CASE 6441: CAULKINS OIL COMPANY FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO

CASE NO.

64/1

APPlication,
Transcripts,
Small Exhibits,

ETC.

1 2 3 4 5	ENERGY AND I OIL CONSI State Lar Santa I 31 d	OF NEW MEXICO MINERALS DEPARTMENT ERVATION DIVISION and Office Building Fe, New Mexico January 1979 INER HEARING
6 7 8 9	IN THE MATTER OF: Application of Caull for downhole comming County, New Mexico.))) CASE (ins Oil Company) 6441 (ling, Rio Arriba))
0		
1	BEFORE: Richard L. Stamets	
2		
3	TRANSCRI	PT OF HEARING
5	<u>APPE</u>	ARANCES
7	For the Oil Conservation Division:	Lynn Teschendorf, Esq. Legal Counsel for the Division State Land Office Bldg. Santa Fe, New Mexico 87503
٠ ا		W. Thomas Kellahin, Esq.
)	For the Applicant:	W. THOMAS RELIANTIN, ESQ.
	For the Applicant:	KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501
	For the Applicant:	KELLAHIN & KELLAHIN 500 Don Gaspar
	For the Applicant:	KELLAHIN & KELLAHIN 500 Don Gaspar

Nye Reporting Service, Inc.
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621 Old Santa Fe Trail - Suite 7
Santa Fe, New Mexico 87501

INDEX PAGE CHARLES VERQUER Direct Examination by Mr. Kellahin EXHIBITS Exhibit Number One, Ownership Map Exhibit Number Two, Plat of Well Location Exhibit Number Three, Pictured Cliffs Pressure & Gas Production Exhibits Number Four and Four-A, Decline Curves for Pictured Cliffs and Mesaverde Exhibit Number Five, Mechanics of Proposed Comminglin

MR. STAMETS: Call the next case, 6441.

MS. TESCHENDORF: Case 6441, Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico.

MR. KELLAHIN: I'm Tom Kellahin of Kellahin and Kellahin, Santa Fe, New Mexico, appearing on behalf of Caulkins Oil Company. I'd like the record to reflect that Mr. Charles Verquer is the same witness, that he's under oath and has previously qualified as an expert witness.

MR. STAMETS: The record will so show.

CHARLES VERQUER

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Verquer, would you identify Exhibit Number One and locate the well in question?

A This is an ownership map. The shaded area is the Caulkins property, Rio Arriba County, New Mexico. The Well No. 12 identified by the red arrow in Section 35, 27 north 6 west. The prefix letters are PM which designates Pictured Cliffs-Mesaverde. We propose to commingle this.

What is the well name for this well?

1	A Twelve.
2	Q The Breech F Well No. 12 in Unit A of Section
3	35?
4	A Yes, sir.
5	Q Is this a currently completed well?
6	A Yes, sir. It is.
7	Q How is it currently completed?
8	A It is a conventional dual Pictured Cliffs-
9	Mesaverde.
10	Q What do you propose to do?
11	A I propose to commingle the Pictured Cliffs and
12	Mesaverde in the wellbore. The Pictured Cliffs is a very
13	sorry well and we have been unable to keep it producing at
14	a regular rate, especially in 1978, and we would propose to
15	commingle them so that we could use the gas in both zones
16	and keep the well clean and just thereby producing a little
17	bit more.
18	Q Let's look at Exhibit Number Two and have you
19	identify that.
20	A That is a plat of the well location and the
21	direct offset well.
22	Q Let's look at Exhibit Number Three. What's
23	that?
24	A Exhibit Number Three is the pressure and gas
25	production for the Pictured Cliffs; pressure, gas and oil
<u> </u>	

production for a Mesaverde zone, 1958 through 1977. It also has the production split that I would recommend for the Pictured Cliffs and Mesaverde.

- Q Are the Pictured Cliffs and Mesaverde ownerships in this well common?
 - A They are.
- Q And the proposed method of allocating production between the two zones as indicated on that exhibit is simply a mathematical computation based upon past production?
 - A That is correct.
 - Q Let's look at Exhibit Number Four and Four-A.
- A Those are the decline curves for Pictured Cliffs and Mesaverde zones, pressures and productions. The solid line being the pressure and the hachured marks the gas. The dot is the oil of the Mesaverde.
- Q Would you explain for us, Mr. Verquer, what is the explanation for the rather erratic nature of the decline curve?
- A Mostly that is created by -- part of it may be a production -- being able to sell more gas in, say, 1970 on, but most of it is fluid accumulation in the well. It just sits there and bubbles through that fluids without enough gas to carry it to the surface.
- Q If, then, the downhole commingling is approved, that kind of erratic production ought to be eliminated?

