

CASE 6839: KIMBELL OIL COMPANY FOR
DOWNHOLE COMINGLING, RIO ARriba COUNTY,
NEW MEXICO

CASE NO.

6839

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

ETC.

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

EXAMINER HEARING

IN THE MATTER OF:

Application of Kimbell Oil Company) CASE
for downhole commingling, Rio) 6839
Arriba County, New Mexico.)

BEFORE: Richard L. Stamets

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:

W. Thomas Kellahin, Esq.
KELLAHIN & KELLAHIN
500 Don Gaspar
Santa Fe, New Mexico 87501

SALLY W. BOYD, C.S.R.

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I N D E X

E. A. CLEMENT

Direct Examination by Mr. Kellahin 3

Cross Examination by Mr. Stamets 10

E X H I B I T S

Applicant Exhibit One, Map 4

Applicant Exhibit Two, Tabulation 6

Applicant Exhibit Three, Tabulation 8

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1 MR. STAMETS: We'll call next Case 6839.

2 MR. PADILLA: Application for Kimbell
3 Oil Company for downhole commingling, Rio Arriba County,
4 New Mexico.

5 MR. STAMETS: Call for appearances.

6 MR. KELLAHIN: If the Examiner please,
7 I'm Tom Kellahin of Santa Fe, New Mexico, appearing on be-
8 half of the Applicant, and I have one witness.

9 MR. STAMETS: Any other appearances?
10 I'd like to have the witness stand and be sworn, please.

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12 (Witness sworn.)

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

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18 DIRECT EXAMINATION

19 BY MR. KELLAHIN:

20 Q Mr. Clement, would you please tell us
21 your name, your address, and by whom you're employed?

22 A E. A. Clement. My address is 906 North
23 Watson, Farmington, New Mexico. I'm employed by Kimbell
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25 Q In what capacity are you employed?

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9 Q Are you a geologist or a petroleum en-
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11 A I'm a geologist.

12 MR. KELLAHIN: We tender Mr. Clement as
13 an expert geologist.

14 MR. STAMETS: The witness is considered
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17 as Applicant Exhibit Number One and identify for us the
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7 A That's right.

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Q Yes, sir, are the gases compatible for commingling?

A It's quite similar, quite similar in BTU's.

Q All right. In your opinion, Mr. Clement, will approval of this application be in the best interests of conservation, prevention of waste, and the protection of correlative rights?

A Yes, I believe it will.

Q Were Exhibits One, Two, and Three prepared by you or compiled under your direction and supervision?

A Prepared by me.

MR. KELLAHIN: We move the introduction of Exhibits One, Two, and Three.

MR. STAMETS: The exhibits will be admitted.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Clement, when you talk about the liquids not being appreciable, what volume are you discussing?

A In the well we're producing, we don't get any distillate at all. It's only water, and it's a matter of five, six, gallons a day. It's very difficult to

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3 Q Which zone does that come from?

4 A Mostly from the Chacra. We do -- we do
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6 the way we're producing this well through the casing, you
7 can't blow it off and it's a matter of so much liquid get-
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16 A Oh, in depth, the Pictured Cliffs is
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19 Q And how do you anticipate the well will
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24 Q Now you indicated that other wells were
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1 the area. Do you have -- what do you mean by area, northwest
2 New Mexico, or --

3 A No, in the immediate area. Amerada Hess
4 Company has several wells to the east of us and it would be
5 in 25 North and 5 West. I don't -- I believe three wells
6 they have in there. I know there's several more. I see
7 where they -- you have had hearings in the past on them,
8 and I can't name the companies. I'm not --

9 Q What sort of potentials do you anticipate
10 in these zones?

11 A The most that I would expect from the
12 Pictured Cliffs would be 1000 -- be able to produce, would
13 be 1000 Mcf per month. That would be the top.

14 Q Okay.

15 A Probably won't make that much.
16 From the Chacra I think we might make
17 3000 Mcf per month.

18 MR. STAMETS: Any other questions of the
19 witness? He may be excused.

20 Anything further in this case?

21 MR. KELLAHIN: No, sir.

22 MR. STAMETS: The case will be taken
23 under advisement.
24

25 (Hearing concluded.)

REPORTER'S CERTIFICATE

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.

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I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6839 heard by me on 3-26 1980.
Richard H. Stamm, Examiner
Oil Conservation Division

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16 From the Chacra I think we might make
17 3000 Mcf per month.

18 MR. STAMETS: Any other questions of the
19 witness? He may be excused.

20 Anything further in this case?

21 MR. KELLAMIN: No, sir.

22 MR. STAMETS: The case will be taken
23 under advisement.

24

25

(Hearing concluded.)

REPORTER'S CERTIFICATE

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. _____, heard by me on _____ 19____.

