CASE 5688: DUGAN PROD. CORP. FOR DOWNFOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO

CASE NO.

5688

APPlication, Transcripts, Small Exhibits,

ETC.

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BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico June 9, 1976

EXAMINER HEARING

IN THE MATTER OF:

Application of Dugan Production Corporation for downhole commingling,
Rio Arriba County, New Mexico.

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil Conservation Commission:	William F. Carr, Esq. Legal Counsel for the Commission State Land Office Building Santa Fe, New Mexico					
For the Applicant:	Richard T. C. Tully, Esq. General Counsel					

Richard T. C. Tully, Esq.
General Counsel
Dugan Production Corporation
P. O. Box 234
Farmington, New Mexico

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Phone 4003, 981-971)

INDEX Page THOMAS A. DUGAN Direct Examination by Mr. Tully Cross Examination by Mr. Nutter EXHIBIT INDEX Page Applicant's Exhibit One, Map Applicant's Exhibit Two, Resume Applicant's Exhibit Three, Schematic Drawing Applicant's Exhibit Four, Discussion Applicant's Exhibit Five, Production History Applicant's Exhibit Six, Tabulation

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MR. NUTTER: We will call Case Number 5688.

MR. CARR: Case 5688, application of Dugan

Production Corporation for downhole commingling, Rio Arriba

County, New Mexico.

MR. TULLY: If it please the Commission, my name is Richard Tully, I'm general counsel for Dugan Production Corp., I have one witness to be sworn, Thomas A. Dugan.

MR. NUTTER: Mr. Dugan is still under oath.

MR. TULLY: Are the witness's qualifications still a matter of record and acceptable?

MR. NUTTER: Yes.

THOMAS A DUGAN

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

DIRECT EXAMINATION

BY MR. TULLY:

- Q Mr. Dugan, are you familiar with the application for approval for downhole commingling of the Jicarilla E No. 1 Well?
 - A. Yes.
 - Q What is the purpose of this application?
- A. Just recently we discovered that we had a packer or tubing leak between the Pictured Cliff and the Mesaverde

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zones in this well and we are asking for permission to commingle the well downhole because we do not think it is economically feasible to correct the leak and it is also possibly hazardous to the well if we attempt to correct the leak.

- Q What is the minimum figures, monetary sum, that you feel it would cost to repair this well?
- A. Well, if we were real lucky we might get the job
 done for seventy-five hundred dollars and if we are not so
 lucky it could cost as much as thirty or forty thousand dollars
- Q Do you feel that there might possibly be damage to the formation in repairing this leak?
- A. Since this is a dual well it is very difficult to work on the well without killing both zones and if you kill these zones and as old as they are and as low as the pressure is getting it is possible that you could damage them and not get the well back.
- Q. Do you feel that there is marginal production in each of these zones?
- A. If we continue to produce the well as is, we could produce the well for a long period of time at a marginal rate.
 - Q What price are you now receiving per MCF for this?
- A. We are getting twenty-three and a half, plus BTU's, plus small producer, plus some taxes, which all boils down to approximately thirty-nine cents per MCF.

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í	Q .	Okav.	where	iq	this	well	located?
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A. It's in the southwest quarter of Section 21, Township 26 North, Range 3 West.

- Q Who is the operator of this well?
- A. Dugan Production Corporation.
- Q What two zones has this well been dually completed in?
 - A The Pictured Cliff and the Mesaverde.
- Q Okay, I now hand you Exhibit Number One, would you identify this exhibit and tell what it contains?
- A. This is just a map showing the well in relationship to the other wells in the area and the yellow is the outline of the Tapacito-Pictured Cliff Provation Unit and the blue is the outline of the Blanco-Mesaverde Provation Unit.
- Q I now hand you Exhibit Number Two, would you identify this and tell what it contains?
- A. Okay, this is a resume of the completion of the Jicarilla E-1 that occurred back in '58.
- Q I now hand you Exhibit Number Three, would you identify it and tell what it contains?

MR. NUTTER: Just a minute, Mr. Dugan, while we are on this Exhibit Number Two, I haven't had time to read it but does this completion data show that this well was dually completed at that time?

A. Yes, sir.

MR. NUTTER: Okay.

- A Exhibit Three is the schematic drawing of the wellboxe and showing the perforations, the casing sizes and the tubing sizes and where they are set and where the packer is set.
- For the record would you tell us the casing sizes
 and tubing sizes, as well as the perforations?
- A. Okay, there is ten-and-three-quarter set at two, sixty-four and seven-and-five-eighths set at forty-one hundred and a five-and-a-half liner set at sixty-one, sixty-two.
- Q If this application is approved what method of downhole commingling do you propose?
- A. If it is approved I would propose to perforate the Mesaverde tubing string at approximately thirty-nine, fifty, which would be opposite the Pictured Cliff perforations and then produce both zones through the Mesaverde tubing string, in that manner.
- Q I now hand you Exhibit Number Four, would you identify it and tell what it contains?
- A Okay, this is just a discussion as to the prognosis of the future production but it is really derived from the decline curves that are attached and the decline curve shows the history of production for the last few years from both zones.
 - Q Is there a steady rate of decline established for

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each of these zones?

A Yeah, it's a fairly steady rate, not too drastic at this late date.

- Do you believe that the rate of decline that is shown on this could permit a reasonable allocation of the commingled production for each of these zones?
- A. Yes, I think that with the eighteen years of production history that we have from the well that it would be no problem at all to arrive at an allocation for each zone.
- Q Okay, I now hand you Exhibit Number Five, would you identify this and tell what it contains?
- A Okay, it is just a Xerox of the production history for 1975, a Xerox from the New Mexico Engineering annual book and the one shows the Tapacito-Pictured Cliff where we have underlined the production from this well from the Tapacito-Pictured Cliff and also from the Blanco-Mesaverde for each zone. Essentially it says that the Pictured Cliff produced thirty thousand, nine hundred and eighty-seven MCF in 1975 and the Mesaverde produced twenty-eight thousand, eight hundred and sixty-four MCF.
- Q What method of allocation for each of these zones would you recommend at this time?
- A. I propose that we just use the 1975 production from each zone and dividing them out it would come out approximately fifty-two percent of the well's production would be allocated

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to the Tapacito-Pictured Cliff zone, forty-eight percent would be allocated to the Blanco-Mesaverde zone.

