tubing to do so.

Q It's 7-inch casing in that hole isn't it?

A This is correct; this does have a 7-inch casing in it. Well, we could dual this well with two strings of tubing.

Q Do you have multi-point tests on any of these wells yet?

A Yes, I think the "CR" was four-pointed. I don't have information before me but, yes.

Q Do you have copies of the multi-point tests with you?

A No, sir, I don't.

Q Could those be made available to the Examiner in the next week?

A On Exhibit 2 I show where the well flowed from Canyon may 1.183 million cubic feet per day and the Atoka flowed 5 and 3/4 million per day.

Q Nevertheless I would like to have this multi-points test if they are available.

A Okay.

Q And the "CY" and the Powell and the "CZ" it's proposed to produce the Atoka up tubing and then through cross-over assembly up the annulus?

A This is correct.

Q And to your knowledge, do any of those wells produce sufficient liquids from the Atoka to require another string of tubing?

A Our tests so far have indicated negligible fluid. It is conceivable that it could load up.

Q Just looking through your Exhibits here, the State "CY" appears to have about 3 barrels per million, Powell about 7 barrels per million and the "CZ" about 6 to 7 barrels per million. If those volumes don't increase, would that give you any particular problem?

A No. Our experience is that the gas-oil ratio will increase and liquid content decrease as we deplete the reservoir.

Q You referred to both the Canyon and the Cisco and both of these zones are part of what is commonly referred to as the Upper Pennsylvanian. Would that cause any problem if the Orders would refer to these as the Upper Pennsylvanian rather than to the isolated zones Cisco and Canyon?

A I cannot see any problem there because neither formation have continuous pay. The pays are scattered in small intervals.

MR. STAMETS: Any other questions of this Witness?

MR. LOSEE: I have just one question, Mr. Examiner.

REDIRECT EXAMINATION

BY MR. LOSEE:

Q In your "CY" if you are required to shut off the Strawn, the four feet of Strawn, will you produce that in any manner; triple complete the well?

A No, sir. I might point out this Strawn is such a small pay that it would not be economical to even attempt a simple completion there.

MR. LOSEE: That's all I have, Mr. Examiner.

MR. STAMETS: If there is nothing further

we will take this case under advisement.

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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. 5386
Order No. R-4955

APPLICATION OF YATES PETROLEUM
CORPORATION FOR FOUR DUAL
COMPLETIONS AND UNORTHODOX
LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 8, 1975, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 28th day of January, 1975, 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 seeks approval for four conventional dual completions in Eddy County, New Mexico, as follows:

The Federal "CR" Com Well No. 1 in Unit M of Section 29, Township 17 South, Range 25 East, NMPM, with gas production from the Upper Pennsylvanian formation through the casing-tubing annulus and gas production from the Atoka formation through 2 3/8-inch tubing with a packer set at approximately 7870 feet;

the State "CY" Well No. 1 in Unit K of Section 32, Township 17 South, Range 25 East, NMPM, with gas production from the Upper Pennsylvanian formation through 2 3/8-inch tubing and gas production from the commingled Strawn and Atoka formations through 2 3/8-inch tubing, a crossover assembly, and the casing-tubing annulus with packers set at approximately 6350 feet and 7723 feet;

Case No. 5386
Order No. R-4955

the Powell "DG" Com Well No. 1 in Unit O of Section 35, Township 17 South, Range 25 East, NMPM, with gas production from the Upper Pennsylvanian formation through 2 3/8-inch tubing and gas production from the Morrow formation through 2 3/8-inch tubing, a crossover assembly, and the casing-tubing annulus with packers set at approximately 6500 feet and 8324 feet; and

the Federal "CZ" Well No. 1 in Unit B of Section 8, Township 18 South, Range 25 East, NMPM, with gas production from the Upper Pennsylvanian formation through 2 3/8-inch tubing and gas production from the Morrow formation through 2 3/8-inch tubing, a crossover assembly, and through the casing-tubing annulus with packers set at approximately 6500 feet and 8245 feet.

(3) That the mechanics of the proposed dual completions appear to be feasible and in accord with good conservation practices.

(4) That additional production information should be obtained on each of said four dual completions to determine that efficient flow is taking place from all zones in said wells.

(5) That if such production information demonstrates inefficient flow from any of the zones, the Secretary-Director of the Commission should rescind the authority for the dual completion of the well.

(6) That the subject application for four dual completions should be approved.

(7) That the applicant further seeks an unorthodox gas well location for its Federal "CR" Com Well No. 1 at a point 660 feet from the South line and 660 feet from the West line of Section 29, Township 17 South, Range 25 East, NMPM, Eddy County, New Mexico.

(8) That no offset operator objected to the proposed unorthodox location.

(9) That the application for an unorthodox location should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant, Yates Petroleum Corporation, is hereby authorized four conventional dual completions, Eddy County, New Mexico, as follows:

Case No. 5386
Order No. R-4955

The Federal "CR" Com Well No. 1 in Unit M of Section 29, Township 17 South, Range 25 East, NMPM, to produce gas from the Upper Pennsylvanian formation through the casing-tubing annulus and gas from the Atoka formation through 2 3/8-inch tubing with separation of the zones by a packer set at approximately 7870 feet;

the State "CY" Well No. 1 in Unit K of Section 32, Township 17 South, Range 25 East, NMPM, to produce gas from the Upper Pennsylvanian formation through 2 3/8-inch tubing and commingled gas from the Strawn and Atoka formations through 2 3/8-inch tubing and the casing-tubing annulus by means of a crossover assembly at approximately 6350 feet with separation of the zones by means of packers set at approximately 6350 feet and 7723 feet;

the Powell "DG" Com Well No. 1 in Unit O of Section 35, Township 17 South, Range 25 East, NMPM, to produce gas from the Upper Pennsylvanian formation through 2 3/8-inch tubing and gas from the Morrow formation through 2 3/8-inch tubing and the casing-tubing annulus by means of a crossover assembly at approximately 6500 feet with separation of the zones by means of packers set at approximately 6500 feet and 8324 feet; and

the Federal "CZ" Well No. 1 in Unit B of Section 8, Township 18 South, Range 25 East, NMPM, to produce gas from the Upper Pennsylvanian formation through 2 3/8-inch tubing and gas from the Morrow formation through 2 3/8-inch tubing, and through the casing-tubing annulus by means of a crossover assembly at approximately 6500 feet with separation of the zones by means of packers set at approximately 6500 feet and 8245 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce each of said wells 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 on each well upon completion and annually thereafter during the Shut-In Pressure Test Period for gas wells in Southeast New Mexico.

-4-
Case No. 5386
Order No. R-4955

(2) That the applicant shall take and file test data including, at least, monthly rates of production of gas and liquids, periodic flowing wellhead pressures and shut-in pressures for the first 3 months of production, after the date of this order, from any zone of a dual completion herein approved.

(3) The applicant shall file such test data with both the Artesia district and Santa Fe offices of the Commission.

(4) The Secretary-Director of the Commission may rescind the authority for the dual completion of any well herein approved if a review of the test data required by Order (2) above demonstrates inefficient flow from either or both zones from any of said wells.

IT IS FURTHER ORDERED:

(1) That the unorthodox gas well location of applicant's Federal "CR" Com Well No. 1 located 660 feet from the South line and 660 feet from the West line of Section 29, Township 17 South, Range 25 East, NMPM, is hereby approved.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

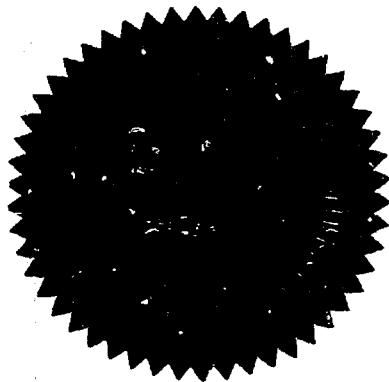
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman

Phil R. Lucero
PHIL R. LUCERO, Member

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



S E A L

dr/



YATES BUILDING - 207 SOUTH 4TH ST.
ARTESIA, NEW MEXICO - 88210

S. P. YATES
PRESIDENT
MARTIN YATES, III
VICE PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SEC. - TREAS.

January 8, 1975

Mr. R. L. Stamets
New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Stamets:

Herewith is 4-point on our Federal CR #1 Comm
Atoka completion. We are sorry but apparently we
have never run a 4-point on the Canyon.

Yours truly,

YATES PETROLEUM CORPORATION

Eddie M. Mahfood
Petroleum Engineer

EMM/jg
Encl.

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 4-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 9-28-73	
Company Yates Petroleum Corp		Connection	
Pool Undesignated		Formation Atoka	
Completion Date 9-25-73	Total Depth 8340	Plug Back TD 8339	Elevation 3627' KB
Form or Lease Name Federal "CR" Com		Well No. 1	
Cog. Size 7"	Wt. 26#	Set At 8340	Perforations: From 7945 To 7963
Tbg. Size 2 3/8	Wt. 4.7#	Set At 7944	Perforations: From To
Type Well - Single - Brdenhead - G.C. or G.O. Multiple G.G. Multiple		Packer Set At 7872	County Eddy
Producing Thru 2 3/8" Htg	Reservoir Temp. °F 129	Mean Annual Temp. °F	Baro. Press. - P _a 13.2
State New Mexico	Prover 7944	Meter Run 3"	Taps Flange
H ₂ 7944	G _g 0.606	% CO ₂ 0.36	% N ₂ 0.35
% H ₂ S Nil	Prover Barton		

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							2301	70			69 hrs
1.	3		1.750	733	8	70	2065	72			1 hr
2.	3		1.750	735	22	73	1655	73			1 hr
3.	3		1.750	750	36	72	1223	76			1 hr
4.	3		1.750	755	42	74	879	76			1 hr
5.											

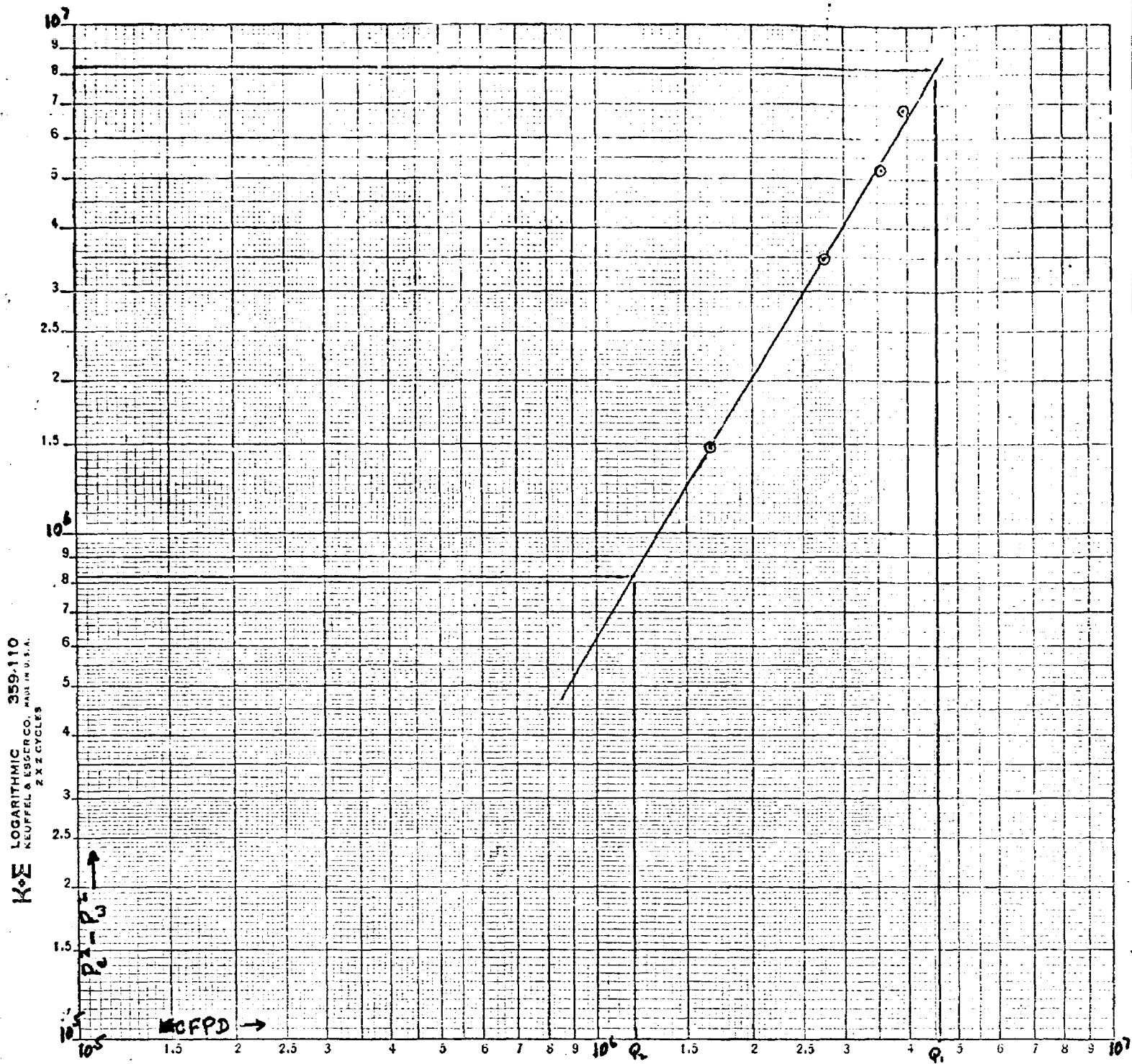
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	15.87	77.263	746.2	.9905	1.285	1.064	1660
2	15.87	128.298	748.2	.9877	1.285	1.063	2747
3	15.87	165.756	763.2	.9882	1.285	1.065	3559
4	15.87	178.450	768.2	.9868	1.285	1.066	3828
5							

NO.	R ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					93390/1	
2.					A.P.I. Gravity of Liquid Hydrocarbons	55.9 Deg.
3.					Specific Gravity Separator Gas	0.606
4.					Specific Gravity Flowing Fluid	X X X X X
5.					Critical Pressure	673.6 P.S.I.A.
					Critical Temperature	361.4 R

NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{8.225}{3.494}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6572$
1		2599	6.755	1.470		
2		2125	4.731	3.494		
3		1738	3.021	5.204		
4		1428	2.039	6.792		
5						

Absolute Open Flow	4552	Mcf @ 15.025	Angle of Slope	59° 28'	Slope, n	0.590
Remarks: Witnessed by Jack Moore & Brent Linebarier (TWPL), Lonnie Jordan (NGPL)						
Approved By Commission:	Conducted By:	Eddie Mahfood	Calculated By:	Eddie Mahfood	Checked By:	

Yates Petroleum Corporation
 Federal CR #1 (tubing)
 M-29-17S-25E
 Eddy Undesignated Atoka
 9-28-73



K * E LOGARITHMIC 359-110
 KEUFFEL & ESSER CO. MADE IN U.S.A.
 2 X 2 CYCLES

$Q_1 = 4570$
 $Q_2 = 1175$

$\log Q_1 = 6.65992$
 $\log Q_2 = 6.07004$
 $n = 0.58988$

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

Form C-107
5-1-61

Company Yates Petroleum Corporation		County Eddy	Date 11-14-74
Address 207 So. 4th St., Artesia, New Mexico		Lease Federal "CR" Com	Well No. 1
Location of Well	Unit M	Section 29	Township 17South Range 25East

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	Richard Knob-Canyon		Richard Knob-Atoka
b. Top and Bottom of Pay Section (Perforations)	6999-7006' 7114-7175'		7944-7964'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

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 checked="" type="checkbox"/> | <input 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.

Sun Oil Company 12350 Hillcrest Dallas, Texas 75230

Yates Petroleum Corporation 207 So. 4th Street.. Artesia, New Mexico 98210

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 11-14-74.

CERTIFICATE: I, the undersigned, state that I am the Chief Engineer of the Yates Petroleum Corp. (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.

