CASE No.

191

Large Exhibits

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WESTERN UNION

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=NEW MEXICO CONSERVATION COMMISSION=

ATTN OF GUY SHEPARD CHAIRMAN SANTA FE NMEX=

RE AMERADA APPLICATION SILURO DEVONIAN SPACING AND PRORATION UNITS BAGLEY AREA LEA COUNTY NEW MEXICO SET FOR HEARING DECEMBER 20 1949 DUE TO PRIOR COMMITMENT PHILLIPS REPRESENTATIVE CANNOT BE PRESENT BUT PHILLIPS PETROLEUM COMPANY DESIRES TO ENDORSE THE TESTIMONY AND RECOMMENDATIONS OF THE AMERADA PETROLEUM CORPORATION IN RESPECT TO EIGHTY ACRE SPACING AND PRORATION UNITS=

C P DIMIT VICE PRESIDENT PHILLIPS PET CO=

Case 191

Copy of Order sent to
Glenn Staley, 2/13/50
(See transmittal letter copy in
Case 211)

AMERADA PETROLEUM CORPORATION
BEACON BUILDING
TULSA 2, OKLA.

July 30, 1949

Mr. R. R. Spurrier, Secretary
State of New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Dear Mr. Spurrier:

Attached are four (4) copies of an application by Amerada Petroleum Corporation requesting a hearing before the Commission for the purpose of designating 80-acre spacing in the Bagley area, Lea County, New Mexico. We will appreciate your setting this for a hearing at an early date.

You may be interested to know that we have furnished each of the Operators in this area with a copy of this application and they have indicated that this proposal meets with their approval.

Yours very truly,

AMERADA PETROLEUM CORPORATION

By: John P. Hammond

JPH-J

cc: Mr. Foster Morrell, U. S. G. S., Roswell
Mr. Glenn Staley, Lea County Operators, Hobbs
Mr. R. S. Christie, Fort Worth

I HEREBY CERTIFY, That the foregoing transcript of proceedings before the Oil Conservation Commission of New Mexico in Santa Fe, New Mexico, on December 20, 1949, is the true record of such proceedings to the best of my knowledge, skill, and ability.

Dated at Albuquerque, New Mexico, this 27th day of December, A. D. 1949.

/s/ Ruth Warden
Reporter.

March 22, 1950

Mrs. Margaret Powell
312 North Stath
Albuquerque, New Mexico

Dear Mrs. Powell:

Will you please send as extra copy of the transcript for March 21, to:

Mr. W. H. Hose, Attorney at Law
P. O. Box 1339
Hobbs, New Mexico.

Very truly yours,

R. R. Spurrier
Secretary-Director

RRS:bu

December 28, 1949

Oil Conservation Commission
P. O. Box 1545
Hobbs, New Mexico

Gentlemen:

We are forwarding you today, under separate cover, copy of transcript of hearing held by the Oil Conservation Commission, at Santa Fe, New Mexico, on December 20, 1949.

This is for your records.

Very truly yours,

R. R. Spurrier
Secretary-Director

RRS:bw

December 20, 1949

Oil Conservation Commission
205 Booker Building
Artesia, New Mexico

Gentlemen:

We are forwarding you today, under separate cover, copy of transcript of hearing held by the Oil Conservation Commission, at Santa Fe, New Mexico, on December 20, 1949.

This is for your records.

Very truly yours,

R. R. Spurrier
Secretary-Director

RRS:bw

OIL CONSERVATION COMMISSION HEARING
House of Representatives
December 20, 1949
Santa Fe, New Mexico

Case 191

NAME	ADDRESS	REPRESENTING
Jack M Campbell	Roswell NM	Texas-Pacific Coal & Oil Co.
Payne T. Edens	Fort Worth, Tex	" " " " "
[illegible]	McCamey Tex	" " " " "
R. G. Stroebele	Midland Tex	" " " " "
Booth Kellough	Tulsa Okla	Amerada Pet Corp
[illegible]	Santa Fe	" "
Foster Morrell	Roswell N.M.	U.S.G.S.
Olen Set	Santa Fe	Amerada
R.S. Christie	Hobbs N.M.	—
John O Loeder	Midland Tex	—
C.V. Milliken	Tulsa Okla	—
[illegible]	Santa Fe	"
J.P. Hammond	Tulsa Okla	Mid Cont Pet Corp
[illegible] Staley	Hobbs N.M.	Lea Co Operators
Roy O. Yarbrough	Hobbs N.M.	Oil Cons Comm
[illegible]	Roswell	Malco Ref. Inc
[illegible]	"	"
[illegible]	O.C.C.	Santa Fe, N. Mex.
[illegible]	NM Bur Mines	Artesia
Don G. McCormick	O.C.C.	Carlsbad, N. Mex.
Spurrier		
Graham		
Shepard		

NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice, pursuant to law, of the following public hearing to be held December 20, 1949 beginning at 10:00 o'clock A.M. on that day in the City of Santa Fe, New Mexico, in the House of Representatives.

STATE OF NEW MEXICO TO:

All named parties in the following cases, and notice to the public:

Case 191

In the matter of application of Amerada Petroleum Corporation for the establishment of proration units and uniform spacing of wells for the common source of supply discovered in Amerada-State BTA No. 1 Well in NW/4 SE/4 Section 2, Township 12 South, Range 33 East, N.M.P.M., in Lea County, New Mexico. This is a readvertisement.

Case 207

In the matter of application of Stanley L. Jones, Inc., a New Mexico Corporation, for an order approving an unorthodox location for Stanley L. Jones, Inc., State No. 13, 335 feet south of the north line and 73 feet west of the east line NE/4 NE/4 NE/4 of Section 23, Township 18 South, Range 27 East, N.M.P.M. in the Artesia pool, Eddy County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico at Santa Fe, New Mexico, on December 5, 1949.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
R. R. SPURRIER, SECRETARY

SEAL

September 22, 1949

Mr. Glenn Staley
Lea County Operators Committee
Drawer I
Hobbs, New Mexico

Dear Mr. Staley:

We enclose herewith, transcript of record in connection with the hearing held before the Oil Conservation Commission in Santa Fe, New Mexico, on September 8, 1949.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

September 22, 1949

Oil Conservation Commission
P. O. Box 1545
Hobbs, New Mexico

Gentlemen:

We enclose herewith, transcript of record in connection with the hearing held before the Oil Conservation Commission in Santa Fe, New Mexico, on September 8, 1949.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

September 22, 1949

Oil Conservation Commission
235 Booker Building
Artesia, New Mexico

Gentlemen:

We enclose herewith, transcript of record in connection with the hearing held before the Oil Conservation Commission in Santa Fe, New Mexico, on September 8, 1949.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

BEFORE THE

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

PROCEEDINGS

The following matter came on for consideration before a hearing of the Oil Conservation Commission of the State of New Mexico, pursuant to legal notice, at Santa Fe, New Mexico, on September 8, 1949, at 10:00 A. M.

NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice, pursuant to law, of the following public hearings to be held September 8, 1949, beginning at 10:00 o'clock A.M. on that day in the City of Santa Fe, New Mexico in the Senate Chambers.

STATE OF NEW MEXICO TO:

All named parties in the following cases, and notice to the public:

Case 190

In the matter of the application of Twin Oil Corporation for an order unitizing the NE/4NE/4 of Section 4, Township 22 South, Range 37 East, N.M.P.M. or in the alternative, authorizing the drilling of a well or wells upon the following described lands:

Beginning at a point 660 feet west of the southeast corner of NE/4NE/4 of section 4, Township 22 South, Range 37 East, N.M.P.M., thence on a direct line north 420 feet, thence on a direct line west, 210 feet, thence on a direct line south 420 feet, thence on a direct line east 210 feet, containing approximately 2 acres of land more or less, and fixing an allowable therefor.

Case 191

In the matter of application of Amerada Petroleum Corporation for the establishment of proration units and uniform spacing of wells for the common source of supply discovered in Amerada-State NCA No. 1 well in NW/4 SE/4 Section 2, Township 12 South, Range 33 East, N.M.P.M., in Lea County, New Mexico.

Case 192

In the matter of the application of Gulf Oil Corporation for an order authorizing dual completion and production from the Yeso formation (Drinkard pool) and from the Ellenburger formation (Brunson pool) from a single well bore in the Eumics King No. 17 well, located 660 feet from the north line and 2320 feet from the west line (NE/4 NW/4) of section 23, Township 21 South, Range 37 East, N.M.P.M., in Lea County, New Mexico.

Case 193

In the matter of the application of Shell Oil Company for a special exception from the provisions of Order No. 78 re-lating to central tank batteries with respect to State oil and gas leases E-1630, B-9446, B7949 and E-276 under conditions existing in the West Wilson pool, Lea County, New Mexico.

Case 194

In the matter of the application of the Oil Conservation Commission upon its own motion at the suggestion of the proration office, to amend Section B-4 of Commission Order #704 also known as the Gas-Oil Ratio Order of September 10, 1948, by adding the following:

"When remedial work on a well has been completed by an operator to correct for high gas-oil ratio in a pool having a limiting gas-oil ratio the adjusted allowable shall become effective on the date the new test is completed as indicated by Commission Form C-116."

or such other wording in the premises as may be determined from testimony adduced in open hearing.

Given under the seal of the Oil Conservation Commission of New Mexico at Santa Fe, New Mexico, on August 19, 1949.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

By /s/ R. R. Spurrier
R. R. SPURRIER, Secretary

SEAL

BEFORE:

Hon. Guy Shepard, Chairman
Hon. R. R. Spurrier, Secretary

REGISTER:

E. S. Fenn
Tulsa, Oklahoma
For Mid-Continent Petroleum Corporation

E. J. Pierce
Midland, Texas
For Mid-Continent Petroleum Corporation

J. F. Hammond
Tulsa, Oklahoma
For Amerada Petroleum Corporation

Booth Kellough
Tulsa, Oklahoma
For Amerada Petroleum Corporation

Roy C. Yarbrough
Hobbs, New Mexico
For the New Mexico Oil Conservation Commission

G. L. Shoemaker
Midland, Texas
For Stanolind Oil Purchasing Company

Frank H. Lovering
Hobbs, New Mexico
For Shell Oil Company

Paxton Howard
Midland, Texas
For Shell Oil Company

E. T. Addir
Fort Worth, Texas
For Texas Pacific Coal & Oil Company

H. C. Schuehle
Midland, Texas
For Texas Pacific Coal & Oil Company

Carl Barnhart
Midland, Texas
For Amerada Petroleum Corporation

R. S. Christie
Fort Worth, Texas
For Amerada Petroleum Corporation

J. W. Howe
Midland, Texas
For Humble Oil Company

Herman Pressler
Houston, Texas
For Humble Oil Company

Lloyd L. Gray
Tulsa, Oklahoma
For Gulf Oil Corporation

M. J. Gallagher
Hobbs, New Mexico
For Gulf Oil Corporation

C. D. Borland
Hobbs, New Mexico
For Gulf Oil Corporation

R. E. Canfield
Roswell, New Mexico
For the U. S. Geological Survey

Foster Morrell
Roswell, New Mexico
For the U. S. Geological Survey

Paul S. Johnston
Lubbock, Texas
For the Texas Tech. College

R. S. Blynn
Hobbs, New Mexico
For the Oil Conservation Commission

H. L. Shafer
Hobbs, New Mexico
For Continental Oil Company

I. M. Minnefeld
Hobbs, New Mexico
For Lea County Operators

Elvis A. Utz
Santa Fe, New Mexico
For the Oil Conservation Commission

E. E. Kinney
Artesia, New Mexico
For New Mexico Bureau of Mines

E. C. Anderson
Socorro, New Mexico
For New Mexico Bureau of Mines

Dan McCormick
Carlsbad, New Mexico
For the Oil Conservation Commission

MR. SHEPARD: The meeting will please come to order. Mr. Graham, will you please read the first case.

(Mr. Graham read the notice of publication in Case No. 190.)

MR. KELLOUGH: May it please the Commission, I am attorney for Amerada. I don't know whether anybody is here to represent the Twin Oil Corporation or not. This application is an application to unitize a lease covering two acres owned

by a cemetery tract in a 40-acre tract in which Amerada owns the lease on the other thirty-eight acres. The agreement has been entered into between the Twin Oil Corporation and the Cemetery Association and Amerada. We are, however, still negotiating with some of our lessors, to ask their joining in this agreement. If there is no objection, we would like to ask this matter be continued for sixty or ninety days so that we may complete the settlement. The case as between the Twin Oil Corporation and the Cemetery Association has been settled, and we would like the matter just continued over until we can finally get it wound up.

MR. SHEPARD: Is there anyone representing the Twin Oil Company or the Cemetery Association here? Does anyone have any objection to this being carried over? If not, it will be carried over until the next hearing. Would you want ninety days?

MR. KELLOUGH: That would be agreeable--thirty, or sixty or ninety.

MR. SHEPARD: We will allow ninety days.

MR. KELLOUGH: That will be all right. We feel certain we will have it worked out in a few weeks.

MR. SHEPARD: Read the next case, please.

(Mr. Graham reads the notice of publication in Case No. 191.)

MR. KELLOUGH: If the Commission please, I would like to make a statement for the record in connection with this matter. We came here yesterday prepared to present our evidence in this case with the understanding that all the operators were in agreement to our application. However, yesterday afternoon we were advised by the Texas Pacific Coal Company that they desired a continuance of this matter.

We have some properties which will be jointly owned in the 80-acre units if they are granted, and also the Texas Pacific Coal Company is now drilling a well located in the southeast of the northeast of Section 2, Township 18 South, Range 33 East, and they have requested that this matter be continued over until they complete their well. At the present time, it will be set down as soon as possible after the completion of their well. Their request is based upon the fact that additional information will be obtained from this well which is now drilling, and further that it will give us an opportunity to work out some arrangements with respect to these jointly owned leases. On behalf of Amerada, we have agreed to such a continuance with the understanding with Mr. Adair, the attorney for the Texas Pacific Company, that they will not seek any further continuance of this matter when it is set down as soon as possible after the well is completed and also with the understanding that any wells drilled in the meantime will not be located off of the pattern which Amerada has proposed in our application. Now, Mr. Adair, is that a correct statement?

MR. ADAIR: The well drilled by our company--I think possibly some other companies are involved--but any drilled by our company will conform to the proposed pattern.

MR. KELLOUGH: And you will not seek any further continuance after the matter is set down after the completion of this well?

MR. ADAIR: That is true.

MR. KELLOUGH: There are other operators interested in the area, and I wish to state to the Commission at this time

that it is possible that we now have sufficient evidence for 80-acre units in this field, and that we are not agreeing to the continuance with any hesitancy on our part that we do not have sufficient evidence, but because of the request of the Texas Pacific Coal Company, if there are any other operators here in the area, why then, of course, personally, I think I would welcome any statement they have to make as to their attitude on the continuance in this matter.

MR. SHEPARD: How long a continuance do you want?

