CASE 6909: EL PASO NATURAL GAS COMPANY FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO

any

Case No.

6909

Application

Transcripts

Small Exhibits

ETC

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

August 19, 1980

Mr. David T. Burleson
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

Re: CASE NO. ~~6989~~
ORDER NO. ~~R-6375-A~~

Applicant:

~~El Paso Natural Gas Company~~

Dear Sir:

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

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD x
Artesia OCD x
Aztec OCD x

~~Other~~

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

CASE NO. 6909
Order No. R-6375-A

APPLICATION OF EL PASO NATURAL GAS COMPANY FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE DIVISION:

It appearing to the Division that Order No. R-6375, dated June 18, 1980, does not correctly state the intended order of the Division,

IT IS THEREFORE ORDERED:

(1) That Order No. "(A)" on Page 2 of Order No. R-6375, Case No. 6909, be and the same is hereby corrected to read as follows:

"(4) That the Division reserves the right to rescind the commingling authority herein contained if the reservoir and producing characteristics of the Gallup zone in the subject well are incompatible to efficient commingling of said zone with the Basin Dakota Pool and if it appears that waste will be prevented by such rescission."

(2) That the correction set forth in this order be effective nunc pro tunc as of June 18, 1980.

DONE at Santa Fe, New Mexico, on this 18th day of August, 1988.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

JOE D. RAMEY
Director

SEAL

fd/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

June 20, 1980

Re: CASE NO. 6909
ORDER NO. R-6375

Mr. David T. Burleson
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

Applicant:

El Paso Natural Gas Company

Dear Sir:

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

Yours very truly,

Joe D. Ramey

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD X
Artesia OCD X
Aztec OCD X

Other _____

El Paso EXPLORATION COMPANY

P. O. BOX 289
FARMINGTON, NEW MEXICO 87401
PHONE: 505-325-2841

Frank Chavez says this is premature and we will get com bined stream data later 8-15-80

Netter

July 1, 1980

Rincon Unit #164

L-2-26-4

Case 6909

Mr. Frank Chavez
Energy and Minerals Department
Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM

Dear Frank:

In accordance with Order R-6375, Oil Conservation Division, production allocation for the Dakota formation of the Rincon Unit #164 of the proposed commingling of the Gallup-Dakota formations should be as follows: The gas should be allocated at 100 MCF/D and the oil at 1.21 BOPD or 1 bbl of oil for each 82.5 MCF of gas.

The allocation for production was based on 1979 production information due to incomplete liquid production for 1980. The well had a few minor producing problems in early 1980 but the well is on stop-cock now and having no problems lifting its liquids.

The well has had no remedial work since completion and the downhole condition of the well is excellent as far as anyone knows. The purpose for requesting commingling, as indicated in the order, is to allow the production of two Marginal Formations where another well would not be justified.

H. E. McAnally
Production Engineer

cc: File
D. Adams
H. McAnally
Commission

El Paso EXPLORATION COMPANY

Memorandum

TO: H. E. McAnally

DATE: June 30, 1980

FROM: Dennis Anderson

PLACE: Farmington, New Mexico

Subject: Production Allocation
Rincon Unit #164
Section 2, T-26-N, R-7-W
Rio Arriba County, New Mexico
Gallup and Dakota

In accordance with the state of New Mexico Energy and Minerals Department, Oil Conservation Division Order No. R-6375, an allocation of 100 MCF/D gas and one bbl. oil per 82.5 MCF gas best represent the Dakota zone's productive capabilities. This allocation is based upon 1979 production data due to incomplete liquid production data for 1980.

The well is currently on stop-cock operation and has no production problems. The well makes a small amount of water but is able to unload all produced liquids without being blown. No remedial work has been performed on the well since completion.

Dennis Anderson
Production Engineer

DA:tt
cc: Dennis Anderson
Well File

RPT # CHT

PRODUCTION DEPARTMENT
WELL DELIVERABILITY SYSTEM
SAN JUAN DIVISION WELL PRODUCTION DATA-EPNG

RUN DATE 80-04-17
0600

COUNTY NAME	ST CD	FIRST DELIV	POOL CODE	POOL - FORMATION NAME	LOC	FLD OFC	SWITCHER	WELL LOCATION U	SEC	TWP	RGE	WELL NAME AND NUMBER	OPER CODE	METER CODE
RA	31	691030	314	BASIN DAKOTA	06	06	45	L	2	26	7	KINCON UNIT #164	2100	87-069-01

TEST-INITIAL POTENTIAL CHOKE	INITIAL CAOF	TYPE LEAS	FORM CODE	EXEMPT WELL	CASING OD INCHES	TUBING OD INCHES	WELL COMP CODE	TUBING LENGTH	TYPE STIMULUS	POOL DPA %	PAY ZONE UPPER	PAY ZONE LOWER	OPERATOR NAME
3395	0	0	09	NO	4.500	2.375	0	7253	CSNF	25	7050	7294	EL PASO NATURAL GAS CO

DATE	DAYS OPER	AVG LINE PRES PSIG	MONTH AVG G MCF/D	MOVIN AVG G MCF/D	MONTH TOTAL VOLUME MCF	CUMULATIVE GAS VOLUME MCF	AVG API GRA VIT	MONTHLY LIQ BARRELS	CUMULATIVE LIQUID BARRELS	GAS-OIL RATIO CUFT/BL	SIPC PSIA	SIPT PSIA	FLO STR	WHFP CSG PSIA	WHFP TBG PSIA	STATE Q MCF/D	LINE PRES PSIA	STATE D MCF/D	CHG DPA %
74	362.4	230	100		36322	307474		493	4390	73675									
75	366.5	216	113		40606	348340		515	4905	79351	986	920	T	700	260	102	270	90	
76	359.9	175	97		34821	383161		470	5375	74087	1976	TOTALS — OFF YEAK							
77	362.6	89	129		46657	429818		473	5849	98640	738	734	T	485	161	125	106	105	
7901	21.7	63	98	94	2192	472336	58.6	40	6193	54800									4
7902	.0	0	0	86	52	472390	58.3	16	6209	3250									
7903	.0	0	0	98	0	472390	53.4	1	6210	0									
7904	16.0	77	153	153	2836	475226	58.9	0	6210	2836000									
7905	31.1	82	90	113	2834	478060	60.6	39	6249	72666									20
7906	25.2	71	109	112	2594	480654	61.3	36	6285	72055	876	862	T	645	354	111	82	102	3
7907	30.2	96	103	100	3157	483811	62.6	27	6312	116925									3
7908	31.4	107	93	101	2978	486789	61.5	48	6359	62041									8
7909	29.9	91	94	97	2887	489676	62.0	32	6391	90218									3
7910	31.2	81	95	94	3027	492703	62.1	36	6426	84063									1
7911	30.0	66	83	91	2566	495269	63.0	35	6463	73314									9
7912	31.5	70	85	88	2765	498034	62.1	28	6491	98750									3
	278.2	80	100		27688			336		82508	*** 1979 TOTALS ***								
8001	31.0	73	76	81	2358	500392	62.0	41	6532	57512									6
8002	29.1	73	89	83	2587	502979	62.0	27	6559	95814									7
8003	30.9	76	88	84	2720	505699	.0	0	6559	0									5
	91.0	74	84		7665			68		112720	*** 1980 TOTALS ***								

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6909
Order No. R-6375

APPLICATION OF EL PASO NATURAL
GAS COMPANY FOR DOWNHOLE COMMINGLING,
RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on June 4, 1980, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 18th day of June, 1980, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, El Paso Natural Gas Company, is the owner and operator of the Rincon Unit Well No. 164, located in Unit L of Section 2, Township 26 North, Range 7 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant seeks authority to commingle Basin-Dakota and Largo-Gallup production within the wellbore of the above-described well.

(4) That from the Basin-Dakota zone, the subject well is capable of low marginal production only.

(5) That from the Largo-Gallup zone, the subject well is expected to be capable of low marginal production only.

(6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

(10) That the Division should reserve the right to rescind the authority for downhole commingling of the subject zones in the subject well if the reservoir and producing characteristics of the Gallup zone prove to be incompatible with the Dakota zone and waste would be prevented by such rescission.

IT IS THEREFORE ORDERED:

(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle Basin-Dakota and Largo-Gallup production within the wellbore of the Rincon Unit Well No. 164, located in Unit L of Section 2, Township 26 North, Range 7 West, NMPM, Rio Arriba County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in the subject well.

(3) That the operator of the subject well shall immediately notify the Division's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present to the Division, a plan for remedial action.

(4) That the Division reserves the right to rescind the commingling authority herein contained if the reservoir and producing characteristics of the Gallup zone in the subject well are incompatible to inefficient commingling of said zone with the Basin Dakota Pool and if it appears that waste will be prevented by such rescission.

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

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

JOE D. RAMEY,
Director

S E A L

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6909
Order No. R-6375

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GAS COMPANY FOR DOWNHOLE COMMINGLING,
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(4) That from the Basin-Dakota zone, the subject well is capable of low marginal production only.

(5) That from the Largo-Gallup zone, the subject well is expected to be capable of low marginal production only.

(6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

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(9) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

(10) That the Division should reserve the right to rescind the authority for downhole commingling of the subject zones in the subject well if the reservoir and producing characteristics of the Gallup zone prove to be incompatible with the Dakota zone and waste would be prevented by such rescission.

IT IS THEREFORE ORDERED:

(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle Basin-Dakota and Largo-Gallup production within the wellbore of the Rincon Unit Well No. 164, located in Unit L of Section 2, Township 26 North, Range 7 West, NMPM, Rio Arriba County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in the subject well.

(3) That the operator of the subject well shall immediately notify the Division's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present to the Division, a plan for remedial action.

(4) That the Division reserves the right to rescind the commingling authority herein contained if the reservoir and producing characteristics of the Gallup zone in the subject well are incompatible to inefficient commingling of said zone with the Basin Dakota Pool and if it appears that waste will be prevented by such rescission.

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

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

JOE D. RAMEY,
Director

S E A L

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
4 June 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of El Paso Natural Gas Company for downhole commingling, Rio Arriba County, New Mexico. CASE 6909

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant: David T. Burleson, Esq.
El Paso Natural Gas Co.
El Paso, Texas

I N D E X

PAUL W. BURCHELL

E X H I B I T S

MR. NUTTER: Call Case Number 6909.

MR. PADILLA: Application of El Paso Natural Gas Company for downhole commingling, Rio Arriba County, New Mexico.

MR. BURLESON: David T. Burleson for El Paso Natural Gas Company. I have one witness.

We'll be associated with Montgomery and Andrews for this presentation.

(Witness sworn.)

PAUL W. BURCHELL

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. BURLESON:

Q For the record, will you please state your name and where you reside?

A My name is Paul W. Burchell and I reside in El Paso, Texas.

Q By whom are you employed and in what capacity?

A I am employed by the El Paso Natural Gas Company as a Senior Proration Engineer.

Q In that capacity have you testified before the Commission previously and had your qualifications accepted?

A Yes, sir.

Q Are you familiar with the El Paso application in this case?

A Yes, I am familiar with Case Number 6909, presently before the Examiner.

MR. BURLESON: Mr. Examiner, are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q Mr. Burchell, who is the operator of the well that's the subject of this application?

A The operator of the well is the El Paso Natural Gas Company.

Q What is El Paso seeking in this application?

A We are seeking permission to downhole commingle gas and condensate of the Basin Dakota Pool with gas and condensate of the Largo Gallup Gas Pool, and we wish to produce this gas through one meter in the Rincon Unit No. 164 Well. This well is located in Unit letter L of Section 2, Township 26 North, Range 7 West, Rio Arriba County, New Mexico.

Now this well presently produces from the

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

Dakota formation as a single completion only. Now, after perforating the Gallup and commingling its gas with the Dakota, El Paso proposes that the allocation of gas and fluids to each formation be allocated in a certain manner that I will explain later on in my testimony.

Q. The production that currently is being obtained from the Dakota formation is essentially gas production, is this correct?

A. Yes, it is a gas pool.

Q. And the production that would be anticipated from the Gallup zone, which would be opened, would essentially be gas, as well?

A. Yes, it's a gas pool, also.

Q. Why is El Paso asking permission to downhole commingle in this well?

A. El Paso is asking for this permission because we consider it to be the most economic and conservative method to undertake and also because of the low productivity of both zones that we expect to encounter, and we feel that the economics of not having to have to drill a single Gallup well would be a very significant matter.

Q. How is the Rincon Unit No. 164 Well presently completed?

A. The -- basically the well has a 4-1/2 inch OD casing set at 7406 feet with cement placed behind

the pipe in three stages. A temperature survey indicated that the top of the cement was at 2525 feet. The well is perforated from 7050 feet to 7254 feet in the Dakota formation only. The gas is produced through a string of 2-3/8ths inch tubing and it is set a 7253 feet.

Q. Do you have an exhibit which indicates the production history of this well?

A. Yes, I do.

Q. Would you please refer to that exhibit and give us some indication of what's contained on it?

A. Yes, if the Examiner would refer to Exhibit Number One, it is a production decline curve of the Rincon Unit No. 164, and I'd like to explain on the exhibit that the solid black line is the -- represents the Dakota gas, and that gas is plotted with respect to time and the yearly daily gas average. In other words, the MCF of gas per day average.

The dashed line is the Dakota condensate production and it's in time plotted since the well was completed and its figures are plotted on a yearly daily condensate average in barrels per day.

Now, as can be observed from the exhibit, Number One, the Dakota gas began production back in 1969 at 480 Mcf of gas per day and it has steadily declined to its present rate as of March, 1980, to 84 Mcf of gas per day.

The cumulative amount of gas that has been produced from the Dakota formation amounts to about one half billion cubic feet.

The other graph there is showing the Dakota condensate and shows that the well started off at 13.83 barrels of oil per day and it has steadily declined over the period of years to the present rate of .93 barrels of condensate per day. It has produced a total of 7035 barrels.

The exhibit also shows on the lower part what the well's pressures were. On the lefthand side it shows the initial wellhead shutin pressure at 2472 pounds per square inch absolute, and its corresponding bottom hole pressure would be 3093 pounds per square inch. Then on the righthand side of the curve, or the chart, shows the well's current as of 1-1-80 wellhead shutin pressure at 840 pounds per square inch absolute, and that corresponds to a bottom hole pressure of 1025 pounds per square inch.

Q. What do you conclude concerning the well's current productivity from an examination of this data?

A. Well, from examining Exhibit Number One I would -- it's my opinion that the present flow rate from the Dakota is very small. I'd like to point out the Dakota zone in the Rincon Well is classified as marginal.

Q. Do you have any information concerning the

water production from this well?

A. Yes. This well is presently making about 1 barrel of water per day.

Q. Now, EPNG's application requests permission to come up the hole and also complete in the Largo Gallup Pool. Is there any Gallup production in this general area?

A. Yes. The closest Gallup producing well to this Rincon Well is located somewhat less than a mile due west.

Q. Have you prepared an exhibit indicating the location of those wells?

A. Yes, I have.

Q. Would you refer to that exhibit, then, please, and tell us what that exhibit indicates?

A. The Exhibit Number Two is simply a well location map in the Rincon Unit, and the Rincon Unit is shown as that area that is delineated by the dashed lines or hachured lines, and the present described Largo Pool is shown in the solid black lines. The El Paso Natural Gas's Rincon Unit No. 164 is shown in the southwest of Section 2 and it has a circle around there just to make it stand out. That well is located 1090 feet from the west line and it is located 1840 feet from the south line, and it is the west half of that section that is dedicated to the Dakota producing participating unit. The closest Gallup well is shown there as

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

the Ladd Petroleum Corporation's Lindrith No. 13 Well. It's located in the southwest of Section 3, and both of these wells are in Township 26 North, Range 7 West.

Q. Now this location of the Rincon Unit 164 Well, that is -- that would be a standard location for a Gallup completion.

A. Yes, sir.

Q. Let me call your attention to the Ladd Petroleum Company well which is located in the northwest quarter of Section 4 of that same township and range, which, as I understand it, is a well completed in the Largo Gallup Pool, and do you know, Mr. Burchell, if the Commission has issued a commingling order in current -- in recent months with respect to that well?

A. Yes, sir, that well was originally a dual completion. As a matter of fact, I'd like to point out that that "D" shown on the map represents dual completion, and then apparently, there was some problem with that -- downhole with that well, and the -- as of September, I think the Commission issued an order on September the 5th, 1975, granting Ladd Petroleum Corporation approval to downhole commingle both the Dakota and the Gallup formations. This was issued in Case Number -- Case Docket Number 6638, and I believe the order issued was R-6120.

MR. NUTTER: That would not have been

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

September of '75, then.

A. Did I -- it was 1979.

MR. NUTTER: '79.

A. I'm sorry.

MR. NUTTER: What was the R number again?