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REPORTER'S CERTIFICATE

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I, STEFANIE XANTHULL, a court reporter, DO HEREBY CERTIFY that the foregoing and attached 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, knowledge, and skill, from my notes taken at the time of the hearing.

STEFANIE XANTHULL, C.S.R.

I do hereby certify that the foregoing is a consider the same than the same in

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Oil Conservation Division

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5	EXAMINE	R HEARING	
6 7 8 9	IN THE MATTER OF: Application of Caulkin for downhole commingli County, New Mexico.	ns Oil Company) Ing, Rio Arriba)	CASE 6441
10 11	BEFORE: Richard L. Stamets		
12 13 14		OF HEARING	
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16 17 18	For the Oil Conservation Division:	Lynn Teschendorf, Legal Counsel for State Land Office Santa Fe, New Mex	the Division Bldg.
19			
21 22	For the Applicant:	W. Thomas Kellahi KELLAHIN & KELLAH 500 Don Gaspar Santa Fe, New Mex	IIN
23 24 25			

1	I N D E X	
2		PAG
3	CHARLES VERQUER	
4	Direct Examination by Mr. Kellahin	3
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6	EXHIBITS	
7	Exhibit Number One, Ownership Map	6
8	Exhibit Number Two, Plat of Well Location	6
9	Exhibit Number Three, Pictured Cliffs Pressure &	
10	Gas Production	6
11	Exhibits Number Four and Four-A, Decline Curves for Pictured Cliff; and Mesaverde	6
12	Exhibit Number Five, Mechanics of Proposed Comminglin	6
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MR. STAMETS: The record will so show.

CHARLES VERQUER

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Verquer, would you identify Exhibit Number
One and locate the well in question?

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What is the well name for this well?

1	A Twelve.
2	Q The Breech F Well No. 12 in Unit A of Section
3	357
4	A Yes, sir.
5	Q Zs this a currently completed well?
6	Yes, sir. It is.
7	Q How is it currently completed?
8	A It is a conventional dual Pictured Cliffs-
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- Q Are the Pictured Cliffs and Mesaverde ownerships in this well common?
 - A They are.
- Q And the proposed method of allocating production between the two zones as indicated on that exhibit is simply a mathematical computation based upon past production?
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- A Mostly that is created by -- part of it may be a production -- being able to sell more gas in, say, 1970 on, but most of it is fluid accumulation in the well. It just sits there and bubbles through that fluids without enough gas to carry it to the surface.
- Q If, then, the downhole commingling is approved, that kind of erratic production ought to be eliminated?

1	A It should be eliminated. Yes, sir.
2	Q In your opinion, the downhole commingling is
3	the most effective and efficient method for production in th
4	well?
5	A Yes.
6	Q Would you refer to Exhibit Number Five and
7	identify it?
8	A That's the mechanics of how my proposed com-
9	mingling would be completed. Pull the tubing from the Pic-
10	tured Cliffs and salvage it. Well, I'm actually going to
11	run 1 1/4 to produce the well if this commingling is approve
12	because the 2 3/8 is just too large for the amount of gas
13	that the well will produce.
14	Q Were Exhibits One through Five prepared by
15	you?
16	A They were.
17	Q In your opinion, will approval of this appli-
18	cation prevent waste and protect correlative rights?
19	A It will.
20	MR. KELLAHIN: We move introduction of Exhibit
21	One through Five.
22	MR. STAMETS: These Exhibits will be admitted.
23	Any questions of the witness? He may be excused. Anything
24	further in this case? It will be taken under advisement.
25	(Hearing Concluded.)

REPORTER'S CERTIFICATE

I, STEFANIE XANTHULL, a court reporter, DO HEREBY CERTIFY that the foregoing and attached 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, knowledge, and skill, from my notes taken at the time of the hearing.

STEFANIE XANTHULL, C.S.R.

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ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

JERRY APODACA GOVERNOR NICK FRANKLIN SECRETARY

February 21, 1979

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Mr. Tom Kellahin	ve.	ORDER NO. R-5925
Kellahin & Kellahin		
Attorneys at Law Post Office Pox 1769		
Santa Fe, New Mexico		Applicant:
		Caulkins Oil Company
Dear Sir:		
Enclosed herewith are Division order recentl	two c y ent	opies of the above-referenced ered in the subject case.
Yours very truly,		
told Hanny		
JOE D. RAMEY Director		
/ DILector		
JDR/fd		
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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. 6441 Order No. R-5925

APPLICATION OF CAULKINS 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 January 31, 1979, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 20th day of February, 1979, 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, Caulkins Oil Company, is the owner and operator of the Breech F Well No. 12, located in Unit A of Section 35, Township 27 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle Pictured Cliffs and Mesaverde production within the wellbore of the above-described well.
- (4) That from the Pictured Cliffs zone, the subject well is capable of low marginal production only.
- (5) That from the Mesaverde zone, the subject well is 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.