MR. KELLOUGH: I don't believe a definite time can be specified. Mr. Adair advises me he believes their well can be completed in approximately ninety days. Rather than set it down--it may be completed sooner. I don't know how they are getting along with the drilling. I believe they are down around seven or eight thousand feet, but we would be most anxious to advise the Commission immediately upon the completion of the well to have the matter set down as soon as possible, because we are urging it very strongly, and we don't want to be delayed any more than we possibly can.

MR. SHEPARD: Any objections? If not, it will be continued indefinitely until you ask for it. Case 192.

(Mr. Graham reads notice of publication in Case 192.)

MR. GRAY: We would like to ask for a continuance in that case also. At the present time, we have a well completed as an Ellenburger Well. There is some indication it may be making a little bit of water. We would like to observe it a longer period of time before we put on testimony since we may want to withdraw the application.

MR. SHEPARD: Can we set that down for the first of November?

MR. GRAY: Yes, I think that will be all right.

MR. SHEPARD: If there is no objection, it will be continued until the first of November hearing. Case No. 193.

(Mr. Graham reads the notice of publication in Case No. 192.)

MR. HOWARD: Paxton Howard and Frank Lovering for the Shell Oil Company. We ask that Mr. Lovering be sworn.

(Witness sworn.)

FRANK M. LOVERING, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. HOWARD:

Q. State your name, please.

A. Frank M. Lovering.

Q. You live at Hobbs, New Mexico?

A. Yes, sir.

Q. And are employed by the Shell Oil Company, Inc.?

A. That's right.

Q. In what capacity?

A. Superintendent.

Q. In your capacity as superintendent you have jurisdiction of and are familiar with the field designated as the West Wilson Field, Lea County, New Mexico?

A. I do.

Q. You are familiar with the contents of the application filed for this hearing?

A. I am.

Q. I will hand you--will you identify--and please mark this as Exhibit A--please identify this.

A. This is a plat showing--Exhibit A is a plat showing the development to date in the West Wilson pool.

Q. It was prepared under your supervision?

A. That's right.

MR. HOWARD: I ask that it be admitted, please.

MR. SHEPARD: It will be admitted.

Q. Now, Mr. Lovering, will you point out to the Commission the Shell leases that are involved in this application.

A. In this particular application the leases involved are stated in the application, State Nos. E-1030, E-7049, E-9446, E-9876. For purposes of well nomenclature we have designated them as our Shell State Leases A, B, C, and D.

Q. Those leases are all owned by Shell Oil Company, Inc.?

A. That's right.

Q. They are all state leases?

A. That's right.

Q. Now, will you state to the Commission the history of the development in the West Wilson pool, please.

A. We are confronted here with a very unusual problem, as noted on this plat, the territory involved here is surrounded by four dry holes by the Vickers Petroleum up on the northwest corner of the plat, Davidson and Clower in the western portion, Cities Service well which was recently completed as a dry hole up in Section 16, and J. E. Brown with a similar well in Section 22. Further than that the J. C. Clower well No. 2 and the Shell State A-2 in the southeast quarter of Section 16 are very weak wells and determine the eastern limits of the field. So that at the present time the center of the possible development there centers around four or five leases there, and it is indicated that production will probably be limited to about one well per lease. There is no room to the north. The

eastern limits are already defined, and it looks like about a six-well field.

Q. Mr. Lovering, what was the discovery well?

A. It was the J. C. Clower No. 1.

Q. When was the discovery?

A. About a year ago.

Q. In what formation?

A. The formation is reef-type bump, drilled at a depth of about 3960 immediately below the Yates formation.

Q. And it is your belief from the present indications that each of the leases involved in this application will probably be limited to one well, is that correct?

A. That is correct. The only exception to that would be to while there may be a possible extension southward, but the indications of the well drilled on State B-1 is that the pay is pinching out, and the development southward is only problematical. The pay is only about eleven to fourteen feet in thickness which overlies a water strata, and production is rather limited. All wells were brought in under the pump rather than open flow.

Q. In the present application you ask to be relieved from the necessity of having a separate tank battery on each lease and ask permission to use a central tank battery for all State leases?

A. That's right.

Q. At the present time, what type of battery facilities do you have in contemplation?

A. At the present time, we have two high 500-barrel tanks and one separator. We are at the present time installing heating and treating facilities which will include a 750-

gun barrel and a jug-type water heater. We anticipate if our petition is accepted that we will add another 500-barrel tank to the battery, one additional separator which will permit us to test any of the possible five wells that may be turned into that battery. We will be able to test them at any time at the pleasure of the Commission or any other authority.

Q. The tank battery is on Shell A as shown in the plat?

A. Directly between wells 1 and 2.

Q. And what is the estimated cost of the installation of this tank battery?

A. Between sixteen and eighteen thousand dollars. It has been generally--we like to carry at least four and a half tank production in our batteries. And it has been, and it generally runs between five and six dollars a barrel exclusive of heating, treating, and settling facilities.

Q. Now, to construct separate tank batteries on each of the leases, do you have an estimate as to what the cost would be as to each lease?

A. With heating and treating facilities it would run around $12,000.00, to state a rough estimate.

Q. Yes, sir, that's right.

A. The engineers gave us a figure here, I believe.

Q. Well, it is stated in the application, and in your opinion that cost as regards each of these separate leases would be for the sole purpose of taking care of what at this time appears to be just one well?

Q. By asking the central tank battery, there can be saved the cost of these separate installations and in

addition to that the central tank battery can be equipped so that separate tests can be taken on all of these wells?

A. That's right.

Q. In your opinion will the granting of this application in any manner aid in conservation and prevention of the waste of natural resources?

A. It will.

Q. In what manner?

A. In reduced further maintenance cost and operational cost. It will reduce operational cost in the neighborhood of 60 per cent. It will cut down maintenance cost tremendously, just the difference between one tank battery and four or five.

Q. And that matter will prolong the economic life of the various leases?

A. It will make it possible to continue producing those wells for a longer period of time due to the reduced operating and maintenance cost.

Q. All the royalty is the same, owned by the State?

A. That is correct.

Q. Do you have anything else to add?

A. No, I would be glad to answer any questions.

MR. HOWARD: Does the Commission have any questions?

MR. McCORMICK: How about overriding royalties or oil payments?

A. None that I know of.

MR. McCORMICK: None on the other leases?

A. We were informed the royalties were all the same.

MR. HOWARD: That is [illegible] information that the royalties were all the same.

MR. GRAHAM: Does your information disclose the institutional ownership of all the four leases? Is it the same institution? Do they all belong to the s[illegible]ole?

MR. HOWARD: Yes, sir.

MR. McCORMICK: Do you have the leases with you, Mr. Howard?

MR. HOWARD: No, sir, I do not.

MR. McCORMICK: What system will you have for actually measuring the oil produced from each separate lease?

A. The facilities will be there to make periodic tests of at least two wells at a time, weekly, monthly, which we normally do anyway, and it would be no different than any other battery with the same facilities.

MR. McCORMICK: How do you know exactly how much oil each well produces each month during a proration period?

A. We never know exactly any more than we know on any two wells in the State of New Mexico. That is our general practice; it is based on period production. We can make these at the rule of the Commission, or at any specific interval, or at any time you wish for that matter.

MR. McCORMICK: This testing device you will have to test the production, it can be run for any period?

A. Any predetermined period, that is right.

MR. HOWARD: Whatever tests the Commission requires, we are ready to make. We do have a peculiar problem, and it looks like it will be a very small field. They are all leases with a common royalty.

MR. SHEPARD: Any objections? Does anyone have anything to say? If not, then it will be granted.

MR. HOWARD: Thank you.

MR. SHEPARD: Case 194.

(Mr. Graham reads the notice of publication in Case No. 194.)

MR. SHEPARD: Mr. Staley, do you have anything to offer on this?

MR. STALEY: Under the present Commission the changing of allowable between the first of one proration period until the beginning of the next proration period on any new allowable--I mean new wells--are given an allowable. That is, during the opening and closing of any proration period; from time to time the operators have done remedial work and been able to correct for high gas-oil ratios on wells in fields having limited ratios, but it has been necessary to wait until the beginning of the next proration period before assigning an allowable to that well; that is, a new allowable based on the new gas-oil ratio tested after the remedial work is completed. Therefore, the Commission was requested to make a ruling regarding the placing of high gas-oil ratios--that is, giving a new allowable to a well that is penalized under the present system.

MR. SHEPARD: Mr. Morrell, do you have anything to say on this?

MR. MORRELL: I see no objection to it.

MR. SHEPARD: Any other objections? Anyone have anything to say? If not, it will be granted. There being no further business, we will stand adjourned.

STATE OF NEW MEXICO)
: ss
COUNTY OF BERNALILLO)

I HEREBY CERTIFY That the foregoing transcript of proceedings before the Oil Conservation Comission is a true record of the matters therein set forth.

DONE at Santa Fe, New Mexico, this 20th day of September, 1949.

E. E. Greer

E. E. GREER
Notary Public

My Commission Expires 8-4-52.

NEW MEXICO
OIL CONSERVATION COMMISSION

GOVERNOR THOMAS J. MABRY
CHAIRMAN
LAND COMMISSIONER GUY SHEPARD
MEMBER
STATE GEOLOGIST R. R. SPURRIER
SECRETARY AND DIRECTOR

P. O. BOX 871
SANTA FE, NEW MEXICO

September 22, 1949

Oil Conservation Commission
205 Booker Building
Artesia, New Mexico

Gentlemen:

We enclose herewith, transcript of record in connection with the hearing held before the Oil Conservation Commission in Santa Fe, New Mexico, on September 8, 1949.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

January 23, 1950

REGISTERED MAIL

Mr. Glenn Staley
Lea County Operators Committee
Avenue D
Hobbs, New Mexico

Dear Mr. Staley:

We enclose herewith, signed copy of Order No. R-2, issued in connection with Case No. 191, heard in Santa Fe, New Mexico, on September 8 and December 20, 1949.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

January 23, 1950

Mr. John P. Harmond
Amerada Petroleum Corporation
P. O. Box 2040
Tulsa, Oklahoma

Dear Mr. Harmond:

We enclose herewith, signed copy of Order No. R-2, issued in connection with Case No. 191, heard in Santa Fe, New Mexico, on September 8 and December 20, 1949.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

9/28/49 (12)

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF AMERADA PETROLEUM CORPORATION FOR THE ESTABLISHMENT OF PRORATION UNITS AND NON-STANDARD SPACING OF WELLS FOR THE COMMON SOURCE OF SUPPLY DISCOVERED IN AMERADA-STATE NCT-A NO. 1 WELL, NW/4 SE/4 SEC. 2, TOWNSHIP 12 SOUTH, RANGE 33 EAST, LEA COUNTY, NEW MEXICO.

CAUSE NO. _____
ORDER NO. _____

APPLICATION

COMES, NOW, Amerada Petroleum Corporation, Tulsa, Oklahoma, and alleges and states:

1. That applicant has drilled and completed a well known as "State NTA No. 1" located in the center of the NW/4 SE/4 Sec. 2-12S-33E, Lea County, New Mexico, and discovered a new common source of supply found in said well at the approximate depth of from 10,770 feet to 11,000 feet, the probable productive limits of said common source of supply to be determined by the Commission.

2. That in addition to the discovery well referred to above, the following wells are now being drilled to said common source of supply in the area:

(a) Amerada-State NTB No. 1, located in SE/4 SW/4 Sec. 35-11S-33E;

(b) Texas Pacific Coal and Oil Company No. 1, State "A" Lessees No. 1, located in SW/4 NW/4 Sec. 8-12S-33E;

(c) Mid-Continent Petroleum Corporation No. 1, State Land 65, located in SW/4 SW/4 Sec. 1-12S-33E;

3. That in addition to the above described wells the following wells have also been drilled, or are now drilling in the area:

(a) Amerada No. 1 Gamble, located in the SW/4 SW/4 Sec. 10-12S-33E, which tested salt water in the same stratigraphic horizon that is producing oil in the discovery well described above, and has been completed as an oil well in a shallower formation;

(b) Amerada-State NTB No. 1, located in NW/4 NW/4 Sec. 25-12S-33E, which tested oil in a formation that may be the same common source of supply in which the above described discovery well has been completed;

4. A plat of the area showing the location of the wells referred to above is attached hereto and marked "EXHIBIT A".

5. That in order to bring about the orderly and proper development of said common source of supply, prevent waste and to avoid the drilling of unnecessary wells, and to secure the greatest ultimate recovery therefrom, and to protect the correlative rights of the interested parties thereto, it is necessary and proper for the Commission to enter its order providing for proration units of 80 acres each, such being the area which may be efficiently and economically drained by one well, and to provide for the uniform spacing of said wells in the center of the Northwest and Southeast forty-acre tracts of each quarter section, with a tolerance of 150 feet to avoid surface obstructions.

6. That the well now being drilled to said common source of supply known as "Mid-Continent Petroleum Corporation No. 1, State Land 65," located in SW/4 SW/4 Sec. 1-12S-33E, should be granted an exception to the spacing order established by the Commission hereunder and be considered as the well for the proration unit on which it is located.

WHEREFORE, applicant respectfully requests that the Commission set this application for public hearing at the time and place to be fixed by the Commission, that due and proper notice be given as required by law, and that at the conclusion of said hearing the Commission make and enter an order determining and defining the probable productive limits of the common source of supply referred to above, naming the pool, establish proration units of 80 acres each, and provide for a uniform spacing of such wells, designating the location of said wells

in the center of the Northwest and Southeast forty-acre tracts of each quarter section with a tolerance of 150 feet in any direction from said prescribed location to avoid surface obstructions, and to provide for exceptions in the case of the well now being drilled to said common source of supply known as the "Mid-Continent Petroleum Corporation No. 1, State Land 65", described above.

DATED this 29 day of July, 1949.

Harry D. Page

Booth Kellough

Attorneys for,
Amerada Petroleum Corporation.

ORIGINAL

AMERADA PETROLEUM CORPORATION,
CASE NO. 8065, DISTRICT COURT OF LEA COUNTY

T P COAL & OIL EXHIBITS	IN EVIDENCE
Exhibit "H"	page 69
Exhibit "I", "J", "K", "L"	70

Oil Conservation Commission Case No. 191

ROTARY ENGINEERING & MFG. CO., INC.

CORE ANALYSIS WELL LOGGING SERVICE WATER ANALYSIS

COREGRAPH

COMPANY TEXAS PACIFIC COAL & OIL
WELL STATE B-1
FIELD BAGLEY ELUNO - DEVONIAN
COUNTY LEA
STATE NEW MEXICO

DEPTH FROM 10824 TO 10914
DATE 11-20-49
ANALYST J.S., L.C.L.

REMARKS

TYPE CORE BARREL DIAMOND

ELEVATION

SANDSTONE
LIMESTONE
DOLOMITE
SHALE
CHERT
ANHYDRITE - GYP
COAL
LOST CORE

DRILLING TIME - MIN. PER FOOT
SCALE AS 1" = 20 50 40 30 20 10

LITHOLOGY

TOTAL WATER SATURATION
OIL SATURATION % P.V.