A. The R number was 6120.

MR. NUTTER: And which well was this?

A. And it is the Ladd Petroleum Corporation's Lindrith Well No. 24, located in Section 4 of Township 26 North, Range 7 West.

MR. NUTTER: But the 13 and 14 here on your exhibit are still dual completions?

A. Are still dual completions, yes, sir.

Q. Now the formations and the reservoirs involved in that Lindrith No. 24 Well are the same ones that either are completed in the 164 Well or will be completed in the 164 Well?

A. Yes, they're the same formations.

Q. And you would expect it to be the same reservoir?

A. Yes, I would.

Q. Do you have an exhibit showing the production history of the Ladd Petroleum Corporation Lindrith No. 13 Gallup Well, which is the nearest well completed in the Gallup formation to the well which is the subject of this

application?

A. Yes, I do.

Q. Would you refer to that exhibit, please, and tell us what that demonstrates?

A. Right. Mr. Examiner, that's El Paso's exhibit marked Number Three, and it's basically about the same type of a map that I showed you on Exhibit Number One, only this time it's a different well. It's the Lindrith -- production decline curve for the Lindrith No. 13 Well in Unit K of Section 3, Township 26 North, Range 7 West. The production illustrated here is for the Gallup pool. The solid black line is the Gallup gas and it is shown on a yearly daily gas average, or Mcf of gas per day is shown on the lefthand side of the graph, and the dashed line is the Gallup condensate production, and its rate is shown on the yearly daily condensate average in barrels per day on the righthand side of the graph.

And as can be examined from this particular exhibit, the Gallup gas began its production back in 1962 and it started at 1100 Mcf of gas per day and it has declined to a present rate, as of March, 1980, to 435 Mcf of gas per day. It has produced a total cumulative value of 3.7 billion cubic feet.

The Gallup's condensate shown with the dashed line began at 9.7 barrels of condensate per day and

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

it has declined to the present rate of 1.18 barrels per day. And it has produced a total amount of condensate of 29,045 barrels.

Now, this exhibit here also shows pressures shown on the bottom part of the graph. The initial wellhead shutin pressure for this well was 1625 pounds per square inch, and that corresponds to a bottom hole of 2035, and its current pressure, as of 1-1-80, the wellhead shutin pressure if 470 psia and its bottom hole pressure is 563 pounds per square inch absolute.

Q. Have you reached any conclusions that are significant in this proceeding from an examination of this exhibit?

A. Yes, I have. Basically, the flow rate for the Gallup formation has declined to a relatively small level. The field rules for the Largo Gallup Gas Pool allows the maximum daily gas production from a standard 320-acre spacing unit not to exceed 1000 Mcf of gas per day, and presently there are three Gallup producers and none of these wells are capable of producing their allowable.

Q. Do you have any information with respect to water production in this well?

A. Yes, the Lindrith No. 13 Well is presently making .33 barrels of water per day.

Q. Do you think that the fluids that would

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
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be produced from this well would be compatible with those which would be produced from the -- that are being produced from the Dakota, should commingling be approved in this hearing?

A. Yes, I believe they're -- all of the characteristics are similar enough because of the small pressure differential, which is less than 2-to-1 ratio, and the relatively small volumes of liquids. I would not expect any migration of gas or fluids from one formation to the other, particularly if the well's production is not interrupted for an extended period of time.

Q. Mr. Burchell, can you predict the approximate volume and pressure that might be encountered if the Gallup is completed in this Rincon Unit No. 164 Well?

A. I cannot be certain as to the exact volume and pressures which will be encountered, if we were granted approval, but I believe that because of the particularly good continuity in correlation of the Gallup zone between the two wells and the production that has taken place over the years from the Gallup, that there probably has been some dissipation in the reservoir pressure. As of the beginning of 1979 over 85,000 barrels of condensate and 11-billion cubic feet of gas has been produced from this Largo Gallup Pool.

I would like to point out to the Examiner

that if we encounter the same Gallup pressure conditions in the Rincon Unit Well as the present pressure of the Ladd Petroleum Corporation's Lindrith No. 13 Well, shown on Exhibit Three, then the ratio of bottom hole pressures would be less than 2, or to be more exact, the ratio would be 1.8, with the Dakota having the highest pressure.

Now, however, if we encounter virgin Gallup pressure, or the initial bottom hole pressure, as shown on Exhibit Number Three, for the Lindrith No. 13 Well, the bottom hole pressure then would be 1.9. That's the bottom hole pressure ratio, would be 1.9 with the Gallup having the highest pressure.

Therefor, in either extreme case, the bottom hole pressures would be less than 2.

Q. But you wouldn't expect that the extreme case would really be what would be encountered, would you, Mr. Burchell?

A. No, I would not.

Q. Do you have any opinion as to what it might be reasonable to expect as to the ratio upon completion of the Gallup, the ratio of that pressure which may be encountered relative to the current Dakota pressure?

A. Well, that's a very difficult question to answer because we really won't know until the day we do it, but it is my opinion that we won't encounter virgin or ini-

tial Largo Gallup pressure. The Lindrith No. 13 Well in Section 3 and the Lindrith No. 14 Well in Section 4 were both completed about the same time, and both wells had an initial wellhead shutin pressure of 1625 pounds per square inch absolute.

When the Lindrith No. 24 Well, which is located in the northwest of Section 4, was completed in December of 1962, the other two wells had produced 3394 barrels of condensate and 299,722 Mcf of gas. The Lindrith No. 24 Well had an initial wellhead shutin pressure of 1532 pounds per square inch, or 127 psi pounds less than the other two Lindrith wells.

Now this decrease in the pressure suggests pressure drainage had occurred, and it's because of this that I do not believe Gallup pressures in the Rincon Unit Well will be virgin.

My best guess would be somewhere around one-half way during the producing life of the Lindrith No. 13 Well, as shown on Exhibit Number Three. That would be around 1971. It's wellhead pressure at that time was about 600 psia and it was producing around 456 Mcf of gas per day and I might also point out, that that 600 pounds per square inch is the approximate average of that well's initial wellhead shutin pressure and its current shutin pressure.

Therefor, if the Rincon Unit No. 164 Well

would encounter a wellhead shutin pressure of around 600 psia, the pressure ratio now would decrease to 1.4.

Q. In other words, your best estimate is that the pressure ratio, comparing the Gallup and the Dakota, would be around 1.4?

A. Yes.

Q. What advantages would there be in commingling these two zones, Mr. Burchell?

A. There really are two main advantages. The first, it is believed that the combined gas volume will more efficiently recover the fluids from the hole and secondly, since the 4-1/2 inch OD production casing is too small to run two tubing strings of reasonable size, commingling offers the advantage of better economics.

To drill and complete a new Gallup well, it is estimated to cost around $270,000, whereas, to complete the Gallup and downhole commingle it with the Dakota will cost around $75,000, so you can see that there would be a savings of around $195,000 over the drilling and completing a new Gallup well.

Q. Now if I understand what you've said, it would not be, from an engineering standpoint, feasible to dually complete this well because of the current size of the hole, so the only way that both zones can be open in this well is the manner that we're suggesting here, which is

through the downhole commingling.

A. It's the most practical, yes.

Q. If the Division approval is granted in this application, how do you propose a formula would be devised to allocate production as would be necessary between these two zones involved, being the Gallup and the Dakota?

A. Well, I would make this recommendation at this time, that prior to any workover on the well that we would produce the Dakota zone for a certain period of time until it stabilized and then we'd keep it there for a certain period of time and then after the well is completed and worked over, we could produce the total production from the well for a similar period of time, and then with this data we could consult with the New Mexico Oil Conservation Commission's District Supervisor in Aztec and some sort of an allocation formula, or percentages, could be arrived at and agreed upon.

Q. Mr. Burchell, do you have any information with respect to the ownership in Gallup production and Dakota production, and if so, would you tell us something about how that production may be owned.

A. Yes, sir. Okay. Yes, the -- I'd first of all like to point out that ownership in the two zones is not common, is not common, and El Paso Natural Gas Company has a 97.46 working interest in the producing well, and the Wiser, W-I-S-E-R, Oil Company owns 2.54 percent working in-

terest. This interest includes both the Dakota and the Gallup zones.

Now, the Wiser Oil Company has consented to this commingling.

Q. Let me stop you for just a second. So that means that all of the working interest owners have agreed to this commingling. El Paso owns -- El Paso and Wiser collectively own 100 percent of the interest --

A. Right.

Q. -- in both zones, --

A. Right.

Q. -- the working interest?

A. Right. The United States government owns a royalty interest in the Dakota zone; however, they have not responded, either a yes or a no, to the proposed commingling.

MR. NUTTER: They own what, now?

A. They own an interest in the Dakota.

MR. NUTTER: Not in the Gallup?

A. Not in the Gallup, no.

MR. NUTTER: How come?

A. It's a State -- it's a State lease. They have 12-1/2 -- the State has 12-1/2 percent royalty in that mineral lease and the United States government only participates --

MR. NUTTER: Oh, it's on -- based on a participating formula then.

A. Yes.

MR. NUTTER: Or participating area in a unit.

A. Yes. Yes, it is.

MR. BURLESON: Mr. Examiner, I might point out that the Dakota production is within the Rincon Unit so the production is distributed in accordance with the ownership in the entire partipating area; whereas the Gallup production will be distributed on a proration unit basis solely, or an initial participating area basis in the event this results.

MR. NUTTER: The Gallup is not unitized, then.

MR. BURLESON: It is, yes, it is unitized; however, there is no unit production from the Gallup. This would be initial unit production from the Gallup.

Q. With regards the royalty ownership, I think you just observed that the U. S. government owns an interest in the Dakota formation production but has no interest in the Gallup production, and that they have not responded to our letter which was sent out to them advising them of our proposal.

A. Yes, they neither agreed nor disagreed.

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Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

And as I was saying to the Examiner, that the State of New Mexico has a royalty interest in the Dakota zone and they have given their consent to the commingling. Edwin and George Kaime, that's K-A-I-M-E, also have a royalty interest in the Dakota and they have consented to the project, also.

Now there are 105 parties with an overriding royalty interest in the Dakota, and out of these 105, 77, or about 75 percent, have consented to the commingling, and the others did not respond. Now, as I said, the State of New Mexico also owns a royalty interest in the Gallup and, again, they have given their consent.

There are 9 parties that have an overriding royalty interest in the Gallup zone and of this 9, 6 have consented to the commingling project, while 3 of them did not respond.

Q. Now this is inferrable from what you said, but letters were sent out to all interest owners advising them about our proposal and asking for their consent.

A. Yes, sir.

Q. And this was sent out some considerable time in the past.

A. Yes sir.

Q. Okay. Did you receive any objections to the proposal from anyone who -- who was given such communication?

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

A. No, we received no objections.

Q. And as you indicated, approximately 2/3rds of the -- 2/3rds, or greater than 2/3rds, of the overriding royalty interest owners consented and all of the royalty interest owners to both zones consented with the exception of the U. S. government, who didn't respond, and as we indicated a few minutes ago, all the working interest owners --

A. Right.

Q. -- have consented.

A. Yes, sir, it's closer to 3/4ths, rather than 2/3rds.

Q. In your opinion would the granting of this application protect correlative rights and prevent waste?

A. Yes, in my opinion, yes, it would protect correlative rights and prevent waste. I would also like to go back to the discussion of the royalty people, that all of those that did not respond, we wrote to them again and notified them of the time and place of this hearing in Case Number 6909.

Q. Right, so they knew that they could appear and express their viewpoint with respect to the proposal --

A. Yes.

Q. -- at this time and at this place.

A. Yes, sir.

Q. Have you anything further to offer in this

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

case?

A. No.

Q. Were Exhibits One through Three prepared by you or under your supervision?

A. Yes, sir, they were.

MR. BURLESON: Mr. Examiner, we ask that Exhibits One through Three be accepted into evidence, and that concludes our direct presentation.

MR. NUTTER: Exhibits One through Three will be admitted in evidence.

CROSS EXAMINATION

BY MR. NUTTER:

Q. Now, Mr. Burchell, as I understand, the working interest is all common in both zones.

A. The working interest is common in both zones, yes, sir.

Q. It's divided but it's --

A. Yes, sir.

Q. -- between two companies --

A. Yes.

Q. -- but it is common in both zones.

A. Yes.

Q. Now, the basic lease on which this well is located is a State lease.

A. Yes, sir.

Q. So the State as of now owns all the royalty.

A. Right.

Q. Under that lease.

A. Right.

Q. And there are 9 overriding royalties in the Gallup, so I presume there -- these 9 overriding royalties in the State lease.

A. Right.

Q. But then the Dakota section, or the Dakota well here, belongs to a Federal participating area, Federal and State.

A. Right.

Q. And the GS does have a royalty interest in this participating area.

A. Yes, sir.

Q. Also there is 105 parties in here that own an overriding royalty in this participating area, so they have a piece of this well in the Dakota.

A. Yes, sir. Yes, sir.

Q. And about 75 percent of them consented to it.

A. 77, yes, sir.

Q. And 6 of the overriding royalties on the State lease consented.

A. Yes, about 75 percent.

Q. And the State Land Office has consented to the commingling.

A. Yes, sir.

Q. Now do you presume that there will be a Dakota paricipating -- I mean a Gallup participating area set up for this Gallup production if you should obtain it?

A. I would think so, yeah, for the 320 acres that would be dedicated to the Gallup, and the people here would all -- that have a Gallup interest would, of course, participate in that allocation, whatever is finally allocated to the Gallup Pool.

Q. Now, the Largo Gallup Pool requires 320 acres dedication?

A. Yes, sir.

Q. And the Dakota, of course, requires 320.

A. 320, yeah.

Q. And you've got the west half dedicated to the Dakota. What would you dedicate to the Gallup, the west half?

A. Either one, the west half or the south half. Probably the south half, based on the --

Q. That would be more on the trend, wouldn't it?

A. I'd say on the trend, yeah, looking at the geological trend, I'd say the south half would be the

most practical one.

Q. Now when you mentioned the cumulative production of wells from the Gallup Pool, you mentioned 85,000 barrels and something like 5 or 6-billion --

A. 11-billion cubic feet.

Q. That was not just from these three wells that are shown on your Exhibit Number Two. There are some additional wells to the west.

A. No, sir, that was those three wells.

Q. These are the only three wells in the Largo Gallup Pool?

A. Yeah, they're the only three wells in the Largo Gallup Pool.

Q. Okay. Now, you didn't give us a prediction on -- you gave us a prediction on what you thought the bottom hole ratio might be of pressures. You didn't give us any prediction on what you thought your productivity might be in the Gallup.

A. Okay, like I pointed out and related to the year of 1971 on Exhibit Number Three, that well was producing at that time 456 Mcf of gas per day. It is presently producing 435 Mcf of gas per day. So since 1971 to 1980 it's been producing 400-plus cubic feet of gas per day, and I would predict that this well, that when we initially complete it, will probably be a little bit higher, as well as

the pressures, but after a month or two months of plus production, I feel that that's where it will stabilize, at 600 psi and around 450 Mcf of gas per day.

MR. NUTTER: Are there any further questions of Mr. Burchell?

MR. BURLESON: Mr. Examiner, I might make one observation raised by your line of questioning, one of your lines of questioning to Mr. Burchell.

Though the proration unit for the Gallup would have to be the south half or the west half of the section, nevertheless, the participating area will be established in accordance with the unit agreement and could be that same -- that same area or it could be a larger area, depending upon --

MR. NUTTER: Yeah, I realize sometimes those participating areas --

MR. BURLESON: -- what production is incurred, productivity is incurred from the completion of that well.

MR. NUTTER: Uh-huh.

MR. PADILLA: Mr. Examiner, I have one question I would ask.

A. Yes.

CROSS EXAMINATION

BY MR. PADILLA:

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

Q. Mr. Burchell, you made reference to the Case 6638, in which Ladd Petroleum was granted downhole commingling for its --

A. Yes, sir.

Q. -- Lindrith Well Unit --

A. Yes, sir.

Q. And you also indicated that in that case they had had a downhole problem. Do you know what that problem was?

A. No, I'm sorry, I do not know. I just assumed it was a problem, as most of the dual completed wells do have a problem when they come to commingling. I do not know what the problem was.

MR. PADILLA: Nothing further.

MR. NUTTER: If there's nothing -- no further questions of the witness, he may be excused.

Do you have anything further, Mr. Burleson?

MR. BURLESON: No, sir.

MR. NUTTER: Does anyone have anything to offer in Case Number 6909?

We'll take the case under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6909 heard by me on 6/4, 1980.

Oil Conservation Division, Examiner

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
4 June 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of El Paso Natural Gas Company for downhole commingling, Rio Arriba County, New Mexico. CASE 6909

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant: David T. Burleson, Esq.
El Paso Natural Gas Co.
El Paso, Texas

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

I N D E X

E X H I B I T S

MR. NUTTER: Call Case Number 6909.