_____, Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.

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

R 6 W

BEFORE EXAMINER
OIL CONSERVATION

K.L.// EXHIBIT NO. 24

CASE NO. 683

Submitted by

Hearing Date 2/27

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V. SALAZAR

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V. SALAZAR

C. J. WARREN

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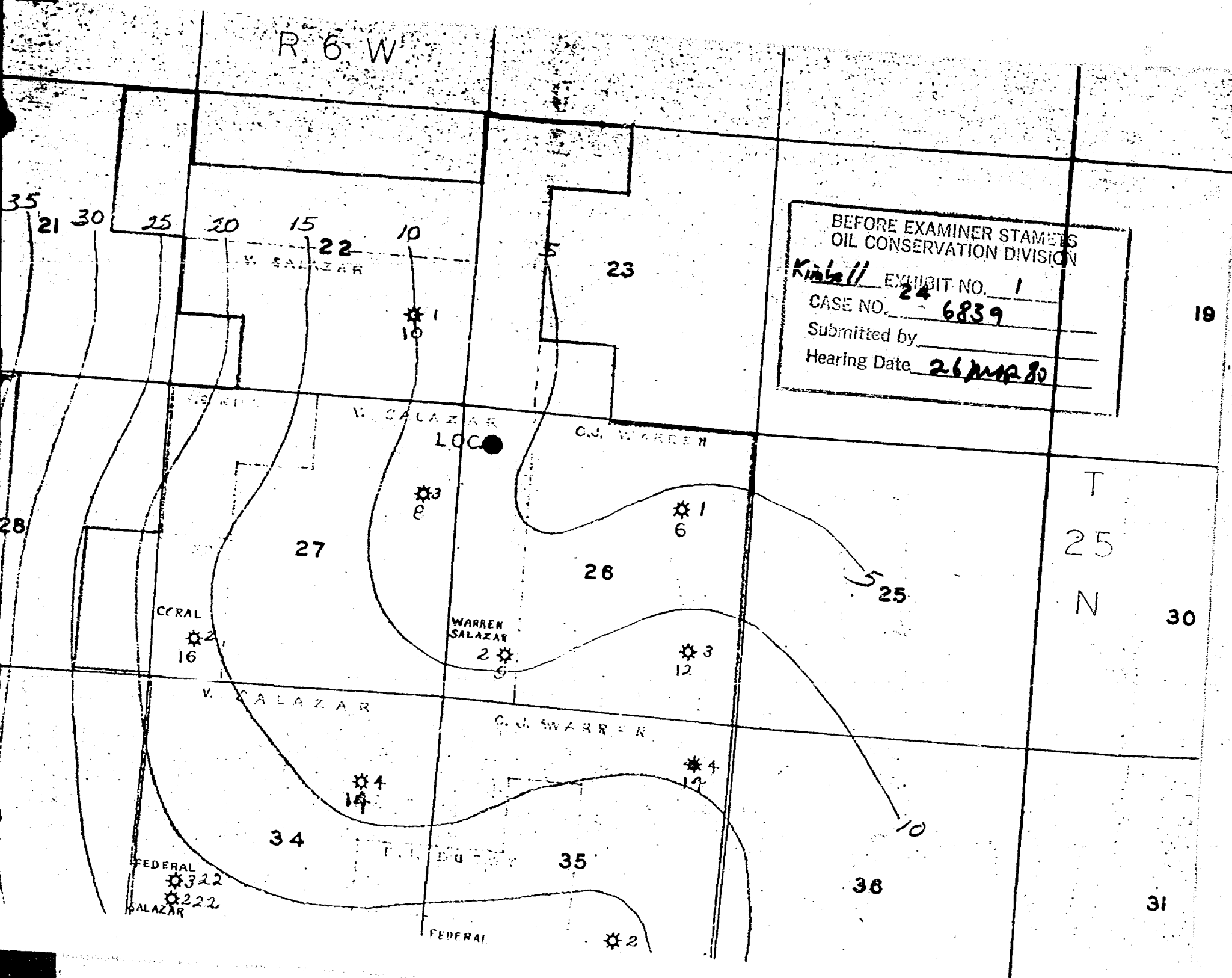
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F. L. DUFFY

FEDERAL

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YEARLY SHUT IN PRESSURES OF PICTURED CLIFFS & CHACRA ZONES
(As filed on packer leakage tests)

Kimbell Oil Company
Salazar No. 1
Unit J, Section 22, T25N, R6W
Rio Arriba County, New Mexico

YEAR	PICTURED CLIFFS Press. PSIG	CHACRA Press. PSIG	DIFFERENCE FACTOR
1959	865	964	1.114
1960	N.A.	N.A.	N.A.
1961	449	450	1.002
1962	387	499	1.289
1963	370	500	1.351
1964	340	460	1.352
1965	350	473	1.351
1966	360	460	1.277
1967	331	451	1.362
1968	317	440	1.388
1969	299	397	1.327
1970	263	342	1.300
1971	268	342	1.276
1972	250	350	1.400
1973	250	310	1.240
1974	234	300	1.282
1975	235	310	1.319
1976	244	281	1.151
1977	240	375	1.562
1978	260	310	1.192
1979	210	300	1.428

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION

Kimbell EXHIBIT NO. 2

CASE NO. 6839

Submitted by

Hearing Date 26 MAR 80

GAS PRODUCTION AND RESERVOIR PRESSURES.

Kimbell Oil Company
Salazar No. 1, (1-22)
SE 1/4 Sec. 22, T25N, R6W
Rio Arriba County, New Mexico

Year	<u>PICTURED CLIFFS</u>		<u>CHACRA</u>	
	<u>Prod.</u> <u>MCF</u>	<u>Pressure</u> <u>P.S.I.G.</u>	<u>Prod.</u> <u>MCF</u>	<u>Pressure</u> <u>P.S.I.G.</u>
1959	23,264	865	19,218	904
1960	24,424	-	42,041	-
1961	20,988	449	20,252	450
1962	18,755	387	26,641	499
1963	14,121	370	29,610	500
1964	15,081	340	32,062	460
1965	13,056	350	28,016	473
1966	11,678	360	31,071	460
1967	10,714	331	29,440	451
1968	12,040	317	29,590	440
1969	11,161	299	28,727	397
1970	10,731	263	25,988	342
1971	10,577	268	26,255	342
1972	10,257	250	27,819	350
1973	9,887	250	25,431	310
1974	9,186	234	23,571	300
1975	9,914	235	22,915	310
1976	9,090	244	22,112	281
1977	8,661	240	20,635	375
1978	9,173	260	20,743	310
1979	4,318	210 (then June) 1,709	200	
TOTAL	267,076		540,246	