Q I now hand you Exhibit Number Six, would you identify it and tell what it contains?

A Okay, it is just a tabulation of the shut-in pressures that we had available on the well on each zone, taken from the various packer leakage tests that had been run and also from the deliverability tests that have been run during the years. It shows that the pressures are getting down where they are reasonably close to the same. The Mesaverde is still slightly higher, maybe a hundred to a hundred and fifty pounds higher than the Pictured Cliff formation.

Q But you feel that this chart shows that there is little pressure differential between the pressures in each of these zones?

A. Yes, it is a hundred and fifty pounds, approximately, at this late date.

Q For this well is the ownership of the two zones common?

A. Yes.

Q Do you know of any other wells in the area where commingling of these two zones or formations was allowed by this Commission?

A. Not in the immediate area, I'm not aware of one.

Q.	In	your	opinion	will	the	total	value	o£	the	g as	be
reduced	by c	ommin	gling?								

A No.

Q Do you feel that if this application is approved that you will be able to produce more gas, be able to lift liquids better and that type of thing?

A. Since this is a relatively marginal well and the name of the game in the marginal well business is to lift the produced fluids, I feel that we can do that better by commingling both zones downhole, so if that is true and we can lift the produced fluids better, we will undoubtedly get better production from the well and longer life from the well.

Q In your opinion, will approval of this application for downhole commingling of the Tapacito-Pictured Cliff formations and the Blanco-Mesaverde formation in this well conserve the natural resources, prevent waste and not impair and interfere with any correlative rights of any owners?

A. I feel sure that it will if we can produce it in that manner.

MR. TULLY: At this time we move for the introduction of Exhibits One through Six into evidence.

MR. NUTTER: Applicant's Exhibits One through Six will be admitted into evidence.

(THEREUPON, Applicant's Exhibits One through Six were admitted into evidence.)

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CROSS EXAMINATION

MR. TULLY: Our direct examination is finished.

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BY MR. NUTTER:

Q Mr. Dugan, is the well classified as a marginal well in both of these gas pools?

A. I think so, I'm not exactly sure how the State classified them, I didn't check.

Q We will take administrative note of our records in this case.

A. I classify them as marginal, I don't know how the State does it.

Q. Okay. Now, I notice here on these decline curves, Mr. Dugan, what kind of a leak, first of all, do you think you've got in the well?

A. I just don't have any idea.

All you know is that you've got communication?

A Yes, sir. It just occurred.

Q I notice now here that on the decline curve for the Mesaverde that production took a very drastic decline in the first two or three months of 1976 and there appears to be a more or less corresponding increase in the production from the PC, what do you attribute that to?

A Well, I would guess that is when our leak occurred.

O Production from one is just coming out the other one

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A That would be my guess at this time. At the time I didn't think much of it. Apparently Al must have thought that because he sure caught it so fast on this one.

- Q Now, there really isn't a decline as far as the PC is concerned on Exhibit Number Four. There had been some fluctuation but it is a relatively flat production history?
 - A. Yes.
- Q It appears that the well over the last several years has averaged between two and three thousand MCF per month?
 - A. Yes.
- Q Although after some, so far unexplained increased production in the Mesaverde in mid 1972, there has been a steady decline of production of that well?
 - A. Yes.
- Q To what do you attribute that increase in production in 1972 to?
- A Well, we had the well unloaded a little better and back to the old game of lifting the produced fluids better.
 - Q Okay, now, do both of these zones make liquids?
 - A. Yes, they do, a small amount, not a large amount.
- Q But you do have to produce through tubing to keep those liquids unloaded?
 - A. Yes.
 - Q. And so far you haven't made any effort to determine

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what this leak is, where it is or just what is occurring down in the wellbore?

A No, sir, there would be no way of -- well, I guess there is, you could run some temperature surveys or something.

- Q But you haven't run any tests?
- A We haven't done that, no, sir.

MR. NUTTER: Are there any further questions of the witness? He may be excused.

(THEREUPON, the witness was excused.)

MR. NUTTER: Do you have anything further? Does anyone have anything they wish to offer in Case Number 5688?

MR. CARR: Mr. Examiner, we received a telegram from Northwest Production Company, signed by T. W. Priddy which reads: We have no objection to the application of Dugan Production Corporation for downhole commingling in Case Number 5688. (End of reading.)

MR. NUTTER: One more question, Mr. Dugan. I notice on Exhibit Number One, I guess, that Section 21 here lists ownership as McHugh for the section but Dugan for the southwest quarter. Now, does McHugh have an interest in this well?

MR. DUGAN: No, actually I acquired the Section 21 from Occidental Petroleum who drilled the well originally, who had farmed it out to Northwest Production and I own all rights in Section 21, having acquired them from Occidental. farmed out the north half and the southeast quarter to

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McHugh and he drilled the three Pictured Cliff wells shown there.

MR. NUTTER: So, you have the Pictured Cliff rights under the southwest quarter and you have the entire Mesaverde rights to that west half?

MR. DUGAN: Yes, sir.

MR. NUTTER: So ownership of these two zones is the same, is it?

MR. DUGAN: Yes, sir.

MR. NUTTER: Okay. If there are no further question and nothing further from the applicant -- does anyone have anything they wish to offer in the case? If not, we will take the case under advisement.

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REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Sidney F. Morrish, C.S.R.