MR. PADILLA: Application of El Paso Natural Gas Company for downhole commingling, Rio Arriba County, New Mexico.

MR. BURLESON: David T. Burleson for El Paso Natural Gas Company. I have one witness.

We'll be associated with Montgomery and Andrews for this presentation.

(Witness sworn.)

PAUL W. BURCHELL

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. BURLESON:

Q For the record, will you please state your name and where you reside?

A My name is Paul W. Burchell and I reside in El Paso, Texas.

Q By whom are you employed and in what capacity?

A I am employed by the El Paso Natural Gas Company as a Senior Proration Engineer.

Q. In that capacity have you testified before the Commission previously and had your qualifications accepted?

A. Yes, sir.

Q. Are you familiar with the El Paso application in this case?

A. Yes, I am familiar with Case Number 6909, presently before the Examiner.

MR. BURLESON: Mr. Examiner, are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q. Mr. Burchell, who is the operator of the well that's the subject of this application?

A. The operator of the well is the El Paso Natural Gas Company.

Q. What is El Paso seeking in this application?

A. We are seeking permission to downhole commingle gas and condensate of the Basin Dakota Pool with gas and condensate of the Largo Gallup Gas Pool, and we wish to produce this gas through one meter in the Rincon Unit No. 164 Well. This well is located in Unit letter L of Section 2, Township 26 North, Range 7 West, Rio Arriba County, New Mexico.

Now this well presently produces from the

Dakota formation as a single completion only. Now, after perforating the Gallup and commingling its gas with the Dakota, El Paso proposes that the allocation of gas and fluids to each formation be allocated in a certain manner that I will explain later on in my testimony.

Q. The production that currently is being obtained from the Dakota formation is essentially gas production, is this correct?

A. Yes, it is a gas pool.

Q. And the production that would be anticipated from the Gallup zone, which would be opened, would essentially be gas, as well?

A. Yes, it's a gas pool, also.

Q. Why is El Paso asking permission to downhole commingle in this well?

A. El Paso is asking for this permission because we consider it to be the most economic and conservative method to undertake and also because of the low productivity of both zones that we expect to encounter, and we feel that the economics of not having to have to drill a single Gallup well would be a very significant matter.

Q. How is the Rincon Unit No. 164 Well presently completed?

A. The -- basically the well has a 4-1/2 inch OD casing set at 7406 feet with cement placed behind

the pipe in three stages. A temperature survey indicated that the top of the cement was at 2525 feet. The well is perforated from 7050 feet to 7254 feet in the Dakota formation only. The gas is produced through a string of 2-3/8ths inch tubing and it is set a 7253 feet.

Q Do you have an exhibit which indicates the production history of this well?

A Yes, I do.

Q Would you please refer to that exhibit and give us some indication of what's contained on it?

A Yes, if the Examiner would refer to Exhibit Number One, it is a production decline curve of the Rincon Unit No. 164, and I'd like to explain on the exhibit that the solid black line is the -- represents the Dakota gas, and that gas is plotted with respect to time and the yearly daily gas average. In other words, the MCF of gas per day average.

The dashed line is the Dakota condensate production and it's in time plotted since the well was completed and its figures are plotted on a yearly daily condensate average in barrels per day.

Now, as can be observed from the exhibit, Number One, the Dakota gas began production back in 1969 at 480 Mcf of gas per day and it has steadily declined to its present rate as of March, 1980, to 84 Mcf of gas per day.

The cumulative amount of gas that has been produced from the Dakota formation amounts to about one half billion cubic feet.

The other graph there is showing the Dakota condensate and shows that the well started off at 13.83 barrels of oil per day and it has steadily declined over the period of years to the present rate of .93 barrels of condensate per day. It has produced a total of 7035 barrels.

The exhibit also shows on the lower part what the well's pressures were. On the lefthand side it shows the initial wellhead shutin pressure at 2472 pounds per square inch absolute, and its corresponding bottom hole pressure would be 3093 pounds per square inch. Then on the righthand side of the curve, or the chart, shows the well's current as of 1-1-80 wellhead shutin pressure at 840 pounds per square inch absolute, and that corresponds to a bottom hole pressure of 1025 pounds per square inch.

Q What do you conclude concerning the well's current productivity from an examination of this data?

A Well, from examining Exhibit Number One I would -- it's my opinion that the present flow rate from the Dakota is very small. I'd like to point out the Dakota zone in the Rincon Well is classified as marginal.

Q Do you have any information concerning the

water production from this well?

A. Yes. This well is presently making about 1 barrel of water per day.

Q. Now, EPNG's application requests permission to come up the hole and also complete in the Largo Gallup Pool. Is there any Gallup production in this general area?

A. Yes. The closest Gallup producing well to this Rincon Well is located somewhat less than a mile due west.

Q. Have you prepared an exhibit indicating the location of those wells?

A. Yes, I have.

Q. Would you refer to that exhibit, then, please, and tell us what that exhibit indicates?

A. The Exhibit Number Two is simply a well location map in the Rincon Unit, and the Rincon Unit is shown as that area that is delineated by the dashed lines or hachured lines, and the present described Largo Pool is shown in the solid black lines. The El Paso Natural Gas's Rincon Unit No. 164 is shown in the southwest of Section 2 and it has a circle around there just to make it stand out. That well is located 1090 feet from the west line and it is located 1840 feet from the south line, and it is the west half of that section that is dedicated to the Dakota producing participating unit. The closest Gallup well is shown there as

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 435-7409

the Ladd Petroleum Corporation's Lindrith No. 13 Well. It's located in the southwest of Section 3, and both of these wells are in Township 26 North, Range 7 West.

Q. Now this location of the Rincon Unit 164 Well, that is -- that would be a standard location for a Gallup completion.

A. Yes, sir.

Q. Let me call your attention to the Ladd Petroleum Company well which is located in the northwest quarter of Section 4 of that same township and range, which, as I understand it, is a well completed in the Largo Gallup Pool, and do you know, Mr. Burchell, if the Commission has issued a commingling order in current -- in recent months with respect to that well?

A. Yes, sir, that well was originally a dual completion. As a matter of fact, I'd like to point out that that "D" shown on the map represents dual completion, and then apparently, there was some problem with that -- downhole with that well, and the -- as of September, I think the Commission issued an order on September the 5th, 1975, granting Ladd Petroleum Corporation approval to downhole commingle both the Dakota and the Gallup formations. This was issued in Case Number -- Case Docket Number 6638, and I believe the order issued was R-6120.

MR. NUTTER: That would not have been

September of '75, then.

A. Did I -- it was 1979.

MR. NUTTER: '79.

A. I'm sorry.

MR. NUTTER: What was the R number again?

A. The R number was 6120.

MR. NUTTER: And which well was this?

A. And it is the Ladd Petroleum Corporation's Lindrith Well No. 24, located in Section 4 of Township 26 North, Range 7 West.

MR. NUTTER: But the 13 and 14 here on your exhibit are still dual completions?

A. Are still dual completions, yes, sir.

Q. Now the formations and the reservoirs involved in that Lindrith No. 24 Well are the same ones that either are completed in the 164 Well or will be completed in the 164 Well?

A. Yes, they're the same formations.

Q. And you would expect it to be the same reservoir?

A. Yes, I would.

Q. Do you have an exhibit showing the production history of the Ladd Petroleum Corporation Lindrith No. 13 Gallup Well, which is the nearest well completed in the Gallup formation to the well which is the subject of this

application?

A. Yes, I do.

Q. Would you refer to that exhibit, please, and tell us what that demonstrates?

A. Right. Mr. Examiner, that's El Paso's exhibit marked Number Three, and it's basically about the same type of a map that I showed you on Exhibit Number One, only this time it's a different well. It's the Lindrith -- production decline curve for the Lindrith No. 13 Well in Unit K of Section 3, Township 26 North, Range 7 West. The production illustrated here is for the Gallup pool. The solid black line is the Gallup gas and it is shown on a yearly daily gas average, or Mcf of gas per day is shown on the lefthand side of the graph, and the dashed line is the Gallup condensate production, and its rate is shown on the yearly daily condensate average in barrels per day on the righthand side of the graph.

And as can be examined from this particular exhibit, the Gallup gas began its production back in 1962 and it started at 1100 Mcf of gas per day and it has declined to a present rate, as of March, 1980, to 435 Mcf of gas per day. It has produced a total cumulative value of 3.7 billion cubic feet.

The Gallup's condensate shown with the dashed line began at 9.7 barrels of condensate per day and

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

it has declined to the present rate of 1.18 barrels per day. And it has produced a total amount of condensate of 29,045 barrels.

Now, this exhibit here also shows pressures shown on the bottom part of the graph. The initial wellhead shutin pressure for this well was 1625 pounds per square inch, and that corresponds to a bottom hole of 2035, and its current pressure, as of 1-1-80, the wellhead shutin pressure if 470 psia and its bottom hole pressure is 563 pounds per square inch absolute.

Q. Have you reached any conclusions that are significant in this proceeding from an examination of this exhibit?

A. Yes, I have. Basically, the flow rate for the Gallup formation has declined to a relatively small level. The field rules for the Largo Gallup Gas Pool allows the maximum daily gas production from a standard 320-acre spacing unit not to exceed 1000 Mcf of gas per day, and presently there are three Gallup producers and none of these wells are capable of producing their allowable.

Q. Do you have any information with respect to water production in this well?

A. Yes, the Lindrith No. 13 Well is presently making .33 barrels of water per day.

Q. Do you think that the fluids that would

be produced from this well would be compatible with those which would be produced from the -- that are being produced from the Dakota, should commingling be approved in this hearing?

A. Yes, I believe they're -- all of the characteristics are similar enough because of the small pressure differential, which is less than 2-to-1 ratio, and the relatively small volumes of liquids. I would not expect any migration of gas or fluids from one formation to the other, particularly if the well's production is not interrupted for an extended period of time.

Q. Mr. Burchell, can you predict the approximate volume and pressure that might be encountered if the Gallup is completed in this Rincon Unit No. 164 Well?

A. I cannot be certain as to the exact volume and pressures which will be encountered, if we were granted approval, but I believe that because of the particularly good continuity in correlation of the Gallup zone between the two wells and the production that has taken place over the years from the Gallup, that there probably has been some dissipation in the reservoir pressure. As of the beginning of 1979 over 85,000 barrels of condensate and 11-billion cubic feet of gas has been produced from this Largo Gallup Pool.

I would like to point out to the Examiner

that if we encounter the same Gallup pressure conditions in the Rincon Unit Well as the present pressure of the Ladd Petroleum Corporation's Lindrith No. 13 Well, shown on Exhibit Three, then the ratio of bottom hole pressures would be less than 2, or to be more exact, the ratio would be 1.8, with the Dakota having the highest pressure.

Now, however, if we encounter virgin Gallup pressure, or the initial bottom hole pressure, as shown on Exhibit Number Three, for the Lindrith No. 13 Well, the bottom hole pressure then would be 1.9. That's the bottom hole pressure ratio, would be 1.9 with the Gallup having the highest pressure.

Therefor, in either extreme case, the bottom hole pressures would be less than 2.

Q But you wouldn't expect that the extreme case would really be what would be encountered, would you, Mr. Burchell?

A No, I would not.

Q Do you have any opinion as to what it might be reasonable to expect as to the ratio upon completion of the Gallup, the ratio of that pressure which may be encountered relative to the current Dakota pressure?

A Well, that's a very difficult question to answer because we really won't know until the day we do it, but it is my opinion that we won't encounter virgin or ini-

tial Largo Gallup pressure. The Lindrith No. 13 Well in Section 3 and the Lindrith No. 14 Well in Section 4 were both completed about the same time, and both wells had an initial wellhead shutin pressure of 1625 pounds per square inch absolute.

When the Lindrith No. 24 Well, which is located in the northwest of Section 4, was completed in December of 1962, the other two wells had produced 3394 barrels of condensate and 299,722 Mcf of gas. The Lindrith No. 24 Well had an initial wellhead shutin pressure of 1532 pounds per square inch, or 127 psi pounds less than the other two Lindrith wells.

Now this decrease in the pressure suggests pressure drainage had occurred, and it's because of this that I do not believe Gallup pressures in the Rincon Unit Well will be virgin.

My best guess would be somewhere around one-half way during the producing life of the Lindrith No. 13 Well, as shown on Exhibit Number Three. That would be around 1971. It's wellhead pressure at that time was about 600 psia and it was producing around 456 Mcf of gas per day and I might also point out, that that 600 pounds per square inch is the approximate average of that well's initial wellhead shutin pressure and its current shutin pressure.

Therefor, if the Rincon Unit No. 164 Well

would encounter a wellhead shutin pressure of around 600 psia, the pressure ratio now would decrease to 1.4.

Q In other words, your best estimate is that the pressure ratio, comparing the Gallup and the Dakota, would be around 1.4?

A Yes.

Q What advantages would there be in commingling these two zones, Mr. Burchell?

A There really are two main advantages. The first, it is believed that the combined gas volume will more efficiently recover the fluids from the hole and secondly, since the 4-1/2 inch OD production casing is too small to run two tubing strings of reasonable size, commingling offers the advantage of better economics.

To drill and complete a new Gallup well, it is estimated to cost around $270,000, whereas, to complete the Gallup and downhole commingle it with the Dakota will cost around $75,000, so you can see that there would be a savings of around $195,000 over the drilling and completing a new Gallup well.

Q Now if I understand what you've said, it would not be, from an engineering standpoint, feasible to dually complete this well because of the current size of the hole, so the only way that both zones can be open in this well is the manner that we're suggesting here, which is

through the downhole commingling.

A. It's the most practical, yes.

Q. If the Division approval is granted in this application, how do you propose a formula would be devised to allocate production as would be necessary between these two zones involved, being the Gallup and the Dakota?

A. Well, I would make this recommendation at this time, that prior to any workover on the well that we would produce the Dakota zone for a certain period of time until it stabilized and then we'd keep it there for a certain period of time and then after the well is completed and worked over, we could produce the total production from the well for a similar period of time, and then with this data we could consult with the New Mexico Oil Conservation Commission's District Supervisor in Aztec and some sort of an allocation formula, or percentages, could be arrived at and agreed upon.

Q. Mr. Burchell, do you have any information with respect to the ownership in Gallup production and Dakota production, and if so, would you tell us something about how that production may be owned.

A. Yes, sir. Okay. Yes, the -- I'd first of all like to point out that ownership in the two zones is not common, is not common, and El Paso Natural Gas Company has a 97.46 working interest in the producing well, and the Wiser, W-I-S-E-R, Oil Company owns 2.54 percent working in-

terest. This interest includes both the Dakota and the Gallup zones.

Now, the Wiser Oil Company has consented to this commingling.

Q Let me stop you for just a second. So that means that all of the working interest owners have agreed to this commingling. El Paso owns -- El Paso and Wiser collectively own 100 percent of the interest --

A Right.

Q -- in both zones, --

A Right.

Q -- the working interest?

A Right. The United States government owns a royalty interest in the Dakota zone; however, they have not responded, either a yes or a no, to the proposed commingling.

MR. NUTTER: They own what, now?

A They own an interest in the Dakota.

MR. NUTTER: Not in the Gallup?

A Not in the Gallup, no.

MR. NUTTER: How come?

A It's a State -- it's a State lease. They have 12-1/2 -- the State has 12-1/2 percent royalty in that mineral lease and the United States government only participates --

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MR. NUTTER: Oh, it's on -- based on a participating formula then.

A. Yes.

MR. NUTTER: Or participating area in a unit.

A. Yes. Yes, it is.

MR. BURLESON: Mr. Examiner, I might point out that the Dakota production is within the Rincon Unit so the production is distributed in accordance with the ownership in the entire partipating area; whereas the Gallup production will be distributed on a proration unit basis solely, or an initial participating area basis in the event this results.

MR. NUTTER: The Gallup is not unitized, then.

MR. BURLESON: It is, yes, it is unitized; however, there is no unit production from the Gallup. This would be initial unit production from the Gallup.

Q With regards the royalty ownership, I think you just observed that the U. S. government owns an interest in the Dakota formation production but has no interest in the Gallup production, and that they have not responded to our letter which was sent out to them advising them of our proposal.

A Yes, they neither agreed nor disagreed.

And as I was saying to the Examiner, that the State of New Mexico has a royalty interest in the Dakota zone and they have given their consent to the commingling. Edwin and George Kaime, that's K-A-I-M-E, also have a royalty interest in the Dakota and they have consented to the project, also.

Now there are 105 parties with an overriding royalty interest in the Dakota, and out of these 105, 77, or about 75 percent, have consented to the commingling, and the others did not respond. Now, as I said, the State of New Mexico also owns a royalty interest in the Gallup and, again, they have given their consent.