-2-Case No. 6441 Order No. R-5925

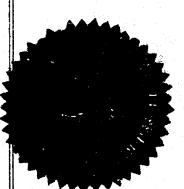
- (7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.
- (8) That to afford the Division the opportunity to assess the potential for waste and to 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, 25 percent of the commingled gas production should be allocated to the Pictured Cliffs zone, and 75 percent of the commingled gas production and all of the condensate production to the Mesaverde zone.
- (10) That Division Administrative Order No. DC-697, which authorized the dual completion of the subject well, should be superseded.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Caulkins Oil Company, is hereby authorized to commingle Pictured Cliffs and Mesaverde production within the wellbore of the Breech F Well No. 12, located in Unit Arriba County, New Mexico.
- (2) That 25 percent of the commingled gas production shall be allocated to the Pictured Cliffs zone and 75 percent of the commingled gas production and all of the condensate production shall be allocated to the Mesaverde 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 Division Administrative Order No. DC-697 is
- (5) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

-3-Case No. 6441 Order No. R-5925

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



STATE OF NEW MEXICO
OLL CONSERVATION DIVISION

JOE D. RAMEY Director

A THE STATE OF THE PROPERTY OF

Breech F 12 Case No.

Proposal

Commingle Pictured Cliffs and Mesa Verde Zones.

Both zones are classed marginal.

Ownership and all working interests are common for each well.

Exhibit # 1

Section map showing all Caulkins wells and offset well.

Exhibit # 2

Plat showing well location and direct offset wells in Section's 26 and 35 west half of 25 and west half 36 27N 6W and Section 2 and west half Section 1 26N 6W, Rio Arriba County, New Mexico.

Exhibit # 3

Tabulation of all shut in pressures, Cumulative yearly gas and oil production, 1958 thur 1977.

Proposed percentage breakdown for each zone.

Exhibit # 4

Pressure and production curves for Pictured Cliffs Zone from tabulations exhibit # 3.

Exhibit # 4 A

Pressure and Production curves for Mesa Verde zone from tabulation exhibit # 3.

Exhibit # 5

Mechanic's

Breech F 12 Case No.

Proposal

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Plat showing well location and direct offset wells in Section's 26 and 35 west half of 25 and west half 36 27N 6W and Section 2 and west half Section 1 26N 6W, Rio Arriba County, New Mexico.

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Proposed percentage breakdown for each zone.

Exhibit # 4

Pressure and production curves for Pictured Cliffs Zone from tabulations exhibit # 3.

Exhibit # 4 A

Pressure and Production curves for Mesa Verde zone from tabulation exhibit # 3.