DEPTH
10824
10825
10830
10835
10840
10845
10850
10855
10860
10865
10870
10875
10880
10885
10890
10895
10900
10905
10910
10915

Perm

Por

Sat

Oil

Water

Def. Exhibit No. "L"

TEXAS & PACIFIC COAL & OIL CO.
State B-1
Lea County, New Mexico

ROTARY ENGINEERS LIMITED
CORE ANALYSIS TABULAR DATA

COMPANY: Texas & Pacific Coal & Oil | WELL: State B-1 | FIELD: Bagley Siluro - Devonian
COUNTY: Lea | STATE: New Mexico | DATE: 11-20-49 | FORMATION: LCL, JS
FORMATION: Devonian | TYPE ANALYSIS: Special | ANALYST | JOB NO. L-65

REMARKS: Analysis of entire core cut with diamond bit.

SAMPLE NUMBER	DEPTH	WATER PERCENT	FRACTURES PER FOOT	TOTAL POROSITY PERCENT	EFFECTIVE POROSITY PERCENT	PERMEABILITY IN MILLIDARCYS	TOTAL WATER SATURATION % PORE	RESIDUAL OIL SATURATION % PORE	FORMATION PRODUCTION	REMARKS
1	10081-85.5			6.5	175	28.0	20.0		Oil	
2	85.5-87.0			3.8	5	33.4	10.4		*	
3	87.0-88.5			3.5	5	17.5	14.7		*	
4	88.5-90.0			4.0	10	17.5	14.3		*	
5	90.0-91.5			1.2	--1	14.4	23.2		None	
6	91.5-93.0			0.4	--1	55.4	12.4		*	
7	93.0-94.5			0.8	--1	27.3	0.0		*	
8	94.5-96.0			0.8	--1	35.2	0.0		*	
9	96.0-97.5			0.8	--1	20.7	0.0		*	
10	10074.0-75.5			2.0	4	87.5	8.4		Oil	
11	75.5-77.0			2.0	4	36.4	4.3		*	
12	77.0-78.6			2.2	5	12.7	9.7		*	
13	78.5-80.0			4.0	40	21.3	16.8		*	
14	80.0-81.5			5.7	100	18.6	7.4		*	
15	81.5-83.0			6.0	55	16.7	8.9		*	
16	83.0-84.5			4.0	25	12.7	12.4		*	
17	84.5-86.0			7.4	110	22.6	16.3		*	
18	86.0-87.5			5.0	15	11.0	16.8		*	
19	87.5-89.0			11.5	130	14.7	18.7		*	
20	89.0-90.5			7.1	33	15.6	18.3		*	
21	90.5-92.0			3.4	13	29.7	4.7		*	
22	92.0-93.5			4.7	32	18.3	10.6		*	
23	93.5-95.0			5.8	12	19.7	7.8		*	
24	95.0-96.5			4.9	60	41.8	10.2		*	
25	96.5-98.0			9.0	58	10.6	14.9		*	
26	98.0-99.5			6.6	12	18.7	16.2		*	
27	99.5-10001.0			3.7	11	16.7	18.3		*	
28	10001.0-02.5			3.0	40	18.7	18.7		*	
29	02.5-04.0			3.7	12	16.4	13.6		*	
30	04.0-05.5			7.6	19	14.3	6.8		*	
31	05.5-07.0			6.5	13	16.7	9.7		*	
32	07.0-08.5			6.1	12	18.7	14.3		*	
33	08.5-10.0			5.8	15	18.3	18.4		*	
34	10.0-11.5			5.7	11	18.6	14.3		*	
35	11.5-13.0			5.7	12	16.6	9.2		*	

ROTARY ENGINEERING AND MANUFACTURING CO., INC.
DRILLING ENGINEERS
MIDLAND, TEXAS

November 25, 1949

Texas & Pacific Coal & Oil Co.
601 West Missouri Street
Midland, Texas

Attention: Mr. O. R. Carter.

Gentlemen:

We are submitting to you eight (8) copies of our core analysis in both tabular and graphic forms on your State B No.1 well, Bagley-Siluro-Devonian Field in Lea County, New Mexico. These cores having been analyzed for porosity, permeability and fluid saturation as percent pore space occupied.

The porosities were obtained by resaturating eighteen (18) inch sections of the core, starting with vacuum and going to 1000 pounds applied pressure. The total volume of fluid injected was assumed to be the effective pore space. Volume, time and pressure measurements were made at 12 different intervals during the resaturation of each sample and the permeability was computed from these measurements. Thus the permeability measurements are non directional.

Curves are submitted showing resaturation characteristics of each sample.

Fluid saturation as percent pore space is believed to be unreliable due to the vugular nature of the formation.

We wish to thank you for the consideration and cooperation shown us and our personnel in securing the information on this well.

Yours very truly,

ROTARY ENG. & MFG. CO., INC.

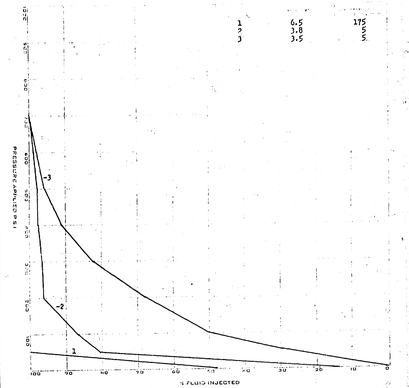
L. C. Locke

LCL:mp
Enclosure

ROTARY ENGINEERING & MANUFACTURING CO.
CORE ANALYSIS GRAPHIC DATA

COMPANY: TEXAS & PACIFIC COAL & OIL | PAGE: 1
WELL: State B #1 | JOB NO.: L-65
COUNTY: Lea | ANALYST: JS, LCL
STATE: New Mexico

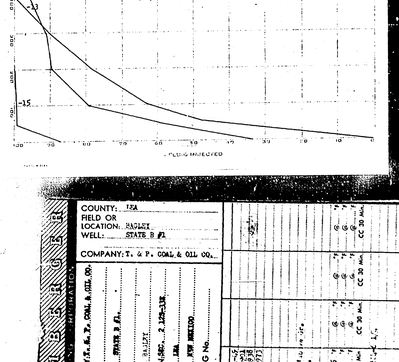
1	6.5	175
2	3.8	5
3	3.5	5



ROTARY ENGINEERING & MANUFACTURING CO.
CORE ANALYSIS GRAPHIC DATA

COMPANY: TEXAS & PACIFIC COAL & OIL | PAGE: 3
WELL: State B #1 | JOB NO.: L-65
COUNTY: Lea | ANALYST: JS, LCL
STATE: New Mexico

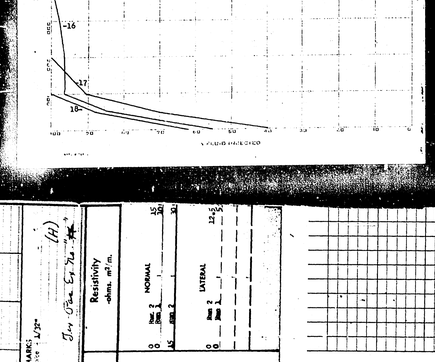
13	4.0	10
14	5.7	100
15	6.0	55



ROTARY ENGINEERING & MANUFACTURING CO.
CORE ANALYSIS GRAPHIC DATA

COMPANY: TEXAS & PACIFIC COAL & OIL | PAGE: 4
WELL: State B #1 | JOB NO.: L-65
COUNTY: Lea | ANALYST: JS, LCL
STATE: New Mexico

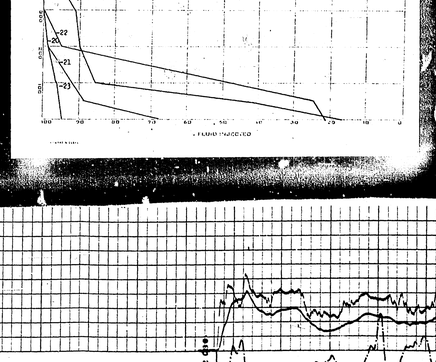
16	4.0	25
17	7.4	110
18	5.0	15



ROTARY ENGINEERING & MANUFACTURING CO.
CORE ANALYSIS GRAPHIC DATA

COMPANY: TEXAS & PACIFIC COAL & OIL | PAGE: 5
WELL: State B #1 | JOB NO.: L-65
COUNTY: Lea | ANALYST: JS, LCL
STATE: New Mexico

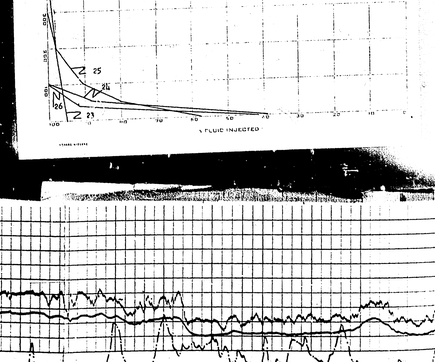
19	11.5	130
20	7.1	133
21	3.4	13
22	4.7	32
23	5.8	12



ROTARY ENGINEERING & MANUFACTURING CO.
CORE ANALYSIS GRAPHIC DATA

COMPANY: TEXAS & PACIFIC COAL & OIL | PAGE: 6
WELL: State B #1 | JOB NO.: L-65
COUNTY: Lea | ANALYST: JS, LCL
STATE: New Mexico

23	5.8	12
24	4.9	60
25	9.0	58
26	6.6	12



SCHLUMBERGER

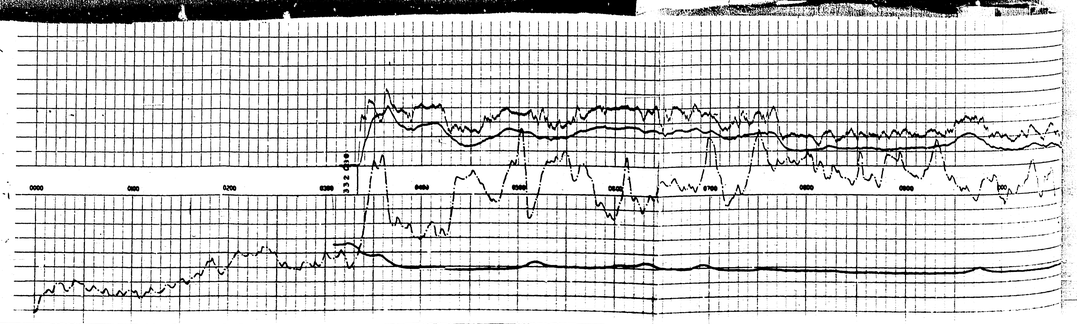
COUNTY: LEA
FIELD OR LOCATION: BAGLEY
WELL: STATE B #1
COMPANY: T. & P. COAL & OIL CO.

Location of Well: 1830' FNL & 660' FEL Sec. 2 22S-33E
COMPANY: T. & P. COAL & OIL CO.
WELL: STATE B #1
FIELD: BAGLEY
LOCATION: SEC. 2 22S-33E
COUNTY: LEA
STATE: NEW MEXICO
FILING No.
Elevation: D.F. G.L. or K.B.

RUN NO. 1
Date: 12-3-49 12-4-49
Depth-Driller: 10,081 10,098
Depth-Logger: 10,078 10,098
Bottom Logged Interval: 10,078 10,098
Top Logged Interval: 3000 6955
Type Fluid in Hole: SALT GEL SALT GEL
Salinity, P.P.M. Cl: 11.5 11.5
Density: 10.0 10.0
Viscosity: 45 45
Resistivity: .23 @ 85° F .23 @ 85° F
Resistivity: .17 @ 85° F .17 @ 85° F
Water Loss: 6 CC 30 Min. 6 CC 30 Min.
Max. Rec. Temp. deg. F: 132° 132°
Equipment: 1500 - 40 1500 - 40
Location: 1 Mi. So. Jct. Hwy. 176 & 529 Hobbs, N.M. Hobbs, N.M.
Recorded By: Jones Jones
Witnessed By: Gallatin Gallatin

REMARKS: Gray Black Dot Run No. 2 (H)

Spontaneous-Potential millivolts
DEPTHS
RADIOACTIVITY INCREASES
Resistivity ohms, m²/m.
NORMAL: Inc. 2 Inc. 16
LATERAL: Inc. 2 Inc. 32



ROTARY ENGINEERING & MANUFACTURING CO.

CORE ANALYSIS GRAPHIC DATA

COMPANY TEXAS & PACIFIC COAL & OIL
WELL State B #1
COUNTY Lea
STATE New Mexico

PAGE 7
JOB NO. L-65
ANALYST JS, LCL

27	3.7	11
28	5.6	19
29	3.7	12
30	6.5	13

PRESSURE APPLIED IN PSI

-38
-29
-27
-28

% FLUID INJECTED

ROTARY ENGINEERING & MANUFACTURING CO.

CORE ANALYSIS GRAPHIC DATA

COMPANY TEXAS & PACIFIC COAL & OIL
WELL State B #1
COUNTY Lea
STATE New Mexico

PAGE 8
JOB NO. L-65
ANALYST JS, LCL

31	6.5	13
32	6.1	12
33	5.8	15

PRESSURE APPLIED IN PSI

-33
-32

% FLUID INJECTED

ROTARY ENGINEERING & MANUFACTURING CO.

CORE ANALYSIS GRAPHIC DATA

COMPANY TEXAS & PACIFIC COAL & OIL
WELL State B #1
COUNTY Lea
STATE New Mexico

PAGE 9
JOB NO. L-65
ANALYST JS, LCL

34	5.7	11
35	5.7	12

PRESSURE APPLIED IN PSI

-35

% FLUID INJECTED

ROTARY ENGINEERING & MFG. CO., INC.

CORE ANALYSIS — WELL LOGGING SERVICE — WATER ANALYSIS

COREGRAPH

COMPANY TEXAS PACIFIC COAL & OIL
WELL STATE B-1
FIELD BAILEY RANCH - DEVONIAN
COUNTY LEA
STATE NEW MEXICO

DEPTH FROM 10826 TO 10914
DATE 11-20-69
ANALYST J.S., L.C.L.