There are 9 parties that have an overriding royalty interest in the Gallup zone and of this 9, 6 have consented to the commingling project, while 3 of them did not respond.

Q. Now this is inferrable from what you said, but letters were sent out to all interest owners advising them about our proposal and asking for their consent.

A. Yes, sir.

Q. And this was sent out some considerable time in the past.

A. Yes sir.

Q. Okay. Did you receive any objections to the proposal from anyone who -- who was given such communication?

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Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

A. No, we received no objections.

Q. And as you indicated, approximately 2/3rds of the -- 2/3rds, or greater than 2/3rds, of the overriding royalty interest owners consented and all of the royalty interest owners to both zones consented with the exception of the U. S. government, who didn't respond, and as we indicated a few minutes ago, all the working interest owners --

A. Right.

Q. -- have consented.

A. Yes, sir, it's closer to 3/4ths, rather than 2/3rds.

Q. In your opinion would the granting of this application protect correlative rights and prevent waste?

A. Yes, in my opinion, yes, it would protect correlative rights and prevent waste. I would also like to go back to the discussion of the royalty people, that all of those that did not respond, we wrote to them again and notified them of the time and place of this hearing in Case Number 6909.

Q. Right, so they knew that they could appear and express their viewpoint with respect to the proposal --

A. Yes.

Q. -- at this time and at this place.

A. Yes, sir.

Q. Have you anything further to offer in this

case?

A. No.

Q. Were Exhibits One through Three prepared by you or under your supervision?

A. Yes sir, they were.

MR. BURLESON: Mr. Examiner, we ask that Exhibits One through Three be accepted into evidence, and that concludes our direct presentation.

MR. NUTTER: Exhibits One through Three will be admitted in evidence.

CROSS EXAMINATION

BY MR. NUTTER:

Q. Now, Mr. Burchell, as I understand, the working interest is all common in both zones.

A. The working interest is common in both zones, yes, sir.

Q. It's divided but it's --

A. Yes, sir.

Q. -- between two companies --

A. Yes.

Q. -- but it is common in both zones.

A. Yes.

Q. Now, the basic lease on which this well is located is a State lease.

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A. Yes, sir.

Q. So the State as of now owns all the royalty.

A. Right.

Q. Under that lease.

A. Right.

Q. And there are 9 overriding royalties in the Gallup, so I presume there -- these 9 overriding royalties in the State lease.

A. Right.

Q. But then the Dakota section, or the Dakota well here, belongs to a Federal participating area, Federal and State.

A. Right.

Q. And the GS does have a royalty interest in this participating area.

A. Yes, sir.

Q. Also there is 105 parties in here that own an overriding royalty in this participating area, so they have a piece of this well in the Dakota.

A. Yes, sir. Yes, sir.

Q. And about 75 percent of them consented to it.

A. 77, yes, sir.

Q. And 6 of the overriding royalties on the State lease consented.

A. Yes, about 75 percent.

Q. And the State Land Office has consented to the commingling.

A. Yes, sir.

Q. Now do you presume that there will be a Dakota paricipating -- I mean a Gallup participating area set up for this Gallup production if you should obtain it?

A. I would think so, yeah, for the 320 acres that would be dedicated to the Gallup, and the people here would all -- that have a Gallup interest would, of course, participate in that allocation, whatever is finally allocated to the Gallup Pool.

Q. Now, the Largo Gallup Pool requires 320 acres dedication?

A. Yes, sir.

Q. And the Dakota, of course, requires 320.

A. 320, yeah.

Q. And you've got the west half dedicated to the Dakota. What would you dedicate to the Gallup, the west half?

A. Either one, the west half or the south half. Probably the south half, based on the --

Q. That would be more on the trend, wouldn't it?

A. I'd say on the trend, yeah, looking at the geological trend, I'd say the south half would be the

most practical one.

Q Now when you mentioned the cumulative production of wells from the Gallup Pool, you mentioned 85,000 barrels and something like 5 or 6-billion --

A 11-billion cubic feet.

Q That was not just from these three wells that are shown on your Exhibit Number Two. There are some additional wells to the west.

A No, sir, that was those three wells.

Q These are the only three wells in the Largo Gallup Pool?

A Yeah, they're the only three wells in the Largo Gallup Pool.

Q Okay. Now, you didn't give us a prediction on -- you gave us a prediction on what you thought the bottom hole ratio might be of pressures. You didn't give us any prediction on what you thought your productivity might be in the Gallup.

A Okay, like I pointed out and related to the year of 1971 on Exhibit Number Three, that well was producing at that time 456 Mcf of gas per day. It is presently producing 435 Mcf of gas per day. So since 1971 to 1980 it's been producing 400-plus cubic feet of gas per day, and I would predict that this well, that when we initially complete it, will probably be a little bit higher, as well as

the pressures, but after a month or two months of plus production, I feel that that's where it will stabilize, at 600 psi and around 450 Mcf of gas per day.

MR. NUTTER: Are there any further questions of Mr. Burchell?

MR. BURLESON: Mr. Examiner, I might make one observation raised by your line of questioning, one of your lines of questioning to Mr. Burchell.

Though the proration unit for the Gallup would have to be the south half or the west half of the section, nevertheless, the participating area will be established in accordance with the unit agreement and could be that same -- that same area or it could be a larger area, depending upon --

MR. NUTTER: Yeah, I realize sometimes those participating areas --

MR. BURLESON: -- what production is incurred, productivity is incurred from the completion of that well.

MR. NUTTER: Uh-huh.

MR. PADILLA: Mr. Examiner, I have one question I would ask.

A Yes.

CROSS EXAMINATION

BY MR. PADILLA:

Q. Mr. Burchell, you made reference to the Case 6638, in which Ladd Petroleum was granted downhole commingling for its --

A. Yes, sir.

Q. -- Lindrith Well Unit --

A. Yes, sir.

Q. And you also indicated that in that case they had had a downhole problem. Do you know what that problem was?

A. No, I'm sorry, I do not know. I just assumed it was a problem, as most of the dual completed wells do have a problem when they come to commingling. I do not know what the problem was.

MR. PADILLA: Nothing further.

MR. NUTTER: If there's nothing -- no further questions of the witness, he may be excused.

Do you have anything further, Mr. Burleson?

MR. BURLESON: No, sir.

MR. NUTTER: Does anyone have anything to offer in Case Number 6909?

We'll take the case under advisement.

(Hearing concluded.)

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

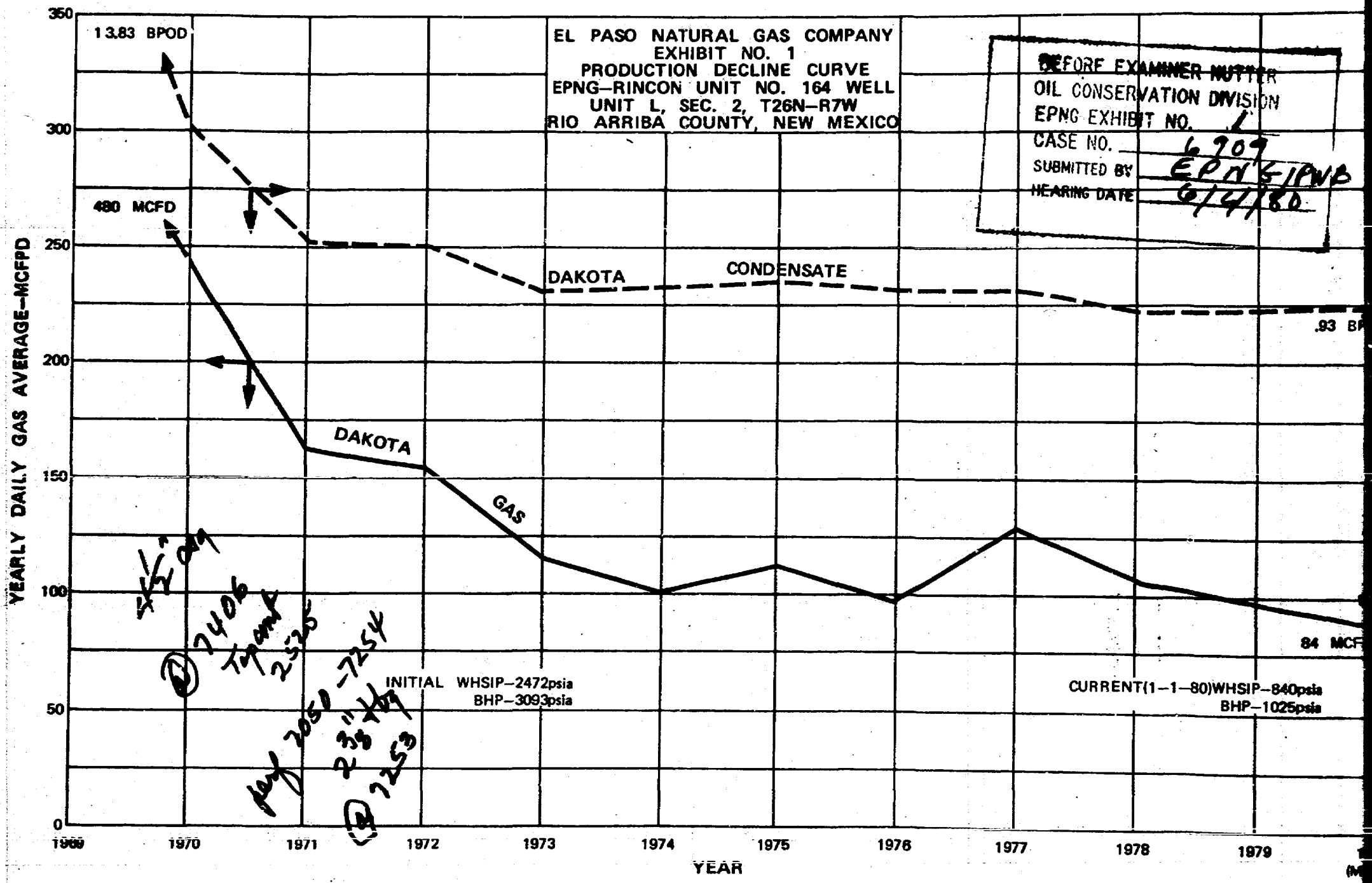
I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6909, heard by me on 6/4 19.80.

Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

EL PASO NATURAL GAS COMPANY
EXHIBIT NO. 1
PRODUCTION DECLINE CURVE
EPNG–RINCON UNIT NO. 164 WELL
UNIT L, SEC. 2, T26N–R7W
RIO ARRIBA COUNTY, NEW MEXICO

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EPNG EXHIBIT NO. 1
CASE NO. 6709
SUBMITTED BY EPNG-IPNB
HEARING DATE 6/4/80



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DAKOTA CONDENSATE

.93 BPD

DAKOTA GAS

INITIAL WHSIP–2472psia
BHP–3093psia

CURRENT(1–1–80)WHSIP–840psia
BHP–1025psia

84 MCFD

YEARLY DAILY CONDENSATE AVERAGE–BPD

0 1 2 3 4 5 6

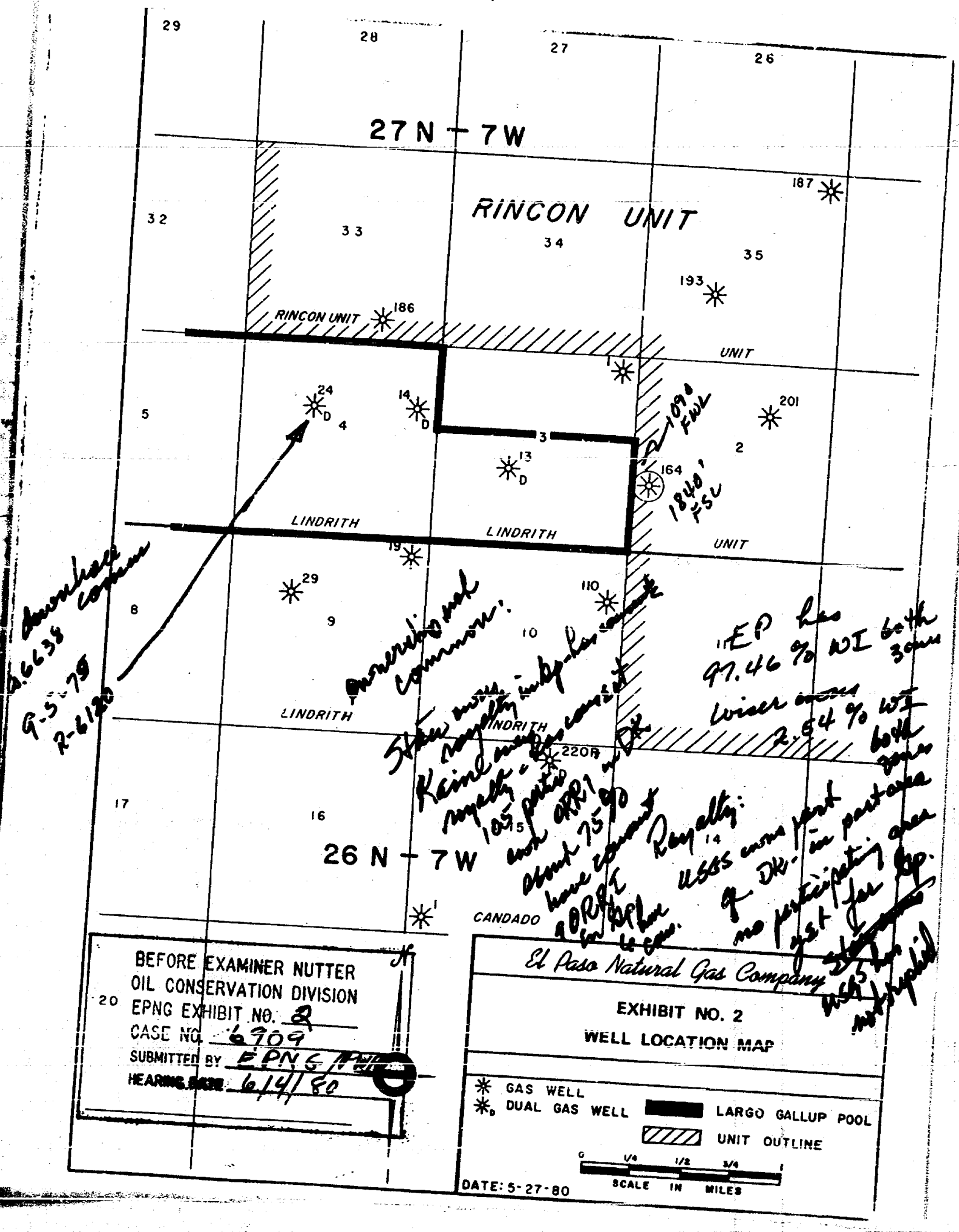
1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 (MARCH)

YEAR

7035 mm cond. prod.

cum DK gas about ½ billion cu ft

make about 1 bbl cond per day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BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EPNG EXHIBIT NO. 2
CASE NO. 6909
SUBMITTED BY EPNG
HEARING DATE 6/4/80
El Paso Natural Gas Company
EXHIBIT NO. 2
WELL LOCATION MAP
GAS WELL
DUAL GAS WELL
LARGO GALLUP POOL
UNIT OUTLINE
0 1/4 1/2 3/4 1
SCALE IN MILES
DATE: 5-27-80