Exhibit # 5

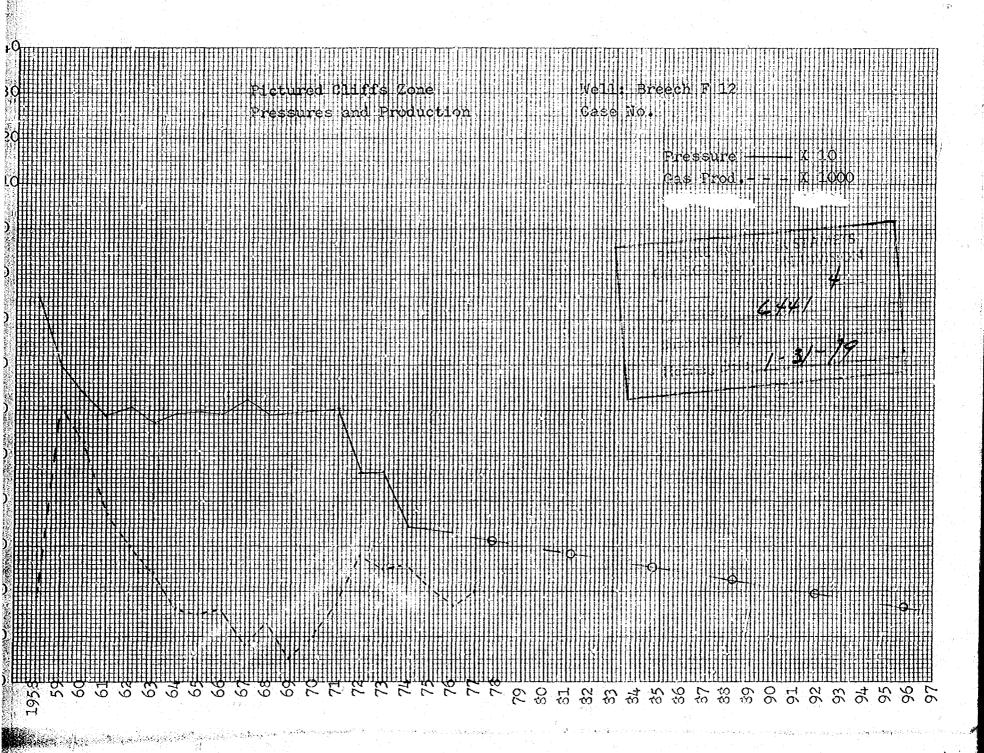
Mechanic's

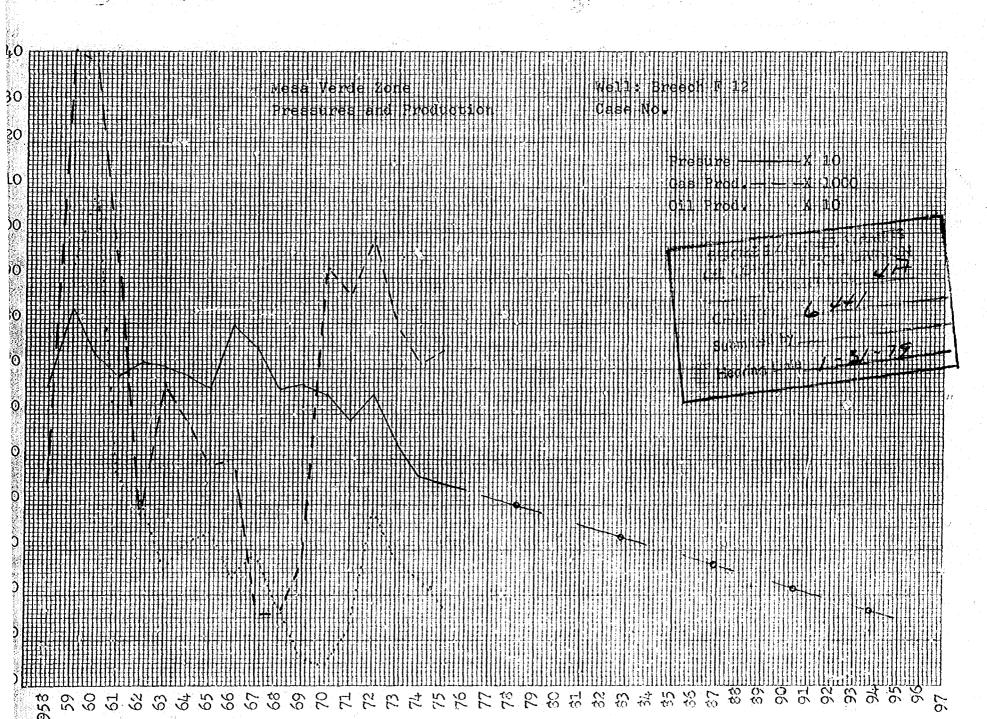
Breech F 12
Unit A Section 35 27N 6W
Yearly Production and Pressures

Case No. 1-31-79

	Pictured Cliff	s Zone	Mesa Ver	le Zore	
Date	Pressure	Gas Production	Pressure	Gas Production	Oil Production
1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975	852 702 638 590 607 572 592 598 592 624 590 606 464 465 342	19,867 61,270 53,847 37,355 30,129 24,749 16,069 15,494 16,733 13,062 5,086 10,038 16,983 28,030 24,086 25,783 21,073 17,114	662 831 731 625 717 707 684 655 798 749 657 642 587 642 533 463	43,597 197,968 138,223 93,534 38,089 67,057 80,812 67,125 58,394 39,505 40,510 16,353 15,633 27,451 92,437 85,622 98,781 79,917	0 919 1092 467 405 255 317 337 238 290 172 67 48 121 386 279 234 175 124
1977	Cum. Total	19, 817 465,011		74,091	32 5,958

Gas production 75% Mesa Verde and 25% Pictured Cliffs Oil Production 100% Mesa Verde





CAULKINS OIL COMPANY Breech F 12 Case No.

Exhibit # 5

Mechanic's

Pull $1\frac{1}{4}$ " tubing now in well for Pictured Cliffs Production.

Pull 2 3/8" tubing and Seals assy. now in well for Mesa Verde Production.

Rum 11 tubing to Mesa Verde Perforation for Pictured Cliffs-Mesa Verde Commingled Productions.

Solution Date 1-31-79.