Eddie M. Mahfood
Eddie M. Mahfood 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 proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

YATES PETROLEUM CORPORATION
 DIAGRAMMATIC SKETCH OF PROPOSED DUAL COMPLETION
 Federal "CR" Com #1, 660' FSL & 660' FWL of Section 29-17S-25E Eddy Co., NM

Spudded 7-31-73
 Dual Completion 9-25-73

Lost Circ. @ 253', dry drld.
 Top of San Andres @ 634' KB

Base of Artesian Zone @ 927' KB

Cored Slaughter Dolomite
 1196-1326 w/scattered shows

Glorietta Sand @ 1917-2030'

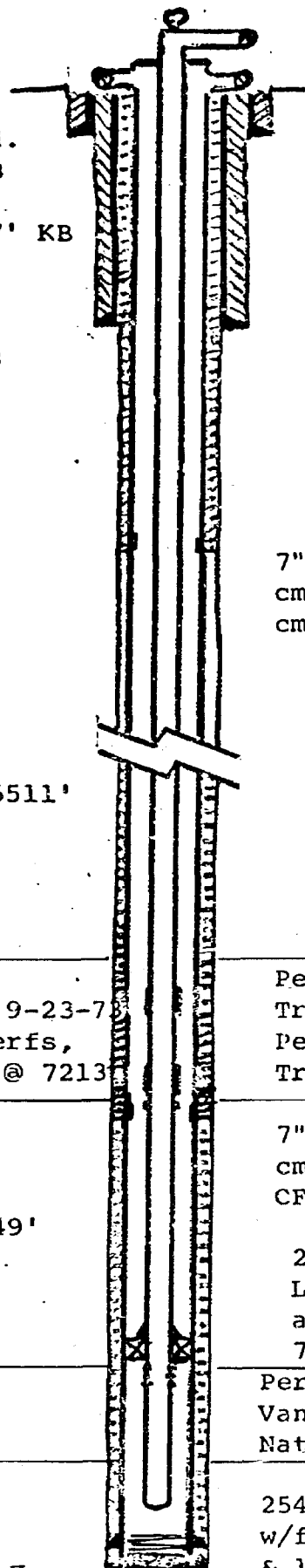
Top of cement at 6000'
 Cisco formation top @ 6245'
 Possible Cisco pay @ 6496-6511'

Canyon Pay - 6999-7174'
 *Flowed 1183 MCFPD 3/4" ck 9-23-73
 NOTE: Blast jts opposite perfs,
 BFC Model L Sliding Sleeve @ 7213'

Poss. Strawn pay @ 7642-7649'

Atoka pay 7944-7964
 *Flowed 6750 MCFPD 3/4" ck
 9-25-73

Total Depth - Driller 8340 =
 8342 EL.



Tbg Compl. - Atoka (Lower Penn)
 Csg Annulus Compl. (Upper Penn)

17" hole to 180' KB
 161' 13-3/8" H-40 @ 180' KB
 w/100 sx Class C 4% CaCl, circ.

12 1/4" hole to 1038' KB
 980 9-5/8" 32.3# H-40 @ 1007'
 w/700 sx Class C 2% CaCl,
 notched Tex-Patt Shoe, central-
 izers @ 905,578,510, bsks @
 542,479', circulated.

7" 23# Howco DV Tool @ 2204' KB
 cmt'd w/225 sx Hal-Lite, est. top
 cmt @ 50'

Perf 6999-7006 w/15-0.50" jets
 Trtd w/1250g 15% acid & 2000g CRA
 Perf 7164-7174 w/20-0.50" jets
 Trtd w/1000g NEA & 7500g CRA

7" 26# Howco DV Tool @ 7276' KB
 cmt'd w/260 sx Class H cmt w/3/4%
 CFR-2, 5# salt.

2-3/8" EUE 4.7# Tbg on Baker 7"x2"
 Lockset Pkr top @ 7870', PSI Actu-
 ated Sleeve & perf sub @ 7874-
 7878'

Perf 7945-7963' w/72-9.41 jets on
 Van Tool Tbg-Conveyed Gun
 Natural Completion

254 jts 7" 23&26# K-55, N-80 csg
 w/float shoe, 3-stage cmenter Equpt
 & 10 centralizers, cmt'd w/195 sx
 Class H cmt w/3/4% CFR 2, 5# salt.

BEFORE EXAMINER STAMETS
 OIL CONSERVATION COMMISSION

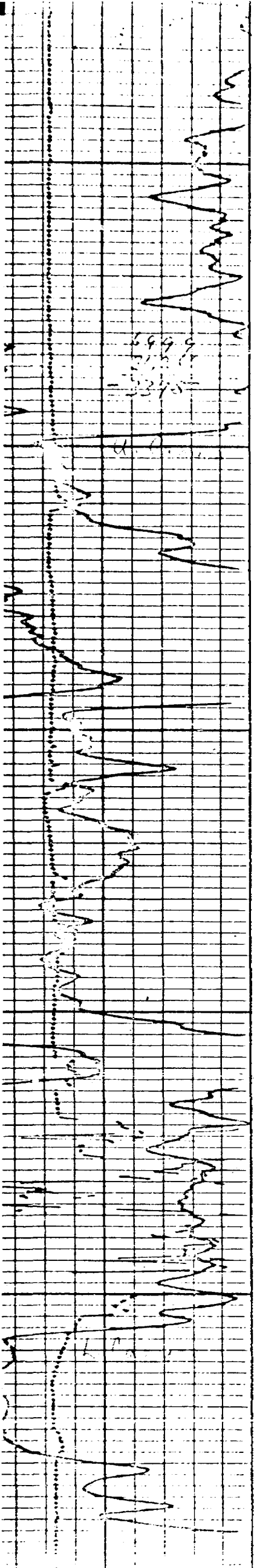
EXHIBIT NO. 2

CASE NO. 5386

Submitted by _____

Hearing Date 1/8/75

Exhibit 2



599
21.5
337.5

7000

7100

72

Federal CR#1 Case
660/5 - 660/4 Sec 29-19-25

PR 6799-7006 / 15 jets 0.50
1250g: 15% NEA
2000g: 15% CRA

7000

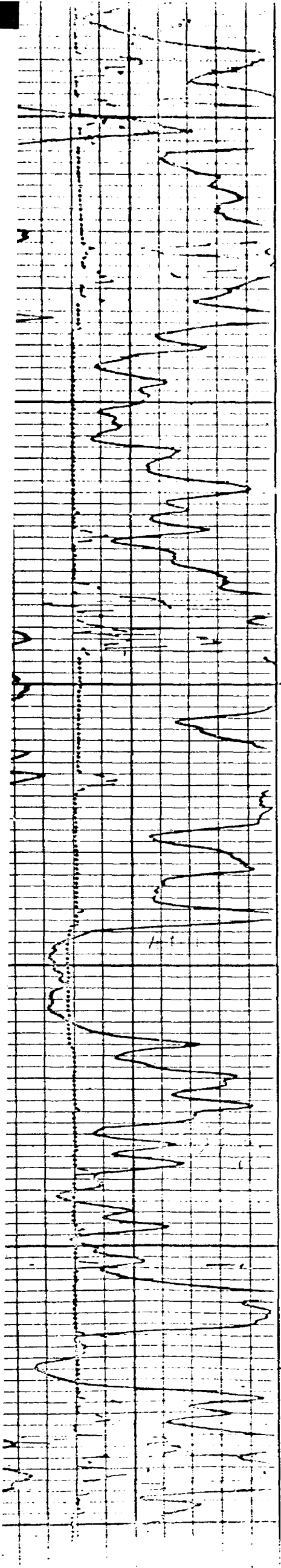
7100

7000

BEFORE EXAMINER STAMETS OIL CONSERVATION COMMISSION	
EXHIBIT NO.	3
CASE NO.	5386
Submitted by	
Hearing Date	1/8/75

PR 7164-7420 / 20 jets 0.50
1000g: 15% NEA
2500g: 15% CRA

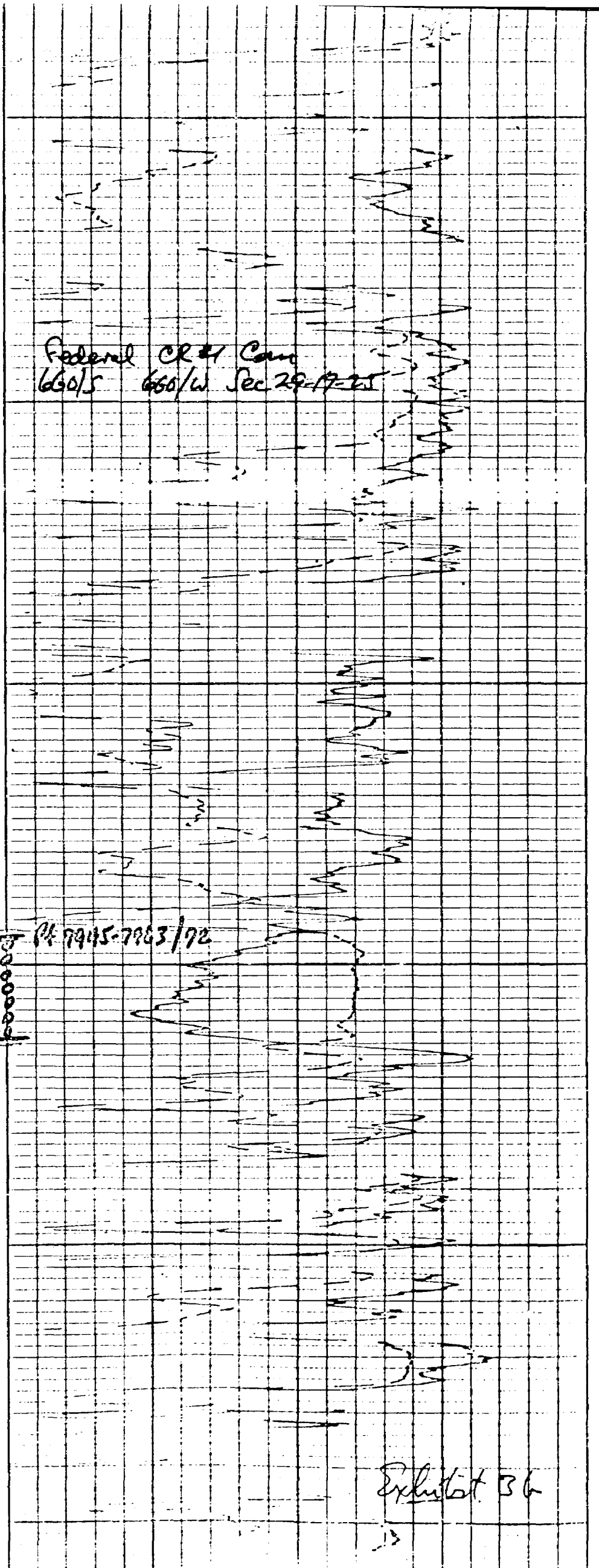
Exhibit 3a



7800

7900

8000



Federal CR 41 Case
660/5 660/W Sec 29-A-25

PA 7945-7963/72

000000

Exhibit 36

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

Form C-107
5-1-61

Company Yates Petroleum Corporation		County Eddy	Date 11-14-74
Address 207 So. 4th St., Artesia, New Mexico		Lease State "CY"	Well No. 1
Location of Well	Well K	Section 32	Township 17South
		Range 25East	

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	Richard Knob-Cisco-Canyon		Richard Knob-Strawn-Atok
b. Top and Bottom of Pay Section (Perforations)	6380-6643'		7732-8070'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Life)	Flowing		Flowing

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 checked="" type="checkbox"/>	<input 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.

Pennzoil Company Drawer 1323, Midland, Texas 79701

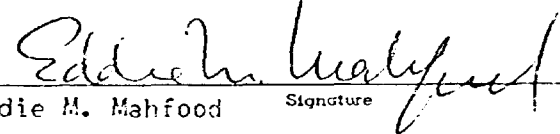
Gulf Oil Company Box 1150 Gulf Bldg., Midland, Texas 79701

Sun Oil Company 12950 Hillcrest, Dallas, Texas 75230

Yates Petroleum Corporation 207 South 4th St., Artesia, New Mexico 89210

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 11-14-74.

CERTIFICATE: I, the undersigned, state that I am the Chief Engineer of the Yates Petroleum Corp. (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.


Eddie M. Mahfood 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 proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

YATES HILL OIL FIELD COMPLETION
 Diagrammatic Sketch of Proposed Dual Completion
 State "CY" #1, 1930' FSL, 1930' FWL, Section 32-T17S-R25E,
 Eddy County, New Mexico

Spudded 11-26-74
 Atoka Completion 1-31-74
 Cisco Completion 2-22-74
 Elevation 3603 GR-3620' KB

Tubing Completion - Cisco

Casing Completion - Atoka

Top of San Andres at 631'

Base of Artesian at 950'

cmt circ on surface & intermediate csos
 17 1/2" hole to 206' KB
 13 3/8" 43# csg set at 206', cmtd w/125 s

12 1/4" hole to 1066' KB
 9 5/8" 24# csg set at 1060', cmtd w/675 sx
 centralizers at 939, 697 and 616, baskets
 at 657 and 616. Tex Patt Notched Shoe

Top of primary cmt at 6010' KB; mud to surf.
 4 1/2" Baker Model AR-1 pkr w/cross-over
 (profile 1.87) at approx 6350'

Top of Cisco at 6234'

Scattered Cisco pays
 flowed 619 MCFPD w/7.5 BO
 on 3/4" choke, 30# TP

Pf 6380-82' Treated with
 Pf 6397-99' 27000 g 15% DS-30
 Pf 6431-37' & CO2
 Pf 6641-43'

2 3/8" EUE 4.7# J-55 tubing (7706') landed
 in on-off tool

Strawn at 7533'

Baker Lok-set Pkr at 7723' KB w/Baker "FL"
 On-Off tool at 7719' KB (profile 1.31)

Top of Atoka at 7960'
 flowed 2.35 MCFPD w/6.2 BO
 on 3/4" choke, 150# TP

Pf 7732-36' Treated w/3000 g 7 1/2% MSA & N-2
 Pf 7997-04' SF w/18000# 20/40 in 10000 g
 Pf 3066-70' 5% MSA & 5000 g CO2

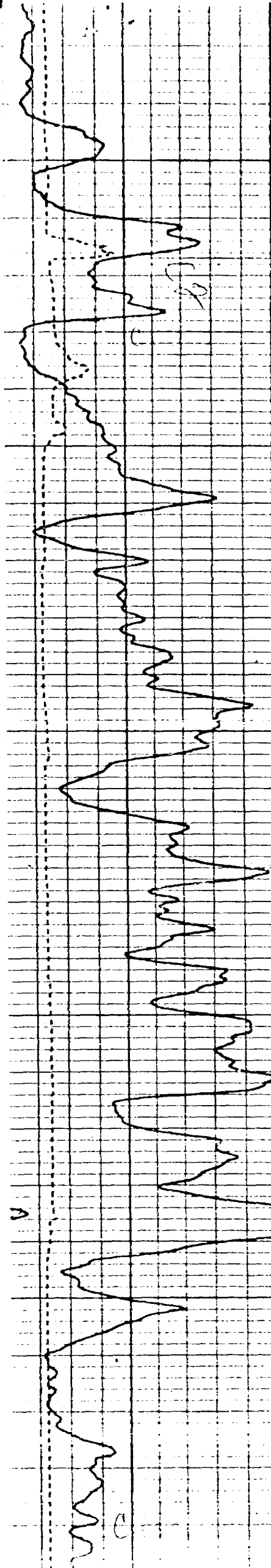
Morrow Clastics at 3115'

PBTD 3190', top of float collar
 250 lbs 4 1/2" 10.5#-11.6# K-55 csg set at 3216'
 KB, cmtd w/525 sx Cl II, 0.75% CFR2, 5% salt.

TD 3330'

Chester at 3253'
BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
 EXHIBIT NO. 4
 CASE NO. 5386
 Submitted by _____
 Hearing Date 1/8/75

Exhibit 4



3 SW 205
 2K
 6 SW 18 COR
 50-50
 K

Pt 6380-82
 Pt 6397-99 J. T. F. 519 MET
 + 7 1/2 1/2 1/2 1/2

State of WI
 LANDS 1984W Sec 32-17-25

Pt 6431-37
 1/2 1/2 1/2 1/2
 1/2 1/2 1/2 1/2



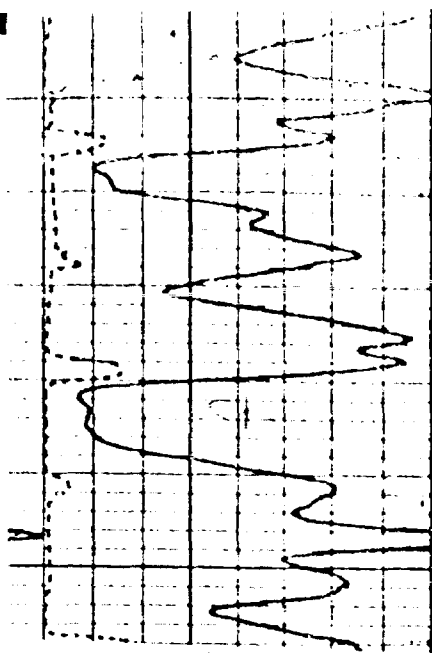
6500

6600

BEFORE EXAMINER STAMETS	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	5
CASE NO.	5386
Submitted by	
Hearing Date	1/5/15