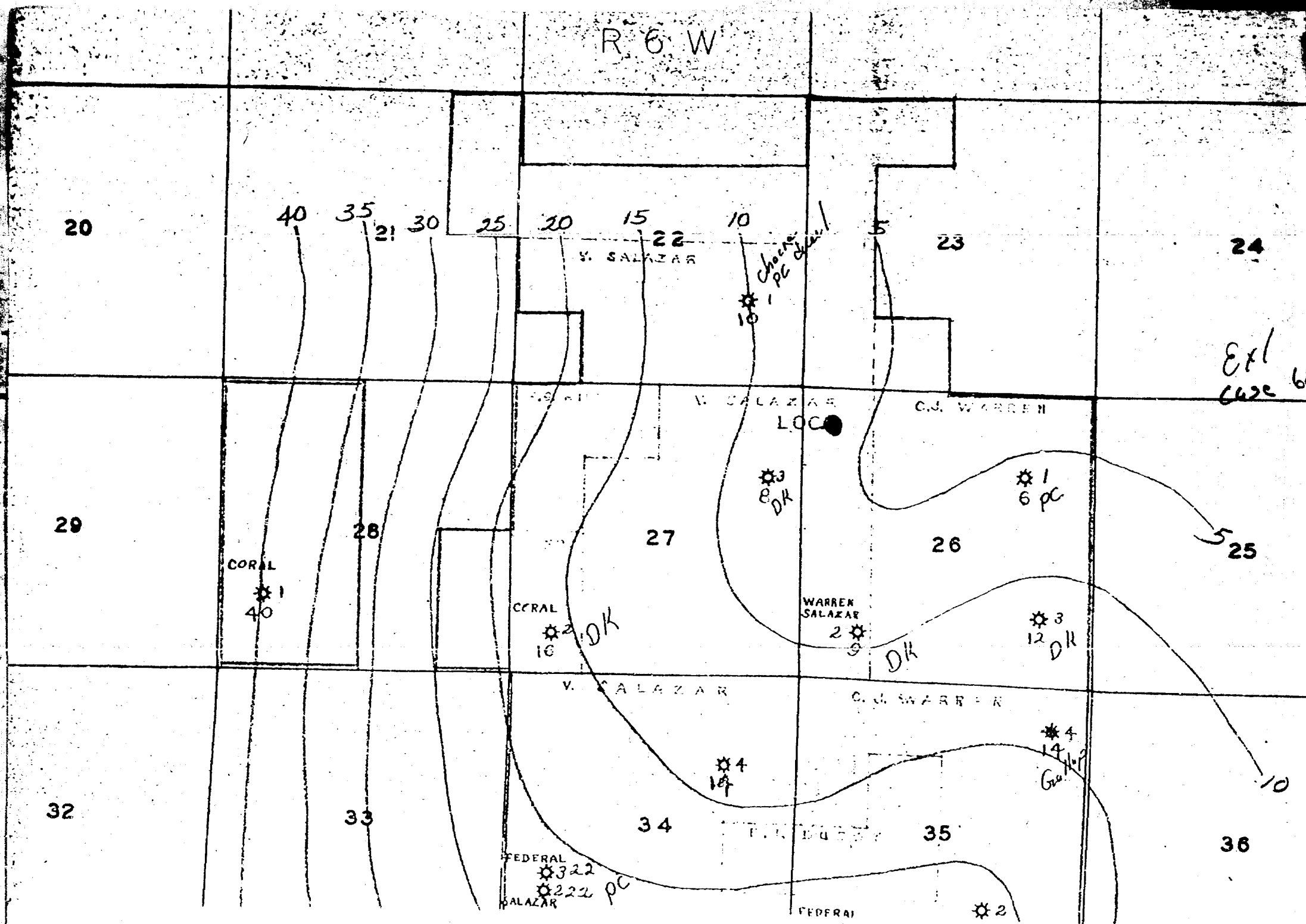
BRIDGE EXAMINER STAMETS
OIL CONSERVATION DIVISION

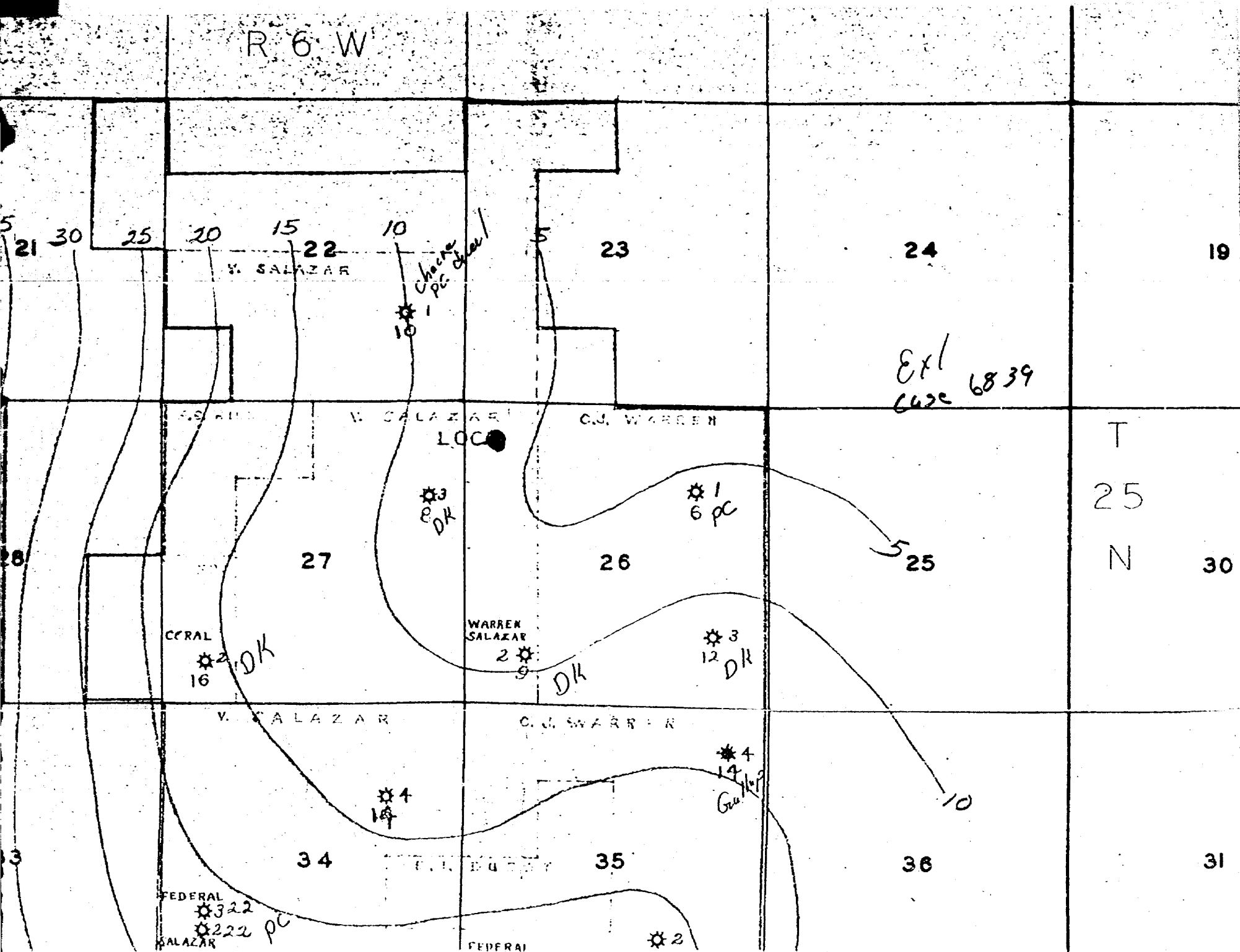
Kimbell EXHIBIT NO. 3

CASE NO. 6839

Submitted by _____

Hearing Date 26 MAR 80





YEARLY SHUT IN PRESSURES OF PICTURED CLIFFS & CHACRA ZONES
(As filed on packer leakage tests)

Kimbell Oil Company
Salazar No. 1
Unit J, Section 22, T25N, R6W
Rio Arriba County, New Mexico

Ex 2
Case 6839

YEAR	PICTURED CLIFFS Press. PSIG	CHACRA Press. PSIG	DIFFERENCE FACTOR
1959	865	964	1.114
1960	N.A.	N.A.	N.A.
1961	449	450	1.002
1962	387	499	1.289
1963	370	500	1.351
1964	340	460	1.352
1965	350	473	1.351
1966	360	460	1.277
1967	331	451	1.362
1968	317	440	1.388
1969	299	397	1.327
1970	263	342	1.300
1971	268	342	1.276
1972	250	350	1.400
1973	250	310	1.240
1974	234	300	1.282
1975	235	310	1.319
1976	244	281	1.151
1977	240	315	1.562
1978	260	310	1.192
1979	210	300	1.428

GAS PRODUCTION AND RESERVOIR PRESSURES.