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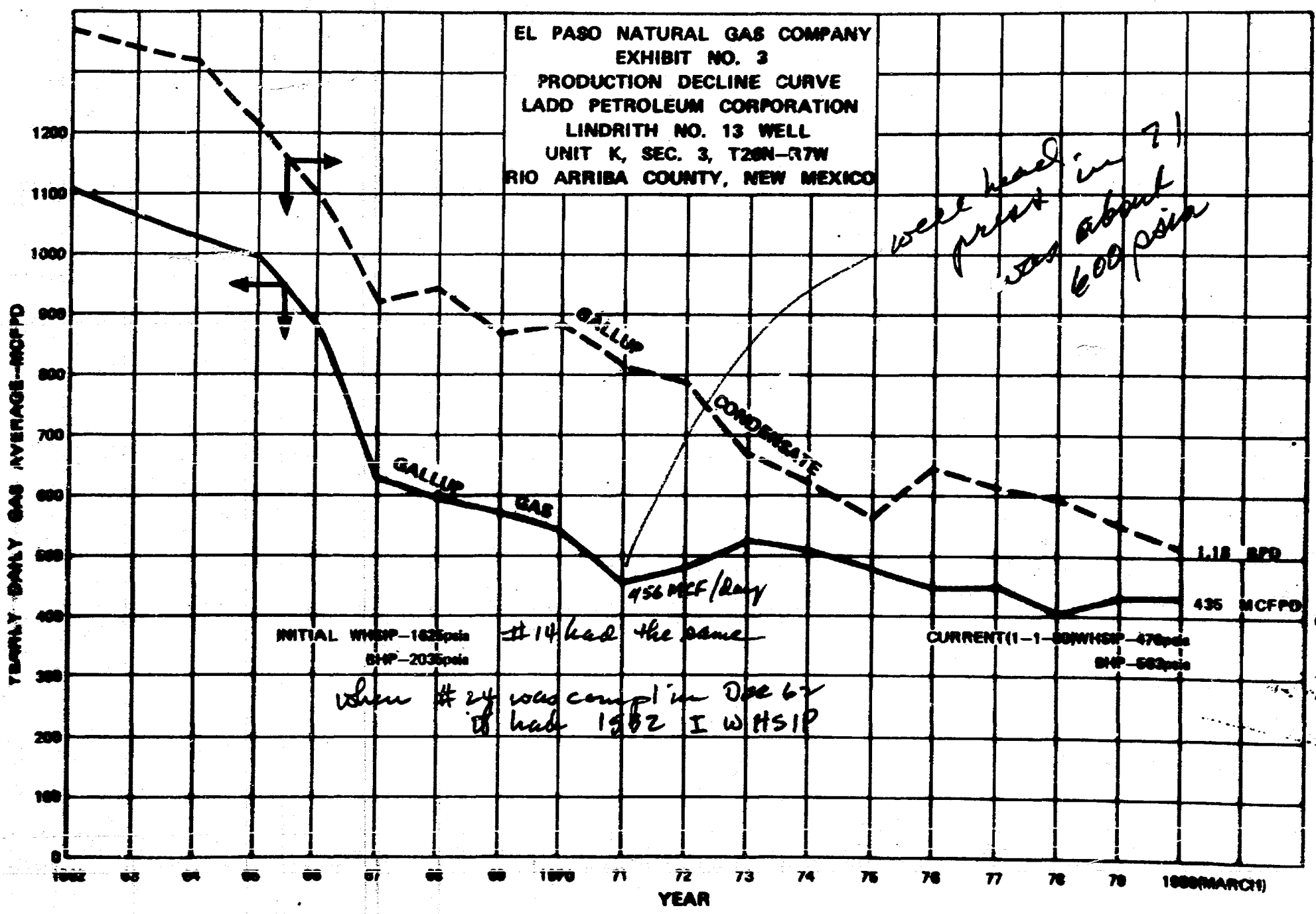
EL PASO NATURAL GAS COMPANY
EXHIBIT NO. 3
PRODUCTION DECLINE CURVE
LADD PETROLEUM CORPORATION
LINDRITH NO. 13 WELL
UNIT K, SEC. 3, T26N–R7W
RIO ARRIBA COUNTY, NEW MEXICO



well head in 71 was about 600 psia

Pool was Wildcat Flora in 320 100

Bradenhead 90p

BEFORE
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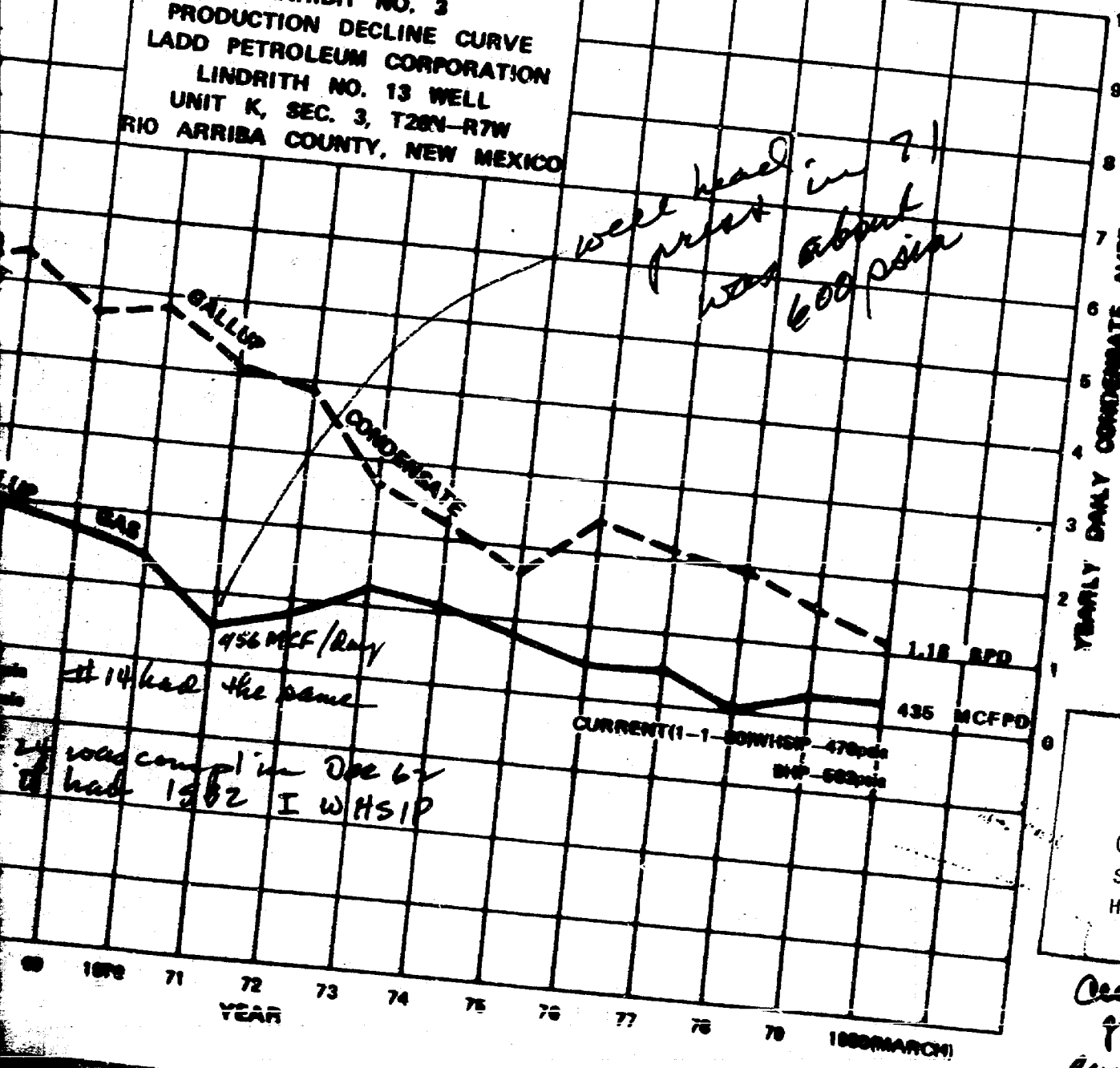
Same gas & Cum oil

EL PASO NATURAL GAS COMPANY
EXHIBIT NO. 2
PRODUCTION DECLINE CURVE
LADD PETROLEUM CORPORATION
LINDRITH NO. 13 WELL
UNIT K, SEC. 3, T26N–R7W
RIO ARRIBA COUNTY, NEW MEXICO



well head in 71 prior was about 600 psia

Pool wells most had in 320 1000 MCF/day now 3 wells make this.

Burchell estimates Dp in #164 will have BHP of 1.4 and IP of about 450

#14 had the same

2nd road completion Dec 67 had 1562 I WHSIP

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EPNG EXHIBIT NO. 3
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Cum gas 3.7 billion

Cum oil 29045 bbls
33 bbls wtr/day

EL PASO NATURAL GAS COMPANY
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EPNG–RINCON UNIT NO. 164 WELL
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RIO ARRIBA COUNTY, NEW MEXICO

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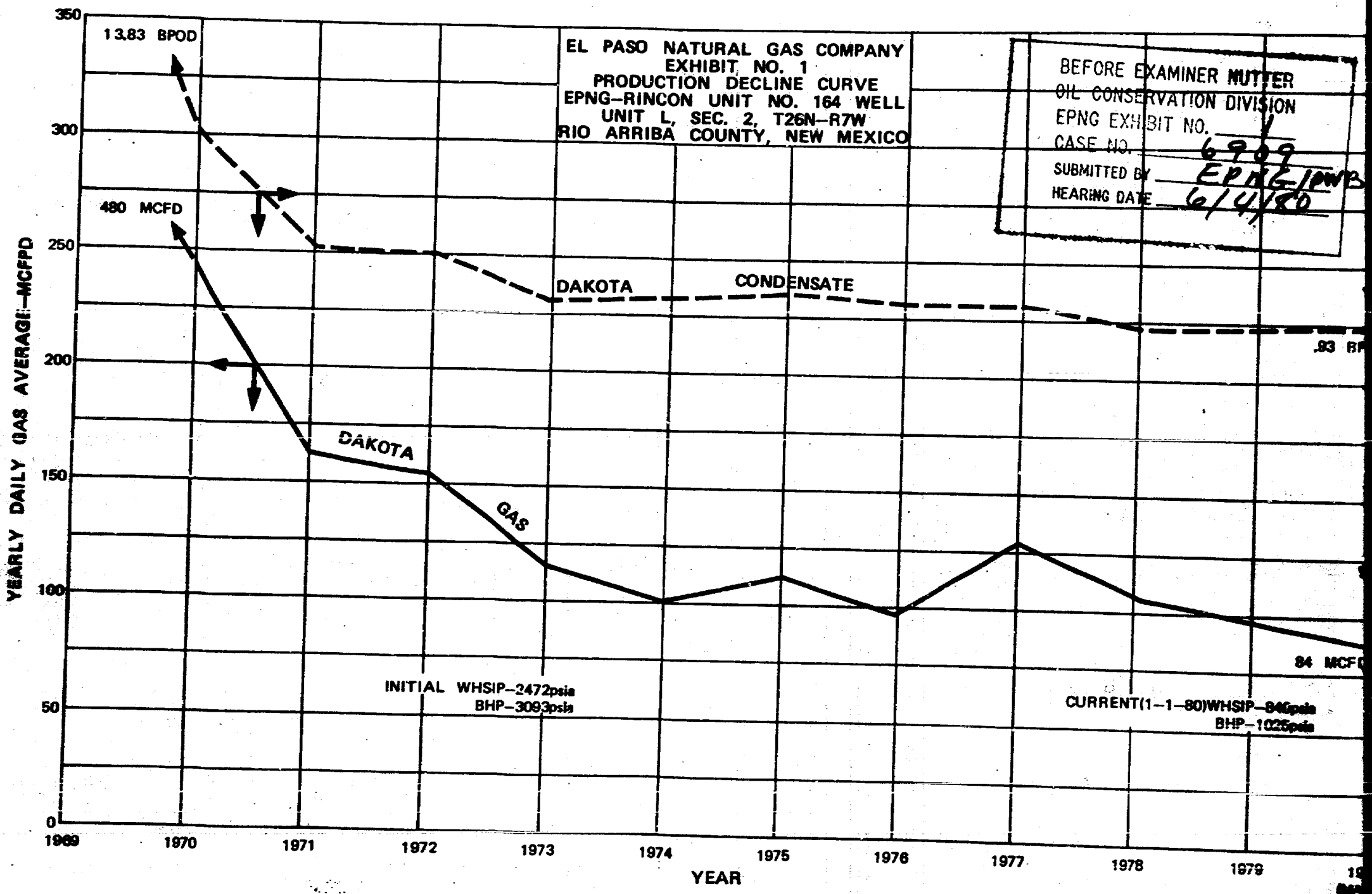

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RIO ARRIBA COUNTY, NEW MEXICO

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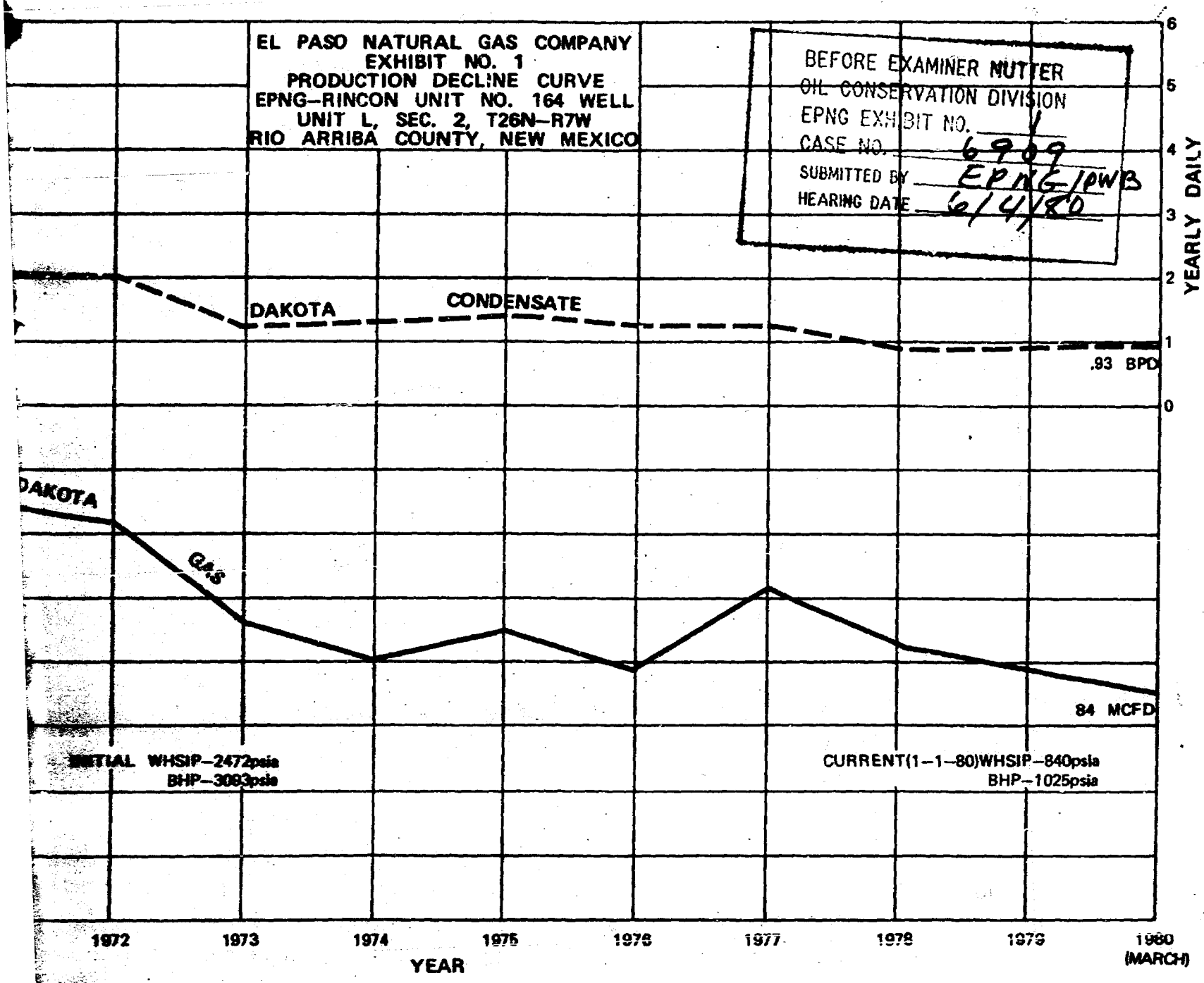