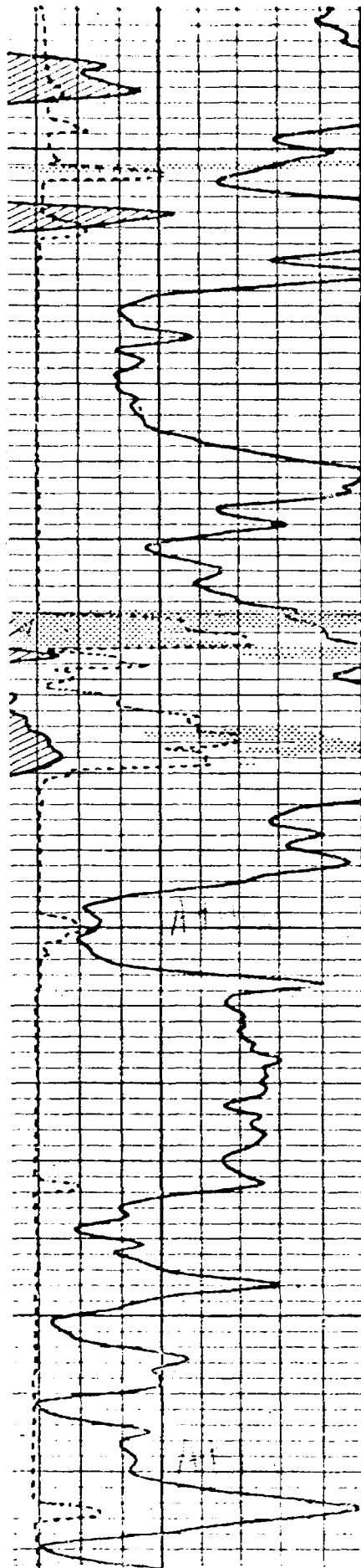
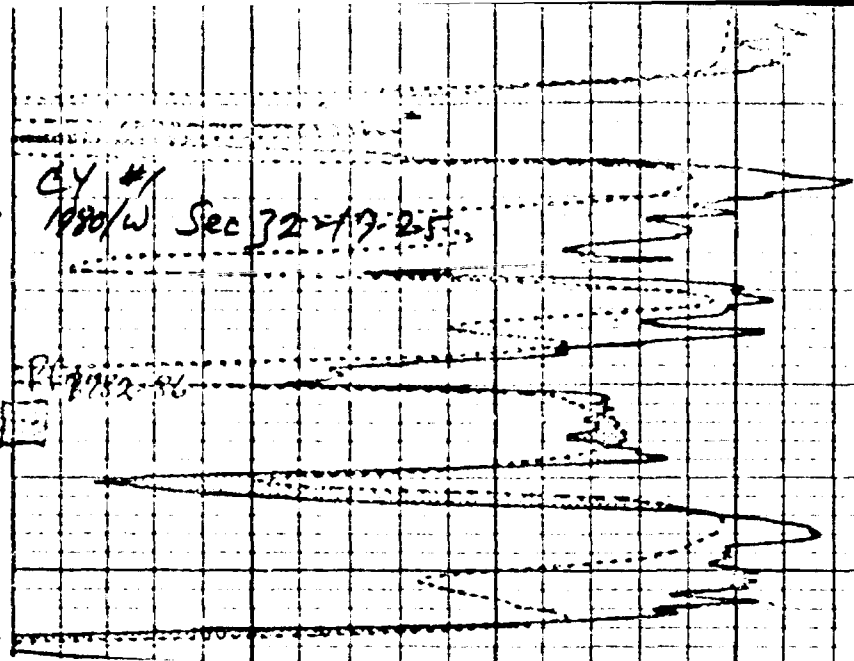
Pt 6641-43
 K

Exhibit 5a



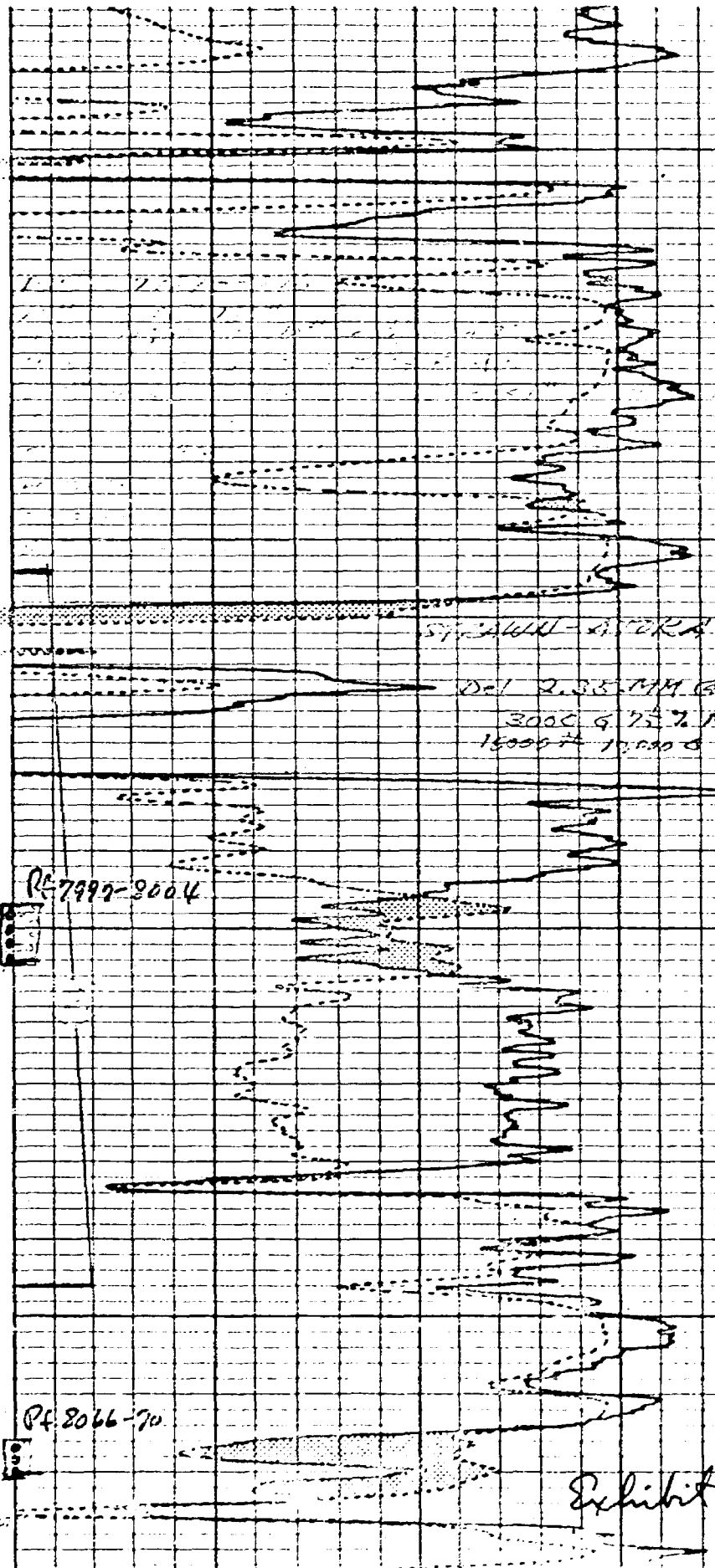
State CY #1
1980/S 1980/W Sec 32-17-25

6
655
107
25
7800



7900

12 SW
17 SW
8000 22
10 perm



ST-2444-2004
Del 2.35 MM @ 1500
3000 @ 75% MA
15000 @ 10,000 @ FIRE

12 SW
23 SW
2000 30
2000

PE-2066-70

Exhibit 56

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

Form C-107
5-1-61

Operator Yates Petroleum Corporation		County Eddy	Date 11-14-74
Address 207 So. 4th St., Artesia, New Mexico		Lease Powell "DG"	Well No. 1 = Com
Location of Well	Unit C	Section 35	Township 17South Range 25East

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	Richard Knob-Cisco		W. Atoka Morrow
b. Top and Bottom of Pay Section (Perforations)	6539-6633'		9333-8333'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

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 checked="" type="checkbox"/>	<input 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.

Superior Oil Company, Box 1900, Midland, Texas 79701

Atlantic Richfield Company, Box 1610, Midland, Texas 79701

Coquina Oil Corporation, 200 Bldg. of the SW, Midland, Texas 79701

Amoco Production Company, Box 3092, Houston, Texas 77001

Yates Petroleum Corporation, 207 South 4th Street, Artesia, New Mexico 89210

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 11-14-74.

CERTIFICATE: I, the undersigned, state that I am the Chief Engineer of the Yates Petroleum Corp. (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.


Eddie M. Mahfood 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 proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

YALSA PETROLEUM CORPORATION
 Powell "DG" #1 Com, 660' FSL, 1030' REL, Section 35-T17S-R25E
 Eddy County, New Mexico

Spudded 6-14-74
 Morrow Completion 8-22-74
 Cisco Completion
 Elevation 3490' GR-3505' KB

Tubing Completion - Cisco
 Casine Completion - Morrow

Top San Andres @ 1778
 Base of Artesian @ 1138

cmf circ on surface & intermediate csg
 17 1/2" hole to
 13 3/8" 43# J-55 csg (336') set at 391' KB
 cmd w/250 sx and 4 yards ready mix

12 1/2" hole to 1233' KB

34 jts 3 5/8" 24# J-55 csg (1223') set at
 1323' KB. cmd w/1100 sx. centralizers at
 1113 and 700', Baskets at 741 and 667',
 Guide shoe.

Top of cmf behind 4 1/2" csg at 6050'
 4 1/2" Baker Model AR-1 Pkr w/cross-over
 (profile 1.37) at approx ?

Cisco at 6435'

Pf 6539-44'
 Pf 6574-32'
 Pf 6611-22'
 Pf 6675-93'

Canyon at 7341'

4 1/2" DV tool at 6822' KB,
 cmd w/200 sx Cl C; 1/2% CFR2, 5% salt

Strawn at 7731'

Atoka at 8115'

2 Pkr @ ?

Morrow Clastics at 8304'
 flowed 1.01 MMCFPD w/7 BO on
 3/4" choke at 55 psi TP

Pf 3367-63' Treated w/1000 g 7 1/2% MSA & N2
 Pf 3330-36' SF w/17000# 20/40 sd in
 15000 g KCl wtr and CO2

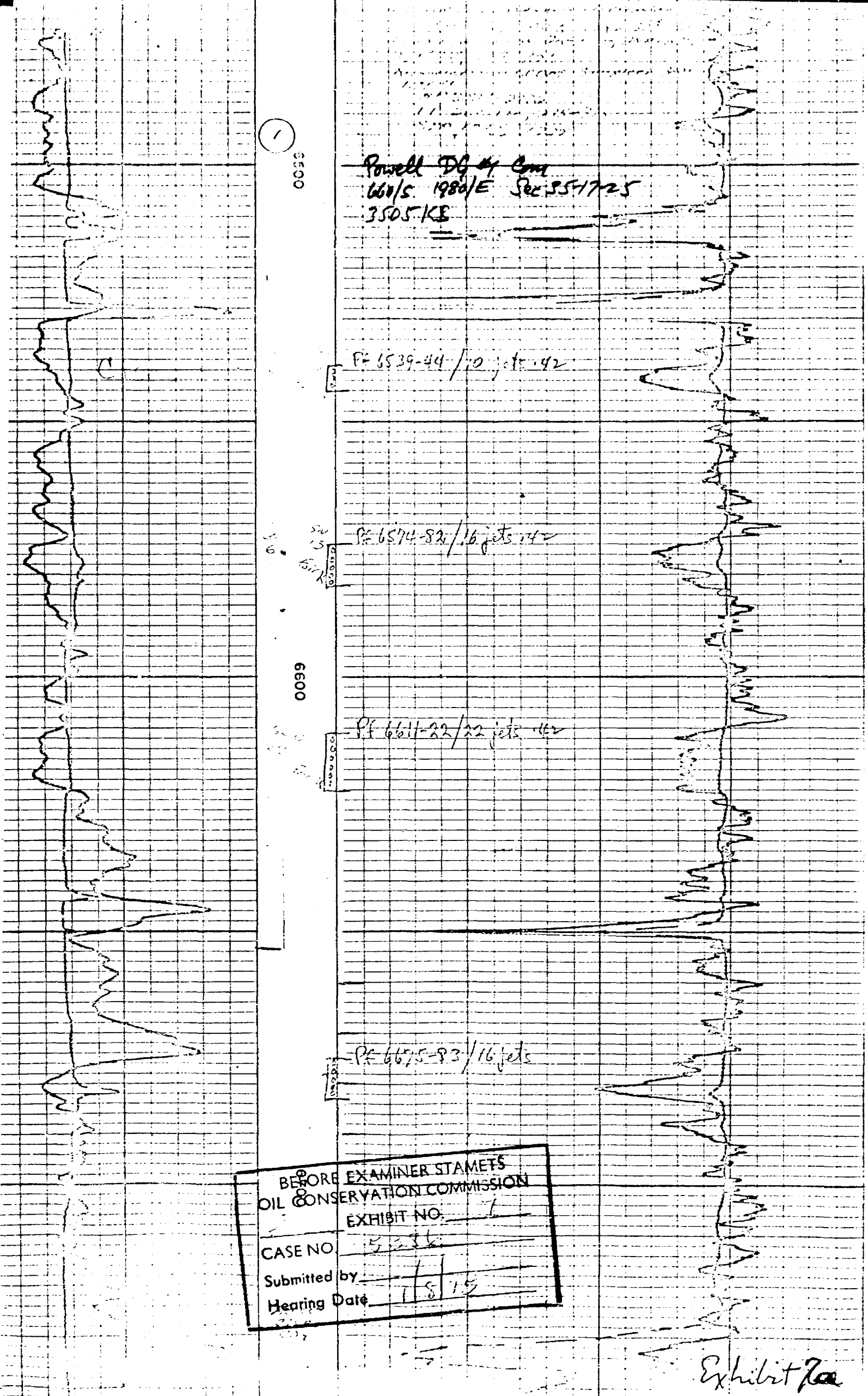
Chester at 8475'

265 jts 4 1/2" 10.5-11.6# K-55 csg set at 8561'
 cmd w/250 sx Cl H 3/4% CFR2, 5% salt.

ID 3740'

BEFORE EXAMINER STAMETS OIL CONSERVATION COMMISSION	
EXHIBIT NO.	6
CASE NO.	5386
Submitted by	
Hearing Date	1/8/75

Exhibit 6



Powell DG of Gm
 660/S. 1980/E Sec 351725
 3505/KE

PF 6539-44 / 10 jets 42

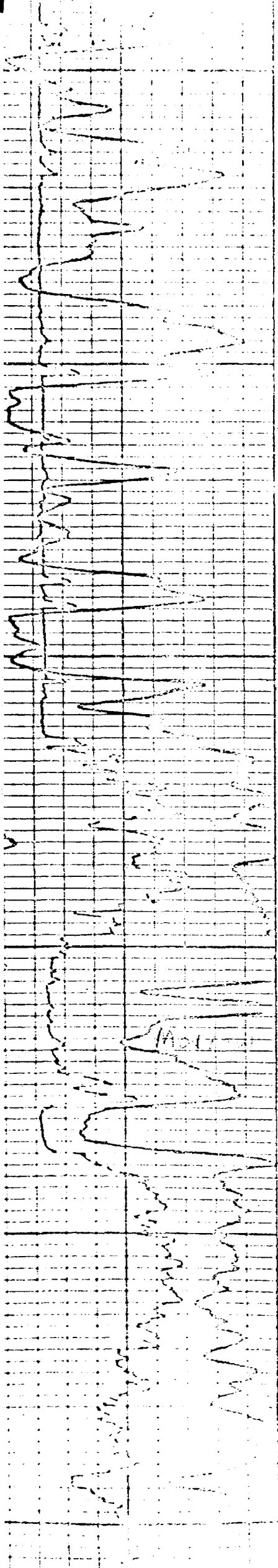
PF 6574-82 / 16 jets 14

PF 6611-22 / 22 jets 16

PF 6675-83 / 16 jets

BEFORE EXAMINER STAMETS
 OIL CONSERVATION COMMISSION
 EXHIBIT NO. 1
 CASE NO. 5286
 Submitted by 1/8/15
 Hearing Date 1/8/15

Exhibit 7a

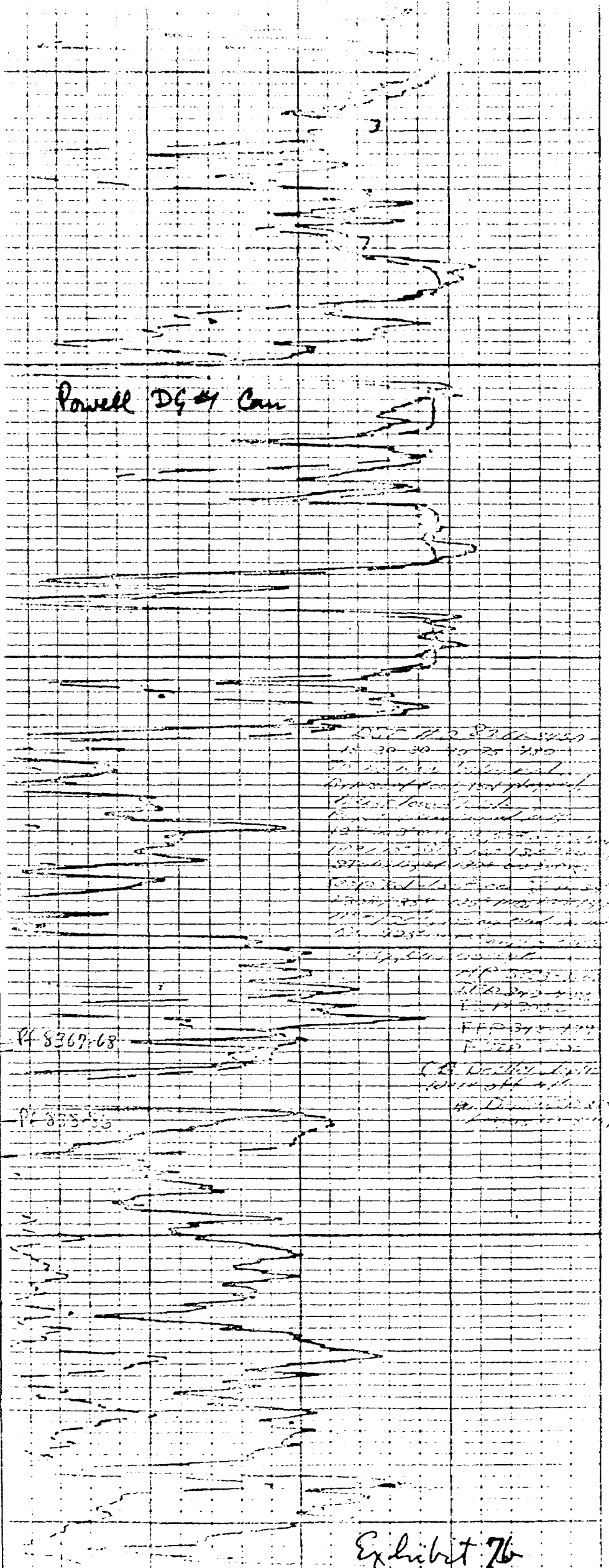


8300

8300

8400

(N)