REMARKS

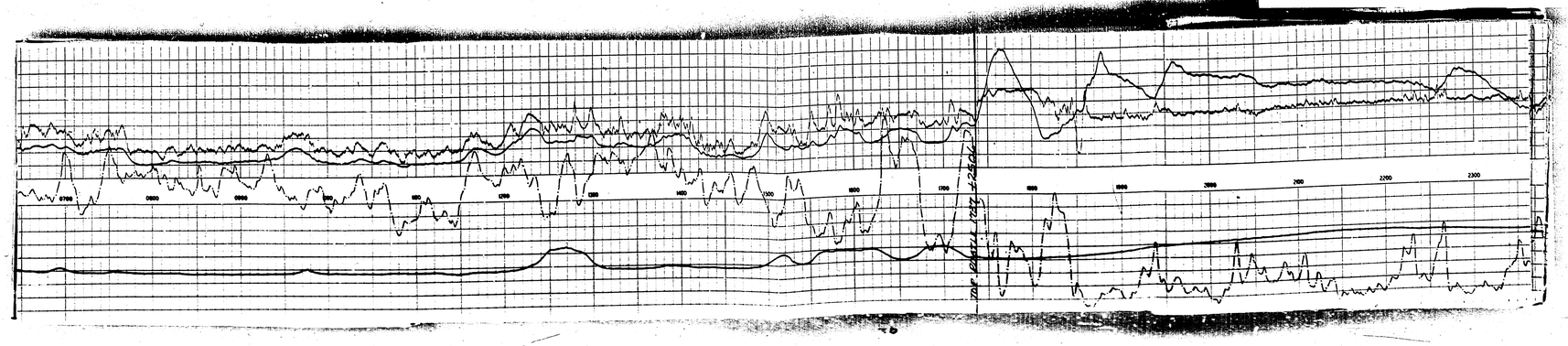
TYPE CORE BARREL DIAMOND

ELEVATION

SANDSTONE
LIMESTONE
DOLOMITE
SHALE
CHERT
ANHYDRITE - GYP
COAL
LOST CORE

DRILLING TIME - MIN. PER FOOT
PERMEABILITY MD.
POR. %
TOTAL WATER SATURATION
OIL SATURATION %PV

DEPTH: 10826, 10825, 10830, 10835, 10840, 10845, 10850, 10855, 10860, 10865, 10870, 10875, 10880, 10885, 10890, 10895, 10900, 10905, 10910, 10915



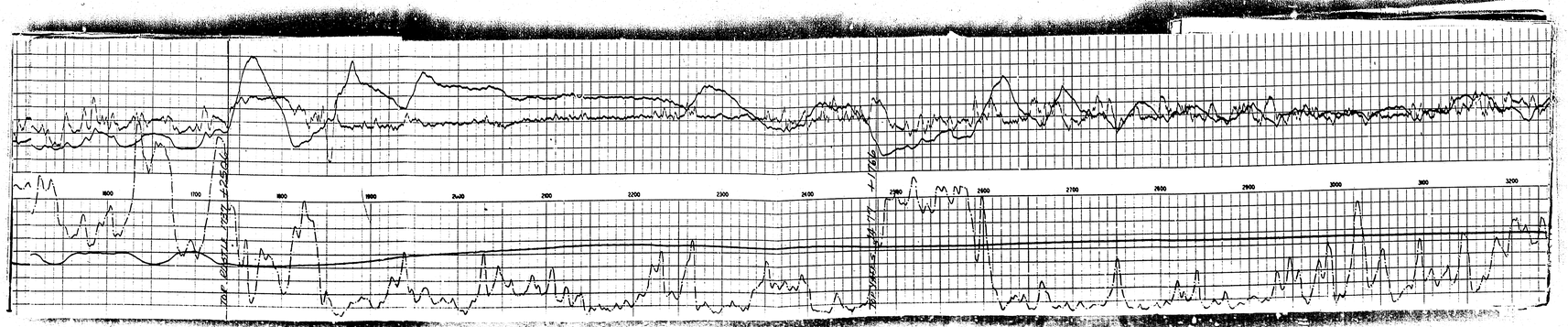
ORIGINAL

AMERADA PETROLEUM CORPORATION,
CASE NO. 8485, DISTRICT COURT OF LEA COUNTY

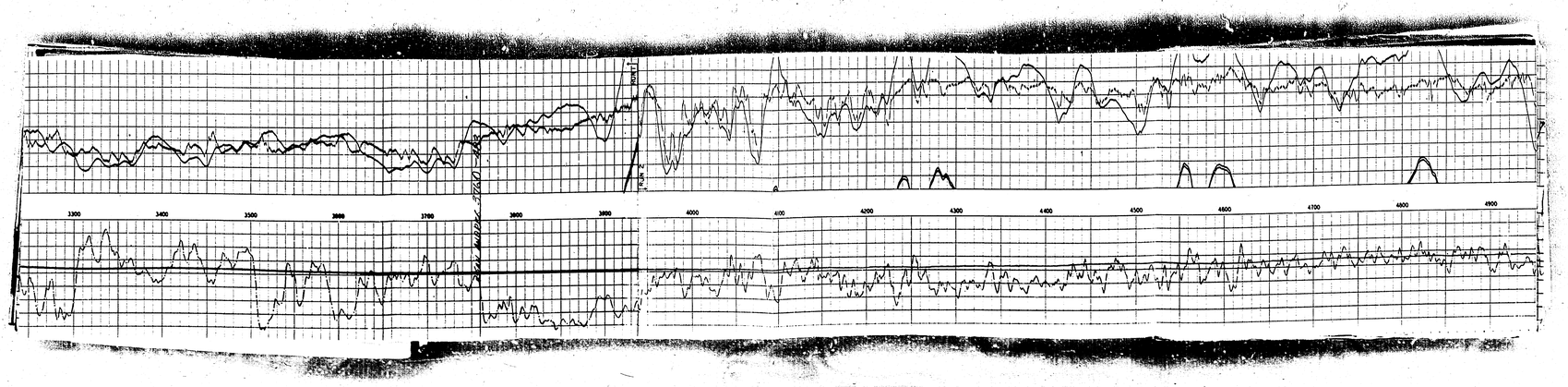
TEXAS-PACIFIC COAL & OIL EXHIBITS	IN EVIDENCE
Exhibit "A"	page 22
Exhibit "B"	65
Exhibits "C", "D", "E", "F", "G"	68

Oil Conservation Commission Case No. 191

OIL AND GAS LEASE



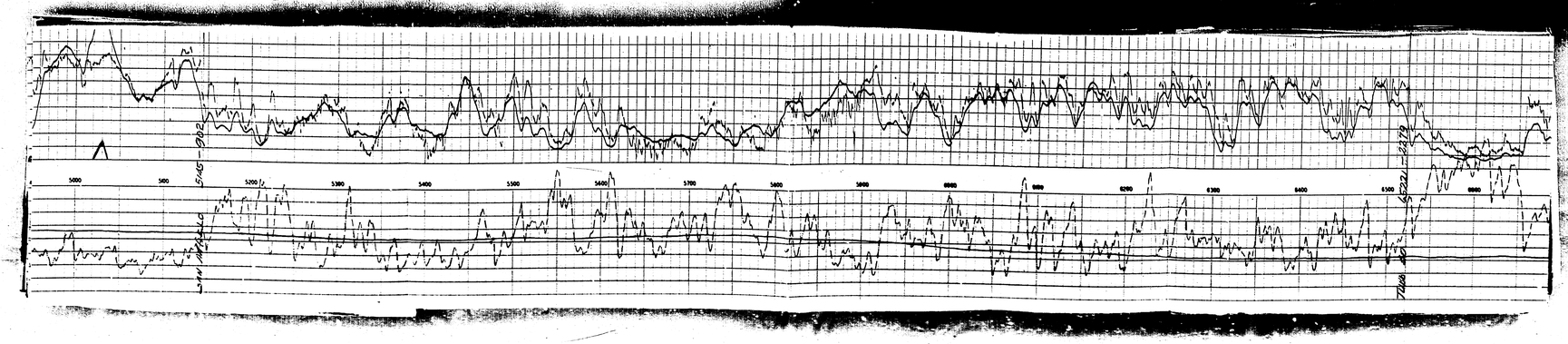
OIL AND GAS LEASE

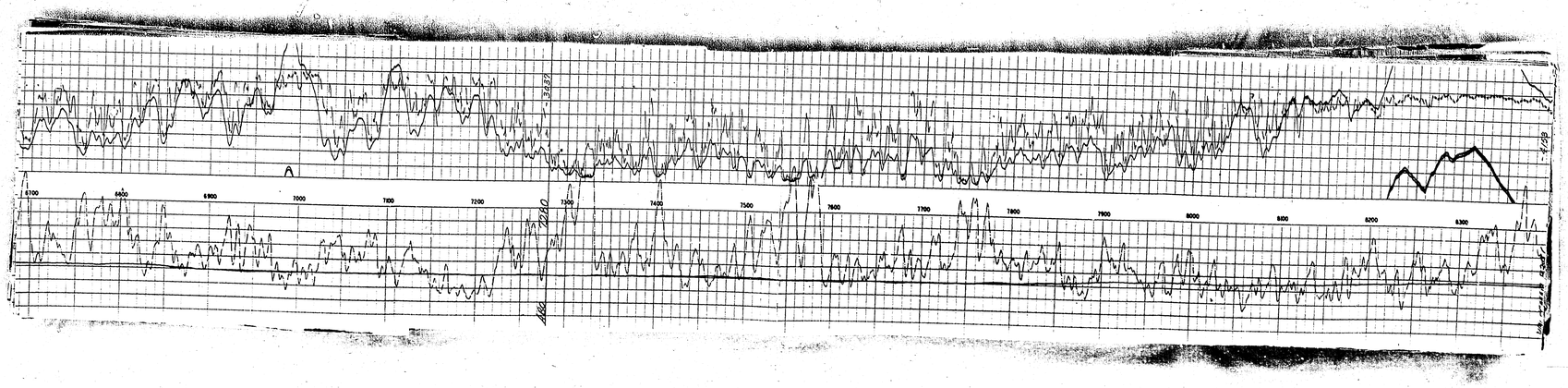


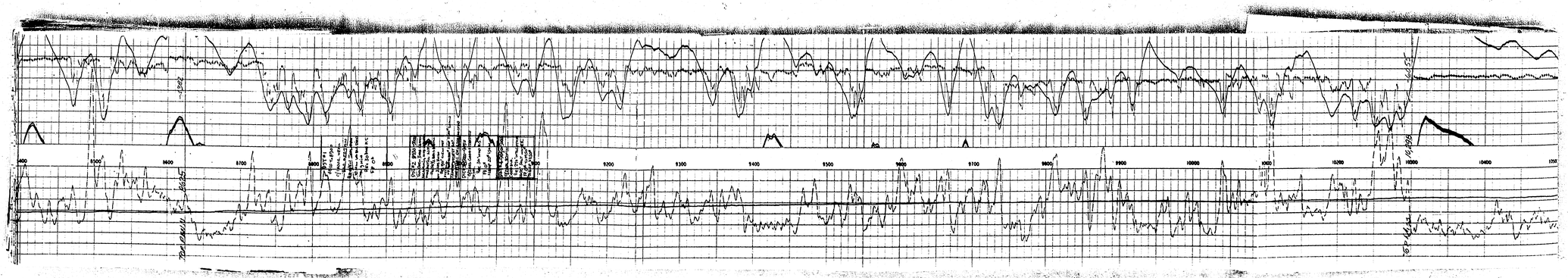
OIL AND GAS LEASE

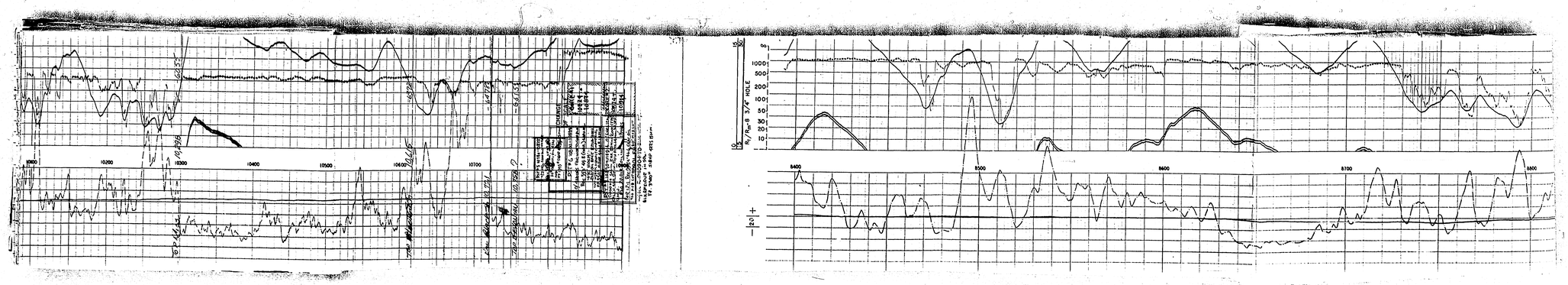
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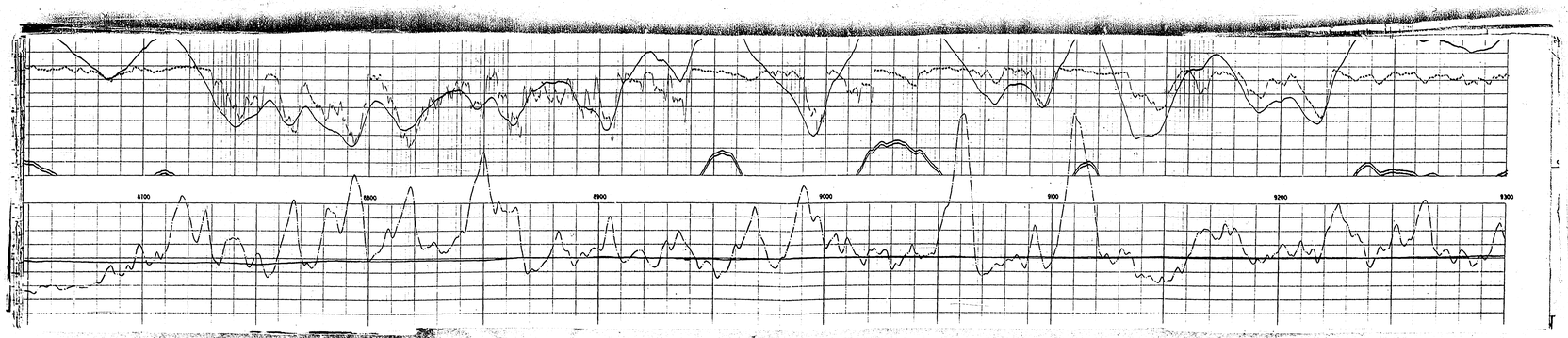
COPY




A
6700
6800
6900
7000
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7400
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7600
7700
7800
7900
8000
8100
8200
8300




10000
10200
10300
10400
10500
10600
10700
8400
8500
8600
8700
8800
$R_t/R_{m\text{-}B}$ 3/4" HOLE
1000
500
200
100
50
30
20
10
—|20|+


8700
8800
8900
9000
9100
9200
9300

GAMMA RAY
OFF SCALE
10800
10900
10901 FR
10904 TD
"MICROLOG"
GOOD
FAIR
BROKEN
PERMEABILITY
8800
8900
DRY
DST #2
DST #3
DST #4
2400'
WATER

8800
8900
9000
9100
9200
9300
50
0

9100
9200
9300

50
0
10760
10800
10840
10880
10896 FR
T. P. CON. & OIL CO.
STATE NO. 1
EAGLE FIELD
LEA CO., N. MEX.

R 33 E

Gulf | Continental | Honolulu | Continental | Devonian | Shell | Amerada 7-28-58 320 Ac. | Youngblood

Amerada 8-11-57 160 Ac. | Amerada 12 A (1/2) Aud 7-1-53

28 | 27 | 28 | 25

Amerada 8-11-57 160 Ac. Ls. | Vida Keelan | Mid-Continent | Amerada 8-11-57 480.36 Ac. Ls. | Devonian

State | State

Continental | Amerada 8-11-57 640 Ac. Ls. | Amerada 12 11-18-56 160 A.