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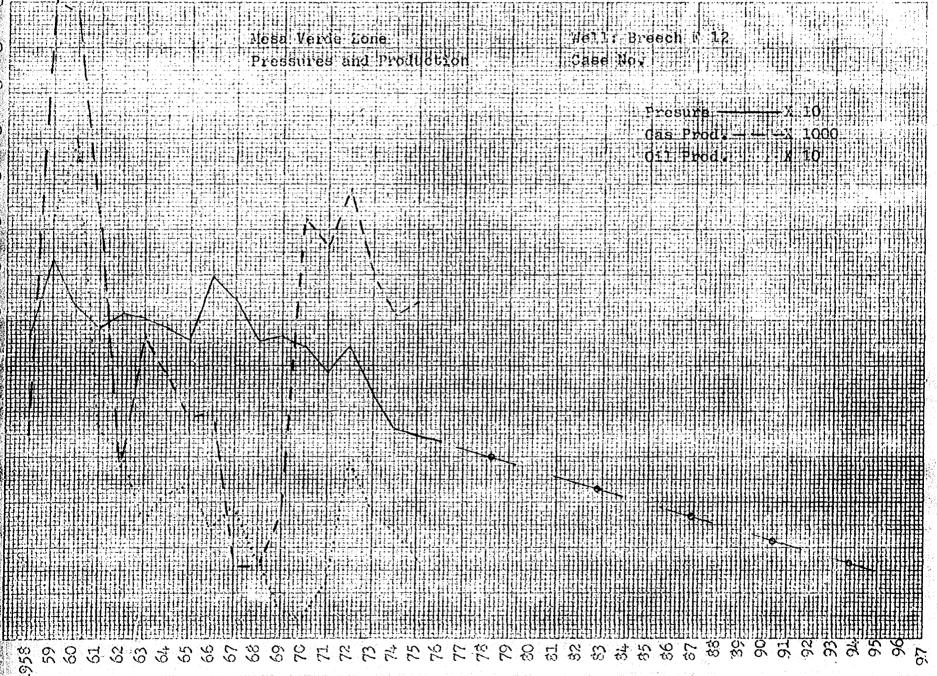
Breech F 12
Unit A Section 35 27N 6W
Yearly Production and Pressures

Case No. 044/

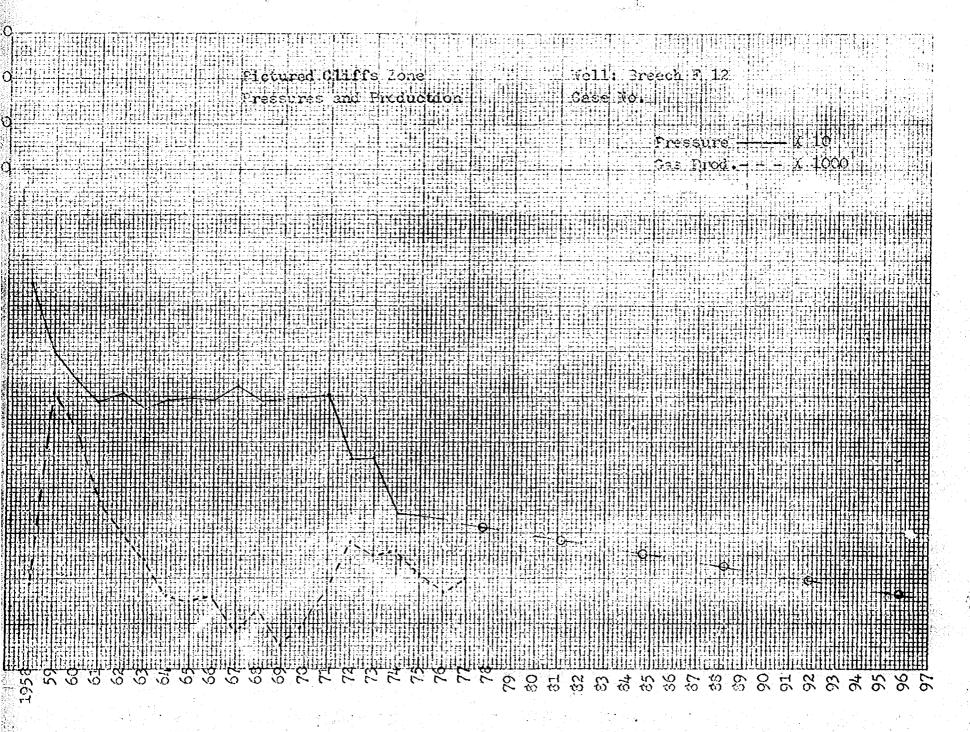
	Pictured Cliffs Zone		Mesa V		
Date	Pressure	Gas Production	Pressure	Gas Production	Oil Production
1958	852	19,867	662	43,597	0
1959 1960 1961	702	61,270	831	197,968	919
1960	638	53,847	731	138,223	1092
1961	590	37,355	685	93,534	467
1962 1963	607	30,129	717	38,089	405
1963	572	24,749	707	67,057	255
1964	592 508	16,069	684	80,812	317
1962	598 502	15,494	655	67,125	33.7 23.8
1965 1966 1967 1968 1969	592 624	16,626	798	58,394	238
1068	590	7,733	749 655	39,505	290
1060	- 790	13,062 5,086	667	40,510	172
1970		10,038 //	642	16,353 15,633	67
. 1971	606	16,983#	587	15,633 27,451	40 121
Ī9 7 2	464	28,030	642	92,437	48 121 386 279
1973	465	24,886	533	85,622	279
1974	342	25,783	533 463	98,781	234
1975		21,073		79,917	175
1976	330	17,114	431	70,678	124
1977		19.817		74,091	32 V
	Cum. Total	465,011		1,425,777	5,958