Powell DG 4 Can

250 270 290 310
 15 30 45 60 75 90
 100 120 140 160 180 200
 220 240 260 280 300
 320 340 360 380 400
 420 440 460 480 500
 520 540 560 580 600
 620 640 660 680 700
 720 740 760 780 800
 820 840 860 880 900
 920 940 960 980 1000
 1020 1040 1060 1080 1100
 1120 1140 1160 1180 1200
 1220 1240 1260 1280 1300
 1320 1340 1360 1380 1400
 1420 1440 1460 1480 1500
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 1720 1740 1760 1780 1800
 1820 1840 1860 1880 1900
 1920 1940 1960 1980 2000
 2020 2040 2060 2080 2100
 2120 2140 2160 2180 2200
 2220 2240 2260 2280 2300
 2320 2340 2360 2380 2400
 2420 2440 2460 2480 2500
 2520 2540 2560 2580 2600
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 3320 3340 3360 3380 3400
 3420 3440 3460 3480 3500
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 7120 7140 7160 7180 7200
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 8920 8940 8960 8980 9000
 9020 9040 9060 9080 9100
 9120 9140 9160 9180 9200
 9220 9240 9260 9280 9300
 9320 9340 9360 9380 9400
 9420 9440 9460 9480 9500
 9520 9540 9560 9580 9600
 9620 9640 9660 9680 9700
 9720 9740 9760 9780 9800
 9820 9840 9860 9880 9900
 9920 9940 9960 9980 10000

Pf 8367-68

Pf 8355-56

Exhibit 76

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

Form C-107
5-1-61

Operator Yates Petroleum Corporation		County Eddy	Date 11-14-74
Address 207 So. 4th St., Artesia, New Mexico		Lease Federal "CZ"	Well No. 1
Location of Well	Unit B	Section 3	Township 13South
			Range 25East

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	Richard Knob-Cisco Canyon		Richard Knob-Morrow
b. Top and Bottom of Pay Section (Perforations)	6554-6576'		9333-9398'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

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 checked="" type="checkbox"/>	<input 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.

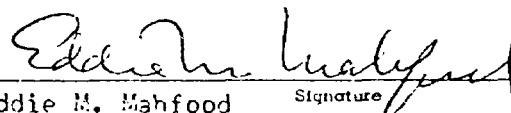
Franklin, Aston & Fair, Inc., Box 1090, Roswell, New Mexico 38201

Atlantic Richfield Company, Box 1610, Midland, Texas 79701

Yates Petroleum Corporation, 207 South 4th Street., Artesia, New Mexico 38210

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 11-14-74.

CERTIFICATE: I, the undersigned, state that I am the Chief Engineer of the Yates Petroleum Corp (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.


Eddie M. Mahfood 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 proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

YATES PETROLEUM CORPORATION
 Diagrammatic Sketch of Proposed Dual Completion
 Federal "CZ" #1, 660' FNL, 1930' FNL, Section 9-T19S-R25E
 Eddy County, New Mexico

Spudded 12-29-73
 Morrow Completion 3-24-74
 Cisco Completion 5-4-74
 Elevation 3595 CR-3612 KB

Tubing Completion - Cisco
 Casing Completion - Morrow

Cnt circ on surface & intermediate csq.
 17 1/2" hole to 257' KB
 12 3/4" 30# csq set at 257' KB
 cmd w/200 sx

Top of San Andres at 636'

12 1/2" hole to 1111' KB
 29 jts 3 5/8" 28# J-55 csq set at 1111' KB
 cmd w/950 sx, Centralizers at 990 and 674,
 Basket at 642'

Base of Artesian at 1010'

Top of cnt behind 4 1/2" csq at 5350'
 4 1/2" Baker Model AR-1 Pkr w/corss-over
 (profile 1.37) at approx 6500'

Cisco at 6437'

Pf 6554-6576'
 Treated w/11000 g 15% DS-30 and CO2

flowed 1.15 MWC/FPD on
 3/4" choke at 70 psi

Canyon at 7327'

4 1/2" DV tool at 6704' KB, cmd w/ 250 sx
 CLh, 3/4% CFR2, 5% salt

2 3/8" EUE 4.7# J-55 Tubing (3223') landed
 in On-Off tool

Strawn at 7333'

4 1/2" Baker Lok-set Pkr at 8245' KB w/Baker
 Model FL on-Off tool at 8241' KB (profile 1.3)

Morrow Clastics at 3323'
 flowed 6.51 MWC/FPD w/33.4 BC
 on 3/4" ck at 450# TP

Pf 3333-59' Treated w/3000 g 7 1/2% MSA & CO2
 Pf 3363-76' SF w/37000# 20/40 in 20000 g
 Pf 3331-88' 5% MSA and CO2

Chester at 9513'

PBTD 3503' (Top of float collar)
 262 jts 4 1/2" 10.5-11.6# K-55 csq set at 9535'
 cmd w/200 sx CL h 3/4% CFR2, 5% salt

TD 8671'

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

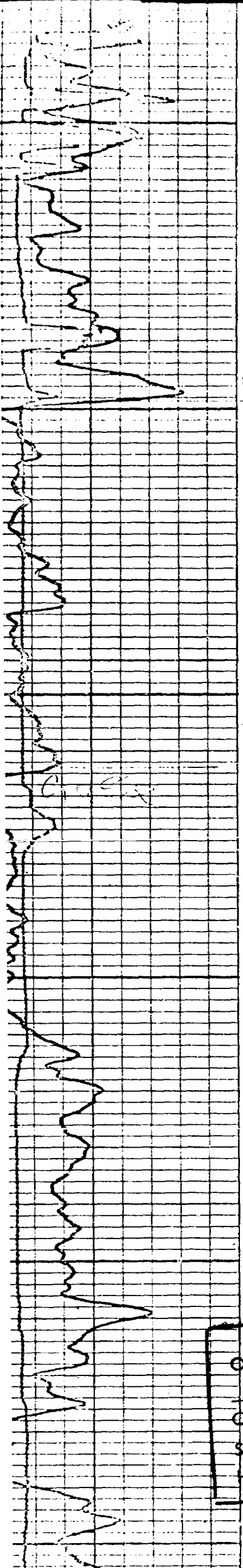
EXHIBIT NO. 8

CASE NO. 5381

Submitted by _____

Hearing Date 1/8/75

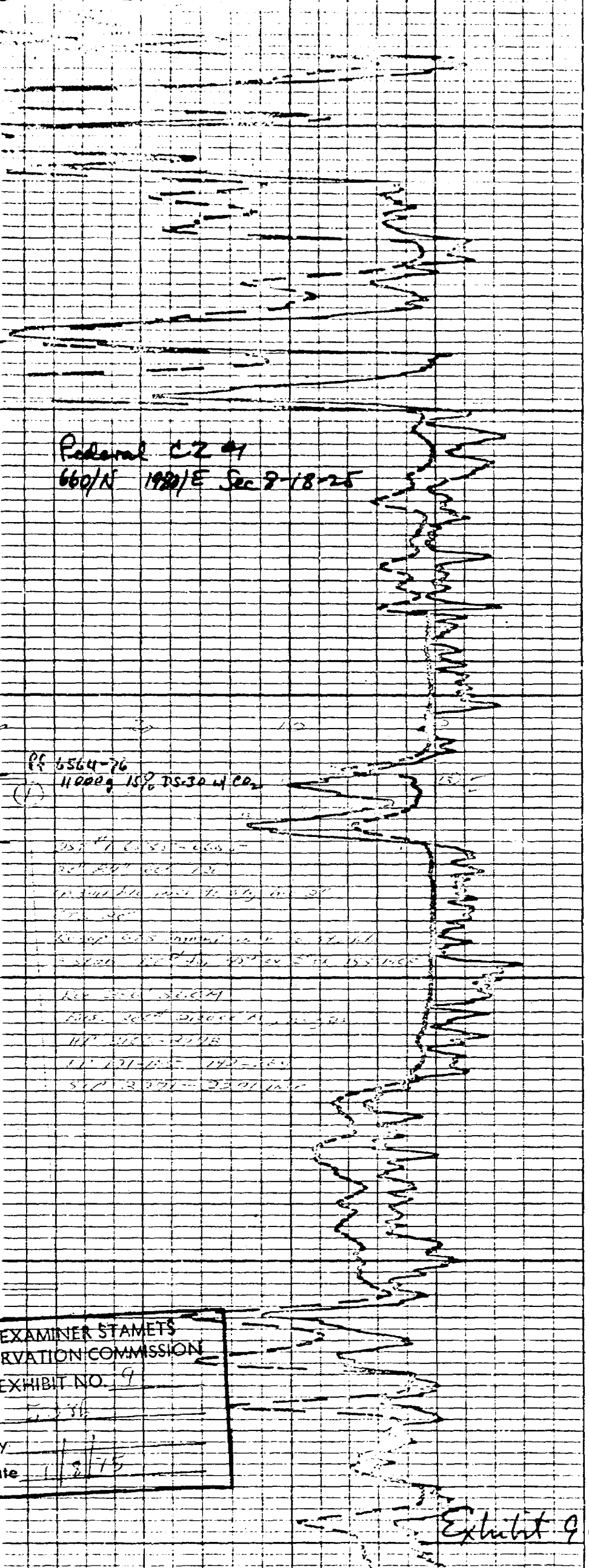
Exhibit 8



660/1
 6600
 6600

5 50
 5 13
 100 K
 9 13
 100 K

6600



Federal CZ 41
 660/N 1980/E Sec 2-18-25

RF 6564-76
 11000g 15% DS-30 W CO₂

25' 4" 20' 5" - 6600 -
 20' 20" 20' 12"
 10' 30" 110' 100' 70' 100' 30'
 10' 30"
 100' 30" 100' 100' 100' 100' 100'
 10' 30" 10' 30" 10' 30" 10' 30" 10' 30"
 10' 30" 10' 30" 10' 30" 10' 30" 10' 30"
 10' 30" 10' 30" 10' 30" 10' 30" 10' 30"
 10' 30" 10' 30" 10' 30" 10' 30" 10' 30"

BEFORE EXAMINER STAMETS
 OIL CONSERVATION COMMISSION
 EXHIBIT NO. 9
 CASE NO. 11000
 Submitted by [Signature]
 Hearing Date 1/2/75

6700

Exhibit 9a

- CASE 5381: Application of Mobil Oil Corporation for temporary special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of temporary special pool rules for the Eunice-San Andres Pool, Lea County, New Mexico, including a provision for a limiting gas-oil ratio of 5,000 to 1.
- CASE 5382: Application of Belco Petroleum Corporation for special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Los Medanos-Atoka Gas Pool, Eddy County, New Mexico, to provide for 320-acre spacing rather than 160 acres. In the absence of objection, this pool will be placed on the standard 320-acre spacing for Pennsylvania Gas Pools rather than the present 160-acre spacing.
- CASE 5383: Application of Union Texas Petroleum Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Crosby Deep Well No. 3, located in Unit J of Section 33, Township 25 South, Range 37 East, Crosby Field, Lea County, New Mexico, in such a manner as to produce oil from the Fusselman formation and gas from the McKee formation through parallel strings of tubing.
- CASE 5384: Application of Atlantic Richfield Company for a non-standard gas proration unit, three unorthodox gas well locations, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 240-acre non-standard gas proration unit comprising W/2 NE/4, W/2 SE/4, SE/4 SE/4, and SE/4 SW/4 of Section 32, Township 24 South, Range 37 East, Lea County, New Mexico, to be simultaneously dedicated to its State 157-E Well No. 1, located 2310 feet from the North and East lines, its State 157-C Com Well No. 1, located 330 feet from the South line and 2310 feet from the East line, and its State 157-C Well No. 2, located 990 feet from the South line and 330 feet from the East line, all unorthodox gas well locations in said Section 32.
- CASE 5385: Application of Yates Petroleum Corporation for pool creation and special pool rules and an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the High Hope-Abo Gas Pool in Section 13, Township 17 South, Range 23 East, Eddy County, New Mexico, and the promulgation of special pool rules therefor, including a provision for 320-acre spacing and proration units. Applicant further seeks approval for the unorthodox location of its High Hope DJ Federal Well No. 1, located 690 feet from the North line and 480 feet from the West line of Section 13, Township 17 South, Range 23 East, Eddy County, New Mexico, the W/2 of said Section 13 to be dedicated to the well.
- CASE 5386: Application of Yates Petroleum Corporation for four dual completions and one unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the following dual completions in Township 17 South, Range 25 East, Eddy County, New Mexico:

(Case 5386 Continued from Page 2)

The Federal "CK" Com Well No. 1, located at an unorthodox gas well location 660 feet from the South and West lines of Section 29, to produce gas from the Canyon formation through the casing-tubing annulus and from the Atoka formation through tubing, the W/2 of said Section 29 to be dedicated to the well;

The State "CY" Well No. 1, located in Unit K of Section 32, to produce gas from the Strawn and Atoka formations through the casing-tubing annulus and from the Cisco through tubing by means of a cross-over assembly;

The Powell "DG" Com Well No. 1, located in Unit O of Section 35, to produce gas from the Morrow through the casing-tubing annulus and from the Cisco through tubing by means of a cross-over assembly;

And the Federal "CZ" Well No. 1, located in Unit B of Section 8, Township 18 South, Range 25 East, to produce gas from the Morrow through the casing-tubing annulus and from the Cisco through tubing by means of a cross-over assembly.

CASE 5367: (Continued from the November 26, 1974, Examiner Hearing)

Application of Yates Petroleum Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to convert its Hornbaker BA Well No. 1, located in Unit G of Section 25, Township 18 South, Range 25 East, Penasco Draw Yeso-San Andres Pool, Eddy County, New Mexico, to dispose of produced salt water into the Yeso and San Andres formations through the perforated intervals from 1400 to 2480 feet. Applicant further seeks an administrative procedure for approval of additional salt water disposal into the Yeso and San Andres formations in the subject pool without notice and hearing.

CASE 5387: Application of HNG Oil Co. for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox gas well location in the Devonian and/or Ellenburger formation of its Dogie Draw Fed. Well No. 2, to be drilled at a point 1325 feet from the South and West lines of Section 5, Township 26 South, Range 36 East, Lea County, New Mexico, the S/2 of said Section 5 to be dedicated to the well.

CASE 5388: Application of Great Western Drilling Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Hay Hollow Unit Area comprising 7040 acres, more or less, of Federal and State lands in Township 26 South, Range 27 East, Eddy County, New Mexico.

CASE 5389: Application of Shell Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the S/2 NW/4, NE/4 SW/4, and NW/4 SE/4 of Section 3, Township 21 South,

Case 5386



YATES BUILDING - 207 SOUTH 4TH ST.
ARTESIA, NEW MEXICO - 88210

November 14, 1974

NEW MEXICO
OIL CONSERVATION COMMISSION
SANTA FE

S. P. YATES
PRESIDENT
MARTIN YATES, III
VICE PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SEC. - TREAS.

Mr. A.L. Porter, Jr. Secretary-Director
New Mexico Oil Conservation Commission
P.O. Box 2098
Santa Fe, New Mexico 87501

RE: Dual Completion, Richard Knob
Cisco-Canyon, Richard Knob Atoka,
Richard Knob Morrow,
Eddy County, New Mexico

Dear Sir:

Yates Petroleum Corporation seeks permission to dually complete and produce four wells in a New Pool area to be hereafter designated as Richard Knob, and a procedure whereby additional wells drilled within this area maybe dually completed without Notice and Hearing.

The Federal "CR" #1 Com, located 660' FSL and 660' FWL of Section 29-T17S-R25E, is completed with Canyon Perforations (6999-7006'; and 7164-7175') in casing annulus with Blast Joints on tubing string opposite Canyon Perforations and a Sliding Sleeve above packer and blank-off nipple, and with Atoka Perforations (7944-7964') open to the tubing under packer. Neither the Canyon nor Atoka produces much fluid. Should the Canyon accumulate fluid after prolonged flow, however, this fluid may be blown down thru the tubing by setting with wireline a Blanking Plug in blank-off nipple located on top of the packer thereby shutting in the Atoka completion, and opening a Sliding Sleeve located above the Blanking Plug. After unloading the Canyon, the Sliding Sleeve will be closed and Blanking Plug pulled returning well to dual status.