C.I. Dallas, et al | Thos. M. Epperson

T 11 S

Amerada 8-11-57 480 Ac. Ls. | Gulf | Gulf | Amerada 8-11-57 400 Ac. | Gulf | Amerada 8-11-57 480.36 Ac. Ls.

33 | 34 | 35 | 36

Tidewater | Amerada 5-10-57 320 Ac. Ls. | Amerada 10-10-56 120 Ac. Ls. | Amerada 9-11-57 640 Ac. Ls. | Amerada 10-10-56 120 Ac. Ls. | Amerada 8-11-57 480 Ac. Ls. | Amerada 10-10-56 120 Ac. Ls. | Gulf | Amerada 4-10-58 320 Ac. Ls. | Mid-Continent

Mathers | State | State | State | State

T.P.C.&O.Co. H.M.35 12-3-52 | Amerada 7-1-49 1603.27 Ac. Ls. | Amerada 7-1-53 320 Ac. 7b | Amerada 7-1-49 1603.53 Ac. Ls. | Amerada 5-10-57 320.00 Ac. Ls. | T.P.C.&O.Co. H.M. 211 12-3-52 Acct. 1 Tract 6 | Amerada 12-10-57 80 Ac. | T.P.C.&O.Co. H.M. 212 12-3-52 Acct. 1 Tract 8 | Amerada 7-28-58 320 Ac. Ls. | Mid-Continent

U.S.A. | U.S.A. | U.S.A.

Amerada 7-1-53 320 Ac. Ls. Pun

4 | 3 | 2

T.P.C.&O.Co. H.M. 35 12-3-52 | Gulf | Amerada 7-1-49 1603.27 Ac. Ls. | T.P.C.&O.Co. H.M. 211 12-3-52 | T.P.C.&O.Co. H.M. 212 12-3-52 | Amerada 5-10-58 80 Ac. | Amerada 12-10-56 280 Ac. Ls. | Magnolia

Amerada 7-1-49 1603.53 Ac. Ls. | T.P.C.&O.Co. H.M. 349 9-10-54

T 12 S

State | U.S.A. | Mathers | State | State

Amerada 5-5-57 480 Ac. Ls. | Amerada 8-10-56 320 Ac. Ls. | Amerada 10-10-56 1603.53 Ac. Ls. | Amerada 5-10-57 "Zimmers" 480 Ac. Ls. | Amerada 7-1-51 80 Ac. | T.P.C. CO.Co. H.M. 212 12-3-52 | Amerada 12-10-56 280 Ac. Ls. | Phillips | Amerada 7-16-52 481.48 Ac. Ls.

U.S.A.

L. H. Chambers

9 | 10 | 11 | 12

T.P.C.CO.Co. H.M. 212 12-3-52 | Amerada 5-10-53 40 Ac. | T.P.C. CO.Co. H.M. 212 12-3-52 | Amerada 7-1-51 80 Ac | Amerada 8-10-53 320.88 Ac. Ls. | Amerada 7-16-52 320.88 Ac. Ls.

Beadle et al | Magnolia | T.P.C.CO.Co H.M. 532 12-3-52 | Amerada 8-10-56 | Amerada 9-10-57 120 Ac. Ls.

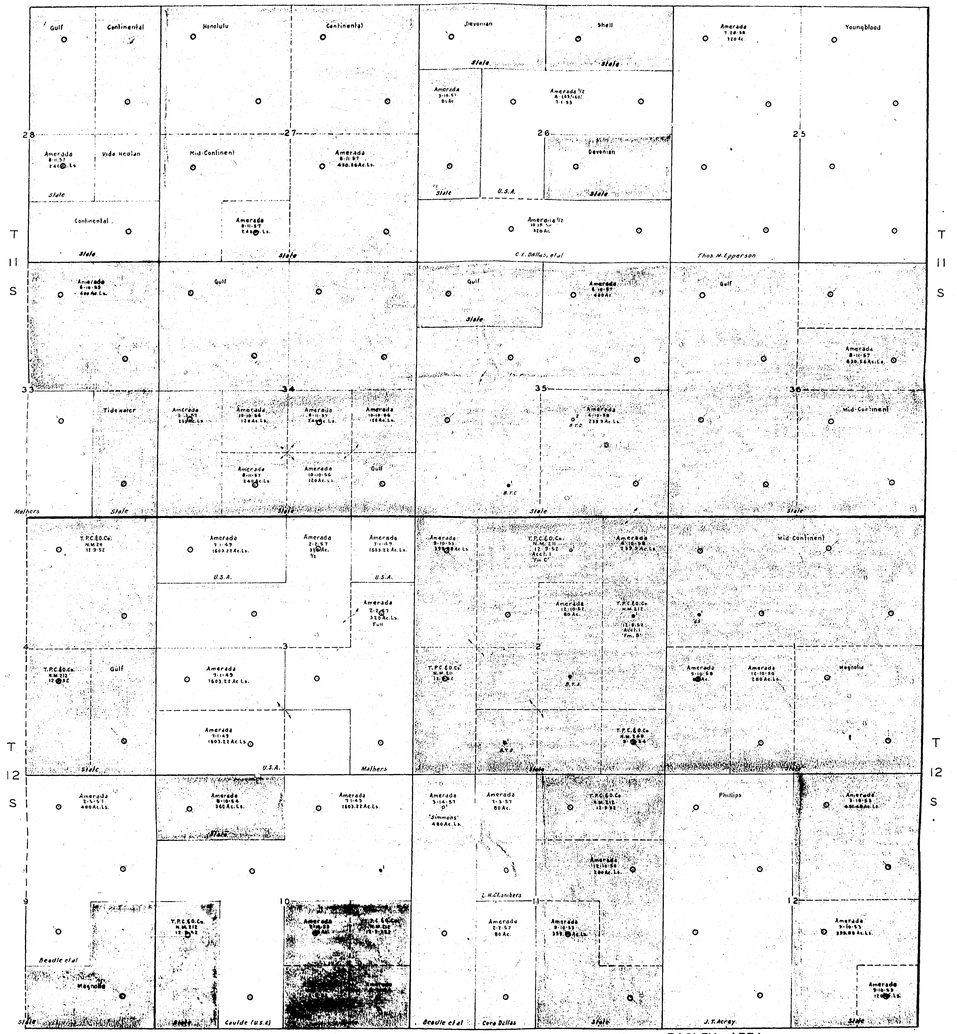
State | State | Caudle (U.S.A.) | State | Beadle et al | Carp Dallas | State | J. T. Berry | State

R 33 E

BAGLEY - AREA
LEA CO. N. MEX.
SCALE: 1" 1000'

Stat. Ex. No. 13

R 33 E



R 33 E

BAGLEY - AREA
LEA CO. N. MEX.
SCALE: 1" 1000'

MINERAL FEE OWNERSHIP

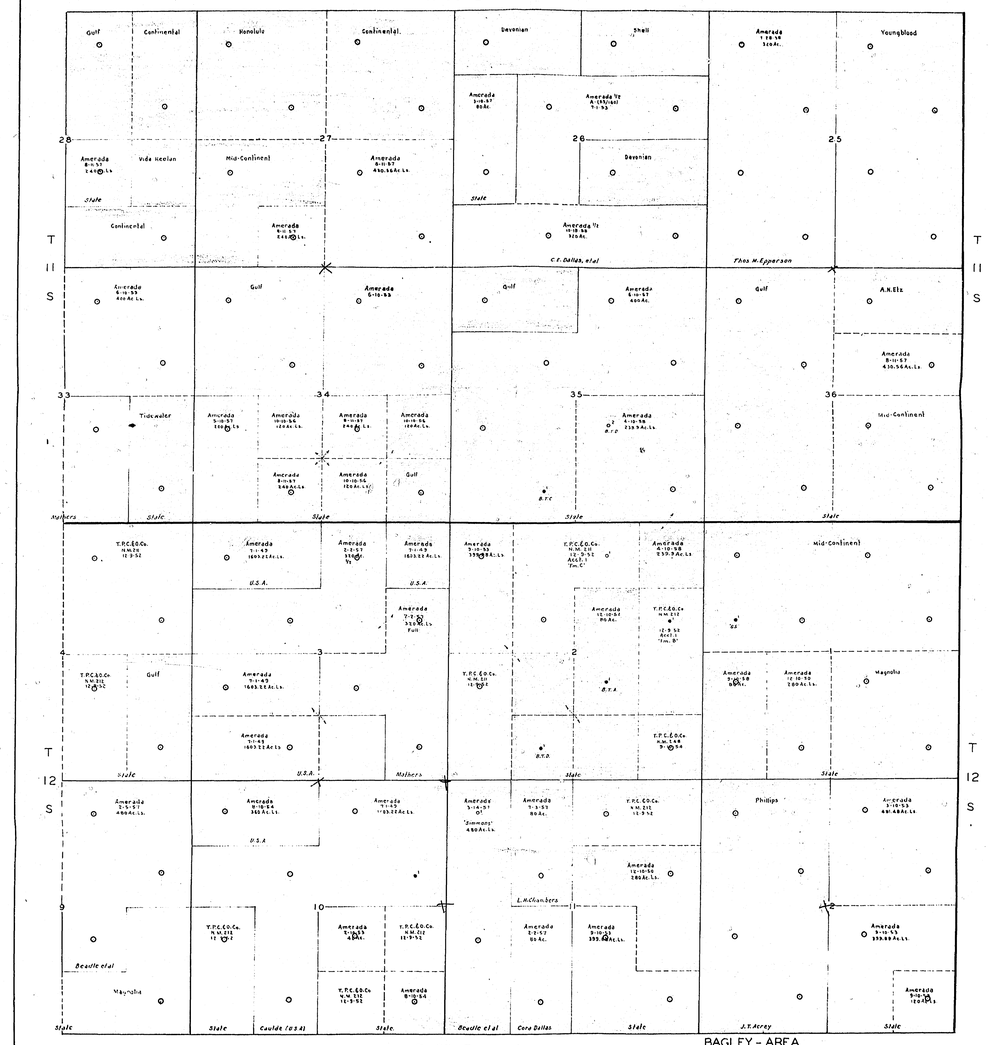
STATE

U. S. A.

INDIVIDUAL

Jas. Pace Ex No. "A"

R 33 E



R 33 E

BAGLEY - AREA
LEA CO. N. MEX.
SCALE: 1" 1000'

LEASE OWNERSHIP

AMERADA

T. P. C. & O. CO.

ALL OTHERS

Fig. Plan Exhibit "C"

R 33 E

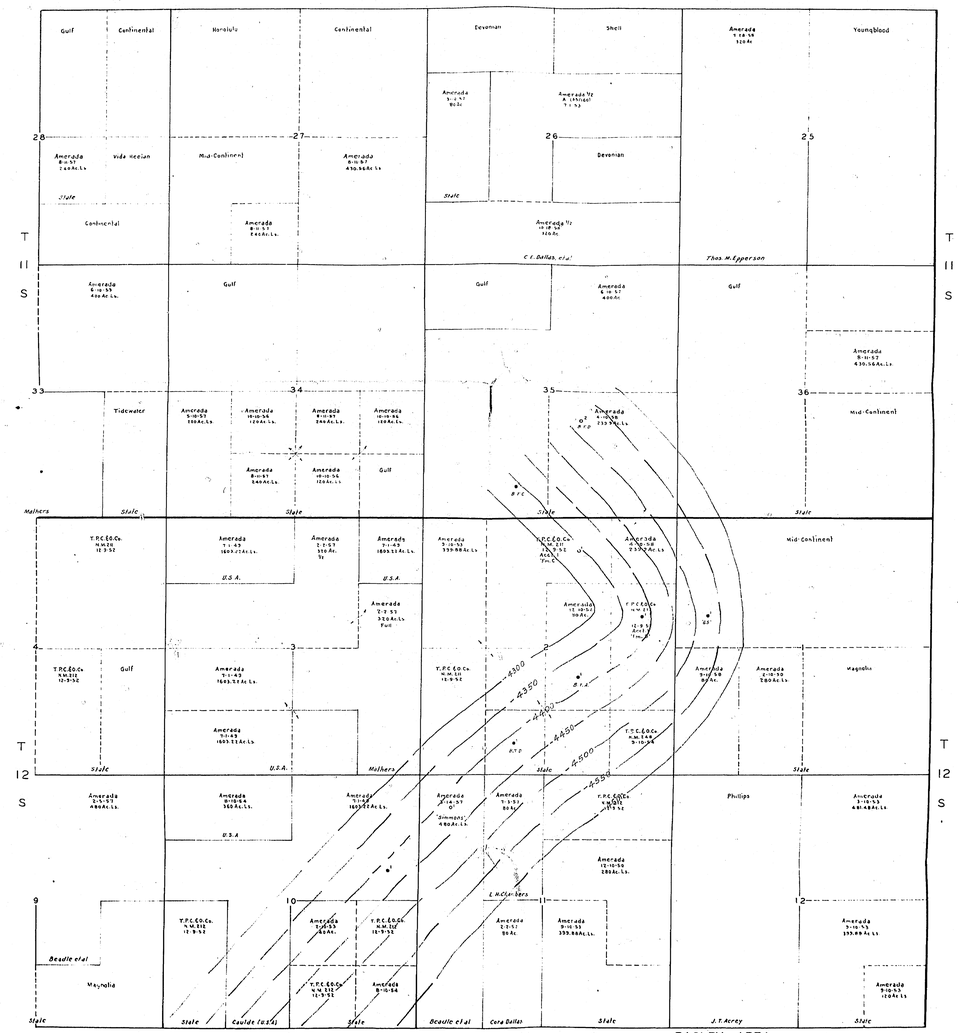
T 11 S

T 12 S

R 33 E

BAGLEY - AREA
LEA CO. N.MEX.
SCALE: 1" 1000'
CONTOUR DATUM - TOP GLORIETA
CONTOUR INTERVAL 50 FT.