Kimbell Oil Company
Salazar No. 1, (1-22)
SE 1/4 Sec. 22, T25N, R6W
Rio Arriba County, New Mexico

Year	<u>PICTURED CLIFFS</u>		<u>CHACRA</u>	
	<u>Prod.</u> <u>MCF</u>	<u>Pressure</u> <u>P.S.I.G.</u>	<u>Prod.</u> <u>MCF</u>	<u>Pressure</u> <u>P.S.I.G.</u>
1959	23,264	865	19,218	964
1960	24,424	-	12,041	-
1961	20,988	149	2,252	450
1962	18,755	387	26,641	499
1963	14,121	370	29,610	500
1964	15,081	340	32,062	460
1965	13,056	350	28,016	473
1966	11,678	360	31,071	460
1967	10,714	331	29,440	451
1968	12,040	317	29,590	440
1969	11,161	299	28,727	397
1970	10,731	263	25,988	342
1971	10,577	268	26,255	342
1972	10,257	250	27,819	350
1973	9,887	250	25,431	310
1974	9,186	234	23,571	300
1975	9,914	235	22,915	310
1976	9,090	244	22,112	281
1977	8,661	240	20,535	375
1978	9,173	260	20,743	310
1979	4,318	210 (thru June)	1,769	300
TOTAL	267,076		540,246	

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Case 6839

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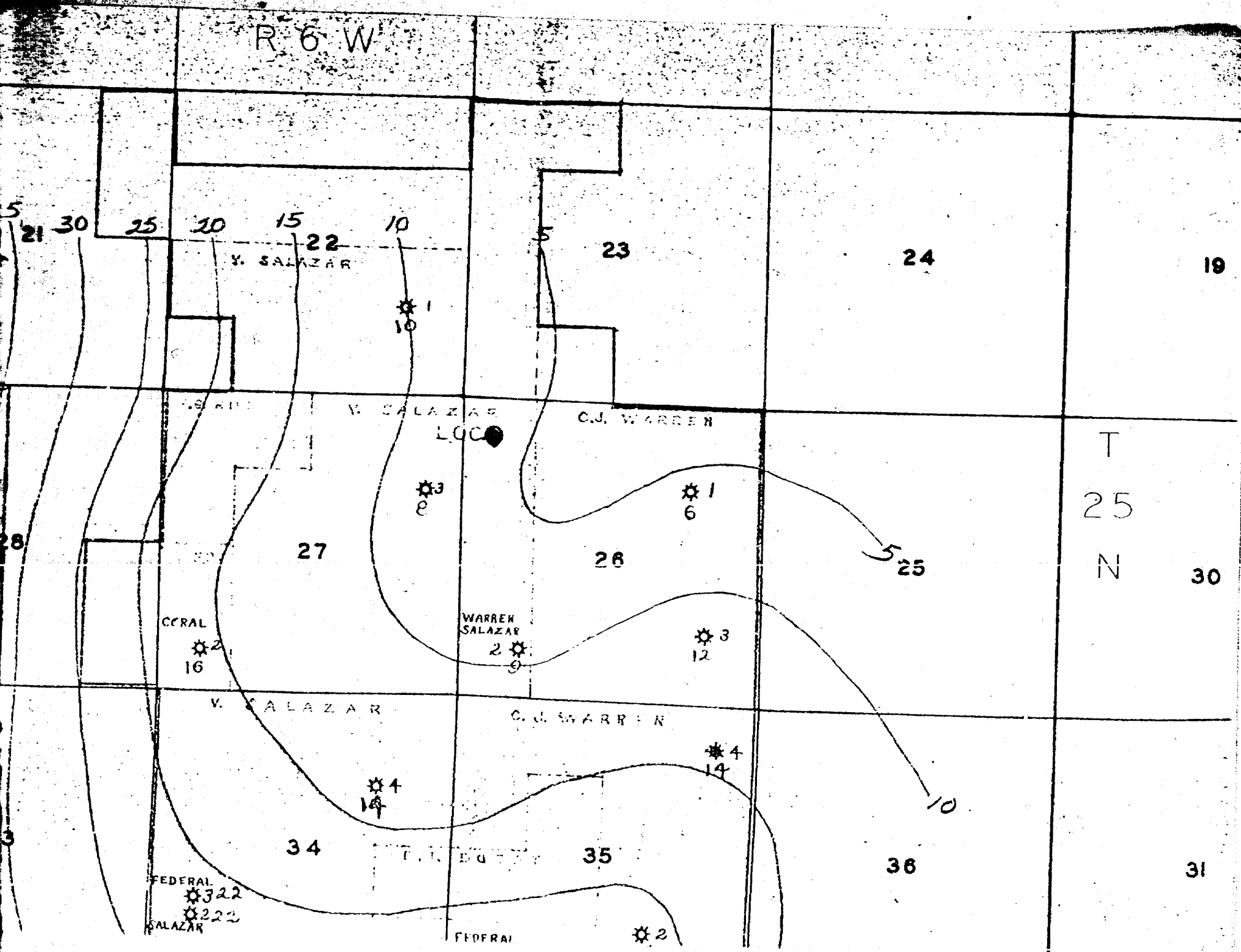
222

SALAZAR

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Exhibit 1
Case 6839



YEARLY SHUT IN PRESSURES OF PICTURED CLIFFS & CHACRA ZONES
(As filed on packer leakage tests)

Kimbell Oil Company
Salazar No. 1
Unit J, Section 22, T25N, R6W
Rio Arriba County, New Mexico

YEAR	PICTURED CLIFFS Press. PSIG	CHACRA Press. PSIG	DIFFERENCE FACTOR
1959	865	964	1.114
1960	N.A.	N.A.	N.A.
1961	449	450	1.002
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1975	235	310	1.319
1976	244	281	1.151
1977	240	315	1.562
1978	260	310	1.192
1979	210	300	1.428

Exhibit 2
Case 6839

GAS PRODUCTION AND RESERVOIR PRESSURES.