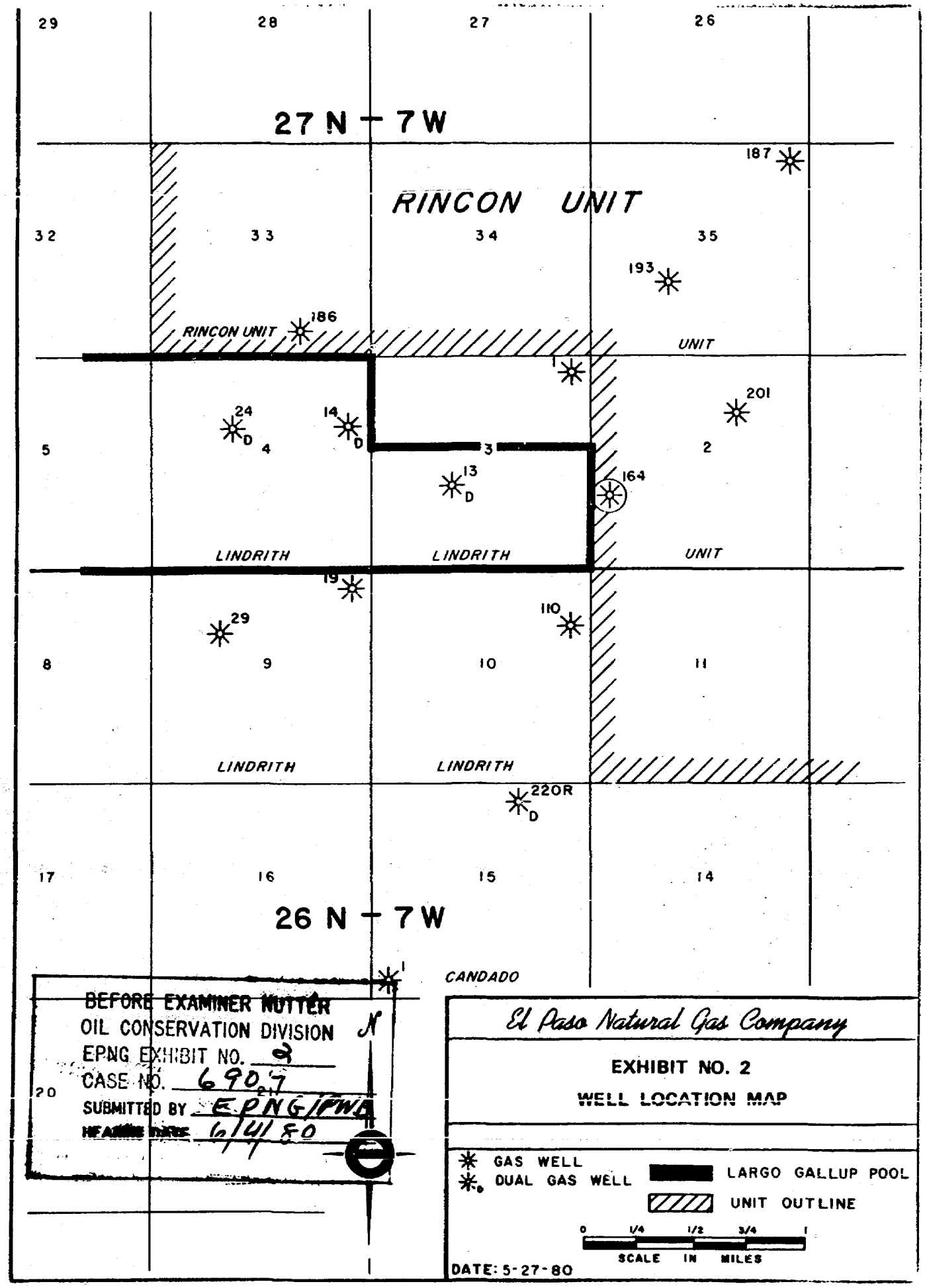
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BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EPNG EXHIBIT NO. 2
CASE NO. 6907
SUBMITTED BY EPNG/PWA
HEARING DATE 6/4/80
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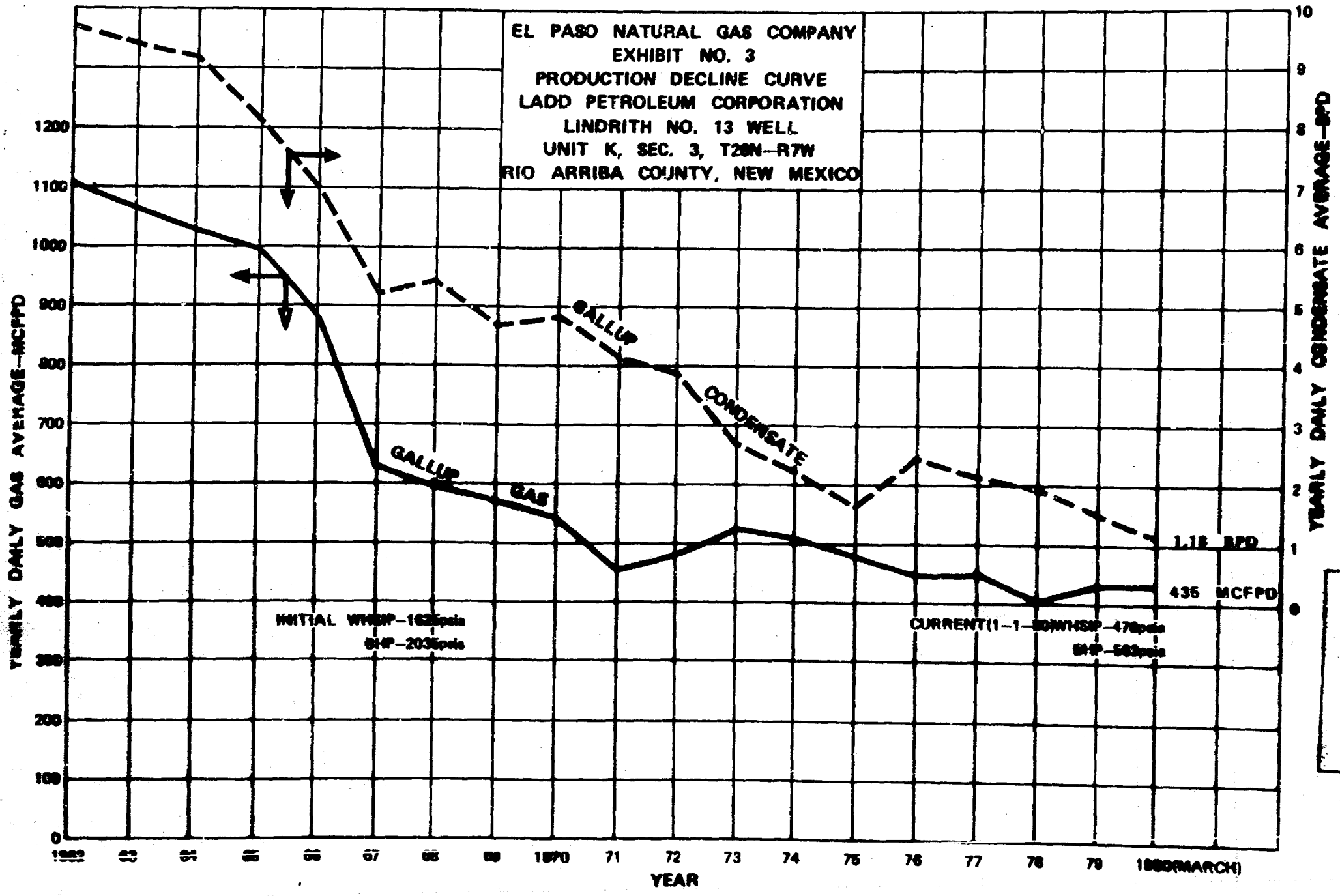
El Paso Natural Gas Company
EXHIBIT NO. 2
WELL LOCATION MAP
GAS WELL
DUAL GAS WELL
LARGO GALLUP POOL
UNIT OUTLINE
0 1/4 1/2 3/4 1
SCALE IN MILES
DATE: 5-27-80

EL PASO NATURAL GAS COMPANY
EXHIBIT NO. 3
PRODUCTION DECLINE CURVE
LADD PETROLEUM CORPORATION
LINDRITH NO. 13 WELL
UNIT K, SEC. 3, T26N–R7W
RIO ARRIBA COUNTY, NEW MEXICO



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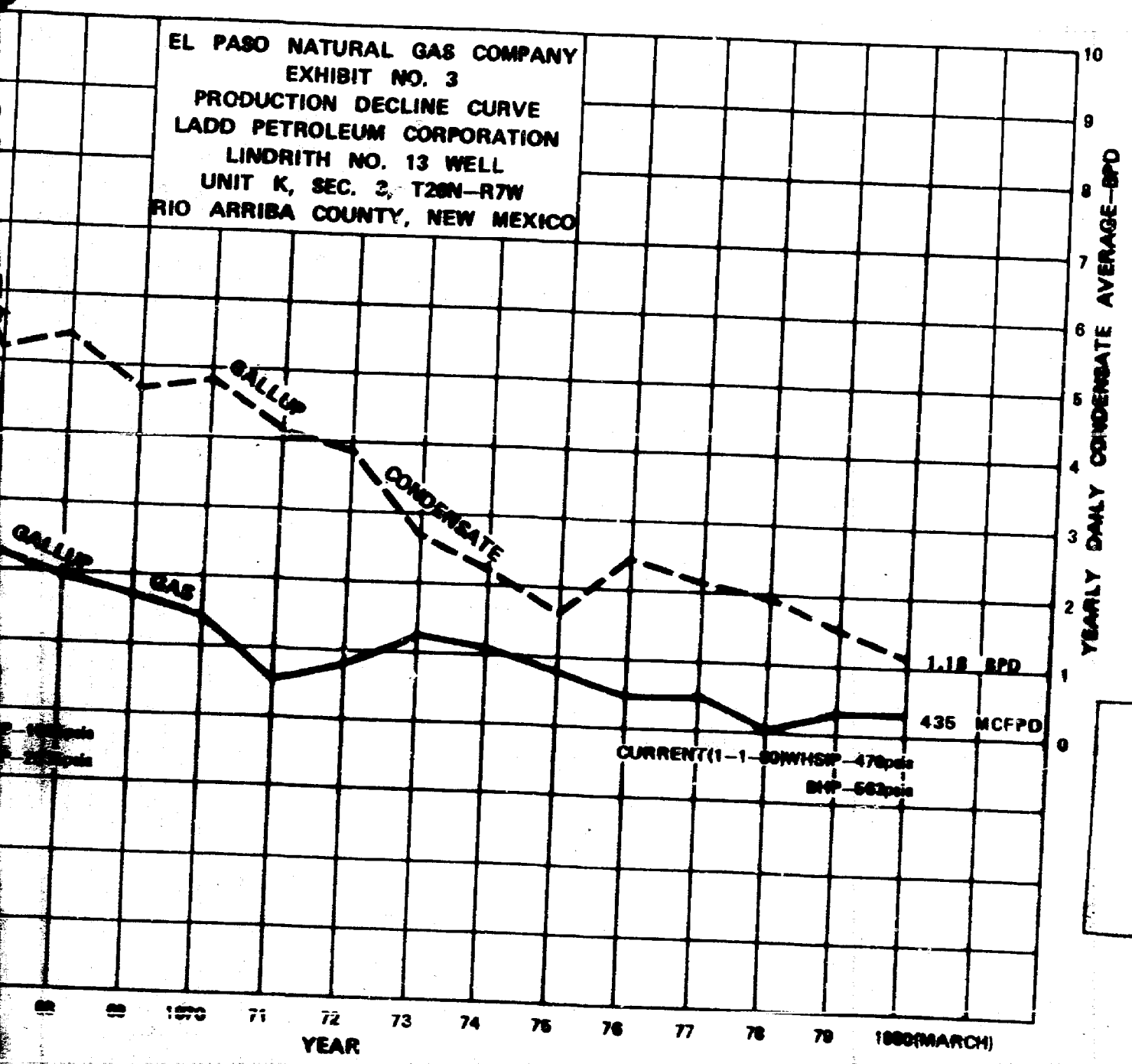
RIO ARRIBA COUNTY, NEW MEXICO



BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EPNG EXHIBIT NO. 3
CASE NO. 6909
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EL PASO NATURAL GAS COMPANY
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RIO ARRIBA COUNTY, NEW MEXICO

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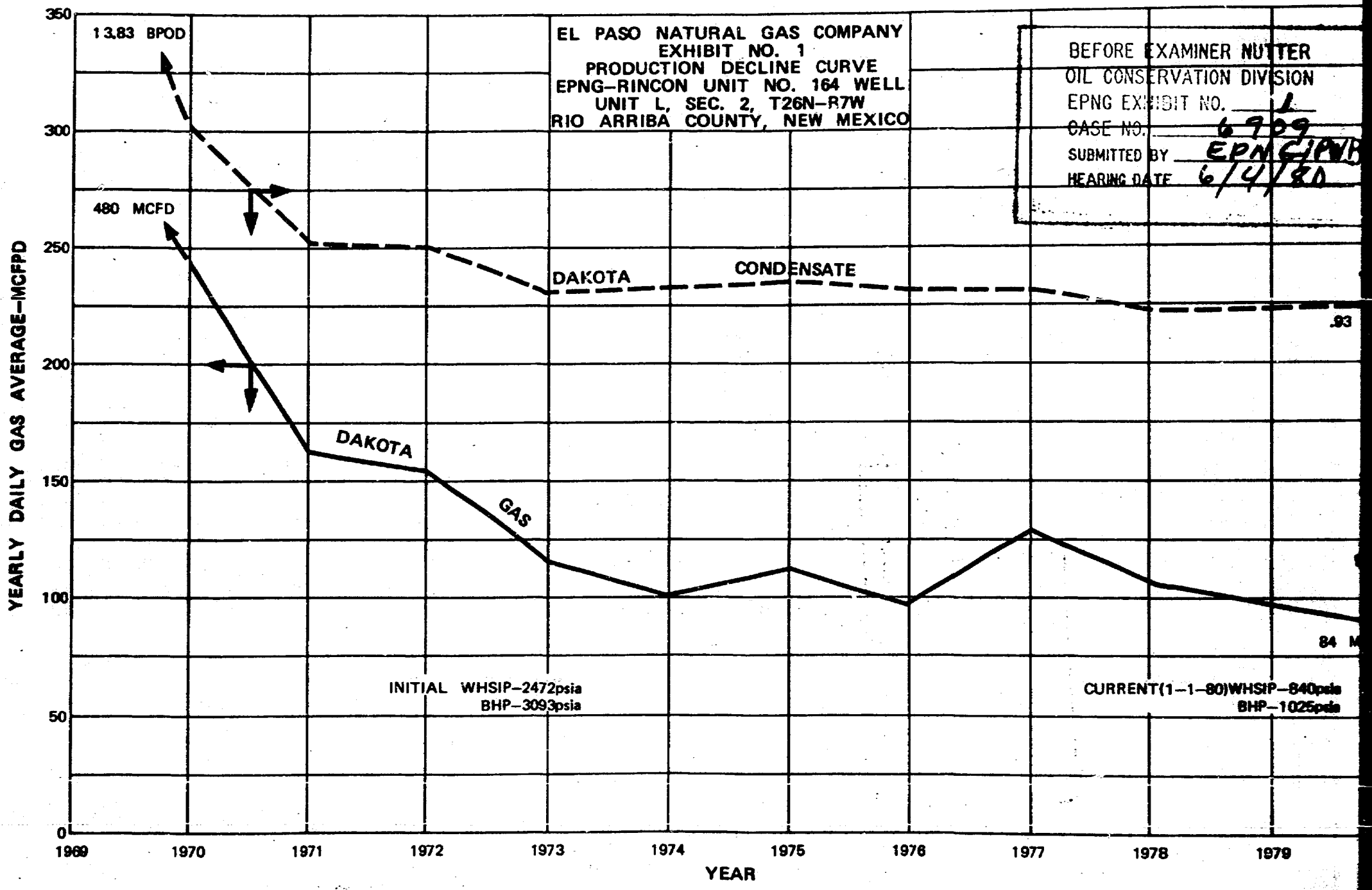

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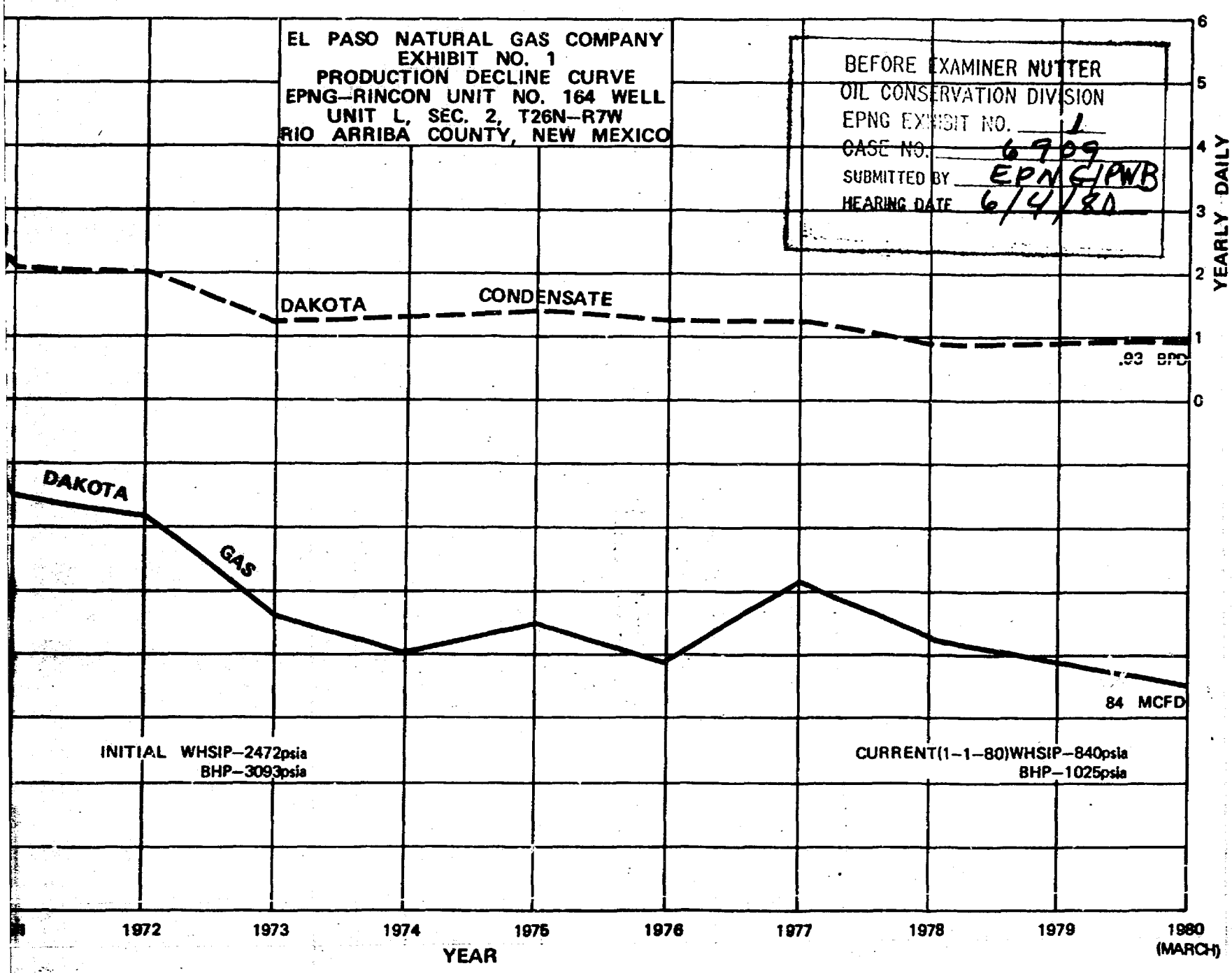