R 33 E



R 33 E

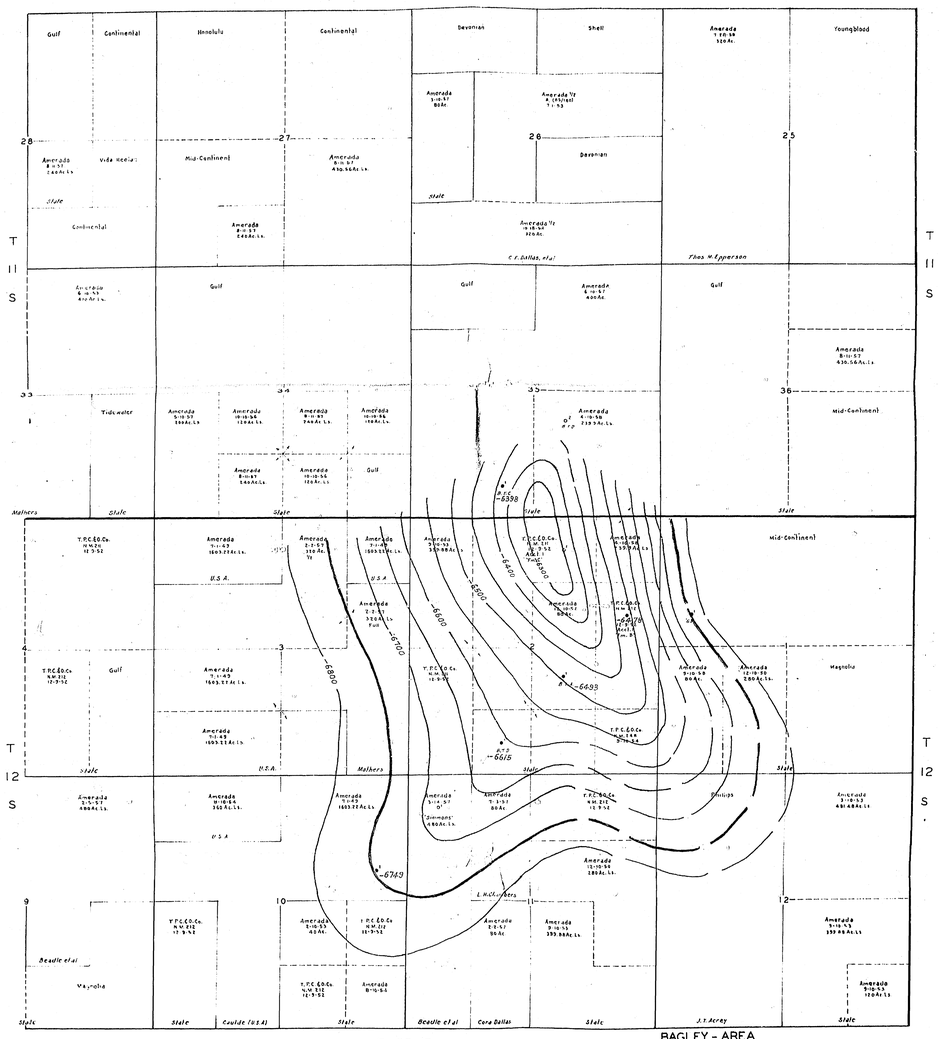
BAGLEY - AREA
LEA CO. N. MEX.
SCALE: 1" 1000'

CONTOUR DATUM - TOP PENNSYLVANIAN

CONTOUR INTERVAL 50 FT.

Dwg. Rec'd No. 7

R 33 E



R 33 E

BAGLEY - AREA
LEA CO. N. MEX.
SCALE: 1" 1000'

CONTOUR DATUM - BASE BLACK SHALE ZONE

CONTOUR INTERVAL 50 FT.

Gas Proc Ex No. "B"

ORIGINAL

ARDELLA PETROLEUM CORPORATION
CASE NO. 5265, DISTRICT COURT OF LEA COUNTY

IN ATTORNEYS
PAGE 81

T P COAL & OIL EXHIBITS
Exhibit #36

Oil Conservation Commission Case No. 191

T 11 S

T 12 S

T 13 S

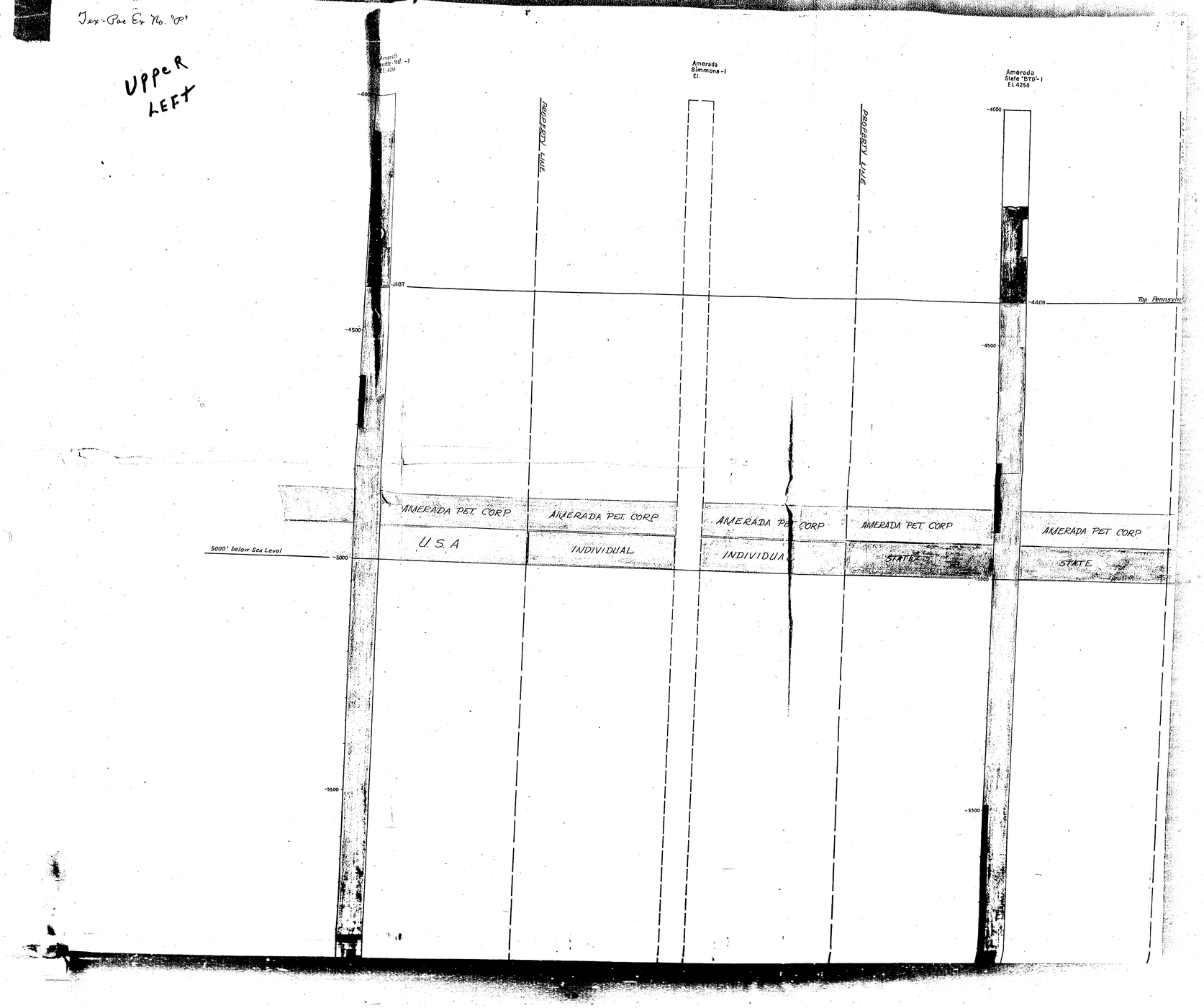
R 33 E

BAGLEY - HIGHTOWER
PROSPECTS
LEA COUNTY, NEW MEXICO
T 11-13 S, R 33 E

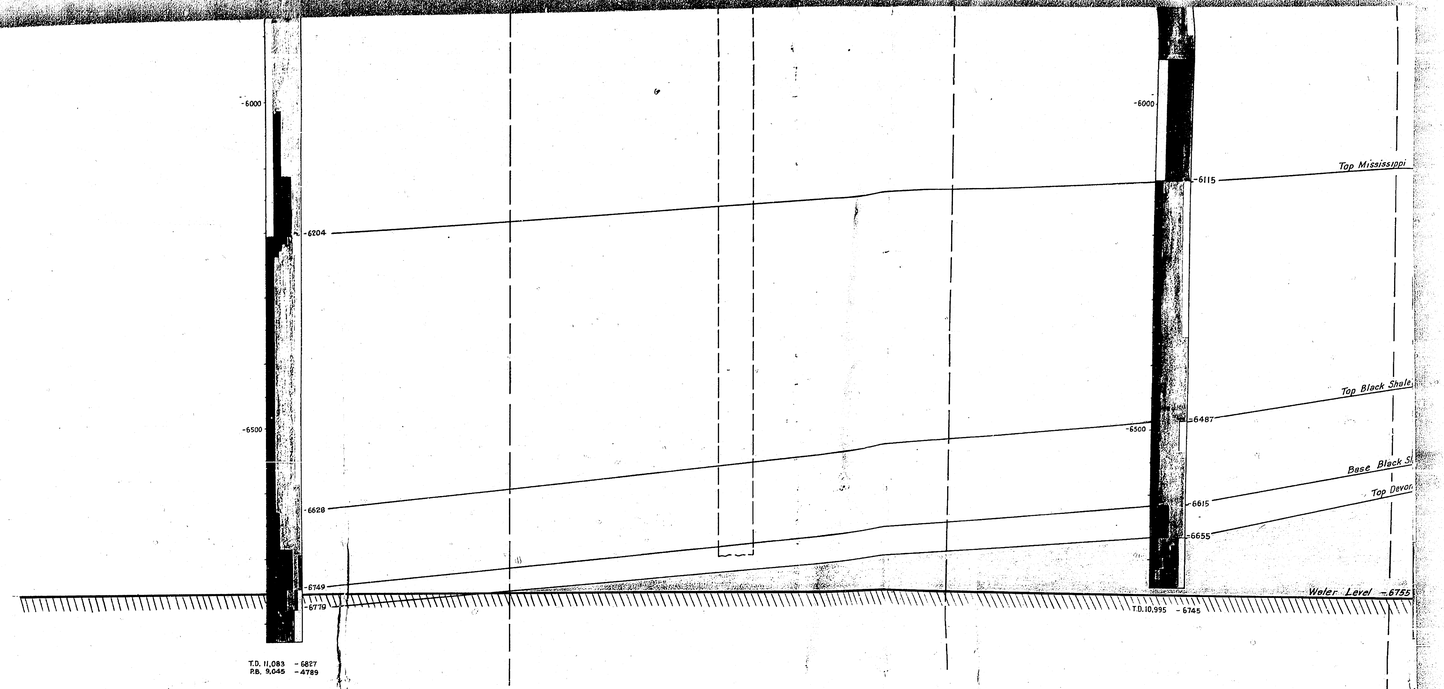
SCALE: 1 INCH = 800 FEET

Tex-Pac Ex No. "P"

UPPER LEFT



Lower Left


-6000
-6104
-6500
-6628
-6749
-6770
T.D. 11,083 -6827
P.B. 9,045 -4789
-6000
-6115
Top Mississippi
-6500
-6487
Top Black Shale
-6615
Base Black Sh
-6655
Top Devon
Water Level -6755
T.D. 10,995 -6745

Amerada
State "BTA"-1
El. 4235

Texas Pacific Coal & Oil
State B-1
El. 4243

Mid. Cont.
State 1-65
El. 4240

UPPER
R, 9H+

-4000

-4393

-4382

-4526

-4500

PROPERTY LINE

PROPERTY LINE

AMERADA PET. CORP.

AMERADA PET. CORP.

Texas Pacific Coal & Oil Co

Texas Pacific Coal & Oil

Mid Continent

STATE

STATE

STATE

STATE

STATE

Sea Level

T.D 9351 - 5111
P.B. 8889 - 4649

-5500

-5500

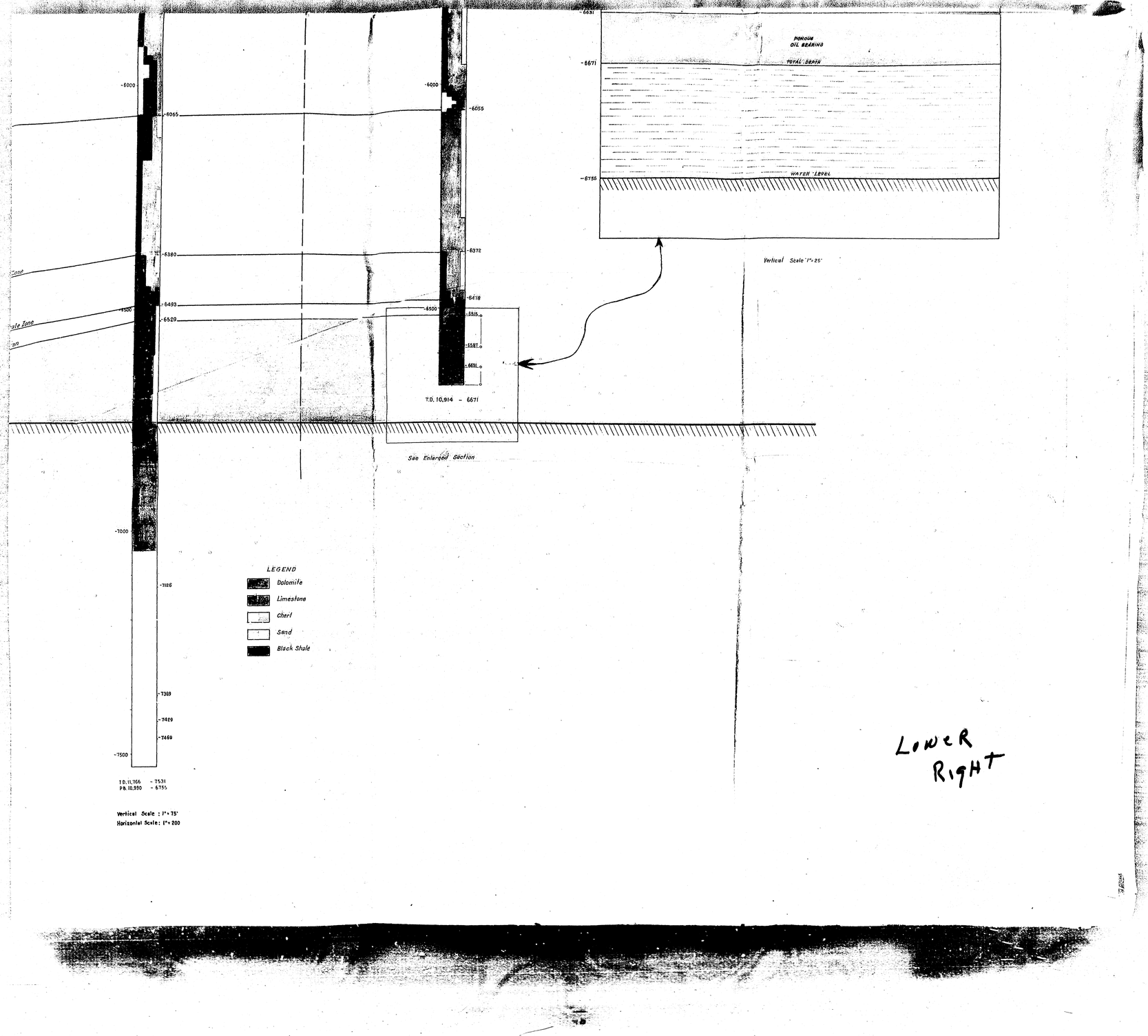
-6515

TOP DEVONIAN

POROUS
OIL BEARING

-6587

CHERT


-6000
-6065
-6380
-6493
-6529
-6500
-6000
-6055
-6372
-6478
-6515
-6557
-6631
T.D. 10,914 - 6671
See Enlarged Section
-6631
-6671
-6755
POROUS OIL BEARING
TOTAL DEPTH
WATER LEVEL
Vertical Scale 1"= 25'
-7000
-7126
-7369
-7469
-7500
T.D. 11,766 - 7531
P.B. 10,930 - 6755
Vertical Scale : 1"= 75'
Horizontal Scale: 1"= 200
LEGEND
Dolomite
Limestone
Chert
Sand
Black Shale