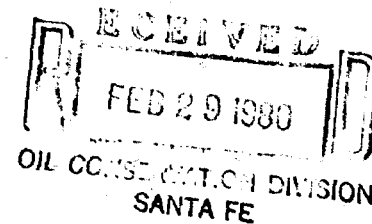
Kimbell Oil Company
Salazar No. 1, (1-22)
SE 1/4 Sec. 22, T25N, R6W
Rio Arriba County, New Mexico

Year	<u>PICTURED CLIFFS</u>		<u>CHACRA</u>	
	<u>Prod.</u> <u>MCF</u>	<u>Pressure</u> <u>P.S.I.G.</u>	<u>Prod.</u> <u>MCF</u>	<u>Pressure</u> <u>P.S.I.G.</u>
1959	23,264	865	19,218	964
1960	24,424	-	42,041	-
1961	20,988	449	20,252	450
1962	18,755	387	26,641	499
1963	14,121	370	29,610	500
1964	15,081	340	32,062	460
1965	13,056	350	28,016	473
1966	11,678	360	31,071	460
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1970	10,731	263	25,988	342
1971	10,577	266	26,255	342
1972	10,257	250	27,819	350
1973	9,887	250	25,431	310
1974	9,186	234	23,571	300
1975	9,914	235	22,915	310
1976	9,090	244	22,112	281
1977	8,661	240	20,635	375
1978	9,173	260	20,143	310
1979	4,318	210 (thru June)	8,769	300
TOTAL	267,076		540,246	

Exhibit 3
Case 6839

KIMBELL OIL COMPANY

P. O. BOX 1097
FARMINGTON, NEW MEXICO 87401
505. 325.2229



February 28, 1980

Mr. Joe D. Ramey, Division Director
State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Case 6839

Subject: Application for Downhole Commingling

Dear Sir:

Kimbell Oil Company plans to drill a Chacra-Pictured Cliffs well known as the Salazar No. 4-26 located in Unit D, Section 26, T25N, R6W, Rio Arriba County, New Mexico. We desire to commingle the gas production from the Otero Chacra and South Blanco Pictured Cliffs formation in this well for the following reasons:

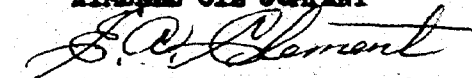
- (1) The Pictured Cliffs is expected to be approximately 6 feet thick at this location, as correlated from existing nearby well logs, and will be capable of low marginal production only.
- (2) The Chacra formation is expected to be capable of a low rate of production.
- (3) It is believed the total commingled production from both zones will result in an economically feasible well.
- (4) Should a dual completion be required, it is not believed the gas from the Pictured Cliffs will justify the added expense, and if so, the Pictured Cliffs will not be produced.
- (5) The commingling and production of the Pictured Cliffs gas will result in producing gas that would probably not be produced otherwise.
- (6) No correlative rights will be violated as all direct offsetting acreage is under the Salazar-Warren leases.
- (7) The Kimbell Oil Company Salazar No. 1 located in Unit J, Section 22, T25N, R6W, has been dually produced from the Chacra and Pictured Cliffs with a packer between the formations and we have found it very difficult to keep the water off of the Pictured Cliffs formation.

For your consideration is arriving at a decision on this application, I am enclosing a 20 year record of the shut-in pressures on the Kimbell Oil Co. Salazar No. 1, which is a northwest diagonal offset well. This demonstrates that the pressures of the 2 zones have never differed by a factor greater than 1.562 and there should be no damaging crossflow between zones in the event it is ever necessary to shut the well in for an extended period.

Also enclosed is an isopach map of the Pictured Cliffs zone in the immediate area.

Sincerely yours,

KIMBELL OIL COMPANY



E. A. Clement, Prod. Supt.
Farmington District

cc: Oil Conservation Div.
Astec District

YEARLY SHUT IN PRESSURES OF PICTURED CLIFFS & CHACRA ZONES
(As filed on packer leakage tests)

Kimbell Oil Company
Salazar No. 1
Unit J, Section 22, T25N, R6W
Rio Arriba County, New Mexico

YEAR	<u>PICTURED CLIFFS</u> Press. PSIG	<u>CHACRA</u> Press. PSIG	<u>DIFFERENCE</u> FACTOR
1959	865	964	1.114
1960	N.A.	N.A.	N.A.
1961	449	450	1.002
1962	387	499	1.289
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1965	350	473	1.351
1966	360	460	1.277
1967	331	451	1.362
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1969	299	397	1.327
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1972	250	350	1.400
1973	250	310	1.240
1974	234	300	1.282
1975	235	310	1.319
1976	244	281	1.151
1977	240	375	1.562
1978	260	310	1.192
1979	210	300	1.428