The State "CY" #1, located 1930' FSL and 1930' FWL of Section 32-T17S-R25E, is to be completed with Cisco Perforations (6330-82'; 6397-99'; 6431-37'; and 6641-43') in tubing and Strawn-Atoka Perforations (7732-86'; 7997-99'; 8002-04'; and 8066-70') in casing annulus using two packers and a cross-over assembly. Blast joints will be installed opposite Cisco Perforations, packer with on-off tool below the Cisco Perforations, and packer with cross-over tools above the Cisco Perforations. By pulling the cross-over tool and replacing with a straight-thru tool, the Cisco may be shut in between the two packers and the Atoka will then be open in the tubing for unloading or remedial work as may be needed.

DOCKET MAILED

Date 12-26-74

Page 2
November 11, 1971

The Powell "C" #1, located 60' FSD and 1930' FBL of Section 35-1139-R29E, is to be completed with Cisco Perforations (6574-76') in tubing and Morrow Perforations (8324-27') in casing annulus using two packers and a cross-over assembly, as above.

The Powell "D" #1 Cor. located 600' FSD and 1930' FBL of Section 35-1139-R29E, is to be completed with Cisco Perforations (6539-44'; 6574-82'; 6611-22'; and 6671-23') in tubing and Morrow Perforations (8367-68' and 8390-86') in casing annulus using two packers and a cross-over assembly, as above.

*Should be
35-17-25*

Please schedule this hearing on the same docket as Continued Case 5367. Thank you.

Yours very truly,

YATES PETROLEUM CORPORATION

Eddie M. Mahfood
Eddie M. Mahfood

EM/pt

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

Case 5386

Form O-107
5-1-61

Operator Yates Petroleum Corporation		County Eliz	State N.M.	Date 11-14-74
Address 207 So. 4th St., Artesia, New Mexico		Lease Federal "OK" Con	Well No. 1	
Location of Well	Unit M	Section 29	Township 17South	Range 2East

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	Richard Knob-Canyon		Richard Knob-Atoka
b. Top and Bottom of Pay Section (Perforations)	6999-7006' 7114-7175'		7944-7964'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

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 checked="" type="checkbox"/> | <input 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.

Sun Oil Company 12950 Hillcrest Dallas, Texas 75230

Yates Petroleum Corporation 207 So. 4th Street., Artesia, New Mexico 38210

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 11-14-74.

CERTIFICATE: I, the undersigned, state that I am the Chief Engineer of the Yates Petroleum Corp. (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.

Eddie M. Mahfood
Eddie M. Mahfood 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 proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

YATES PETROLEUM CORPORATION
DIAGRAMMATIC SKETCH OF PROPOSED DUAL COMPLETION
Federal "CR" Com #1, 660' FSL & 660' FWL of Section 29-17S-25E Eddy Co., NM

Spudded 7-31-73
Dual Completion 9-25-73

Lost Circ. @ 253', dry drld.
Top of San Andres @ 634' KB

Base of Artesian Zone @ 927' KB

Cored Slaughter Dolomite
1196-1326 w/scattered shows

Glorietta Sand @ 1917-2030'

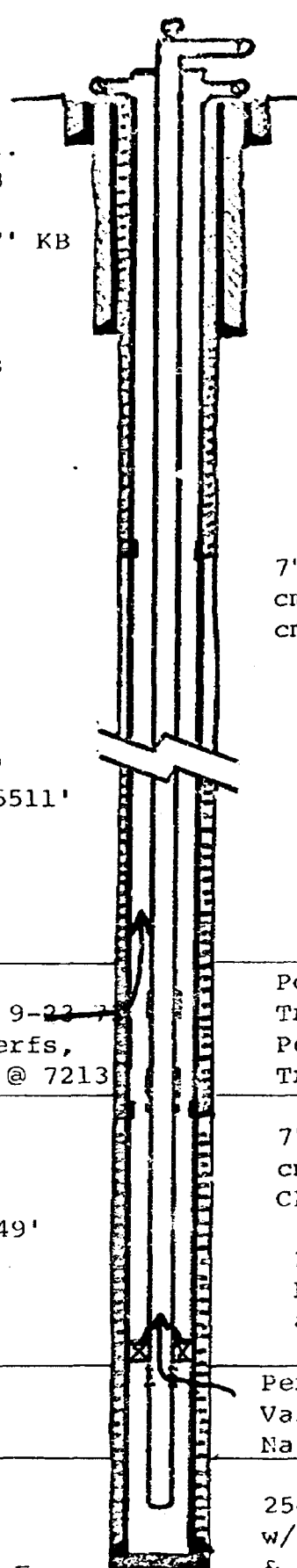
Top of cement at 6000'
Cisco formation top @ 6245'
Possible Cisco pay @ 6496-6511'

Canyon Pay - 6999-7174'
*Flowed 1183 MCFPD 3/4" ck 9-22-73
NOTE: Blast jts opposite perfs,
BFC Model L Sliding Sleeve @ 7213'

Poss. Strawn pay @ 7642-7649'

Atoka pay 7944-7964
*Flowed 6750 MCFPD 3/4" ck
9-25-73

Total Depth - Driller 8340 =
8342 EL.



Tbg Compl. - Atoka (Lower Penn)
Csg Annulus Compl. (Upper Penn)

17" hole to 180' KB
161' 13-3/8" H-40 @ 180' KB
w/100 sx Class C 4% CaCl, circ.

12 1/4" hole to 1038' KB
989 9-5/8" 32.3# H-40 @ 1007'
w/700 sx Class C 2% CaCl,
notched Tex-Patt Shoe, central-
izers @ 905, 578, 510, bsks @
542, 479', circulated.

7" 23# Howco DV Tool @ 2204' KB
cmt'd w/225 sx Hal-Lite, est. top
cmt @ 50'

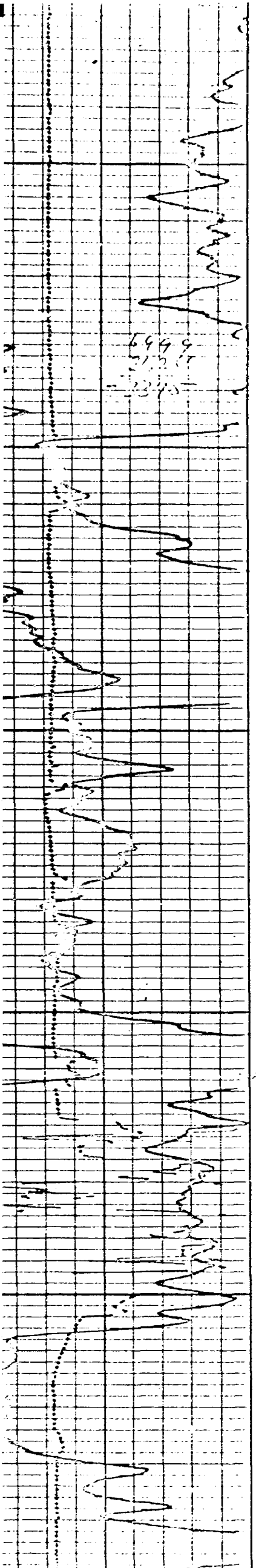
Perf 6999-7006 w/15-0.50" jets
Trtd w/1250g 15% acid & 2000g CRA
Perf 7164-7174 w/20-0.50" jets
Trtd w/1000g NEA & 7500g CRA

7" 26# Howco DV Tool @ 7276' KB
cmt'd w/260 sx Class H cmt w/3/4%
CFR-2, 5# salt.

2-3/8" EUE 4.7# Tbg on Baker 7"x2'
Lockset Pkr top @ 7870', PSI Actua-
ated Sleeve & perf sub @ 7874-
7878'

Perf 7945-7963' w/72-9.41 jets on
Van Tool Tbg-Conveyed Gun
Natural Completion

254 jts 7" 23&26# K-55, N-80 csg
w/float shoe, 3-stage cementer Equpt
& 10 centralizers, cmt'd w/195 sx
Class H cmt w/3/4% CFR-2, 5# salt.



6999
513.17
2345

7000

6

7100

72

Federal CR + Com

660/S 660/W Sec 29-17-25

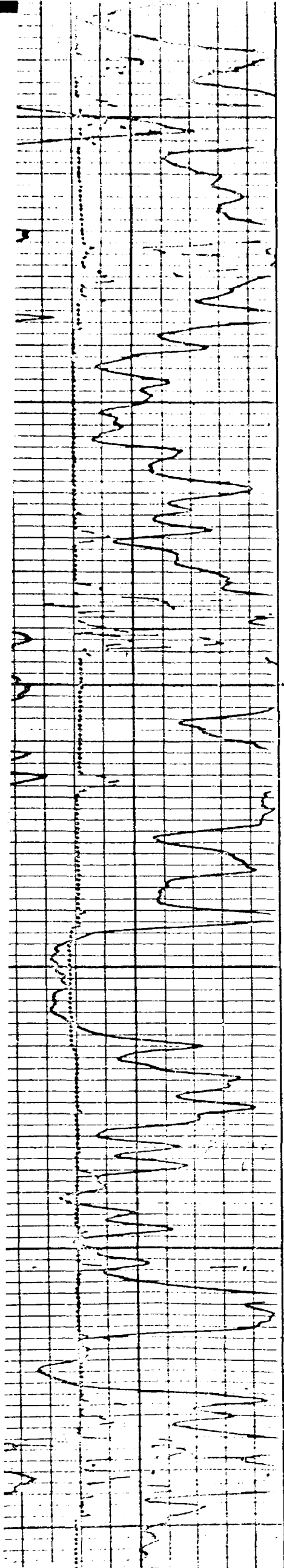
Pf 6999-7006 / 15 jets 0.50

1250g 15% NEA
2000g 15% CRA

Pf 7164-7170 / 20 jets 0.50

1000g 15% NEA
2500g 15% CRA

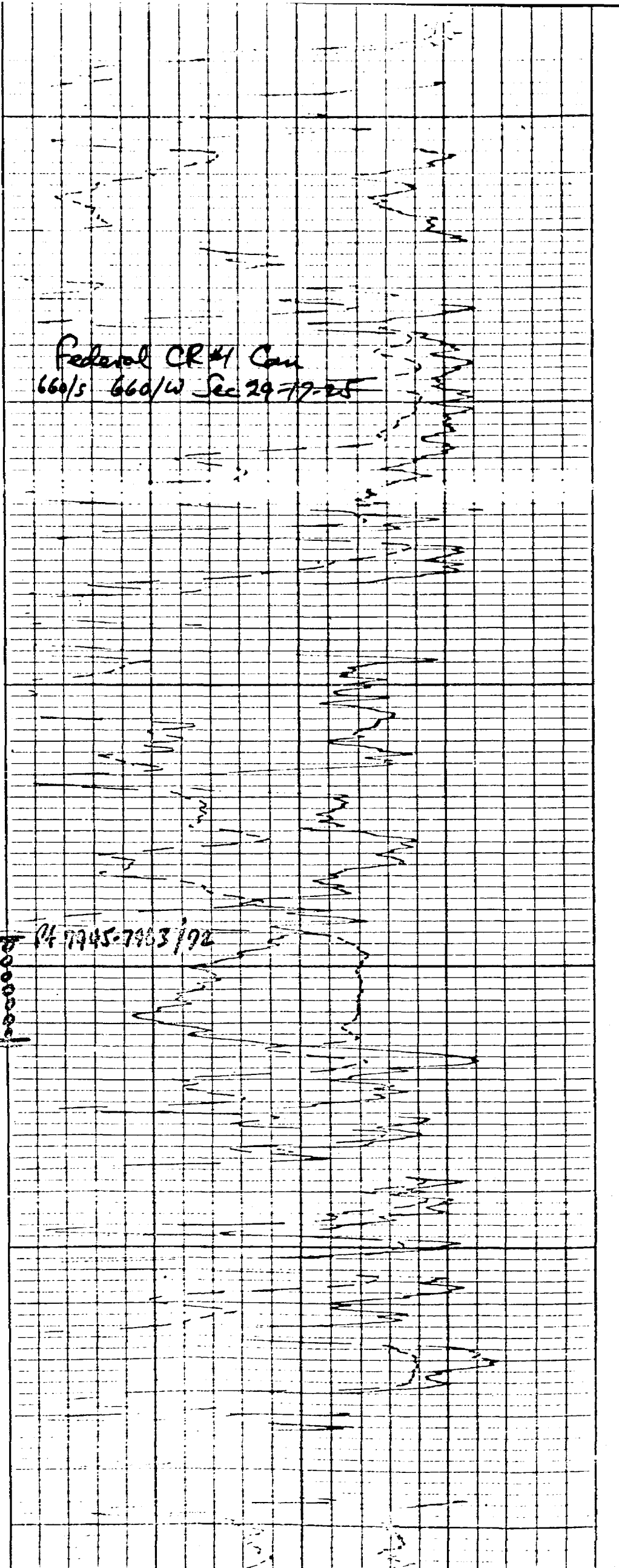
7000



7800

7900

8000



Federal CR #1 Case
660/5 660/W Sec 29-79-25

04 7945-7963 / 92

800000

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

Form O-107
5-1-61

Operator Yates Petroleum Corporation		County Elm	Date 11-14-74
Address 207 So. 4th St., Artesia, New Mexico		Lease State "OY"	Well No. 1
Location of Well	Unit K	Section 32	Township 17South
		Range 25East	

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	Richard Knob-Casco-Canyon		Richard Knob-Strawn-Atoka
b. Top and Bottom of Pay Section (Perforations)	6330-6643'		7732-8070'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

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 checked="" type="checkbox"/>	<input 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.

Pennzoil Company Drawer 1323, Midland, Texas 79701

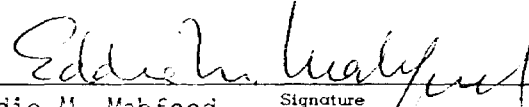
Gulf Oil Company Box 1150 Gulf Blvd., Midland, Texas 79701

Sun Oil Company 12350 Hillcrest, Dallas, Texas 75230

Yates Petroleum Corporation 207 South 4th St., Artesia, New Mexico 88210

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 11-14-74

CERTIFICATE: I, the undersigned, state that I am the Chief Engineer of the Yates Petroleum Corp. (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.


Eddie M. Mahfood 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 proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

Case 5386

YATES PETROLEUM CORPORATION
Diagrammatic Sketch of Proposed Dual Completion
State "CY" #1, 1940' FSL, 1930' FSL, Section 32-T17S-R2NE,
Eddy County, New Mexico

Spudded 11-26-74
Atoka Completion 1-31-74
Cisco Completion 2-22-74
Elevation 3603 GR-3620' KB

Tubing Completion - Cisco
Casing Completion - Atoka

Top of San Andres at 631'

Base of Artesian at 960'

cmtd circ on surface & intermediate csos
17 1/2" hole to 206' KB
13 3/8" 43# csc set at 206'. cmtd w/125 sx

12 1/4" hole to 1066' KB
3 5/8" 24# csc set at 1060', cmtd w/675 sx
centralizers at 939, 697 and 616, baskets
at 657 and 616. Tex Patt Notched Shoe

Top of primary cmt at 6010' KB; mud to surf.
4 1/2" Baker Model AR-1 pkr w/cross-over
(profile 1.87) at approx 6350'

Top of Cisco at 6234'

Scattered Cisco pays
flowed 619 MCFPD w/7.5 BO
on 3/4" choke, 30# IP

Pf 6330-82' Treated with
Pf 6397-99' 27000 c 15% DS-30
PF 6431-37' & CO2
PF 6641-43'

2 3/8" EUE 4.7# J-55 tubing (7706') landed
in on-off tool

Strawn at 7633'

Baker Lok-set Pkr at 7723' KB w/Baker "FL"
On-Off tool at 7719' KB (profile 1.31)

Top of Atoka at 7960'
flowed 2.35 MMCFPD w/6.2 BO
on 3/4" choke, 150# IP

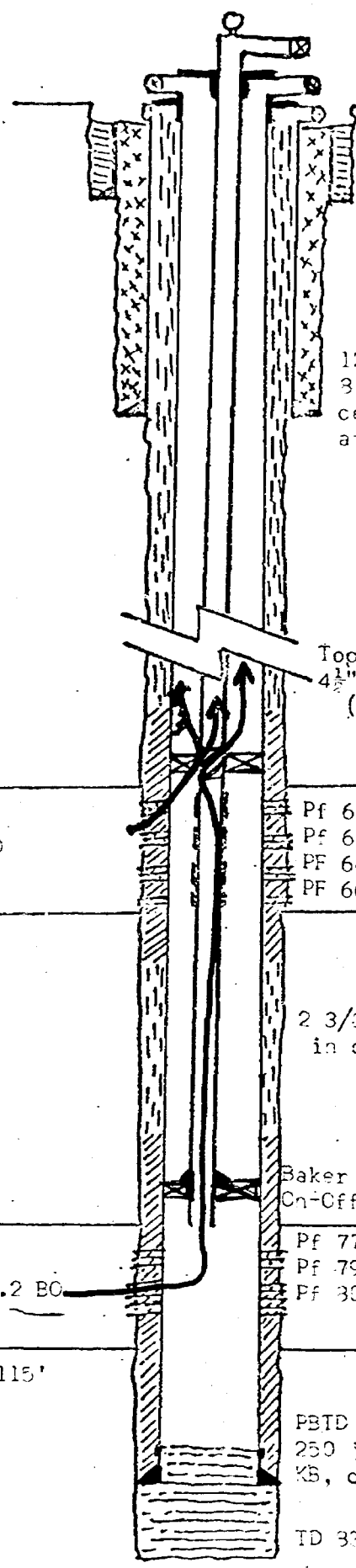
Pf 7732-36' Treated w/3000 c 7 1/2% MSA & N-2
Pf 7997-04' SF w/13000# 20/40 in 10000 c
Pf 3066-70' 5% MSA & 5000 c CO2

Morrow Clastics at 3115'

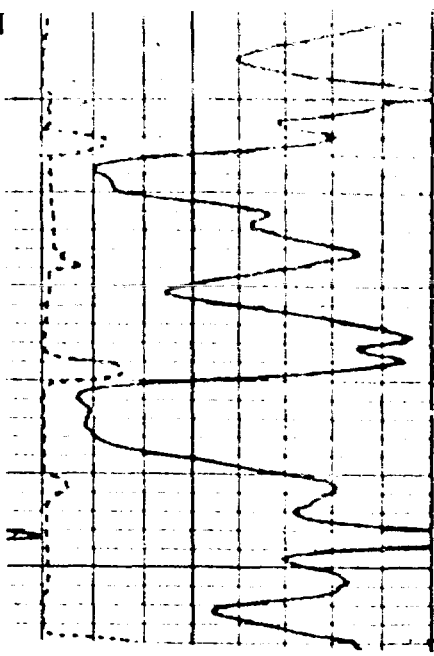
PBTD 3190', top of float collar
250 lbs 4 1/2" 10.5#-11.6# K-55 csg set at 3216'
KB, cmtd w/525 sx Cl H, 0.75% CFR2, 5% salt.