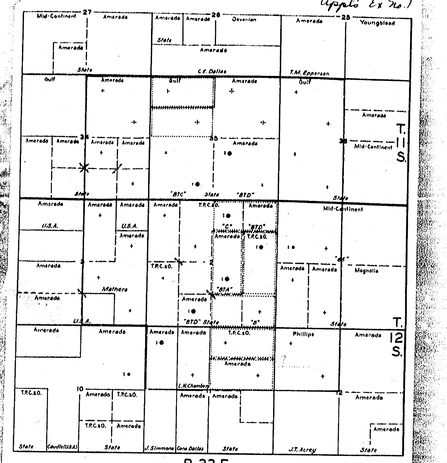
LOWER RIGHT

AMERADA PETROLEUM CORPORATION,
CASE NO. 8455, DISTRICT COURT OF LEA COUNTY

AMERADA EXHIBITS - original	IN EVIDENCE
1. Outlined area of Bagley, recommending required or designated spacing	page 8 - 9
2. Schlumberger of BTA	9
3. Schlumberger of BTC	43
4. Schlumberger of BTD	43

Oil Conservation Commission Case No. 191

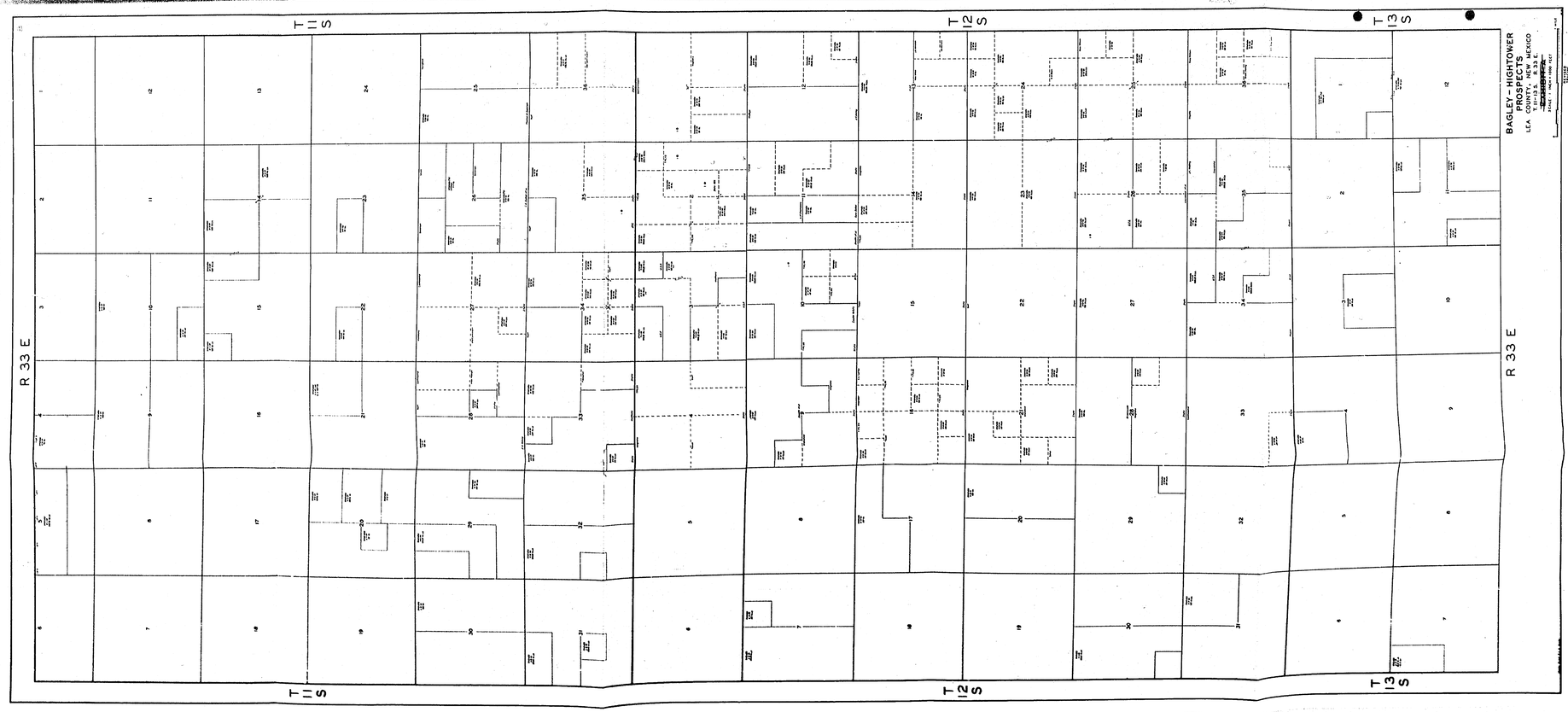
Applt Ex No. 1



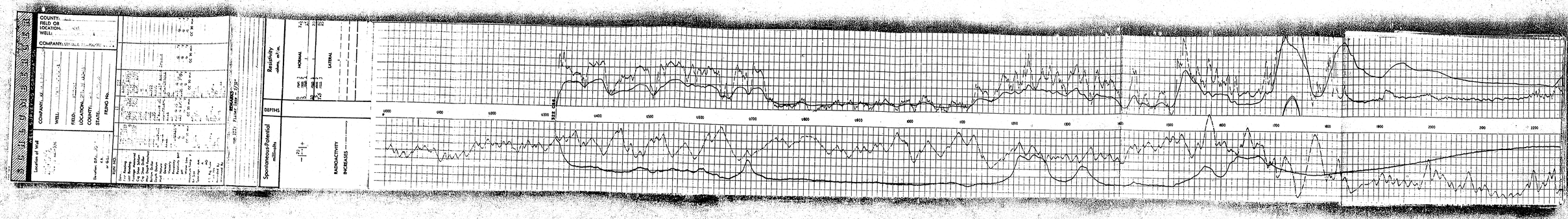
BAGLEY FIELD
LEA COUNTY NEW MEXICO

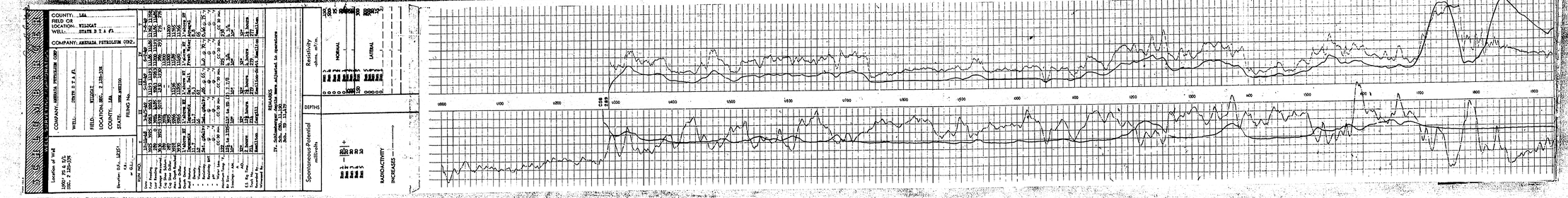
- BAGLEY - SILURO-DEVONIAN POOL WELLS
- BAGLEY - PENNSYLVANIAN POOL WELLS

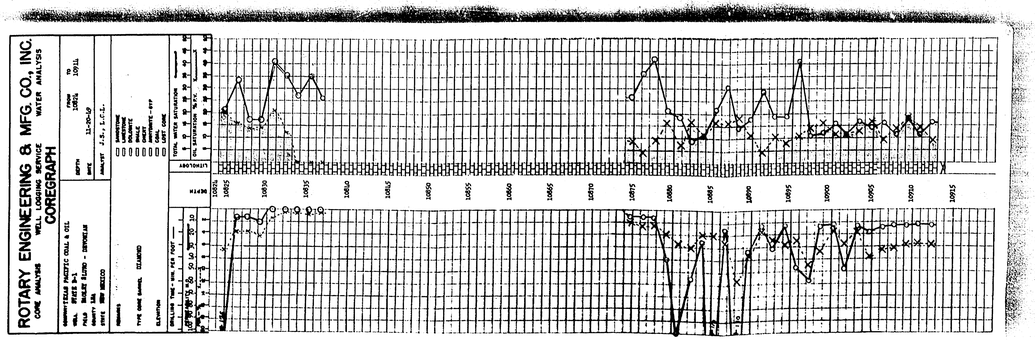
APPLICATION AMERADA PETROLEUM CORPORATION
DECEMBER 20, 1949

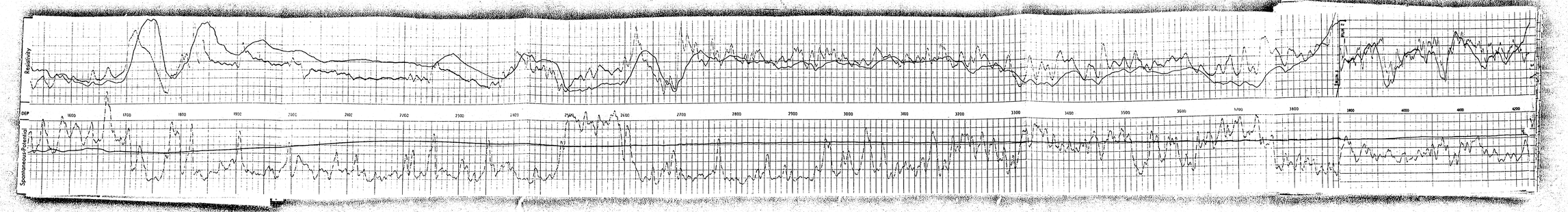


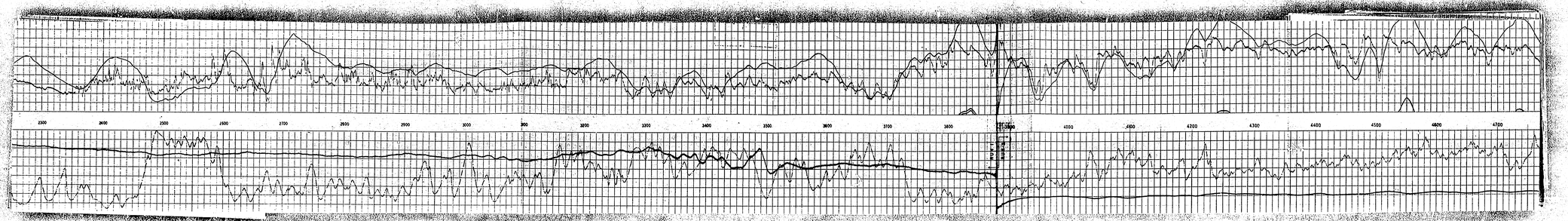

COUNTY: LEA
FIELD OR LOCATION: WILDCAT
WELL: STATE B T D #1
COMPANY: AMERADA PETROLEUM CORP.
Location of Well
1650' FS & 330' FEL
SEC. 2 26-37E
Elevation: D.F. 3237'
G.L.
FILING No.
RUN NO.
REMARKS
Resistivity ohms, m² m.
NORMAL
LATERAL
DEPTHS
Spontaneous Potential millivolts
RADIOACTIVITY INCREASES

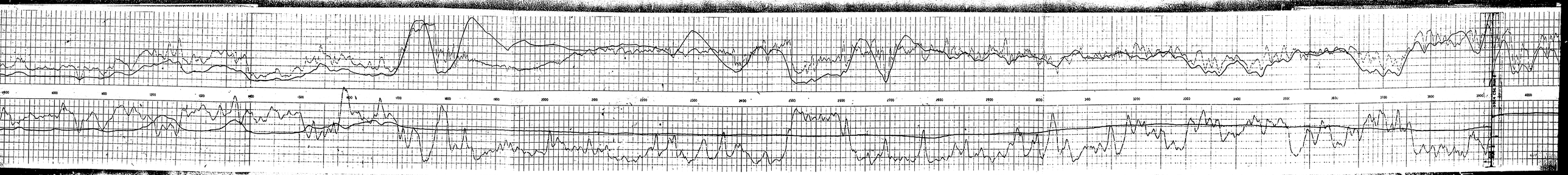

COUNTY:
FIELD OR LOCATION:
WELL:
COMPANY:
Location of Well
FILING No.
RUN NO.
REMARKS
Resistivity ohms, m² m.
NORMAL
LATERAL
DEPTHS
Spontaneous Potential millivolts
RADIOACTIVITY INCREASES

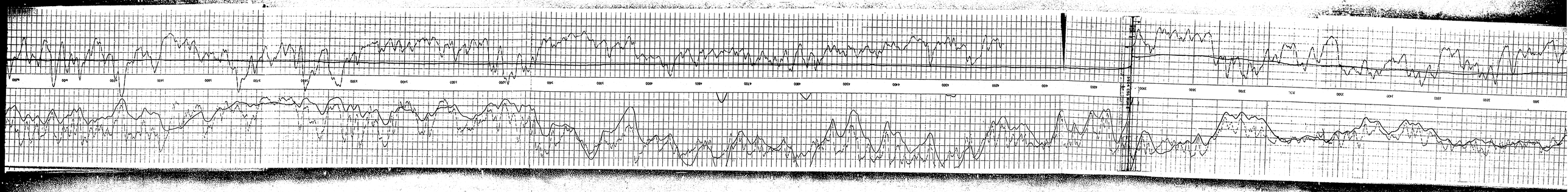

COUNTY: LEA
FIELD OR LOCATION: WILDCAT
WELL: STATE B T D #1
COMPANY: AMERADA PETROLEUM CORP.
Location of Well
1650' FS & 330' FEL
SEC. 2 26-37E
Elevation: D.F. 3237'
G.L.
FILING No.
RUN NO.
REMARKS
Resistivity ohms, m² m.
NORMAL
LATERAL
DEPTHS
Spontaneous Potential millivolts
RADIOACTIVITY INCREASES