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V. SALAZAR

C. J. WARREN

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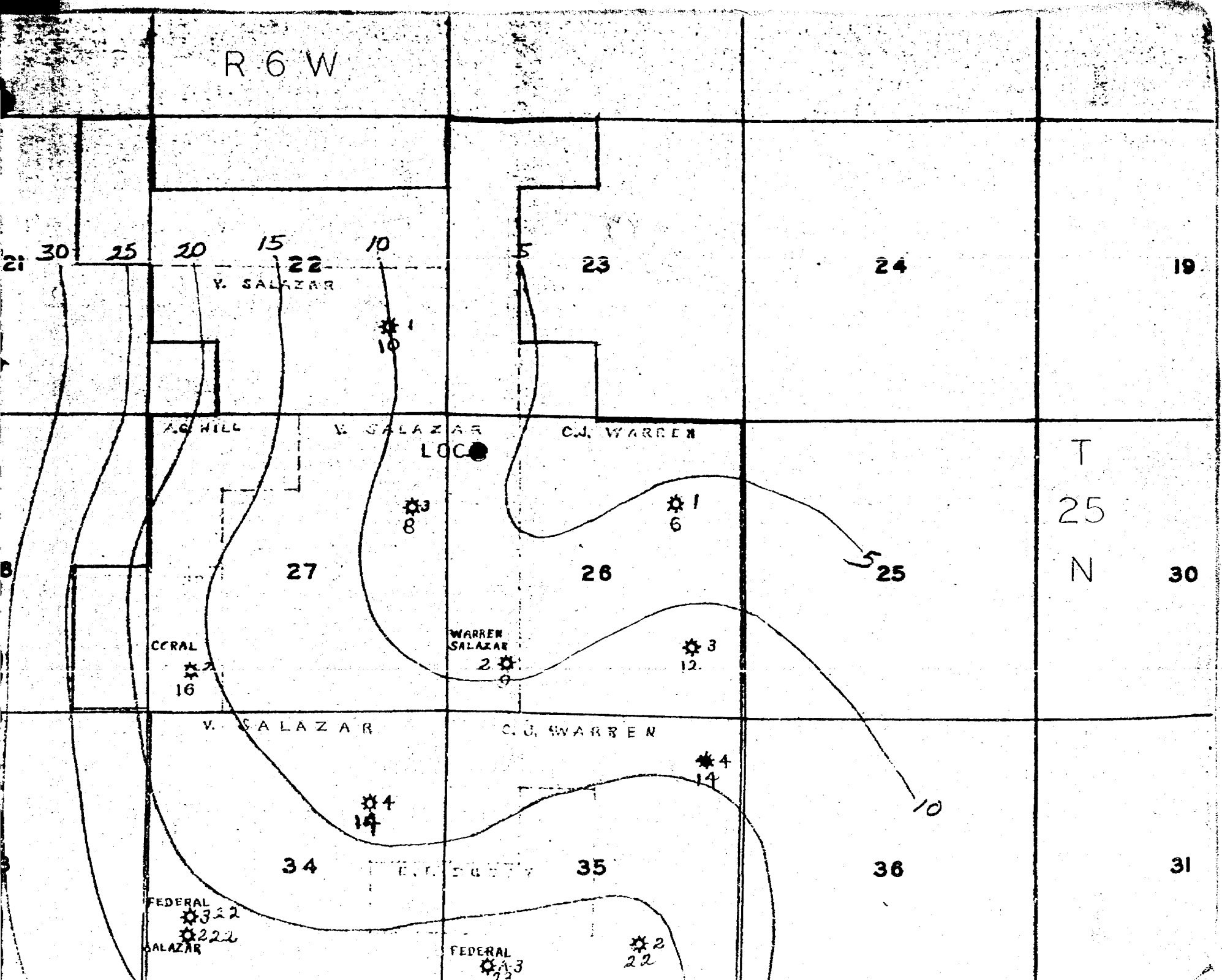
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Docket No. 8-80

Dockets Nos. 9-80 and 10-80 are tentatively set for April 9 and 23, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 26, 1980

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

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

- CASE 6838: Application of Amax Chemical Corporation for the amendment of Order No. R-111-A, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-111-A to extend the boundaries of the Potash-Oil Area by the inclusion of certain lands in Sections 11, 12, and 13, Township 19 South, Range 30 East, and Sections 7 and 18, Township 19 South, Range 31 East.
- CASE 6839: Application of Kimbell Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Otero-Chacra and South Blanco-Pictured Cliffs production in the wellbore of its Salazar Well No. 4-26 to be located in Unit D of Section 26, Township 25 North, Range 6 West.
- CASE 6840: Application of Union Texas Petroleum for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fruitland and Pictured Cliffs production in the wellbore of its Johnston Federal Well No. 11Y located in Unit N of Section 7, Township 31 North, Range 9 West.
- CASE 6841: Application of CIG Exploration, Inc. for two non-standard gas proration units, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of two non-standard gas proration units in Township 16 South, Range 28 East, the first being 219.6 acres comprising Lots 1 thru 8 of Section 1 and the second being 219.92 acres comprising Lots 1 thru 8 of Section 2, for the Wolfcamp, Pennsylvanian, and Mississippian formations, each unit to be dedicated to a well to be drilled at a standard location thereon.
- CASE 6842: Application of ARCO Oil and Gas Company for an unorthodox gas well location, simultaneous dedication, and approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its W. C. Roach Well No. 6, 660 feet from the North line and 1980 feet from the West line of Section 21, Township 20 South, Range 37 East, Cumont Gas Pool, to be simultaneously dedicated with its W. C. Roach Well No. 1 in Unit D to the W/2 of said Section 21. Also sought are findings that the proposed well is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing unit well.
- CASE 6843: Application of Yates Petroleum Corporation for two compulsory poolings, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Yeso formation underlying two 40-acre proration units, the first being the SE/4 SE/4 and the second being the SW/4 SE/4 of Section 6, Township 19 South, Range 25 East, Penasco Draw Field, each unit 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. Also to be considered will be the designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.
- CASE 6844: Application of Arrowhead Oil Corporation for two exceptions to Order No. R-111-A and an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the casing-cementing rules of Order No. R-111-A to complete its Creek Federal Well No. 3 at an unorthodox location 250 feet from the North line and 2350 feet from the East line and its Creek Federal Well No. 4 to be drilled in Unit C, both in Section 23, Township 18 South, Range 30 East, by setting surface casing at a depth of approximately 600 feet and production casing at total depth. The production casing would have cement circulated back to the potash zone in the salt section.
- CASE 6845: Application of Marathon Oil Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 800 feet from the North line and 200 feet from the East line of Section 30, Township 21 South, Range 23 East, Indian Basin-Upper Pennsylvanian Gas Pool, all of Section 30 or that portion thereof which may be reasonably presumed productive of gas from said pool to be dedicated to the well.

CASE 6846: Application of Doyle Hartman for two compulsory poolings, two non-standard gas proration units, and two unorthodox well locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Eumont Gas Pool underlying two 80-acre non-standard gas proration units, the first being the S/2 NE/4 of Section 13, Township 21 South, Range 36 East, to be dedicated to a well to be drilled at an unorthodox location 1650 feet from the North line and 2310 feet from the East line of said Section 13, and the second being the N/2 NE/4 of said Section 13 to be dedicated to a well to be drilled at an unorthodox location 1330 feet from the North line and 2310 feet from the East line of said Section 13. 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. Also to be considered will be the designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.

CASE 6834: (Continued and Readvertised)

Application of Conoco Inc. for a dual completion and unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its SEMU Burger Well No. 107 at an unorthodox location 2615 feet from the South and East lines of Section 19, Township 20 South, Range 38 East, to produce oil from the Blinbry Oil and Gas and Drinkard Pools.