Chester at 3253'

ID 3330'



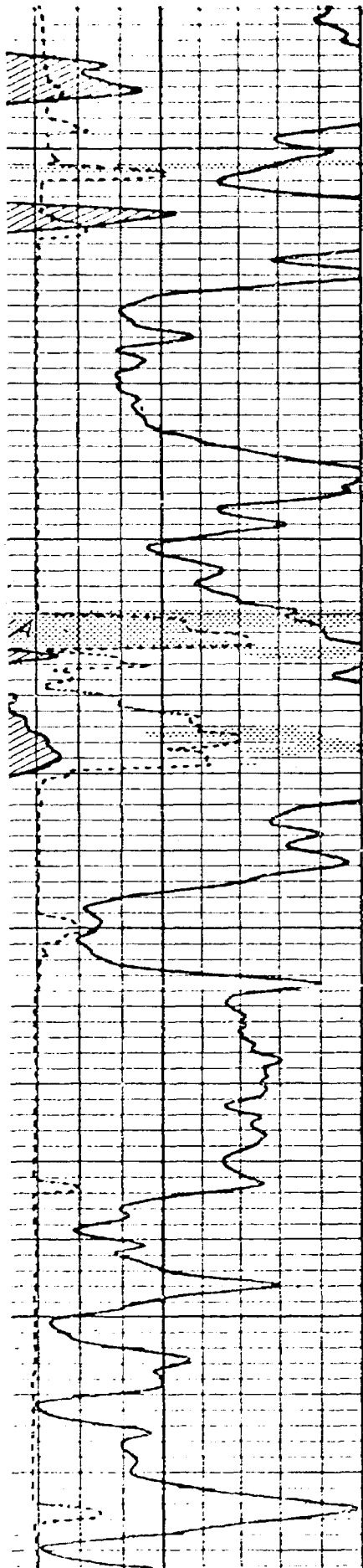
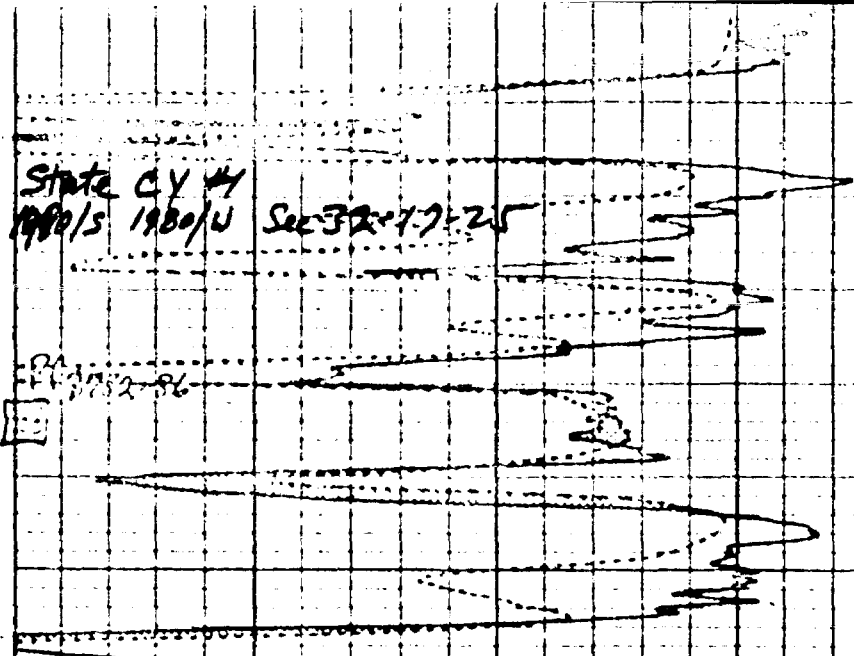
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7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36						
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5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36				
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3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36		
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State CY 44
1980/S 1980/U Sec 32-77-25

PC 7852-86

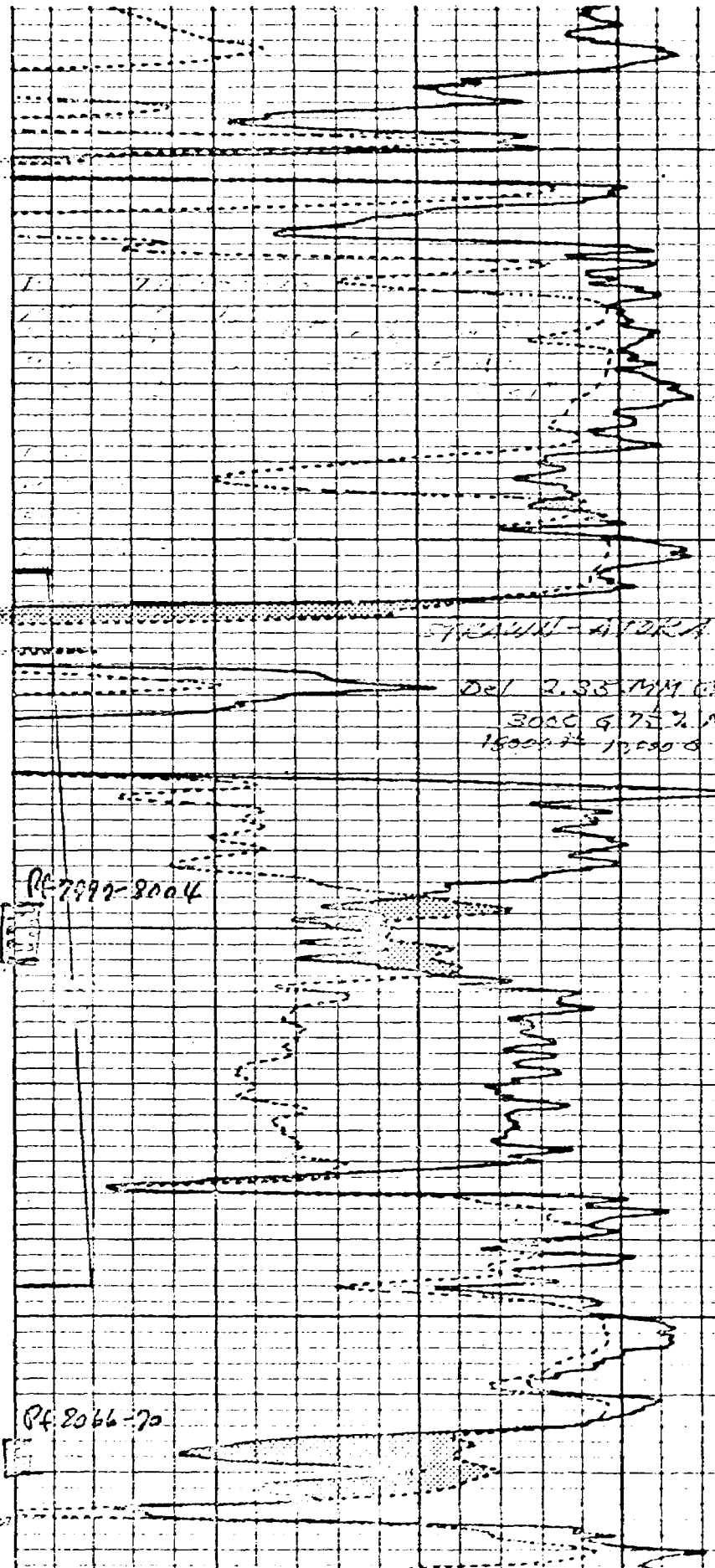
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7900

5
12
8000
10 p.m.

PC 7992-8004



SPAWN-ANDRA

DEL 2.33 MM COASO
3000 G 75% MA
15000 G 10000 G FIVE

2
12
50
70
30
8000

PC 8066-70

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

Form O-107
5-1-61

Operator Yates Petroleum Corporation		County Eddy	Date 11-14-74
Address 207 So. 4th St., Artesia, New Mexico		Lease Federal "CZ"	Well No. 1
Location of Well	Unit B	Section 3	Township 13South
		Range 25East	

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	Richard Knob-Cisco Canyon		Richard Knob-Morrow
b. Top and Bottom of Pay Section (Perforations)	6554-6576'		3333-3393'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

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 checked="" type="checkbox"/>	<input 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.

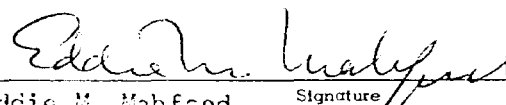
Franklin, Aston & Fair, Inc., Box 1090, Roswell, New Mexico 38201

Atlantic Richfield Company, Box 1610, Midland, Texas 79701

Yates Petroleum Corporation, 207 South 4th Street., Artesia, New Mexico 38210

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 11-14-74

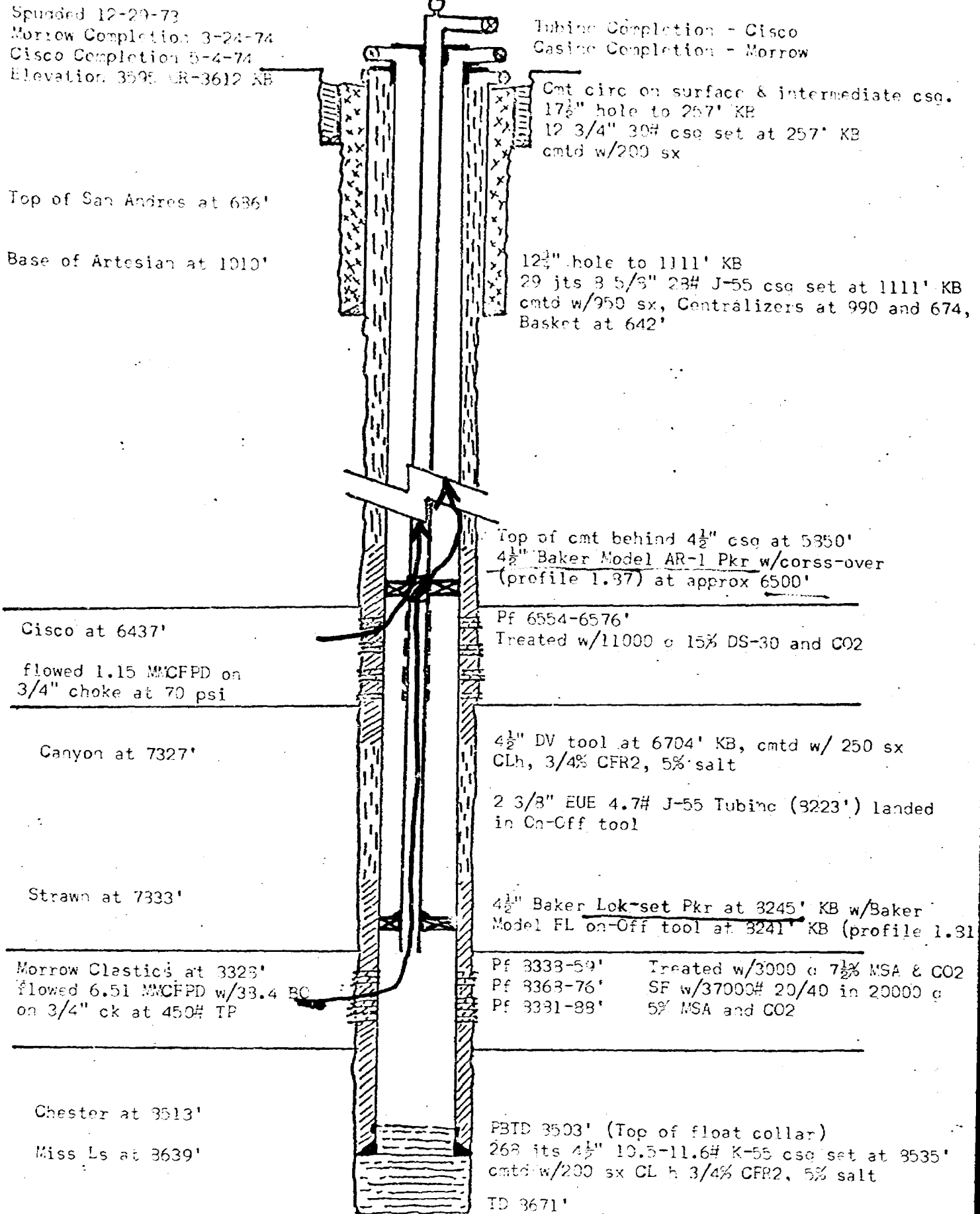
CERTIFICATE: I, the undersigned, state that I am the Chief Engineer of the Yates Petroleum Corp (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

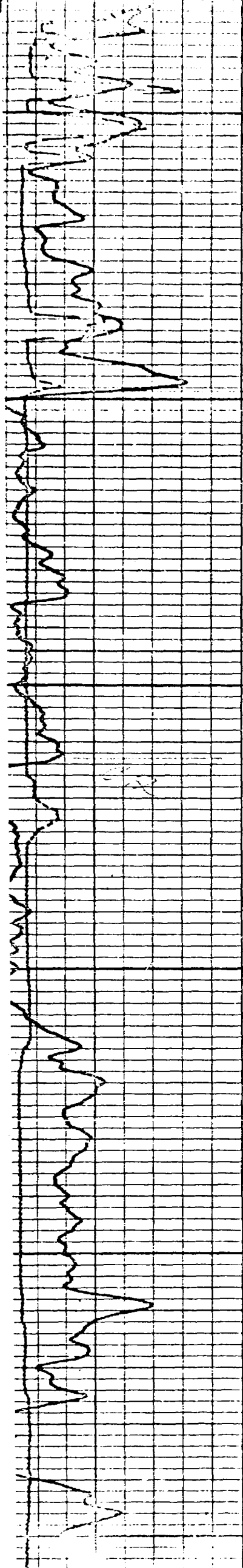

Eddie M. Mahfood Signature

*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 proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

YATCO PETROLEUM CORPORATION
 Schematic Sketch of Proposed Dual Completion
 Federal "C2" #1, 60' FNL, 1033' HLL, Section 8-T13S-R24E
 Bldg. Control, New Mexico