DIRECTOR

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE

87501

January 26, 1977

LAND COMMISSIONER PHIL R. LUCERO



STATE GEOLOGIST **EMERY C. ARNOLD**

JOE D. RAMEY

Other_

Re: CASE NO. Mr. Richard T. C. Tully R-5357 ORDER NO. General Counsel Dugan Production Corporation P. O. Box 234 Applicant: Farmington, New Mexico 87401 Dugan Production Corporation Dear Sir: Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case. Yours very truly, JOE D. RAMEY Director JDR/fd Copy of order also sent to: Hobbs OCC Artesia OCC Aztec OCC_

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 5688 Order No. R-5357

APPLICATION OF DUGAN PRODUCTION CORPORATION FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 9, 1976, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 25th day of January, 1977, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Dugan Production Corporation, is the owner and operator of the Jicarilla "E" Well No. 1, located in Unit M of Section 21, Township 26 North, Range 3 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle Tapacito-Pictured Cliffs and Blanco 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. 5688 Order No. R-5357

- (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 Commission 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 Commission 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, 52 percent of the commingled hydrocarbon production should be allocated to the Pictured Cliffs zone, and 48 percent of the commingled hydrocarbon production to the Mesaverde zone.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Dugan Production Corporation, is hereby authorized to commingle Tapacito-Pictured Cliffs and Blanco Mesaverde production within the wellbore of its Jicarilla "E" Well No. 1, located in Unit M of Section 21, Township 26 North, Range 3 West, NMPM, Rio Arriba County, New Mexico.
- (2) That 52 percent of the commingled hydrocarbon production shall be allocated to the Pictured Cliffs zone and 48 percent of the commingled hydrocarbon production shall be allocated to the Mesaverde zone.
- (3) That the operator of the subject well shall immediately notify the Commission's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

-3-Case No. 5688 Order No. R-5357

hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman

EMERY C. ARNOLD, Member

JOE D. RAMEY. Member & Secretary

SEAL

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TOP OF PICTURED CLIFFS: 3900" BASE OF PICTURED CLIFFS: 3970 PERFORATIONS: 3908 - 3913. 3949 - 3952

3954 - 3964

2 3/8" 0 D. Tubing of 3885"

Buins Liner Hanger at 4010' 7 5/8" O.D. Casing at 4100' cemented w/250 sx

TOP OF MESAVERDE: 5597"

PERFORATIONS: 6074-6078

6088'-6104', 6114'- 6124,

6138 - 6146

DIAGRAMATIC SKETCH OF DUAL GAS WELL

TAPACITO PICTURED CLIFFS AND BLANCO MESAVERDE

for all action:

| Proposition | 1975 | Proposition

2 3/8" 0.D. Tubing at 6056' Baker Model "D" Production Packer at 6056

P.B.T.D. 6146'
5 1/2" O.D. Cosing at 6162'
Cemented w/300 sx entire length
1.D. 6300

Exhibit #3

DUGAN PRODUCTION CORP.

APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5688

JICARILLA E #1 WELL M Section 21, T26N, R3W Rio Arriba County, New Mexico

APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5688

JICARILLA E #1 WELL
M Section 21, T26N, R3W
Rio Arriba County, New Mexico

PROGNOSIS OF FUTURE PRODUCTION FROM EACH ZONE

It is our opinion the repair of the leaking packer for the dually completed Jicarilla E #1 Well will be expensive, and the size of the well and its age will not justify this expense.

As you can see from Exhibit "B" we are estimating the Pictured Cliffs formation will average approximately 1550 MCF per month for the next three years, and the Mesa Verde formation will also average approximately 1550 MCF per month. Assuming the price of interstate natural gas increases to \$0.55 in 1979, we will receive at the most \$1,705 gross production income per month from this well.

The sum of \$1,705 per month as the highest amount of income from this well for the next several years does not allow much room for error when the costs of repairing the leaking packer, or if necessary in the future, the costs of reworking the well are taken into account.

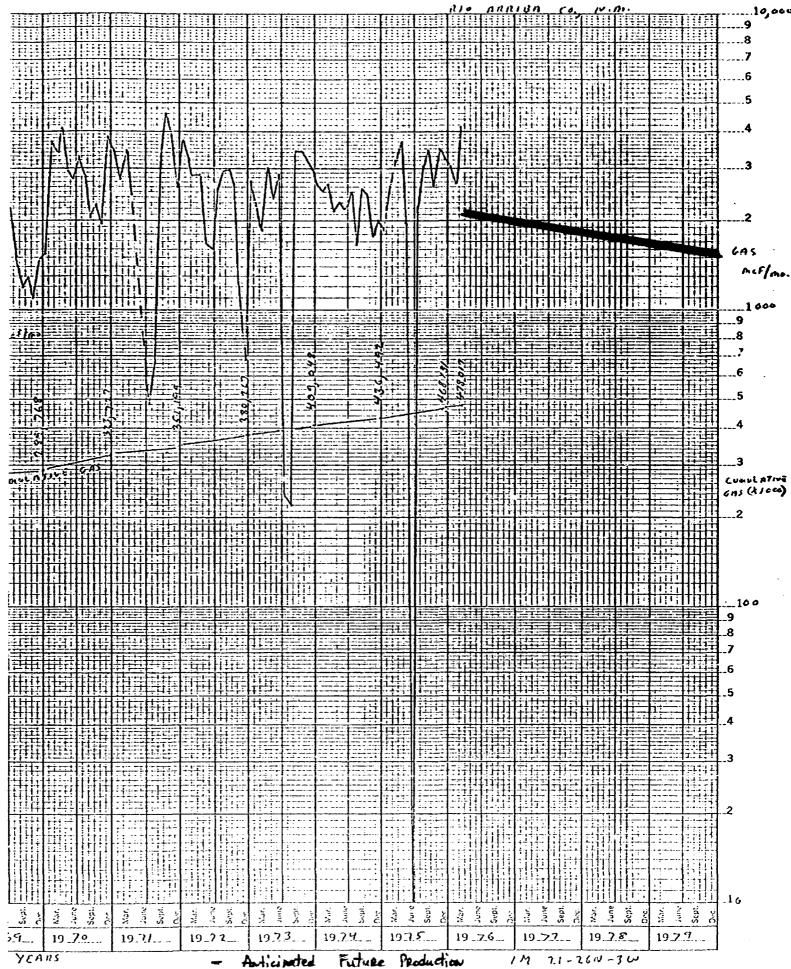
The repair of the packer leak, if made, will constitute an excessive and improper method of operating and producing this well, thereby constituting waste.