CASE 6837: (Continued from March 12, 1980, Examiner Hearing)

Application of Curtis Little for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the W/2 of Section 7, Township 25 North, Range 3 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. 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 6847: Application of Tenneco Oil Company for dual completions and downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete, in such a manner as to produce gas from the Dakota formation and commingled Chacra and Mesaverde production through parallel strings of tubing, ten proposed wells to be located as follows: in Township 29 North, Range 10 West: Unit C, Section 19; Unit N, Section 19; Unit A, Section 30; and Unit D, Section 30; in Township 29 North, Range 11 West: Unit G, Section 24; Unit O, Section 24; Unit A, Section 25; Unit D, Section 25; Unit M, Section 25; and Unit P, Section 25.

CASE 6818: (Continued from March 12, 1980, Examiner Hearing)

Application of Tenneco Oil Company for an NGPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination for its State HL 11 Well No. 1 located in Unit N of Section 11, Township 19 South, Range 29 East.

CASE 6849: (This is the same matter as was previously designated Case No. 6813.)

Application of Petroleum Development Corporation to amend Order No. R-6196, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks to amend Order No. R-6196 which authorized re-entry of a well at an unorthodox location in the Lusk-Morrow Gas Pool to be dedicated to the N/2 of Section 13, Township 19 South, Range 31 East. Applicant now seeks approval for a new revised location 750 feet from the North line and 660 feet from the West line of said Section 13.

CASE 6848: Application of Petroleum Development Corporation for pool contraction and creation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the Querecho Plains-Bone Spring Pool to comprise the Upper Bone Spring formation only, from 8390 feet to 8680 feet on the log of its McKay West Federal Well No. 1 located in Unit F of Section 34, Township 18 South, Range 32 East, and the creation of the Querecho Plains-Lower Bone Spring Pool to comprise said formation from 8680 feet to the base of the Bone Spring underlying the NW/4 of said Section 34.

CASE 6826: (Continued from March 12, 1980, Examiner Hearing)

Application of Tahoe Oil and Cattle Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Penrose Skelly Pool underlying the SE/4 SE/4 of Section 25, Township 21 South, Range 36 East, to be dedicated to its Bromlee Well No. 1 located thereon. Also to be considered will be the cost of recompleting 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 recompleting said well.

OIL CONSERVATION COMMISSION
Alto DISTRICT

Case 6839

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE February 29, 1980

RE: Proposed MC _____
Proposed DHC _____
Proposed NSL α _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated February 28, 1980
for the Kimbell Oil Co. Salmon #4 D-26-25N-6W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve

Yours very truly,

Frank S. Chang

RECEIVED
FEB 29 1980
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

KIMBELL OIL COMPANY

P. O. BOX 1097

FARMINGTON, NEW MEXICO 87401

505 - 225-2229

February 28, 1980

Mr. Joe D. Ramey, Division Director
State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Subject: Application for Downhole Commingling

Dear Sir:

Kimbell Oil Company plans to drill a Chacra-Pictured Cliffs well known as the Salazar No. 4-26 located in Unit D, Section 26, T25N, R6W, Rio Arriba County, New Mexico. We desire to commingle the gas production from the Otero Chacra and South Blanco Pictured Cliffs formation in this well for the following reasons:

- (1) The Pictured Cliffs is expected to be approximately 6 feet thick at this location, as correlated from existing nearby well logs, and will be capable of low marginal production only.
- (2) The Chacra formation is expected to be capable of a low rate of production.
- (3) It is believed the total commingled production from both zones will result in an economically feasible well.
- (4) Should a dual completion be required, it is not believed the gas from the Pictured Cliffs will justify the added expense, and if so, the Pictured Cliffs will not be produced.
- (5) The commingling and production of the Pictured Cliffs gas will result in producing gas that would probably not be produced otherwise.
- (6) No correlative rights will be violated as all direct offsetting acreage is under the Salazar-Warren leases.
- (7) The Kimbell Oil Company Salazar No. 1 located in Unit J, Section 22, T25N, R6W, has been dually produced from the Chacra and Pictured Cliffs with a packer between the formations and we have found it very difficult to keep the water off of the Pictured Cliffs formation.



For your consideration is arriving at a decision on this application, I am enclosing a 20 year record of the shut-in pressures on the Kimbell Oil Co. Salazar No. 1, which is a northwest diagonal offset well. This demonstrates that the pressures of the 2 zones have never differed by a factor greater than 1.562 and there should be no damaging crossflow between zones in the event it is ever necessary to shut the well in for an extended period.

Also enclosed is an isopach map of the Pictured Cliffs zone in the immediate area.

Sincerely yours,

KIMBELL OIL COMPANY

E. A. Clement
E. A. Clement, Prod. Supt.
Farmington District

cc: Oil Conservation Div.
Astec District



YEARLY SHUT IN PRESSURES OF PICTURED CLIFFS & CHAGRA ZONES
(As filed on packer leakage tests)

Kimbell Oil Company
Salazar No. 1
Unit J, Section 22, T25N, R6W
Rio Arriba County, New Mexico

YEAR	PICTURED CLIFFS Press. PSIG	CHAGRA Press. PSIG	DIFFERENCE FACTOR
1959	865	964	1.114
1960	N.A.	N.A.	N.A.
1961	449	450	1.002
1962	387	499	1.289
1963	370	500	1.351
1964	340	460	1.352
1965	350	473	1.351
1966	360	460	1.277
1967	331	451	1.362
1968	317	440	1.388
1969	299	397	1.327
1970	263	342	1.300
1971	268	342	1.276
1972	250	350	1.400
1973	250	310	1.240
1974	234	300	1.282
1975	235	310	1.319
1976	244	281	1.151
1977	240	375	1.562
1978	260	310	1.192
1979	210	300	1.428