Gas production 75% Mesa Verde and 25% Pictured Chiffs Oil Production 100% Mesa Verde





Ex AM



CAULKINS OIL COMPANY Breech F 12 Case No. (1411)

Exhibit # 5

Mechanic's

Pull $1\frac{1}{4}$ " tubing now in well for Pictured Cliffs Production.

Pull 2 3/8" tubing and Seals assy. now in well for Mesa Verde Production.

Run $1\frac{1}{4}$ " tubing to Mesa Verde Perforation for Pictured Cliffs-Mesa Verde Commingled Productions.

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Dockets Nos. 5-79 and 6-79 are tentatively set for hearing on February 14 and 28, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 31, 1979

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 6422: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit
 Helton Engineering & Geological Services, Inc., Travelers Indemnity Company, and all other interested
 parties to appear and show cause why the Brent Well No. 1 located in Unit M of Section 29 and the
 Brent Well No. 3 located in Unit G of Section 19, both in Township 13 North, Range 6 East, Sandoval
 County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved
 plugging program.
- CASE 6415: (Continued from January 17, 1979, Examiner Hearing)

Application of Yates Petroleum Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp thru Devonian formations underlying the W/2 of Section 20, Township 14 South, Range 36 East, Lea County, New Mexico, 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 6419: (Continued from January 17, 1979, Examiner Hearing)

Application of Yates Petroleum Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Lanning JC Well No. 1 located in Unit B of Section 7, Township 18 South, Range 26 East, Eagle Creek Field, Eddy County, New Mexico, to produce gas from the Strawn formation through the casing-tubing annulus and from the Morrow formation through tubing.

- Application of Yates Petroleum Corporation for an unorthodox well location, Eddy County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Jackson AT

 Well No. 9 located 650 feet from the South and West lines of Section 13, Township 17 South, Range 25

 East, Eddy County, New Mexico, to test the Wolfcamp, Pennsylvanian, and Mississippian formations,
 the S/2 of said Section 13 to be dedicated to the well.
- Application of Yates Petroleum Corporation for an unorthodox well location, Eddy County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Superior
 Fed. KJ Well No. 1 located 990 feet from the North and Mest lines of Section 7, Township 20 South,
 Range 29 East, Eddy County, New Mexico, to test the Wolfcamp and Pennsylvanian formations, the N/2
 of said Section 7 to be dedicated to the well.
- CASE 6425: Application of T. B. Knox Estate for exception to Order No. R-111-A, Eddy County, New Mexico.

 Applicant, in the above-styled cause, seeks an exception to the casing/cementing rules for the OilPotash Area as promulgated by Order No. R-111-A to permit its Lucia Brookes Well No. 2 located in
 Unit K of Section 14, Township 18 South, Range 30 East, Eddy County, New Mexico, to be completed in
 the following manner: set surface casing and circulate cement; eliminate salt protection string;
 and do not circulate cement on production casing.
- CASE 6426: Application of C. W. Trainer for an unorthodox gas well location, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be located 660 feet from the North and West lines of Section 24, Township 20 South, Range 32 East, South Salt Lake-Morrow Pool, Lea County, New Mexico, the N/2 of said Section 24 to be dedicated to the well.
- CASE 6427: Application of Caribou Four Corners, Inc., for an unorthodox well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Caribou/Kirtland Well No. 1 to be located 1214 feet from the North line and 650 feet from the East line of Section 13, Township 29 North, Range 15 West, Cha Cha-Gallup Pool, San Juan County, New Mexico, the E/2 NE/4 to be dedicated to the well.
- CASE 6428: Application of Mobil 011 Corporation for the amendment of Order No. R-5801, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks the amendment of Order No. R-5801 to delete the requirements for lined tubing in injection wells in the North Vacuum Abo East Pressure Maintenance Project, Lea County, New Mexico.