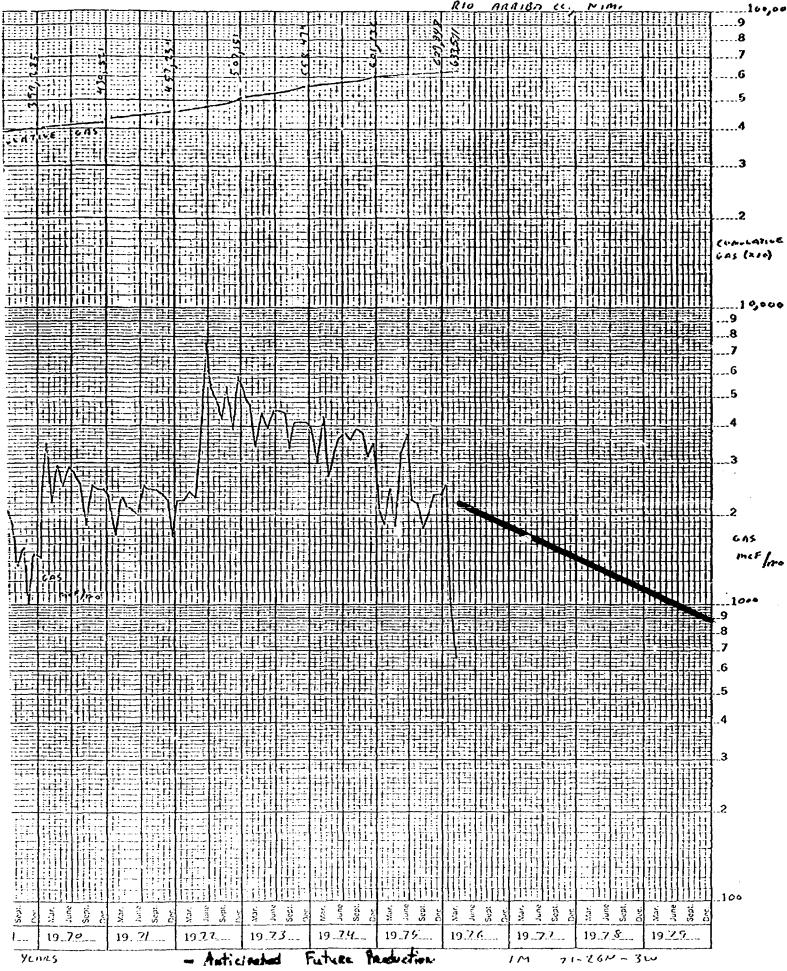
In addition, the Tapacito Pictured Cliffs Pool and Blanco Mesa Verde Pool have been steadily depleted for many years by this well and others. The steady decline in production from these pools are illustrated in Exhibit "B". It is possible the operations we undertake to repair the leaking packer may result in irreparable damage to these reservoirs. Needless to say, the ultimate recovery of gas production from these pools would be reduced.

We feel the commingling of the gas production from these two pools in the well bore will allow the produced fluids to be lifted better, thereby more efficiently increasing the over-all gas production.

For the above reasons, the approval of this Application will result in more efficient production of gas from these two zones.

TICARILLA 'E' WELL IVO. 1
TAPACIT PICTUREO CLIFFS





Dockets Non. 17-76 and 18-76 are tentatively r : For hearing on June 16 and June 23, 1976. Applications for hearing must be filed at least 22 days in redunde of hearing date.

DOCKER! INVESTIGATION OF THE CHECKER - THEIR OF TORK

9 A.M. - OIL COMMING ICH COMMINGION COMMINGER POCH, STATE LAND CURICE MILLDING - SAMEA FE, MEMINGION

The following cares will be heard before baniel C. Matter, Examiner, or Michael L. Ctameta, Alternate Tympher:

- CASE 5690: Application of Mobil Oil Corporation for amendment of Order No. R-5120, Lea County, Mem Mexico. Applicant, in the above-styled cause, seeks amendment of Order No. R-5120, which order provided for the simultaneous dedication of a 320-acre non-standard has promation unit, comprising the W/2 SW/4 and SE/4 SW/4 of Section 28 and the MW/4 and the SW/4 ME/4 of Section 33, Township 21 South, Range 37 Fast, Europi Gas Pool, Lea County, New Mexico, to applicant's E. O. Carson Wells Nos. 4 and 22, located at unorthodox locations in Units M and L, respectively, of said Section 28. Applicant seeks amendment of said Order No. R-5120 by authorizing the simultaneous dedication of said unit to the previously approved F. O. Carson Wells Nos. 4 and 22 and to its E. O. Carson Well No. 23 located 1930 feet from the North line and 2640 feet from the West line of Section 33, Township 21 South, Range 37 East, Lea County, New Mexico.
- CASE 5689: Application of Palport Cil Corporation for an unorthodox oil well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Jones Federal Well No. 4 to be drilled 990 feet from the South line and 1477 feet from the West line of Section 22, Township 15 South, Range 29 East, South Lucky Lake-Queen Pool, Chaves County, New Mexico.

CASE 4843: (Reopened)

In the matter of Case 4843 being reopened pursuant to the provisions of Order No. R-4435-A, which order extended the special pool rules for the Southeast Chaves Queen Gas Area, Chaves County, New Mexico, including a provision for 320-acre spacing and provation units for gas wells. All interested parties may appear and show cause why said Order No. R-4435 should not be rescinded.