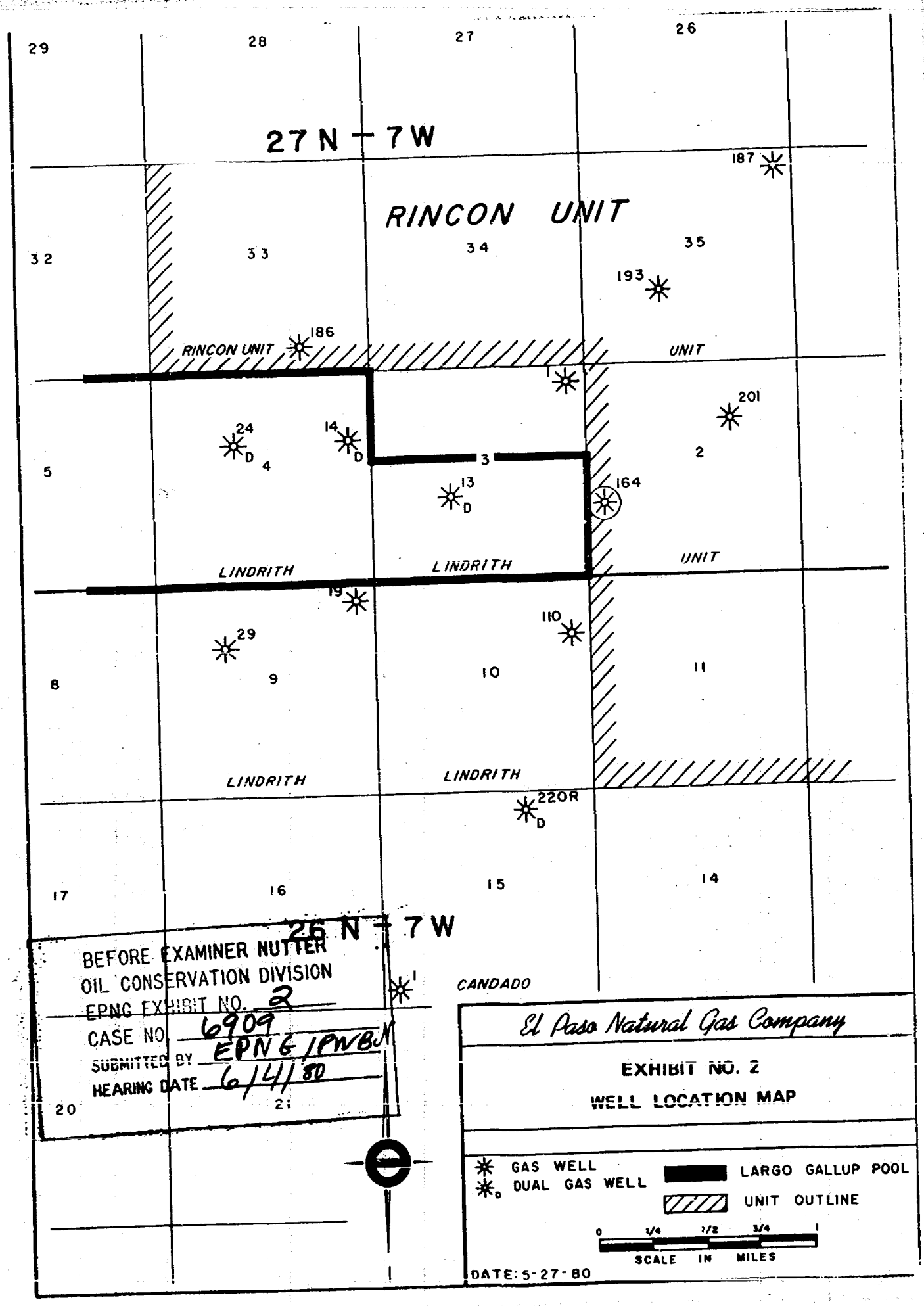
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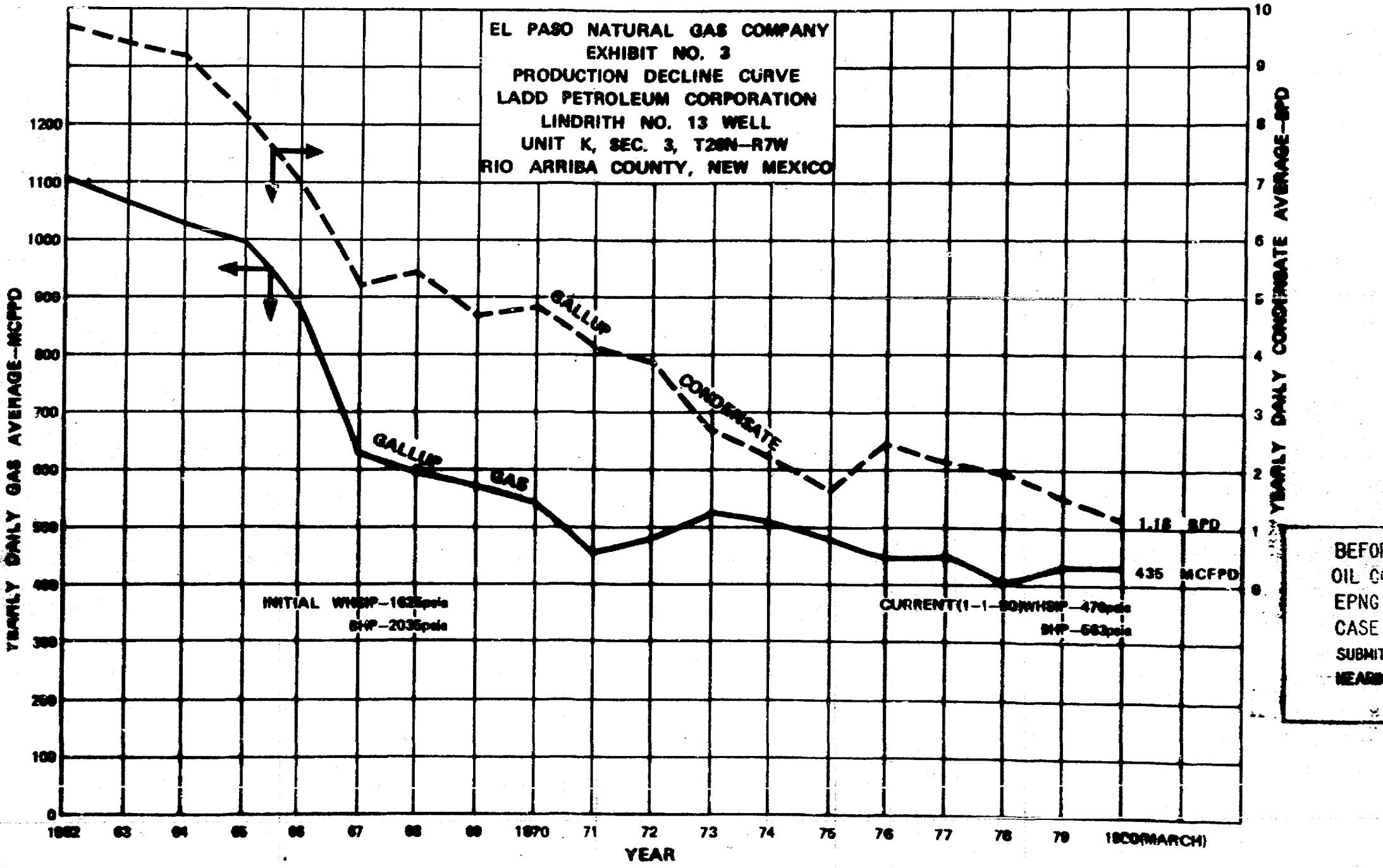

BEFORE
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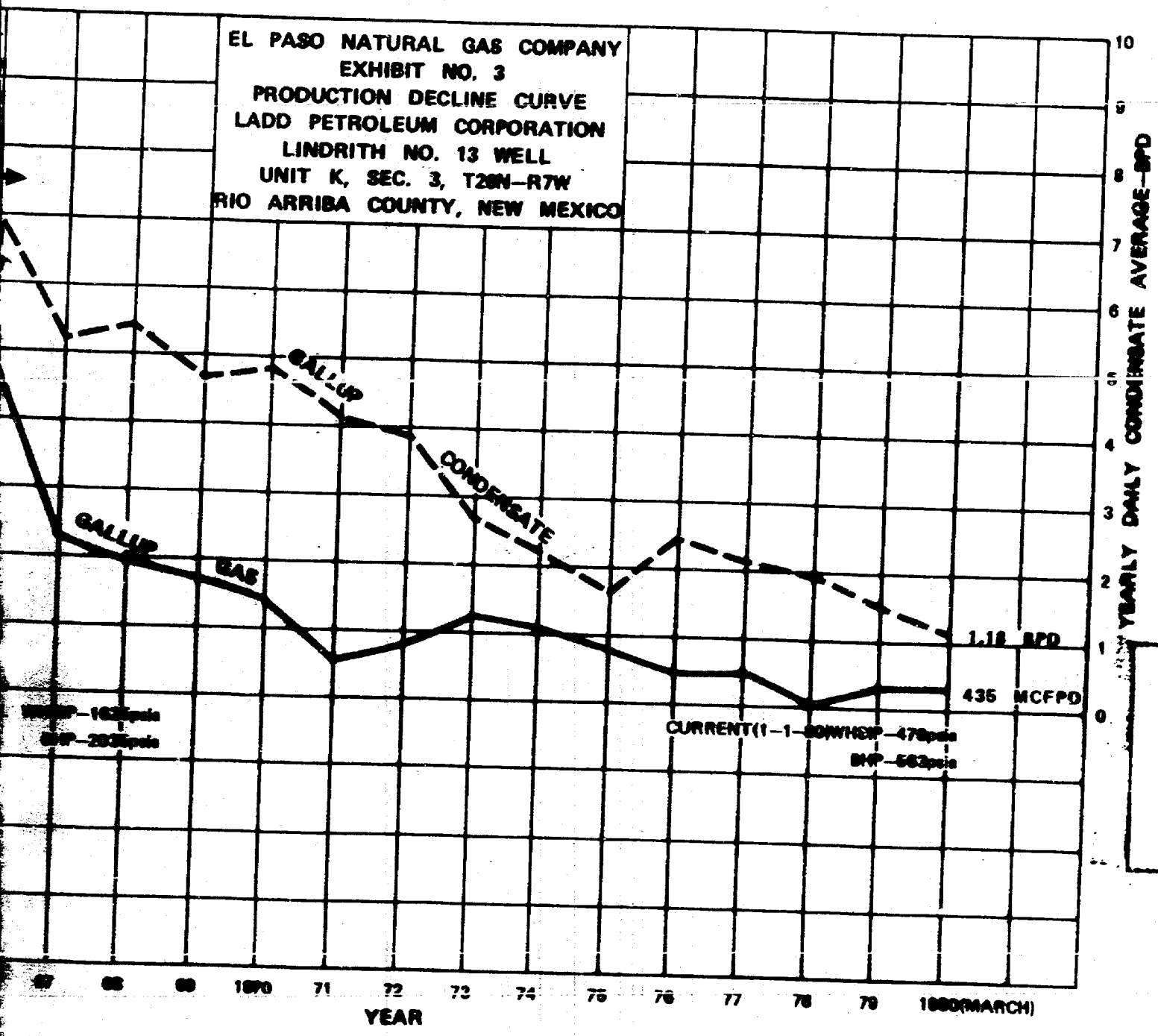
EL PASO NATURAL GAS COMPANY
EXHIBIT NO. 3
PRODUCTION DECLINE CURVE
LADD PETROLEUM CORPORATION
LINDRITH NO. 13 WELL
UNIT K, SEC. 3, T26N–R7W
RIO ARRIBA COUNTY, NEW MEXICO



BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EPNG EXHIBIT NO. 3
CASE NO. 6909
SUBMITTED BY EPNG/PWB
HEARING DATE 6/4/80

MONTGOMERY & ANDREWS
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS AT LAW
325 PASEO DE PERALTA
POST OFFICE BOX 2307
SANTA FE, NEW MEXICO 87501

TELEPHONE 505-982-3873

TELECOPY 505-982-4289

June 2, 1980

New Mexico Energy and
Minerals Department
Oil Conservation Division
Land Office Building
Santa Fe, New Mexico 87503

Re: NMOCD Case No. 6909 - Application of
El Paso Natural Gas Company for downhole
commingling, Rio Arriba County, New Mexico.

Gentlemen:

Please be advised that David T. Burleson of the office of General Counsel of El Paso Natural Gas Company, El Paso, Texas, is associated with our firm for the presentation of evidence and argument in the above-referenced case.

Sincerely,

John B. Draper

John B. Draper

JBD:jcd

Docket No. 17-80

Dockets Nos. 19-80 and 20-80 are tentatively set for June 25 and July 9, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - THURSDAY - JUNE 5, 1980

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 6927: Application of Doyle Hartman for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the S/2 of Section 24, Township 17 South, Range 28 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South and West lines of said Section 24. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 6928: Application of ARCO Oil and Gas Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the S/2 of Section 24, Township 17 South, Range 28 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

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Docket No. 16-80

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 4, 1980

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

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 6803: (Continued from April 23, 1980, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit EPROC Associates, Hartford Accident and Indemnity Company, and all other interested parties to appear and show cause why its Monsanto State H Well No. 1 located in Unit E of Section 2, Township 30 North, Range 16 West, San Juan County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6906: Application of Amoco Production Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its South Mattix Unit Well No. 39 located in Unit G of Section 15, Township 24 South, Range 37 East, to produce oil from the Fowler-Upper Yeso and Fowler-Drinkard Pools thru parallel strings of tubing.

CASE 6907: Application of Amoco Production Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Myers B Federal Well No. 28 located in Unit M of Section 9, Township 24 South, Range 37 East, to produce gas from the Jalmat and Langlie Mattix Pools thru parallel strings of tubing.

CASE 6908: Application of Estoril Producing Corporation for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Curry State Well No. 1, a Pennsylvanian test to be drilled 660 feet from the North and East lines of Section 22, Township 23 South, Range 34 East, Antelope Ridge Field, the N/2 of said Section 22 to be dedicated to the well.

CASE 6909: Application of El Paso Natural Gas Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Basin-Dakota and Largo-Gallup production in the wellbore of its Rincon Unit Well No. 164 located in Unit L of Section 2, Township 26 North, Range 7 West.

CASE 6886: (Continued from May 21, 1980, Examiner Hearing)

Application of Aminoil USA, Inc. for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the S/2 of Section 10, Township 24 South, Range 28 East, to be dedicated to a well to be drilled at an unorthodox location 2080 feet from the South line and 1773 feet from the East line of said Section 10. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6910: Application of Grace Petroleum Corporation for four compulsory poolings, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Gallup formation underlying four 40-acre proration units, being the SE/4 NE/4, the SE/4 NW/4, and the NW/4 NW/4 of Section 28, and the SW/4 SE/4 of Section 29, all in Township 24 North, Range 7 West, each to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the wells, and a charge for risk involved in drilling said wells.