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- CASE 6429: Application of Zia Energy, Inc., for approval of infill drilling, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks a finding that the drilling of its Elliott State Well

 No. 2 to be located in Unit B of Section 34, Township 20 South, Range 36 East, Eumont Gas Pool,

 Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the

 proration unit which cannot be so drained by the existing well, and further seeks approval of a

 waiver of existing well-spacing requirements.
- CASE 6430: Application of Phoenix Resources Company for a unit agreement, Chaves County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for its Buckhorn Canyon Unit Area comprising 23,009 acres, more or less, of Federal and state lands in Township 19 South, Ranges 19 and 20 East, Chaves County, New Mexico.
- CASE 6431: Application of RNG 0il 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 N/2 of Section 35, Township 23 South, Range 28 East, Eddy County, New Mexico, 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 6432: Application of John Yuronka for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Langlie Mattix Pool underlying the NE/4 NW/4 and the SE/4 NW/4 of Section 29, Township 24 South, Range 37 East, Lea County, New Mexico, to form two 40-acre units, 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. 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 6433: Application of Cities Service Company for comp. Isory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formations underlying the S/2 of Section 8, Township 23 South, Range 28 East, Eddy County, New Mexico, 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 6434: Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks a finding that the drilling of its State "O" Well No.

 5 to be located in Unit H of Section 30, Township 19 South, Range 37 East, Eumont Gas Pool, Lea
 County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration
 unit which cannot be so drained by the existing well, and further seeks approval of a waiver of
 existing well-spacing requirements.
 - CASE 6435: Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks a finding that the drilling of its W. A. Weir "B" Well

 No. 3 located in Unit B of Section 26, Township 19 South, Range 36 East, Eumont Gas Pool, Lea County,

 New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit

 which cannot be so drained by the existing well, and further seeks approval of a waiver of existing

 well-spacing requirements.
 - CASE 6436: Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks a finding that the drilling of its State "U" Gas Com

 Well No. 2 to be located in Unit C of Section 32, Township 19 South, Range 37 East, Eumont Gas Pool,

 Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the

 proration unit which cannot be so drained by the existing well, and further seeks approval of a

 waiver of existing well-spacing requirements.
 - CASE 6437: Application of Curtis Little for approval of infill drilling and a non-standard proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the drilling of a well to be located 1085 feet from the South line and 285 feet from the West line of Section 12, Township 28 North, Range 13 West, Basin-Dalota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well. Applicant further seeks rescission of Order No. R-4556 and approval of a 344.36-acré non-standard gas proration unit comprising all of Section 11, and Lot 4 and the SW/4 SW/4 of Section 12 for said well.
- CASE 6438: Application of Caulkins 011 Company for dual completions and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Breech Well No. 812 located in Unit N of Section 18, Township 26 North, Range 6 West, and its Breech Well No. 224-A located in Unit B of Section 13, Township 26 North, Range 7 West, Rio Arriba County, New Mexico, to produce gas from the Dakota formation through a separate string of tubing and to commingle Chacra and Mesaverde production in the wellbores of said wells.

- CASE 6439: Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of Mesaverde and Dakota production in the wellbore of its Breech A Well No. 229 located in Unit D of Section 17, Township 26 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 6440: Application of Caulkins Oil Company for a dual completion and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Breech F Well No. 8 located in Unit A of Section 34, Township 27 North, Range 6 West, Rio Arriba County, New Mexico, to produce gas from the Pictured Cliffs formation through a separate string of tubing and to commingle Messverde and Dakota production in the wellbore of said well.
- CASE 6441: Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of Pictured Cliffs and Mesaverde production in the wellbore of its Breech F Well No. 12 located in Unit A of Section 35, Township 27 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 6442: Application of Caulkins 0il Company for downhole commingling, Rio Arriba County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of Pictured Cliffs, Chacra and Mesaverde production in the wellbore of its Breech E Well No. 109 located in Unit M of Section 3, Township 26 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 6443: Application of Caulkins Oil Company for a dual completion and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Breech B Well No. 210-R located in Unit B of Section 14, Township 26 North, Range 7 West, to produce gas from the Dakota formation through a separate string of tubing and to commingle Pictured Cliffs, Chacra and Mesaverde production in the wellbore of said well.
- CASE 6444: Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of Pictured Cliffs, Mesaverde, Chacra and Greenhorn production in the wellbore of its Breech Well No. 224 located in Unit A of Section 13, Township 26 North, Range 7 West, Rio Arriba County, New Mexico.

BEFORE THE

NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF CAULKINS OIL COMPANY FOR APPROVAL OF DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO

Case 6441

APPLICATION

Comes now Caulkins Oil Company and applies to the Oil
Conservation Division, New Mexico Energy and Minerals Department,
for approval of downhole commingling or production in the
wellbore in its Well No. 12, located in Unit A, Section 35,
Township 27 North, Range 6 West, N.M.P.M., Rio Arriba County,
New Mexico, and in support thereof would show the Division:

- 1. The subject well is now completed as a Pictured Cliffs-Mesaverde dual completion. Applicant proposes to commingle the production from these two zones in order to obtain more efficient production.
- 2. Approval of this application is in the interests of conservation and the prevention of waste, and will result in the production of gas and liquid hydrocarbons that would not otherwise be produced.