R 6 W

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22

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5

23

24

Y. SALAZAR

* 1
10

AG HILL

Y. SALAZAR

LOC

C.J. WARREN

29

28

27

26

25

CORAL

* 1
40

CORAL

* 2
16

WARREN

SALAZAR
* 2
9

* 3
12

Y. SALAZAR

C.J. WARREN

32

33

34

35

36

FEDERAL
* 3 12
* 2 22
SALAZAR

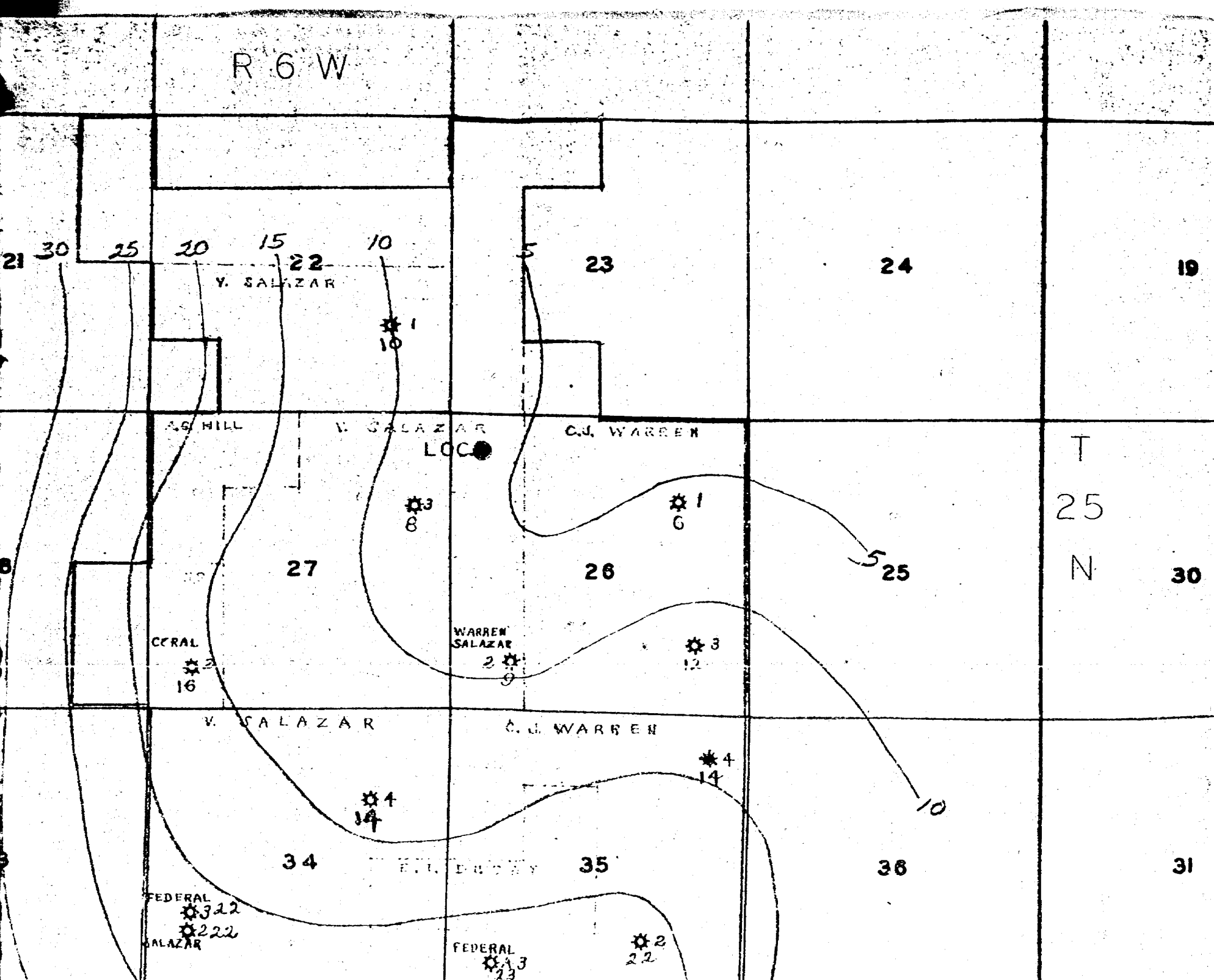
E.L. DUTY

FEDERAL
* 3 13
* 2 23

* 2
22

* 4
14

10



RECEIVED
FEB 29 1980
OIL CON. COM.
DIST. 3



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. 6839

Order No. R-6311

APPLICATION OF KIMBELL OIL 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 March 26
19 80, at Santa Fe, New Mexico, before Examiner Richard L.
Stamets.

NOW, on this _____ day of _____, 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, Kimbell Oil Company, is
the owner and operator of the Salazar Well No. 400 to be
drilled located in Unit D of Section 26, Township 25 North
Range 6 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant seeks authority to commingle
Otero-Chacra and South Blanco-Pictured/^{Cliffs} production
within the wellbore of the above-described well.

(4) That from the Otero-Chacra zone, the subject well is ^{expected to be} capable of low marginal production only.

(5) That from the South Blanco-Pictured Cliffs 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 Otero-Chacra zone, and _____ percent of the commingled _____ production to the South Blanco-Pictured Cliffs 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.

IT IS THEREFORE ORDERED:

(1) That the applicant, Kimbell Oil Company, is hereby authorized to commingle Otero-Chacra and South Blanco-Pictured Cliffs production within the wellbore of the Salazar Well No. 4000 to be ⁴⁰⁶⁰, located in Unit D of Section 26, Township 25 North, Range 6 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 Otero-Chacra zone and _____ percent of the commingled production shall be allocated to the South Blanco-Pictured Cliffs 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.



BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

April 17, 1980

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

Mr. Thomas Kellahin
Kellahin & Kellahin
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: CASE NO. 6839
ORDER NO. R-6311

Applicant:

Kimbell Oil 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/rd

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

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

CASE NO. 6839
Order No. R-6311

APPLICATION OF KIMBELL OIL 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 March 26, 1980,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 15th day of April, 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, Kimbell Oil Company, is the owner
and operator of the Salazar Well No. 4 to be drilled in Unit D
of Section 26, Township 25 North, Range 6 West, NMPM, Rio Arriba
County, New Mexico.

(3) That the applicant seeks authority to commingle Otero-
Chacra and South Blanco-Pictured Cliffs production within the
wellbore of the above-described well.

(4) That from the Otero-Chacra zone, the subject well is
expected to be capable of low marginal production only.

(5) That from the South Blanco-Pictured Cliffs zone, the
subject well is expected to be capable of low marginal produc-
tion only.

-2-

Case No. 6839

Order No. R-6311

(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.

IT IS THEREFORE ORDERED:

(1) That the applicant, Kimbell Oil Company, is hereby authorized to commingle Otero-Chacra and South Blanco-Pictured Cliffs production within the wellbore of the Salazar Well No. 4 to be located in Unit D of Section 26, Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

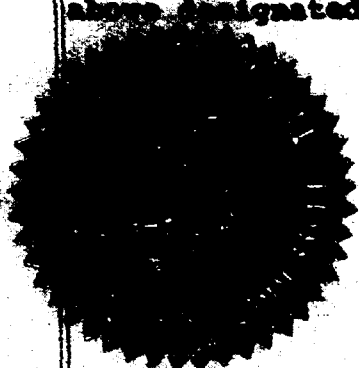
(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in the subject well.

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

-3-
Case No. 6839
Order No. R-6311

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



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramey
JOE D. RAMEY
Director

S E A L

20/