CASE 6911: Application of Grace Petroleum Corporation for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Gallup formation underlying the NE/4 NW/4 of Section 11, Township 23 North, Range 7 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 6912: Application of Southland Royalty Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its State "14" Comm. Well No. 1 located in Unit E of Section 14, Township 19 South, Range 29 East, Turkey Track Field, to produce gas from the Morrow and Atoka formations thru tubing and the casing-tubing annulus, respectively

CASE 6913: Application of Kerr-McGee Corporation for an unorthodox well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its State F Well No. 14 to be drilled 1310 feet from the North line and 1330 feet from the West line of Section 2, Township 8 South, Range 33 East, Chaveroo-San Andres Pool.

CASE 6914: Application of Wilson Oil Company for a non-standard proration unit and unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the S/2 of Section 29, Township 20 South, Range 36 East, North Osudo-Morrow Gas Pool, to be dedicated to its State JD Well No. 1 at an unorthodox location 1650 feet from the South line and 1980 feet from the West line of said Section 29.

CASE 6915: Application of Jake L. Hamon for a non-standard gas proration unit and an unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the S/2 of Section 8, Township 20 South, Range 36 East, North Osudo-Morrow Gas Pool, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South line and 1980 feet from the West line of said Section 8,

CASE 6916: Application of Petro-Lewis Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of the Drinkard and Blinebry production in the wellbore of its State DC Well No. 1, a quadruple completion located in Unit F of Section 19, Township 21 South, Range 37 East.

CASE 6917: Application of Yates Petroleum Corporation for an NGPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination for its Goat Roper "LP" Com. Well No. 1 located in Unit P of Section 30, Township 17 South, Range 26 East.

CASE 6918: Application of Yates Petroleum Corporation for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Upper Penn and Morrow gas production in the wellbore of its Kennedy "JQ" Com. Well No. 1 located in Unit H of Section 33, Township 17 South, Range 26 East, Kennedy Farms Field.

CASE 6919: Application of Yates Petroleum Corporation for downhole commingling or consolidation of two pools, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Wolfcamp and Penn gas production in the wellbore of its Anderson State "CS" Com. Well No. 1-Y located in Unit G of Section 14, and its Fordinkus State "HZ" Com. Well No. 1 located in Unit G of Section 22, both in Township 18 South, Range 24 East, or, in the alternative, the consolidation of the Fordinkus-Cisco Gas Pool and the Penasco Draw Permo-Penn Gas Pool into one Permo-Penn gas pool to include the above-described wells.

CASE 6920: Application of Yates Petroleum Corporation for a dual completion and unorthodox well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its 5 Mile Draw Federal Well No. 1 to produce from the Pennsylvanian and Abo formations thru the tubing and casing-tubing annulus, respectively; applicant also seeks approval for the unorthodox location of said well in the Abo formation 800 feet from the South line and 2100 feet from the East line of Section 34, Township 6 South, Range 25 East, the SE/4 of the section to be dedicated to the well.

CASE 6903: (Continued from May 21, 1980, Examiner Hearing)

Application of Harvey E. Yates Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Pennsylvanian-Mississippian test well to be drilled 660 feet from the South line and 990 feet from the East line of Section 33, Township 13 South, Range 36 East, the S/2 of said Section 33 to be dedicated to the well.

CASE 6904: (Continued from May 21, 1980, Examiner Hearing)

Application of Harvey E. Yates Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the McDonald Unit Area, comprising 1,440 acres, more or less, of fee lands in Townships 13 and 14 South, Range 36 East.

CASE 6921: Application of Harvey E. Yates Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Mississippian formations underlying the S/2 of Section 33, Township 13 South, Range 36 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South and East lines of Section 33. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 6922: Application of Harvey E. Yates Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Pennsylvanian formations underlying the E/2 of Section 24, Township 18 South, Range 28 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6923: Application of Harvey E. Yates Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Cayton-Austin Unit Area, comprising 960 acres, more or less, of State and fee lands in Township 14 South, Range 36 East.

CASE 6924: Application of Caribou Four Corners, Inc. for two unorthodox oil well locations, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of two wells to be drilled, the first being 860 feet from the North line and 2090 feet from the West line, and the second being 910 feet from the North line and 395 feet from the West line, both in Section 13, Township 29 North, Range 15 West, Cha Cha-Gallup Oil Pool, the E/2 and the W/2, respectively, of the NW/4 of said Section 13 to be dedicated to the wells.

CASE 6925: Application of Caribou Four Corners, Inc. for two exceptions to Rule 306, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 306 of the Division Rules and Regulations to permit the permanent flaring of gas from its Kirtland Wells Nos. 1 and 2, located in Units A and B, respectively, of Section 13, Township 29 North, Range 15 West.

CASE 6889: (Readvertised)

Application of Belco Petroleum Corporation for directional drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill a well, the surface location of which is 1980 feet from the North line and 920 feet from the West line of Section 36, Township 22 South, Range 30 East, in such a manner as to bottom it at an unorthodox location within 660 feet of a point 1320 feet from the North line and 2640 feet from the West line of said Section 36 in the Morrow formation, the N/2 of said Section 36 to be dedicated to the well.

CASE 6896: (Continued from May 21, 1980, Examiner Hearing)

Application of John E. Schalk for a non-standard gas proration unit and an unorthodox gas well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard Blanco Mesaverde gas proration unit comprising the NE/4 of Section 8, Township 25 North, Range 3 West, to be dedicated to his Gulf Well No. 2 to be drilled at an unorthodox location 1925 feet from the North line and 790 feet from the East line of said Section 8.

CASE 6926: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating, contracting vertical limits, and extending horizontal limits of certain pools in Chaves, Eddy, and Lea Counties, New Mexico:

(a) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Pennsylvanian production and designated as the Arkansas Junction-Pennsylvanian Pool. The discovery well is Rex Alcorn Bobbi Well No. 1Y located in Unit J of Section 20, Township 18 South, Range 36 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 36 EAST, NMPM
Section 20: SE/4

(b) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Delaware production and designated as the Avalon-Delaware Pool. The discovery well is MWJ Producing Company State GW Well No. 1 located in Unit K of Section 36, Township 20 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 27 EAST, NMPM
Section 36: SW/4

(c) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Delaware production and designated as the East Burton-Delaware Pool. The discovery well is J. C. Williamson TOG Federal Well No. 1 located in Unit F of Section 16, Township 20 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 29 EAST, NMPM
Section 16: NW/4

(d) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Strawn production and designated as the Dog Canyon-Strawn Gas Pool. The discovery well is Harvey E. Yates Company Gates Federal Deep Well No. 1 located in Unit P of Section 6, Township 17 South, Range 28 East, NMPM. Said pool would comprise:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM
Section 6: S/2

(e) CREATE a new pool in Chaves County, New Mexico, classified as an oil pool for San Andres production and designated as the South Double L-San Andres Pool. The discovery well is McClellan Oil Corporation Mark Federal Well No. 1 located in Unit I of Section 30, Township 15 South, Range 30 East, NMPM. Said pool would comprise:

TOWNSHIP 15 SOUTH, RANGE 30 EAST, NMPM
Section 30: SE/4

(f) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Grayburg production and designated as the Empire-Grayburg Gas Pool. The discovery well is Carl A. Schellinger West Federal Well No. 1 located in Unit G of Section 14, Township 17 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 17 SOUTH, RANGE 27 EAST, NMPM
Section 14: NE/4

(g) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the North Hume-Morrow Gas Pool. The discovery well is Bass Enterprises Production Company Bass 36 State Well No. 1 located in Unit E of Section 36, Township 15 South, Range 34 East, NMPM. Said pool would comprise:

TOWNSHIP 15 SOUTH, RANGE 34 EAST, NMPM
Section 36: W/2

(h) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Atoka production and designated as the Lusk-Atoka Gas Pool. The discovery well is Phillips Petroleum Company Lusk Deep Unit A Com Well No. 13 located in Unit K of Section 18, Township 19 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM
Section 18: S/2

(i) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Milepost-Morrow Gas Pool. The discovery well is Exxon Corporation Scheidt Federal Well No. 1 located in Unit L of Section 30, Township 26 South, Range 26 East, NMPM. Said pool would comprise:

TOWNSHIP 26 SOUTH, RANGE 25 EAST, NMPM
Section 36: N/2 N/2 and Lots, 1, 2, 3, and 4

TOWNSHIP 26 SOUTH, RANGE 26 EAST, NMPM
Section 30: S/2
Section 31: N/2 NW/4 and Lots 3 and 4

(j) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Turkey Track-Atoka Gas Pool. The discovery well is Tenneco Oil Company State HL 11 Well No. 1 located in Unit N of Section 11, Township 19 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM
Section 10: E/2
Section 11: S/2

(k) CONTRACT the vertical limits of the East Grama Ridge-Bone Springs Pool to the interval from 10,472 feet to 10,900 feet as found on the type log for the Getty Oil Company State 35 Well No. 1 located in Unit K of Section 35, Township 21 South, Range 34 East, NMPM, and redesignate said pool as the East Grama Ridge-Lower Bone Springs Pool.

(l) EXTEND the Airstrip-Upper Bone Springs Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM
Section 25: W/2 SW/4
Section 26: SE/4

(m) EXTEND the Atoka-Yeso Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 26 EAST, NMPM
Section 33: NW/4 and N/2 S/2

(n) EXTEND the Brunson-Fusselman Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
Section 8: SE/4

(o) EXTEND the Buckeye-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 35 EAST, NMPM
Section 9: NW/4

(p) EXTEND the Burton Flat-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 26 EAST, NMPM
Section 13: W/2
Section 14: E/2

(q) EXTEND the Catclaw Draw-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 26 EAST, NMPM
Section 34: S/2

TOWNSHIP 21 SOUTH, RANGE 25 EAST, NMPM
Section 2: Lots 1 through 8

(r) EXTEND the Chaveroo-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 7 SOUTH, RANGE 32 EAST, NMPM
Section 34: NE/4

TOWNSHIP 8 SOUTH, RANGE 32 EAST, NMPM
Section 3: SW/4

(s) EXTEND the Cinta Roja-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 35 EAST, NMPM
Section 4: All

(t) EXTEND the South Corbin-Strawn Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM
Section 29: N/2
Section 30: N/2

(u) EXTEND the South Corbin-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM
Section 28: W/2

(v) EXTEND the Crooked Creek-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 24 EAST, NMPM
Section 8: S/2

(w) EXTEND the South Empire-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM
Section 17: All

(x) EXTEND the East Grama Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM
Section 12: W/2

(y) EXTEND the Hat Mesa-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM
Section 10: W/2

(z) EXTEND the Henshaw Queen-Grayburg-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 30 EAST, NMPM
Section 11: SW/4 SW/4
Section 14: S/2 and W/2 NW/4
Section 15: E/2 SE/4

(aa) EXTEND the Hobbs-Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 38 EAST, NMPM
Section 4: SE/4

(bb) EXTEND the Indian Flats-Delaware Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 28 EAST, NMPM
Section 2: N/2 NE/4

(cc) EXTEND the South Kemnitz Atoka-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 34 EAST, NMPM
Section 29: W/2

(dd) EXTEND the Logan Draw-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 27 EAST, NMPM
Section 19: N/2 NE/4 and SE/4 NE/4

(ee) EXTEND the Middle Lynch Yates-Seven Rivers Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM
Section 21: E/2 SW/4

(ff) EXTEND the Penasco Draw San Andres-Yeso Associated Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM
Section 31: SW/4

(gg) EXTEND the East Red Lake Queen-Grayburg Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 28 EAST, NMPM
Section 25: S/2 S/2
Section 26: S/2 SE/4 and SE/4 SW/4
Section 36: N/2 NW/4

(hh) EXTEND the North Shugart-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 31 EAST, NMPM
Section 17: S/2

(ii) EXTEND the Tomahawk-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 7 SOUTH, RANGE 31 EAST, NMPM
Section 25: SE/4

(jj) EXTEND the Turkey Track Seven Rivers-Queen-Grayburg Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM
Section 9: E/2 NE/4

(kk) EXTEND the North Vacuum-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM
Section 17: NW/4

(ll) EXTEND the Winchester-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM
Section 3: All

(mm) EXTEND the Winchester-Upper Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM
Section 30: W/2

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Docket No. 18-80

DOCKET: EXAMINER HEARING - THURSDAY - JUNE 19, 1980

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

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

ALLOWABLE: (1) Consideration of the allowable production of gas for July, 1980, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.

(2) Consideration of the allowable production of gas for July, 1980, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

El Paso NATURAL GAS COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-543-2600

May 5, 1980

Case 6909

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

El Paso Natural Gas Company respectfully requests permission to downhole commingle production from the Basin-Dakota and Largo Gallup Pools in the wellbore of the Rincon Unit No. 164 located in Unit L, Section 2, Township 26N, Range 7W, Rio Arriba County, New Mexico. This well is presently a single Dakota Formation completion in the Basin-Dakota Pool. El Paso seeks permission to perforate and complete the Gallup Formation and produce both the Dakota and Gallup gas and condensate through one string of tubing. Allocation of the gas and condensate to each producing formation would be made by applying a suitable formula to the combined measured flow from the well.

Please set this matter for examiner hearing at your next possible date.

If there are any questions concerning this matter, please call me.

Very truly yours,

E. R. Manning

E. R. Manning

je

El Paso NATURAL GAS COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-543-2600

May 5, 1980

Case 6909

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

El Paso Natural Gas Company respectfully requests permission to downhole commingle production from the Basin-Dakota and Largo Gallup Pools in the wellbore of the Rincon Unit No. 164 located in Unit L, Section 2, Township 26N, Range 7W, Rio Arriba County, New Mexico. This well is presently a single Dakota Formation completion in the Basin-Dakota Pool. El Paso seeks permission to perforate and complete the Gallup Formation and produce both the Dakota and Gallup gas and condensate through one string of tubing. Allocation of the gas and condensate to each producing formation would be made by applying a suitable formula to the combined measured flow from the well.

Please set this matter for examiner hearing at your next possible date.

If there are any questions concerning this matter, please call me.

Very truly yours,

E. R. Manning

E. R. Manning

je

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6909

Order No. R-6375

APPLICATION OF EL PASO NATURAL GAS COMPANY

FOR DOWNHOLE COMMINGLING, RIO ARRIBA

COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on June 4, 19 80, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of June, 19 80, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, El Paso Natural Gas Company, is the owner and operator of the Rincon Unit Well No. 164, located in Unit L of Section 2, Township 26 North, Range 7 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant seeks authority to commingle Basin-Dakota and Largo-Gallup production within the wellbore of the above-described well.

(4) That from the Basin-Dakota zone, the subject well is capable of low marginal production only.

(5) That from the Largo-Gallup zone, the subject well is expected to be capable of low marginal production only.

(6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, _____ percent of the commingled _____ production should be allocated to the Basin-Dakota zone, and _____ percent of the commingled _____ production to the Largo-Gallup zone.

(ALTERNATE)

(9) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

(10) That the Division should reserve the right to rescind the authority for down hole commingling of the subject zones in the subject well if the reservoir and producing characteristics of the Gallup zone prove to be incompatible with the Dakota zone and waste would be prevented by such rescission.

IT IS THEREFORE ORDERED:

(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle Basin-Dakota and Largo-Gallup production within the wellbore of the Rincon Unit Well No. 164, located in Unit L of Section 2, Township 26 North, Range 7 West, NMPM, Rio Arriba County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in each of the subject wells.

(ALTERNATE)

(2) That _____ percent of the commingled _____ production shall be allocated to the Basin-Dakota zone and _____ percent of the commingled _____ production shall be allocated to the Largo-Gallup zone.

(3) That the operator of the subject well shall immediately notify the Division's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present to the Division, a plan for remedial action.

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

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

(4) That the Division reserves the right to rescind the commingling authority herein contained if the reservoir and producing characteristics of the Gallup zone in the subject well are incompatible with continued commingling of said zone with the Basin Dakota Pool and if it appears that waste will be prevented by such rescission.

DRAFT

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

CASE NO. 6909

Order No. R- 6375-A

APPLICATION OF EL PASO NATURAL GAS COMPANY FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE DIVISION:

It appearing to the Division that Order No. R- 6375, dated June 18, 1980, does not correctly state the intended order of the Division,

IT IS THEREFORE ORDERED:

1. That ~~Paragraph~~ Order No. "(4)" on Page 2 of Order No. R-6375, Case No. 6909, be and the same is hereby corrected to read as follows:

"(4) That the Division reserves the right to rescind the commingling authority herein contained if the reservoir and producing characteristics of the Gallup zone in the subject well are incompatible to efficient commingling of said zone with the Basin Dakota Pool and if it appears that waste will be prevented by such rescission."

2. That the correction set forth in this order be ~~ordered~~ effective nunc pro tunc as of June 18, 1980.

DONE at Santa Fe, New Mexico, on this _____ day of August, 1980.