- CASE 5691: Application of Hanson Oil Corporation for an unorthodox oil well location, Fidy County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 990 feet from the North line and 2600 feet from the West line of Section 25, Township 26 South, Range 31 East, North Mason-Delaware Pool, Eddy County, New Mexico.
- CASE 5692: Application of Cities Service Oil Company for a dual completion and downhole commingling. Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Owen "A" Well No. 1 located in Unit p of Section 35, Township 21 South, Pange 37 East, Lea County, New Mexico, completing said rell in such a manner as to comminste Blinebry and Drinkard oil production and to dually complete said zones with the "antz-Granite Wash Pool.
- CASE 5670: (Continued from 'ay 12, 1976 Examiner Hearing)

Application of Read & Stevens. Inc. for an unorthodox location and directional drilling. Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to deviate its Farris-Federal Well No. 3, the surface location of which is 660 feet from the South line and 1980 feet from the Fast line of Section 27, Township 15 South, Range 28 Fast, Chaves County, Yer Yexico, by directionally drilling said rell from a rick-off roint at approximately 6000 feet and bottoming it at an unorthodox location in the Pennsylvanian formation within 250 feet of a roint 900 feet from the South line and 1650 feet from the Fast line or said Section 27, the S/2 of the Section to be dedicated to the well.

CASE 5688:

Application of Duran Production Corroration for downhole commingling, Ric Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Tapacito-Pictured Cliffs and Blanco-Mesa Verde production in the wellbore of its Jicarilla E Well No. 1, located in Unit M of Section 21, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.

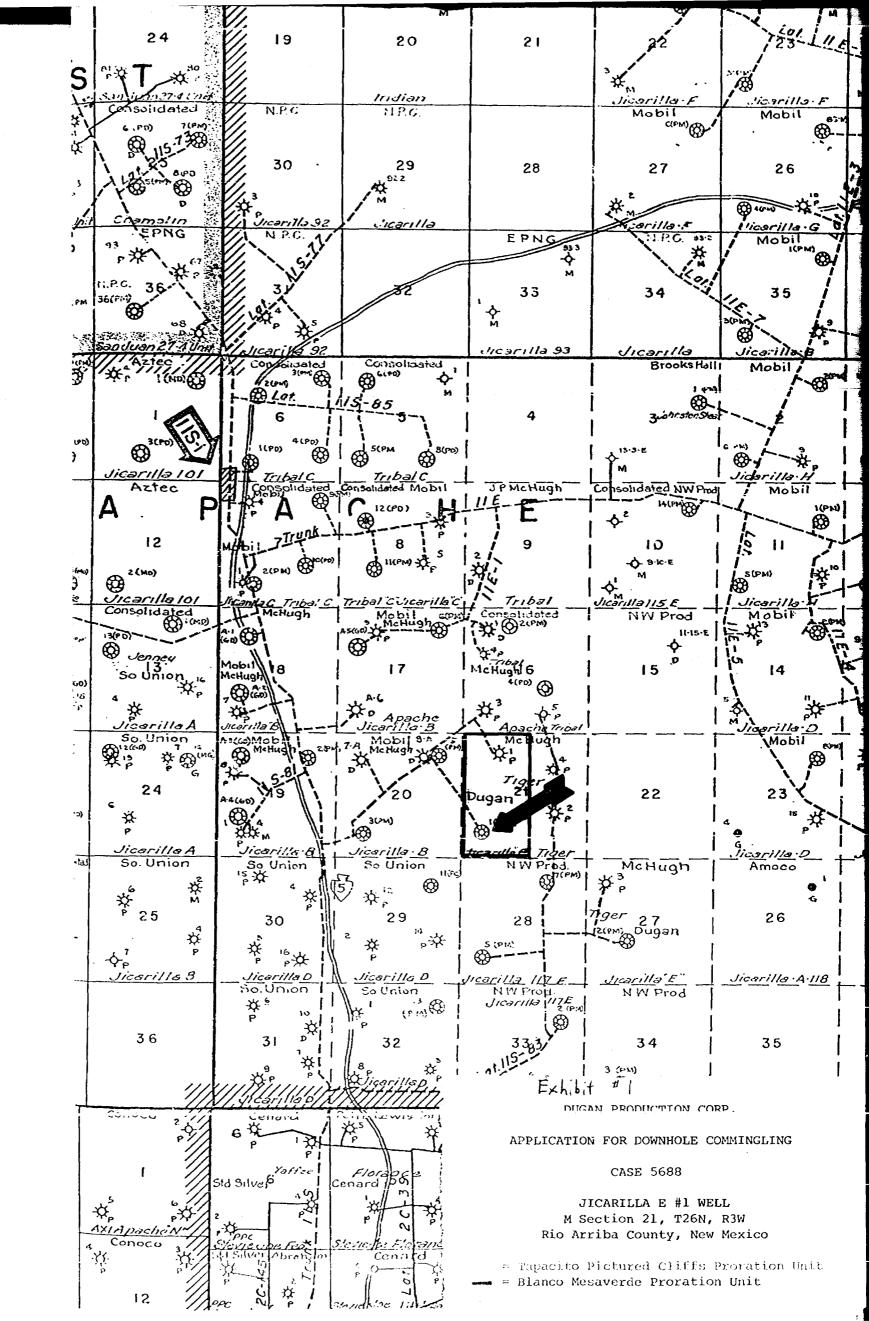
CASE 5693:

Application of Jerome P. McNush for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to downhole commingle Fruitland and Pictured Cliffs production in that area described as being all of Township 24 through 23 North, Manges 9 through 15 West, San Juan County, New Mexico, excluding however, those lands within the boundaries of the Ballard-, Fulcher Kutz-, and West Kutz- and also those lands within the boundary of the Gallegos Canyon Unit Area.