WHEREFORE Applicant prays that this application be set for hearing at the last examiner hearing in January, 1979, and that after notice and hearing as required by law, the Division enter its order granting approval of downhole commingling as requested.

Respectfully submitted, CAULKINS OIL COMPANY

Kellahin & Kellahin P. O. Box 1769 Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

BEFORE THE

NEW MEXICO ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

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CIL CONSERVATION COM.

IN THE MATTER OF THE APPLICATION OF CAULKINS OIL COMPANY FOR APPROVAL OF DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO

APPLICATION

Case 6441

Comes now Caulkins Oil Company and applies to the Oil Conservation Division, New Mexico Energy and Minerals Department, for approval of downhole commingling or production in the wellbore in its Well No. 12, located in Unit A, Section 35, Township 27 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico, and in support thereof would show the Division:

- 1. The subject well is now completed as a Pictured Cliffs-Mesaverde dual completion. Applicant proposes to commingle the production from these two zones in order to obtain more efficient production.
- 2. Approval of this application is in the interests of conservation and the prevention of waste, and will result in the production of gas and liquid hydrocarbons that would not otherwise be produced.

WHEREFORE Applicant prays that this application be set for hearing at the last examiner hearing in January, 1979, and that after notice and hearing as required by law, the Division enter its order granting approval of downhole commingling as requested.

Respectfully submitted, CAULKINS OIL COMPANY

Reliahin & Kellahin
P. O. Box 1769
Santa Fe, New Mexico 87501

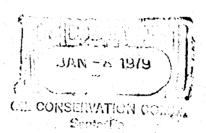
ATTORNEYS FOR APPLICANT

BEFORE THE

NEW MEXICO ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF CAULKINS OIL COMPANY FOR APPROVAL OF DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO



APPLICATION

Case 6441

Comes now Caulkins Oil Company and applies to the Oil Conservation Division, New Mexico Energy and Minerals Department, for approval of downhole commingling or production in the wellbore in its Well No. 12, located in Unit A, Section 35, Township 27 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico, and in support thereof would show the Division:

- 1. The subject well is now completed as a Pictured Cliffs-Mesaverde dual completion. Applicant proposes to commingle the production from these two zones in order to obtain more efficient production.
- 2. Approval of this application is in the interests of conservation and the prevention of waste, and will result in the production of gas and liquid hydrocarbons that would not otherwise be produced.

WHEREFORE Applicant prays that this application be set for hearing at the last examiner hearing in January, 1979, and that after notice and hearing as required by law, the Division enter its order granting approval of downhole commingling as requested.

Respectfully submitted, CAULKINS OIL COMPANY

Rellatin & Kellahin
P. O. Box 1769
Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

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:

APPLICATION OF CAULKINS OIL COMPANY

FOR DOWNHOLE COMMINGLING, RIO ARRIBA

COUNTY, NEW MEXICO.

CASE NO. 6441

Order No. *R-5925*

Su

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on January 31

19 79 , at Santa Fe, New Mexico, before Examiner Richard L.

Stamets

NOW, on this _____ day of ______, 1979 ____, 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, Caulkins Oil Company, is the owner and operator of the Breech F Well No. 12, located in Unit A of Section 35, Township 27 North Range 6 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle

 Pictured Cliffs and Mesaverde production

 within the wellbore of the above-described well.

That from the Me Pictured Cliffs zone, the (4) subject well is capable of low marginal production only. That from the Mesaverde zone, the subject well is capable of low marginal production only. (6) That the proposed commingling may result in the recover 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, 25 percent of the commingled gas production should be allocated to the Pictured Cliffs percent of the commingled 245 Mesaverde zone. (ALTERNATE) (9) That in order to allocate the commingled production to district office

each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec/ of the Division and determine an allocation formula for each of the production zones.

(10) That Division Polininis Trative Order No which anythonings the enal completion of the suspendent DC 697, Should be Supersected.

IT IS THEREFORE ORDERED:

(1) That the applicant, Caulkins Oil Company, is
hereby authorized to commingle <u>pictured Cliffs</u> and
Mesaverde production within the wellbore of
the Breech F Well No. 12 , located in Unit A of
Section 35 , Township 27 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 25 percent of the commingled 965
production shall be allocated to the Pictured Cliffs
percent of the commingled 243 and all of the condensate production production shall be allocated to the Mesaverde
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 concurrent
present, to the Division, a plan for remedial action.
(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 hereinabove
designated.
(4) that Division Administrative Order
(4) that Division Administrative Order No DC-697 is hereby superseded.