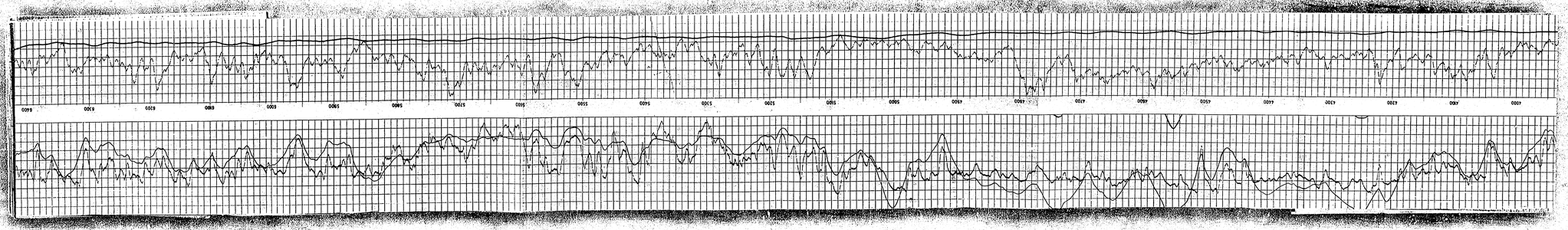

ROTARY ENGINEERING & MFG. CO., INC.
CORE ANALYSIS
WELL LOGGING SERVICE
WATER ANALYSIS
COREGRAPH
COMPANY STEAM PACIFIC OIL & GAS
WELL REES B-1
FIELD WILDCAT
STATE NEW MEXICO
DEPTH FROM 10826 TO 10911
DATE 12-20-49
ANALYST J.L., L.C.L.
REMARKS
TYPE MUD GAS CUT
ELEVATION
DRILLING TIME - MIN. PER FOOT
TOTAL WATER EXTRACTION
PERMEABILITY MILLIDARCYS
ABSOLUTE
K=436

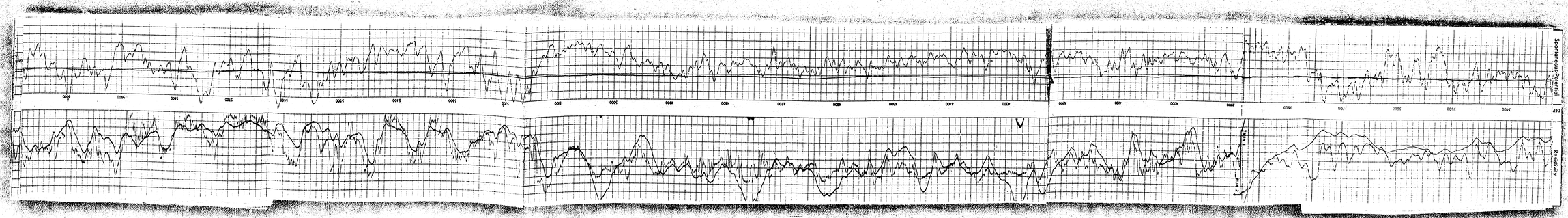

Relativity
DEP
Spontaneous Potential
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
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3100
3200
3300
3400
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3600
3700
3800
3900
4000
4100
4200

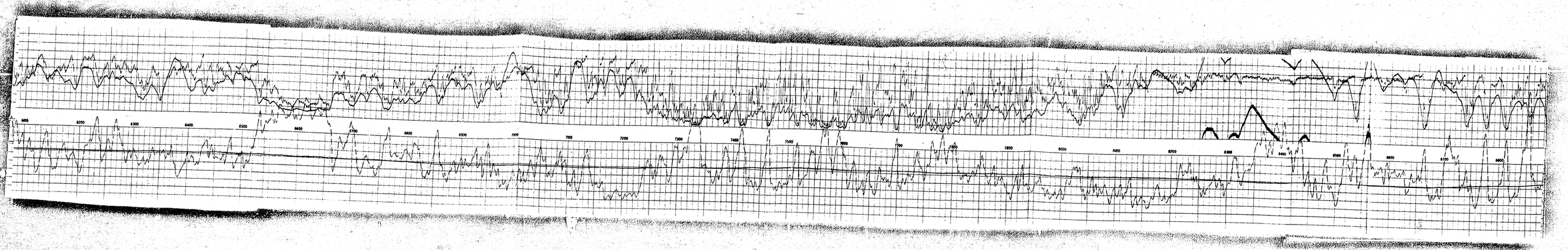

2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
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4400
4500
4600
4700

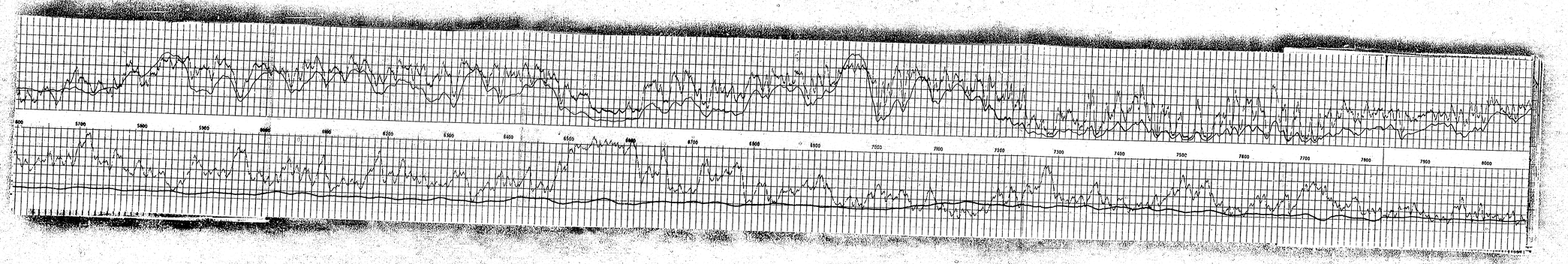

4000
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
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3700
3800
3900
4000

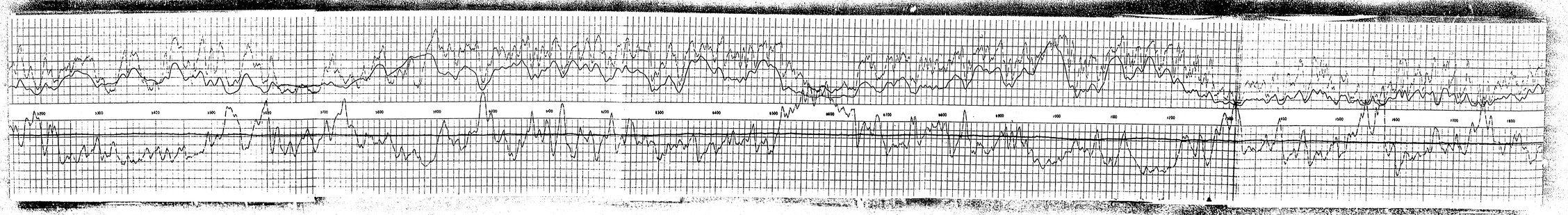


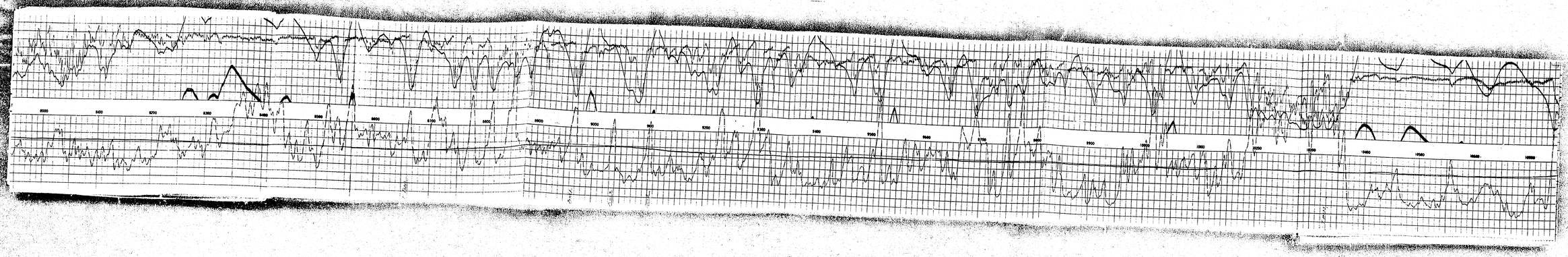


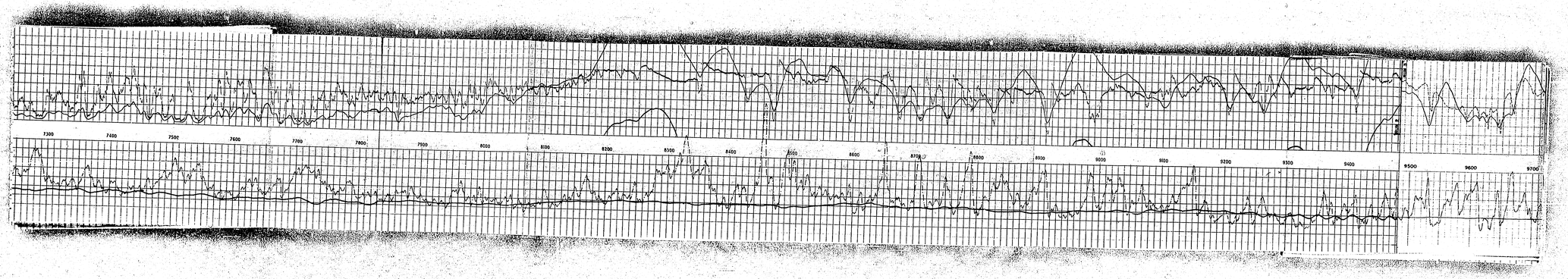

Spontaneous
Provoked

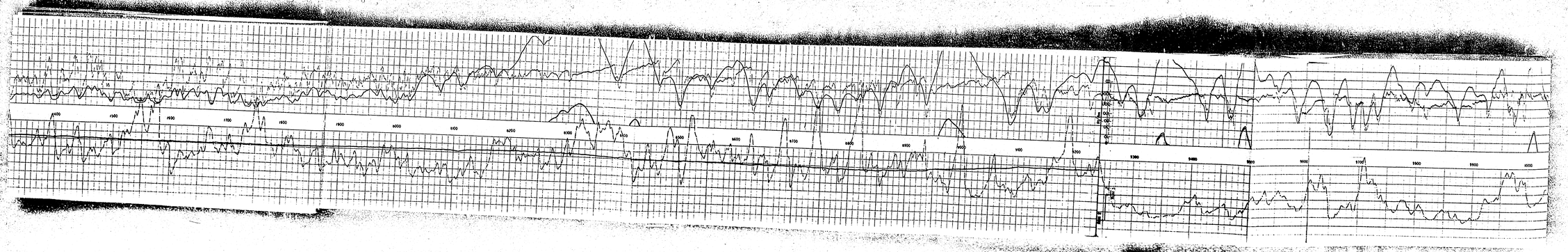


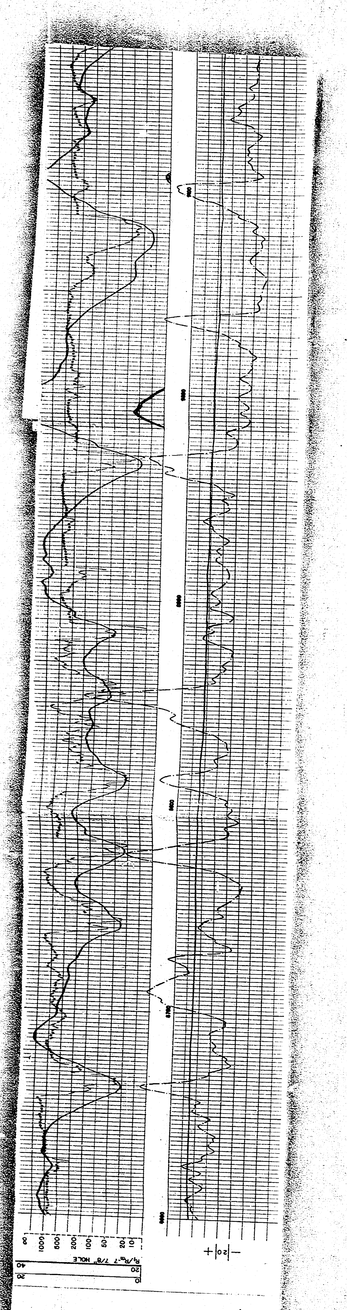


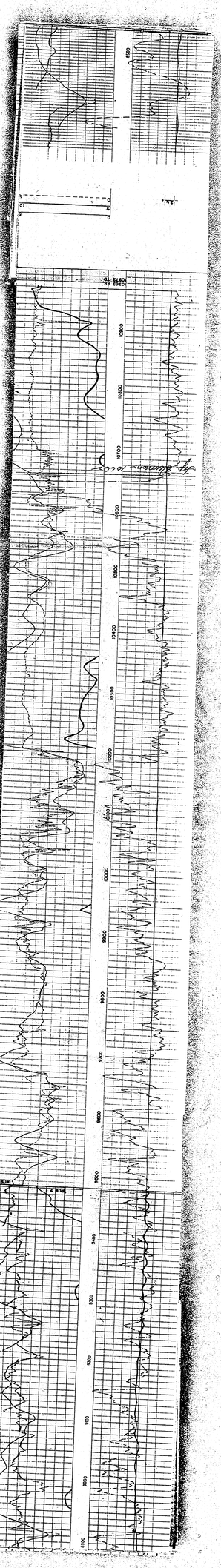


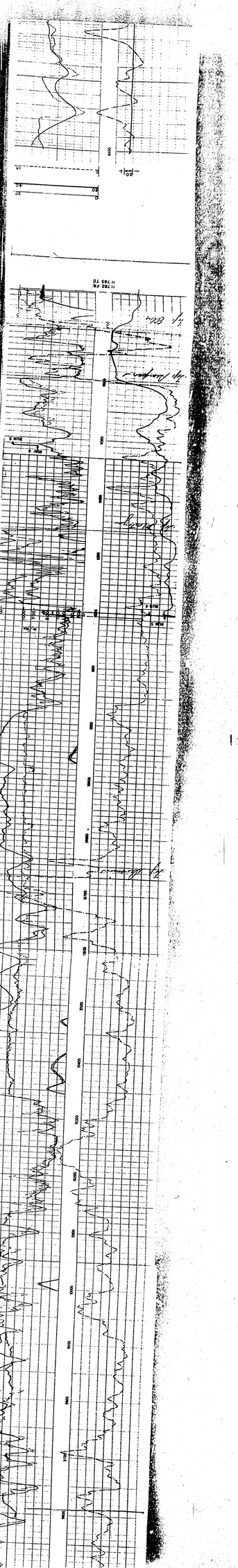












8900
9000
9100
9200
9300
9400
9500
10577 FS
10590 FD
AMERADA PETR. CORP.
STATE "A"
WELL 1-10
N. MEX.

10600
10700
10800
10900
10975 FS
10990 FD
8500
8600
8700
8800
8900
9000
9100
9200

11765 FS
11780 FD
8600
8700
8800
8900
9000
9100
9200
11775
11790
11800

9200
9300
9400
10600
10700
10800
10900
AMERADA PETR. CORP.
STATE #24, NO. 1
N.M. LEA CO. N.MEX.

10700
10800
10900
11000
11100
11200
11300 FT.
1500
1600
1700
11762 FD
11765 TD
AMERADA PETR. CORP.
STATE #24, NO. 1
N.M. LEA CO. N.MEX.