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 5688
APPLICATION OF DUGAN PRO- Order No. R DUCTION CORPORATION FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO
ORDER OF THE COMMISSION
BY THE COMMISSION:
This cause came on for hearing at 9 a.m. on
9 , at Santa Fe, New Mexico, before Examiner .
NOW, on this day of , 19 , the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,
FINDS:
(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
(2) That the applicant, Dugan Production Corporation, is the owner and operator of the Ticarilla "E" well 710. 1,
Located in Unit M of Section 21, Township 26 north, Range 3 West, NMPM, Rio arriba County, New Mexico.
Tapacito-Pictured Cliffe and Planco mesaverde pro-
duction within the wellbore of the above described well
duction within the wellbore of the above described well (4) That from both the Prictured Cliffs and the mesa verde formations. The subject well is capable only of low marginal rates of production.
of low marginal rates of production.
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APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5688

JICARILLA E #1 WELL
M Section 21, T26N, R3W
Rio Arriba County, New Mexico

RESUME OF JICARILLA E #1 WELL'S COMPLETION HISTORY

5-19-58 thru 6-19-58	Spud 3:30 a.m. 5-19-58. Drilled 15" hole to 265'. Ran 7 jts 10-3/4" 32.75# E-40 csg w/larkin guide shoe and larkin centralizer; TE 252' set @ 264', cemented w/200 sx neat plus 2% CaCl. Drilled 9-7/8" hole to 4110'. Ran 99 jts 7-5/8" csg, cemented @ 4100' w/250 sx 8% gel and 1/4# gel flow seal per sack w/2% CaCl. Drilled 6-3/4" hole to 6300', ran 5-1/2" liner TE 2152' set @ 6162' w/burns liner hanger @ 4010', cemented w/100 sx reg 100 diamix, 8% gel, 2% CaCl. Tested top of liner, failed to hold. Squeezed w/100 sx neat. Tested top of liner, failed to hold; squeeze #3 w/100 sx, tested top of liner w/2000#, held OK.
6-22-58 thru 6-27-58	Perforate w/2 bullets per foot 6146-38, 6124-14, 6104-6088, 6078-74, 6067-63. Frac w/100,000 gal. water and 100,000# 20-40 sd BD 800# Min. 800#. Max. 3100#. Ave. 1800#. Dropped 95 RB, good pressure increase. AIR 62 BPM. Went on vacuum. Moved rig off hole. Rig up CPS, found sand @ 6093'. Cleared out hole, running to swab MV. Run 2-3/4" tbg.
6-29-58 thru 6-30-58	Set Baker cement retainer @ 6012' and squeezed perfs w/100 sx 2% CaCl plus 1/4# gel flake/sx. Broke down. Max pressure 900#, final 100#. Resqueeze perfs w/150 sx 2% CaCl plus 1/4# gel flake/sx. Squeeze 60 sx into formation. Break down 900#. Max. sq. press. 2000. Drilling cement to 6148'. Tested hole w/2000#. Did not break down.
7-1-58 thru 7-2-58	Reperforate w/2 bullets per foot 6146-38, 6124-14, 6104-6088, 6078-74. Frac w/80,000 gal water, 75,000# 20-40 sd and 50 RB BD 2200#, Max. 3400#. Ave. 2600#. Min. 2000#. Ave. IR 36.4 BPM. Ran 2" tbg to 6012'. Swabbed well.
10-10-58 thru 10-11-58	Pulling tubing. Preparation to perf. and frac Pictured Cliffs formation. Perforate w/2 bullets per foot 3908-13, 3954-64, 3949-52. Set BP @ 4025'. Frac w/34,000 gal water, 25,000# 20-40 sd, and 30 RB. BD 1500# IP 1200# Ave. 1400# Max. and final 1900#. Ave. IR 72 B/M. Ran tubing, swabbed well.
10-22-58 thru 11-7-58	Plan to run tubing and complete. Running tubing. Pulled bridge plug from 4025', cleaning out to complete FC form. Retrieved bridge plug. Plan to retrieve bridge plug from

4025' and complete MV form. Baker Model D @ 6056' w/2-3/8" OD 4.7# J-55 8R EUE tbg. 2-3/8" OD 4.7# J-55 8R EUE tbg

set @ 3885'. Rig released. Well completed.

10-3/4" O.D. Casing at 264' Cemented w/200 sx

TOP OF PICTURED CLIFFS: 3900'

BASE OF PICTURED CLIFFS: 3970

PERFORATIONS: 3908' - 3913',

3949' - 3952',

3954' - 3964'

2 3/8" O.D. Tubing at 3885'
Burns Liner Hanger at 4010'

7 5/8" O.D. Casing at 4100' cemented w/250 sx

TOP OF MESAVERDE: 5597'

PERFORATIONS: 6074'-6078',
6088'-6104',
6114'-6124',
6138'-6146'

DIAGRAMATIC SKETCH OF DUAL GAS WELL
TAPACITO PICTURED CLIFFS AND BLANCO MESAVERDE

2 3/8" O.D. Tubing at 6056' Baker Model "D" Production Packer at 6056

P.B.T.D. 6146'
5 1/2" O.D. Casing at 6162'
Cemented w/300 sx entire length
1 T.D. 6300

Exhibit #3

DUGAN PRODUCTION CORP.

APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5688

JICARILLA E #1 WELL,
M Section 21, T26N, R3W
Rio Arriba County, New Mexico

APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5688

JICARILLA E #1 WELL
M Section 21, T26N, R3W
Rio Arriba County, New Mexico

PROGNOSIS OF FUTURE PRODUCTION FROM EACH ZONE

It is our opinion the repair of the leaking packer for the dually completed Jicarilla E #1 Well will be expensive, and the size of the well and its age will not justify this expense.

As you can see from Exhibit "B" we are estimating the Pictured Cliffs formation will average approximately 1550 MCF per month for the next three years, and the Mesa Verde formation will also average approximately 1550 MCF per month. Assuming the price of interstate natural gas increases to \$0.55 in 1979, we will receive at the most \$1,705 gross production income per month from this well.

The sum of \$1,705 per month as the highest amount of income from this well for the next several years does not allow much room for error when the costs of repairing the leaking packer, or if necessary in the future, the costs of reworking the well are taken into account.