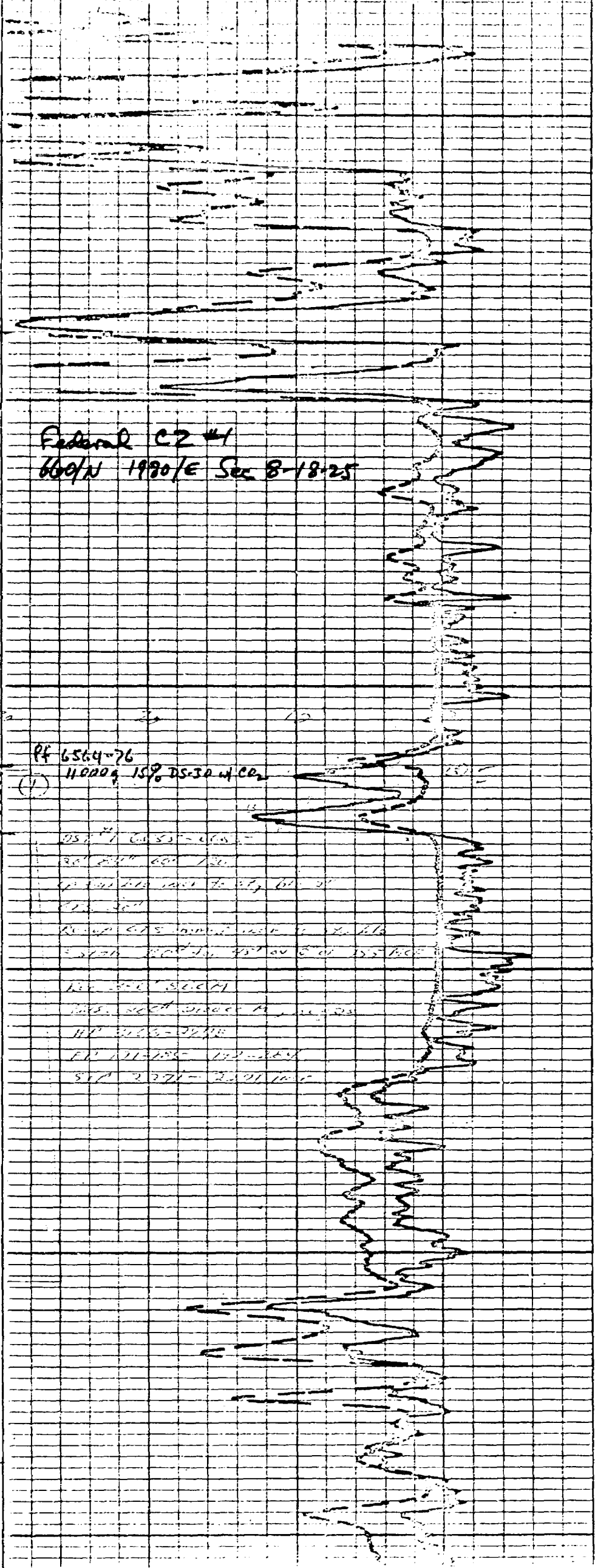
6493
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6510

5 50
5 13
700 K
9 12
700 K

6600

5 50
700 K

6700



Federal C2 #1
660/N 1980/E Sec 8-18-25

RF 6564-76
11000, 15% DS-30 W CO2

- 1057 27 60 53 - 60 53
- 30 27 60 130
- 17 100 110 100 70 90, 100 90
- 100 100
- 10 100 60 5 100 100 100 100 100 100
- 10 100 100 100 100 100 100 100
- 100 100 100 100
- 100 100 100 100
- 100 100 100 100
- 100 100 100 100

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

Form O-107
5-1-61

Operator Yates Petroleum Corporation		County Eddy		Date 11-14-74
Address 207 So. 4th St., Artesia, New Mexico		Lease Powell "DG"		Well No. 1 - Com
Location of Well	Drift C	Section 35	Township 17South	Range 25East

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	Richard Knob-Cisco		W. Atoka Morrow
b. Top and Bottom of Pay Section (Perforations)	6539-6633'		3339-3349'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

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 checked="" type="checkbox"/>	<input 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.

Superior Oil Company, Box 1900, Midland, Texas 79701

Atlantic Richfield Company, Box 1610, Midland, Texas 79701

Coquina Oil Corporation, 200 Bldg. of the SW, Midland, Texas 79701

Amoco Production Company, Box 3092, Houston, Texas 77001

Yates Petroleum Corporation, 207 South 4th Street, Artesia, New Mexico 89210

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 11-14-74.

CERTIFICATE: I, the undersigned, state that I am the Chief Engineer of the Yates Petroleum Corp. (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.

Eddie M. Mahfood
Eddie M. Mahfood 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 proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

YATES PETROLEUM CORPORATION
 Powell "DD" #1 Cas. 600' FSL, 1930' MEL. Section 35-T17S-R25E
 Eddy County, New Mexico

Spurded 6-14-74
 Morrow Completion 3-22-74
 Cisco Completion
 Elevation 3490' GR-3505' KB

Tubing Completion - Cisco
 Casing Completion - Morrow

Top San Andres - 1128
 Base of Artesian - 1138

cmt circ. on surface & intermediate csg
 17 1/2" hole to
 13 3/8" 43# J-55 csg (336') set at 391' KB
 cmt'd w/250 sx and 4 yards ready mix

12 1/2" hole to 1233' KB

34 its 3 5/8" 24# J-55 csg (1223') set at
 1238' KB. cmt'd w/1100 sx. centralizers at
 1113 and 700'. Baskets at 741 and 667',
 Guide shoe.

Top of cmt behind 4 1/2" csg at 6050'
 4 1/2" Baker Model AR-1 Pkr w/cross-over
 (profile 1.37) at approx _____

Cisco at 6435'

Pf 6539-44'
 Pf 6574-32'
 Pf 6611-22'
 Pf 6675-33'

Canyon at 7341'

4 1/2" DV tool at 6322' KB,
 cmt'd w/200 sx C1 C; 1/2% CFR2, 5% salt

Strawn at 7731'

Atoka at 8115'

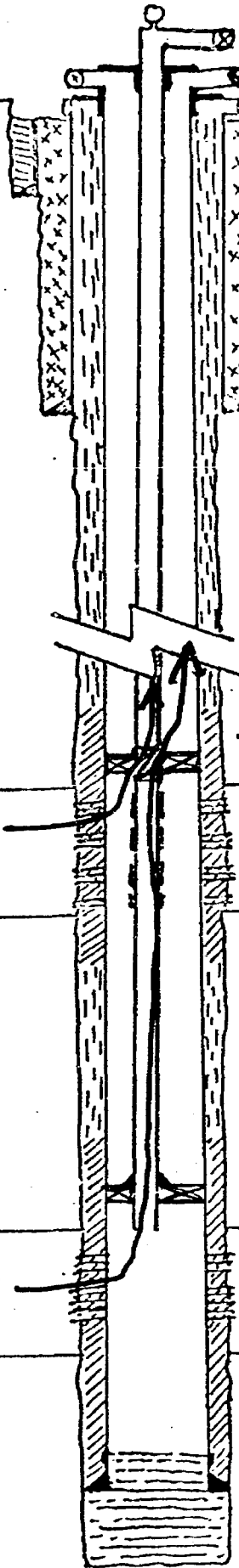
Morrow Clastics at 8304'
 flowed 1.01 MMCFPD w/7 EC on
 3/4" choke at 55 psi TP

Pf 3367-63' Treated w/1000 g 7 1/2% MSA & N2
 Pf 3330-36' SF w/17000# 20/40 sd in
 15000 g KCl wtr and CO2

Chester at 8475'

265 its 4 1/2" 10.5-11.6# K-55 csg set at 8561' KB
 cmt'd w/250 sx C1 H 3/4% CFR2, 5% salt

ID 3740'



Handwritten notes at the top of the page, including a date and possibly a location or project name.

Powell DC et Com
660/s 1984/E Sec 35-17-25
3505KB

PF 6539-44 / 10 jets 42

PF 6574-82 / 16 jets 42

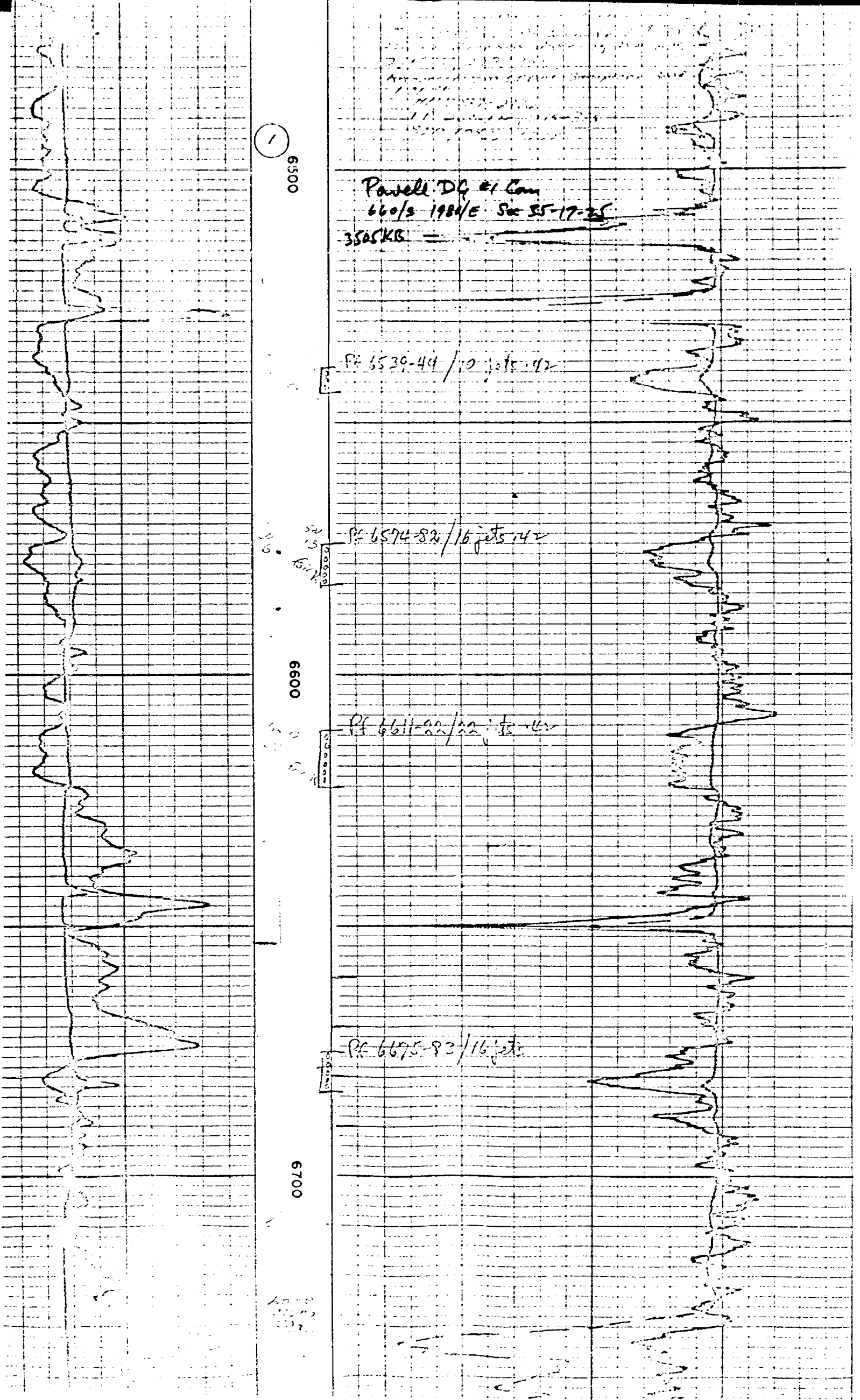
PF 6611-22 / 22 jets 42

PF 6675-82 / 16 jets

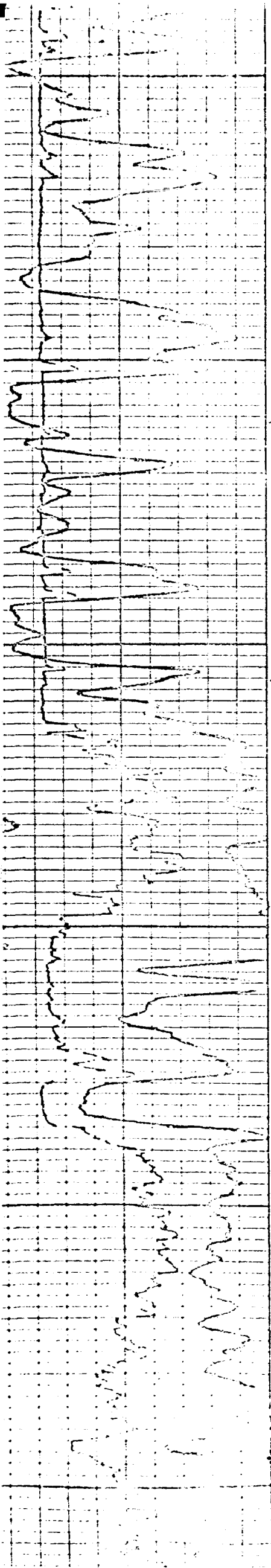
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6600

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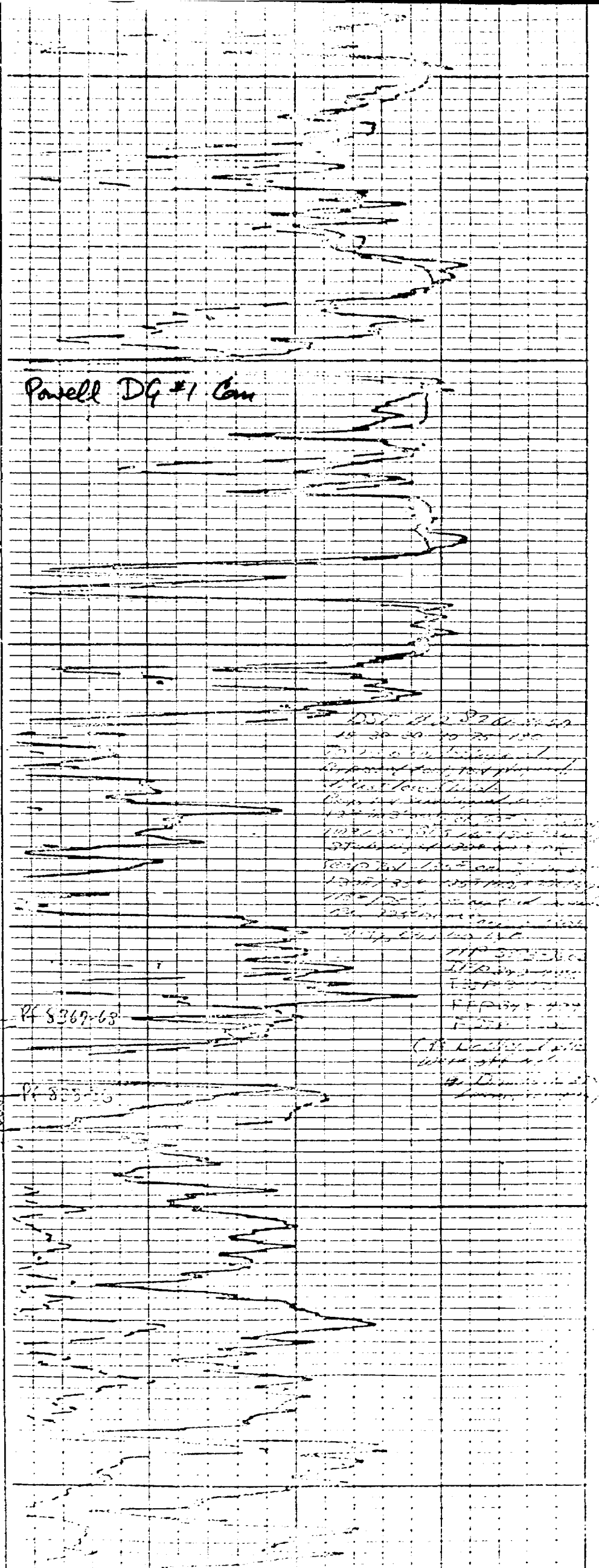
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8200

8300

8400



Powell DG #1 Can

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 70 80 90 100 110
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 170 180 190 200 210
 220 230 240 250 260
 270 280 290 300 310
 320 330 340 350 360
 370 380 390 400 410
 420 430 440 450 460
 470 480 490 500 510
 520 530 540 550 560
 570 580 590 600 610
 620 630 640 650 660
 670 680 690 700 710
 720 730 740 750 760
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 1370 1380 1390 1400 1410
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 1870 1880 1890 1900 1910
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 2020 2030 2040 2050 2060
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YATES BUILDING - 207 SOUTH 4TH ST.
ARTESIA, NEW MEXICO - 88210

November 14, 1974

Case 5386
S. P. YATES
PRESIDENT
MARTIN YATES, III
VICE PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SEC. TREAS.

NOV 20 1974
OIL CONSERVATION COMM
Santa Fe

Mr. A.L. Porter, Jr. Secretary-Director
New Mexico Oil Conservation Commission
P.O. Box 2033
Santa Fe, New Mexico 87501

Handwritten notes:
7/11/74
must go to meeting

RE: Non-Standard Gas Well Spacing
Unit M Section 29-17S-25E
Eddy County, New Mexico

Dear Sir:

Yates Petroleum Corporation seeks Administrative Approval of a non-standard gas well spacing unit for the Federal "CR" #1 Com, located 660' from South and West lines of Section 29-T17S-R25E, Eddy County, New Mexico. The well is a dual gas well completion in Upper and Lower Penn formations, Wildcat discoveries, with suggested New Pool designations as Richard Knob Cisco-Canyon and Richard Knob Atoka, respectively. A West-half section dedication is proposed.

The Federal "CR" #1 Com was originally proposed as a Devonian Test. After penetrating the Atoka pay, the drilling mud became increasingly gas cut and it was considered expedient to case the well and abandon drilling to the Devonian.

Yates Petroleum is the sole Operator offsetting this unit and waive objection to the unorthodox location. An Ownership Plat and Dedication Plat is attached hereto.