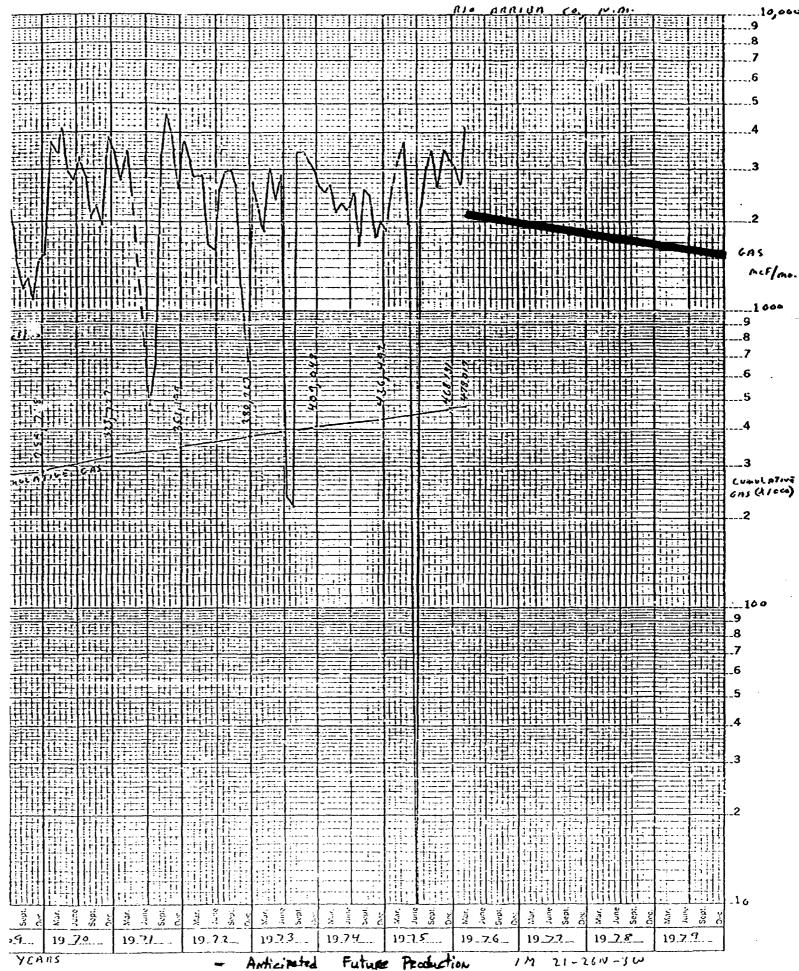
The repair of the packer leak, if made, will constitute an excessive and improper method of operating and producing this well, thereby constituting waste.

In addition, the Tapacito Pictured Cliffs Pool and Blanco Mesa Verde Pool have been steadily depleted for many years by this well and others. The steady decline in production from these pools are illustrated in Exhibit "B". It is possible the operations we undertake to repair the leaking packer may result in irreparable damage to these reservoirs. Needless to say, the ultimate recovery of gas production from these pools would be reduced.

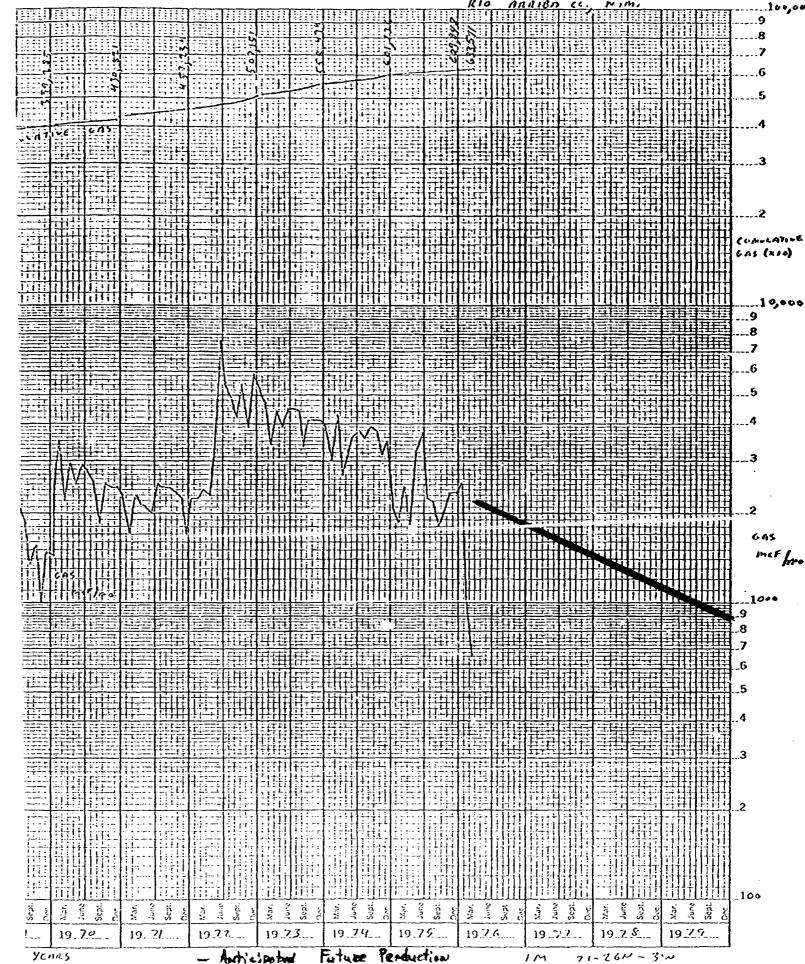
We feel the commingling of the gas production from these two pools in the well bore will allow the produced fluids to be lifted better, thereby more efficiently increasing the over-all gas production.

For the above reasons, the approval of this Application will result in more efficient production of gas from these two zones.