Yours very truly,

YATES PETROLEUM CORPORATION

Eddie M. Mahfood

Eddie M. Mahfood
Engineer

EM/pt
Enclosures

cc: OCC, Artesia

DOCKET MAILED

Date _____

Case 5386

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

NOV 20 1974

All distances must be from the outer boundaries of the Section

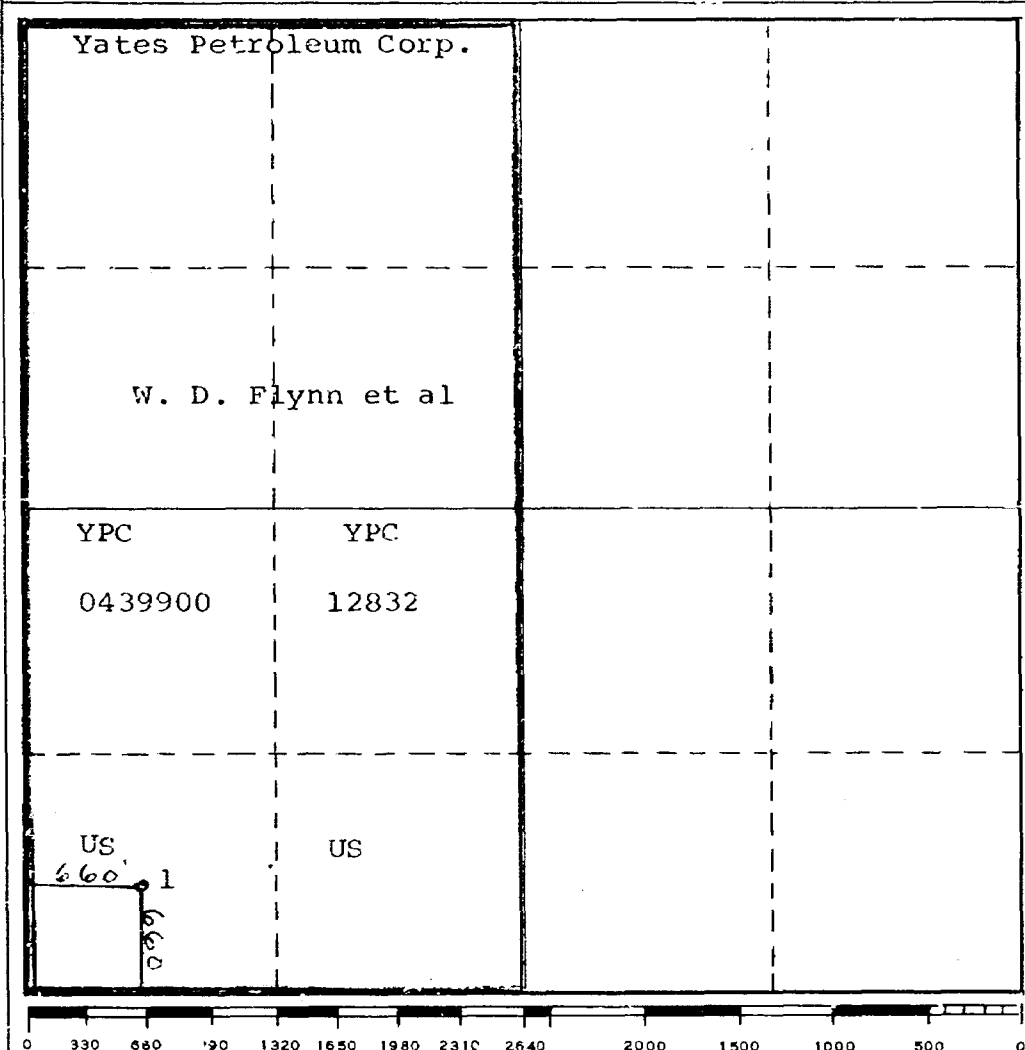
Operator Yates Petroleum Corporation		Lease Federal "CR OIL CONSRVATION COM T		Well No. Santa Fe
Unit Letter M	Section 29	Township 17 South	Range 25 East	County Eddy
Actual Footage Location of Well: 660' feet from the South line and 660 feet from the West line				
Ground Level Elev. 3612'	Producing Formation Atoka	Pool Richard Knob	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Eddie M. Mahfood

Name
Eddie M. Mahfood

Position
Engineer

Company
Yates Pet. Corporation

Date
11-18-74

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Refer to Original Plat Surveyed 6-8-1973

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

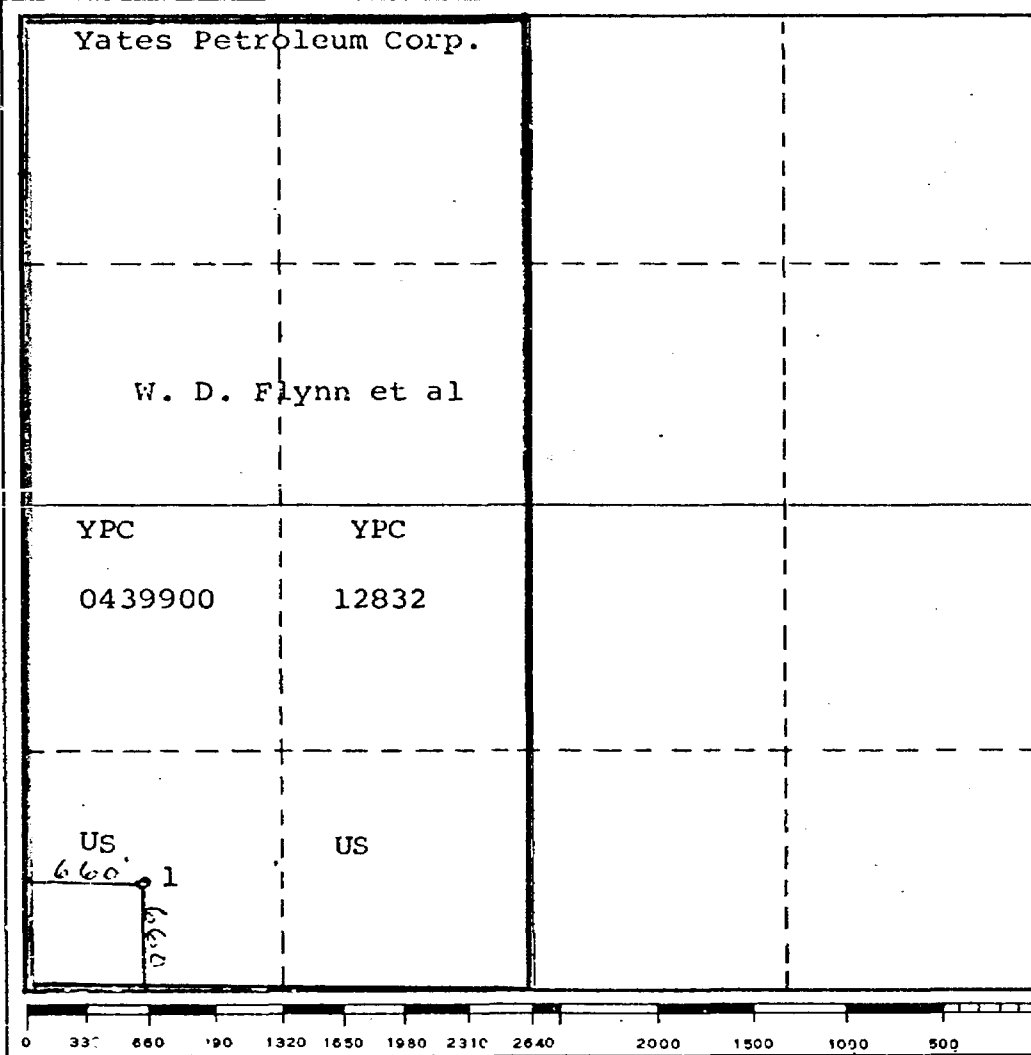
All distances must be from the outer boundaries of the Section.

Operator Yates Petroleum Corporation		Lease Federal OIL CONSERVATION COMMISSION		Well No. 1-C
Unit Letter M	Section 29	Township 17 South	Range 25 East	County Eddy
Actual Footage Location of Well: 660' feet from the South line and 660 feet from the West line				
Ground Level Elev. 3612'	Producing Formation Canyon	Pool Richard Knob	Dedicated Acres: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?
 Yes No If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
<i>Eddie M. Mahfood</i>	
Name	Eddie M. Mahfood
Position	Engineer
Company	Yates Pet. Corporation
Date	11-18-74
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Refer to Original Plat Surveyed 6-8-1973	
Date Surveyed	
Registered Professional Engineer and/or Land Surveyor	
Certificate No.	

Carl - Dan ?

We received Form C-123 along with copies of C-107 application for D.C. for all wells listed on the attached letter.

Then proposed Richard Knob morrow. + Richard Knob Strawn - atake on Lower Penn dont look too bad but the Richard Knob Cisco-Lanyone or Upper Penn looks pretty wild. see attached plot.

Bill.

Case 5386

S. P. YATES
PRESIDENT
MARTIN YATES, III
VICE PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SEC. - TREAS.



YATES BUILDING - 207 SOUTH 4TH ST.
ARTESIA, NEW MEXICO - 88210

*Bill Gierrett
Oce, Artesia*

November 14, 1974

RECEIVED

NOV 19 1974

O. C. C.
ARTESIA, OFFICE

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

RE: Dual Completion, Richard Knob
Cisco-Canyon, Richard Knob Atoka,
Richard Knob Morrow,
Eddy County, New Mexico

Dear Sir:

Yates Petroleum Corporation seeks permission to dually complete and produce four wells in a New Pool area to be hereafter designated as Richard Knob, and a procedure whereby additional wells drilled within this area maybe dually completed without Notice and Hearing.

M
The Federal "CR" #1 Com, located 660' FSL and 660' FWL of Section 29-T17S-R25E, is completed with Canyon Perforations (6999-7006'; and 7164-7175') in casing annulus with Blast Joints on tubing string opposite Canyon Perforations and a Sliding Sleeve above packer and blank-off nipple, and with Atoka Perforations (7944-7964') open to the tubing under packer. Neither the Canyon nor Atoka produces much fluid. Should the Canyon accumulate fluid after prolonged flow, however, this fluid may be blown down thru the tubing by setting with wireline a Blanking Plug in blank-off nipple located on top of the packer thereby shutting in the Atoka completion, and opening a Sliding Sleeve located above the Blanking Plug. After unloading the Canyon, the Sliding Sleeve will be closed and Blanking Plug pulled returning well to dual status.

*Hg of
+ hg ann*

K
The State "CY" #1, located 1980' FSL and 1980' FWL of Section 32-T17S-R25E, is to be completed with Cisco Perforations (6380-82'; 6397-99'; 6431-37'; and 6641-43') in tubing and Strawn-Atoka Perforations (7732-86'; 7997-99'; 8002-04'; and 8086-70') in casing annulus using two packers and a cross-over assembly. Blast joints will be installed opposite Cisco Perforations, packer with on-off tool below the Cisco Perforations, and packer with cross-over tools above the Cisco Perforations. By pulling the cross-over tool and replacing with a straight-thru tool, the Cisco may be shut in between the two packers and the Atoka will then be open in the tubing for unloading or remedial work as may be needed.

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Hg ann
w/ X. over*

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35-12-25*

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w/ x over*

B

The Federal "CZ" #1, located 660' FNL and 1930' FEL of Section 35-T139-R25E, is to be completed with Cisco Perforation (6594-76') in tubing and Morrow Perforations (6338-33') in casing annulus using two packers and a cross-over assembly, as above

O

The Powell "DS" #1 Con, located 660' FSL and 1930' FEL of Section 35-T139-R25E, is to be completed with Cisco Perforations (6539-44'; 6574-62'; 6511-22'; and 6675-63') in tubing and Morrow Perforations (9367-63' and 6390-86') in casing annulus using two packers and a cross-over assembly, as above.

Please schedule this hearing on the same docket as Continued Case 5367. Thank you.

Yours very truly,

YATES PETROLEUM CORPORATION

Eddie M. Mahfood
Eddie M. Mahfood

EM/pt

DRAFT

dr/

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. 5386

Order No. R- 4955

APPLICATION OF YATES PETROLEUM
CORPORATION FOR FOUR DUAL
COMPLETIONS AND UNORTHODOX
LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 8, 1975
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this day of January, 1975, 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 seeks approval for four conventional
dual completions in Eddy County, New Mexico, as follows:

The Federal "CR"^(C) Well No. 1 in Unit M of Section 29, Township 17 South, Range 25 East, NMPM, with gas production from the Upper Pennsylvanian formation through the casing-tubing annulus and gas production from the Atoka formation through 2 3/8-inch tubing with a packer set at approximately 7870 feet;

the State "CY" Well No. 1 in Unit K of Section 32, Township 17 South, Range 25 East, NMPM, with gas production from the Upper Pennsylvanian formation through 2 3/8-inch tubing and gas production from the ^{commingled} Strawn and Atoka formations through 2 3/8-inch tubing, a crossover assembly, and the casing-tubing annulus with packers set at approximately 6350 feet and 7723 feet;

the Powell "DG"^(C) Well No. 1 in Unit O of Section 35, Township 17 South, Range 25 East, NMPM, with gas production from the Upper Pennsylvanian formation through 2 3/8-inch tubing and gas production from the Morrow formation through 2 3/8-inch tubing, a crossover assembly, and the casing-tubing annulus with packers set at approximately ~~6050~~⁶⁵⁰⁰ feet and 8324 feet; and

IV
the Federal "CZ" Well No. 1 in Unit B of Section 8, Township 18 South, Range 25 East, NMPM, with gas production from the Upper Pennsylvanian formation through 2 3/8-inch tubing and gas production from the Morrow formation through 2 3/8-inch tubing, a crossover assembly, and through the casing-tubing annulus with packers ^{set} at approximately 6500 feet and 8245 feet.

(3) That the mechanics of the proposed dual completions appear to be feasible and in accord with good conservation practices.

(4) That additional production information should be obtained on each of said four dual completions to determine that efficient flow is taking place from all zones in said wells.

(5) That if such production information ^{demonstrates} shows inefficient flow from any of the zones, the Secretary-Director of the Commission should rescind the authority for the dual completion of the well.

(6) That the subject application for four dual completions should be approved.

(7) That the applicant further seeks an unorthodox gas well location for its ^{Federal} ~~State~~ ^{Lease} "CR" Well No. 1 at a point 660 feet from the South line and 660 feet from the West line of Section 29, Township 17 South, Range 25 East, NMPM, Eddy County, New Mexico.

(8) That no offset operator objected to the ^{proposed} unorthodox location.

(9) That the application for ^{an} unorthodox location~~s~~ should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant, Yates Petroleum Corporation, is hereby authorized four conventional dual completions, Eddy County, New Mexico, as follows:

The Federal "CR" Well No. 1 in Unit M of Section 29, Township 17 South, Range 25 East, NMPM, to produce gas from the Upper Pennsylvanian formation through the casing-tubing annulus and gas from the Atoka formation through 2 3/8-inch tubing with separation of the zones by a packer set at approximately 7870 feet;

the State "CY" Well No. 1 in Unit K of Section 32, Township 17 South, Range 25 East, NMPM, to produce gas from the Upper Pennsylvanian formation through 2 3/8-inch tubing and ^{commingled} gas from the Strawn and Atoka formations through 2 3/8-inch tubing and the casing-tubing annulus by means of a crossover assembly at approximately 6350 feet with separation of the zones by means of packers set at approximately 6350 feet and 7723 feet;

the Powell "DG" Well No. 1 in Unit O of Section 35, Township 17 South, Range 25 East, NMPM, to produce gas from the Upper Pennsylvanian formation through 2 3/8-inch tubing and gas from the Morrow formation through 2 3/8-inch tubing and the casing-tubing annulus by means of a crossover assembly at approximately ~~6050~~⁶⁵⁰⁰ feet with separation of the zones by means of packers set at approximately ~~6050~~⁶⁵⁰⁰ feet and 8324 feet; and

the Federal "CZ" Well No. 1 in Unit B of Section 8, Township 18 South, Range 25 East, NMPM, to produce gas from the Upper Pennsylvanian formation through 2 3/8-inch tubing and gas from the Morrow formation through 2 3/8-inch tubing, and through the casing-tubing annulus by means of a crossover assembly at approximately 6500 feet with separation of the zones by means of packers set at approximately

6500 feet and 8245 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce each of said wells 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 Shut-In Pressure Test Period ^{for 803 wells in} Southeast New Mexico.

(2) That the applicant shall take and file test data including, at least, monthly rates of production of gas and liquids, *periodic* flowing wellhead pressures, and shut-in pressures for the first 3 months of production, after the date of this order, from any zone of a dual completion herein approved.

(3) The applicant shall file such test data with both the Artesia district and Santa Fe offices of the Commission.

(4) The Secretary-Director of the Commission may rescind the authority for the dual completion of any well herein approved if a review of the test data required by Order (2) above demonstrates inefficient flow from either or both zones from any of said wells.

IT IS FURTHER ORDERED:

(1) That the unorthodox gas well location of applicant's ^{Federal Gov} State "CR" Well No. 1 located 660 feet from the South line and 660 feet from the West line of Section 29, Township 17 South, Range 25 East, NMPM, is hereby approved.

(2) ^{That} ~~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.