TICARILLA 'E' WELL NO. 1
TAPACIT PICTURED CLIFFS



BLANCE JESOVERDE



APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5688

JICARILLA E #1 WELL M Section 21, T26N, R3W Rio Arriba County, New Mexico

SHUT-IN PRESSURES

Date Shut-in	Length of Shut-in	Pictured Cliffs	Mesaverde
Pressure Taken	Days	Csg	Tbg
•• •• ••			
11-17-58	9	969	1225
11-24-58	7	1006	1217
7-13-61	7	674	802
7-27-61	7	709	790
1-02-63	7	617	735
1-16-63	7	647	742
7-23-64	7	616	712
9-01-64	7	623	767
9-15-64	7	644	752
1-06-65	7	651	
8-31-65	7	586	141
9-14-65	7	622	755
8-09 - 66	7	595	744
8-23-66	7	619	748
5-02-67	7	617	758
5-16-67	7	~35	761
6-21-67	7	642	778
5-13-68	7	652	772
5-19-70	7	dies stein	742
9-16-70	3	435	705
5-06-71	7	454	722
9-01-71	3	540	690
5-08-72	7	392	722
5-04-73	7	407	722
1-30-74	3	288	418
5-06-74	3	305	440
7-23-75	3	330	360
	-		300

Exhibit #6

APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5688

JICARILLA E #1 WELL M Section 21, T26N, R3W Rio Arriba County, New Mexico

CONTINUED TAPACITO	PICTURE(CLIFFS FEB	EGASI MAR	APRIL	MAY	JUNE	3027	Àus	32,7	DIT	ŅŪY	DEC	rk-PROD N	AGE 128
3N 126N 4# GAS 4D 126N 4H GAS	8046	6935	4407	6583	5556	4713 13019	43319	11121	367		3168	9296 624	64645 68083	405867 68083
CCHPANY TOTAL OIL GAS	20402	23105	23782	4583	7106	21125	51602	27348	11428	19943	2257#	27623	\$1515	1370498
APACHE APACHE APACHE AJI626N 3W GAS AJI626N 3W GAS		NG APPRO			,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					-	4524
THANH IN AM GAS	2563	3560	2040	2025	2532	1913	2063 1643 1731 3997	3565 3533	3323	3825 3398	3470 3253 3213	4582 4065	35300 38844	454170
203577N 4M 643 383527N 4M 643 4F3527N 4M 643 5K2527N 4M 643 6F2327N 4M 643 7M2527N 4M 643 8U2527N 4M 643 NCVI	1950 2454 3679 2615 2865 4293	3017 3462 4258 3425 3476 4002	4023 1910 2980 4453 2908 3012 3898	3694 1860 2842 4445 3548 3597 3439	2532 1935 2175 2718 2718 2718	3557 1889 1505 1554 3317	1731 3997 3305	3533 2199 2911 4924 3962 4027	3393 3187 2044 2663 4426 3793 3692 3377	3398 2136 2890 4654 3573 3744 3532	3253 2312 2743 3351 2608 2727 2781	4582 4065 2494 3303 3941 3432 3989 3974	24709 32711 47278 37392	583531 386248 495310 517017 597739
THESETH 44 GAS BUZSETH 44 GAS HGYT HGYT BE SZON 44 GAS	2865 4293 3670	3476 4002 3408	3012 3898 3106	3597 3439 1917	2778 2414 2703	1554 3317 2195	3305 3288 2731 859	3627	3692 3377 242	3744 3532 3107	2727 2781 3046	3974 3974	38644 41385 27255	594920 590385 479071
HJRÓN 1M 226N 4X GAS 2D 226N 4# GAS 3A 226N 4# GAS 42 226N 4# GAS	2793 2517 4793 4242	2488 4832	2201	2352 3769 5608 3338	2051 2374 4893	2090 2978 5303 3098	1921 3465 5843	1769 3228 5469 3480	1789 3045 5569 3494	1879	2235 4298 6132 4105	2114 3340 5600 3952	25682	449637 689948 1010915 576077
		4648 3778 PROD. DAT	3175 5901 3391 E 11/74		3041		3638			3230 5276 3723			69031 43280	
CAD WA MOSTICE CAD WA MOSTICE CAD WA MOSTICE CAD WA MOSTICE CAD WA MOSTICE CAD WASTICE	2427 2323 5004	2402 2056 4430	2061 2061 5064	2419 2251 4907	2357 1642 3870	2336 2151 3205	2402 2128 4719	2027 1318 3491	1134 1546 4507	693 1666 3770	2182 1919 4123	3117 1203 2686	25753 22264 49854	12551 8 414921 669228 1844911
PORTHUEST 21 726N 4W GAS 12 726N 3W GAS 2F 626N 3W	1128 3944 2987	972 3099 2484	734 3336	783 3191	1048 2501 2869	940 1751	576 1092	798 1932	911	717 3499	923 4786 3191	861 5255	10389 13306	193500 \$23039
4P 626N 3H GAS 5H 526N 3H GAS	3868 3000 3197	3199 1915 2391	2985 3805 2638 2732	3191 3084 4047 2494 2953	3637 2508 2732	2550 1585 1653 255 438	2231 4048 957 2457	1939 3142 4694 2761 3064	2691 3863 2727 2065	2132 2737 2061 2393		4256 3095 4224 3262 3986	33461 44051 26397 32999	650485 708549 647530 635621
63 526N 3W 6A3		PROQ. 2	OR TO M	773 737	850		2707 711 1567	358 358 1650 1870	2065 1672 311	2393 1335 4598			32999 38765 18249	435421 436421 2011 232179
9Ā 726N 3H GAS 10J 726N 3H GAS 11K 826N 3H GAS 12E 826N 3H SAS CO4PANY TOTAL GAS	4228 4313 3370	2618 2081 3595 2106 84608	4543 4543 2370	1601 3415 4128 4998 3051	1707 2985 4784 4317 2886 75445	1246 2600 3186 3054 816	1458 595 60 1870	2525 1670 2790 76168	3490	5423 2002	1470 4286 1626 6685 4385 94604	1549 3970 542 5907 3310 92575	35454 28238 45074 32946 958763	731671 576486 1072995 754944 18030988
		396	86714	******	******	63661 ••••••	62383 10101111	******	65689	80311				<u>:</u>
##31 425N 3W GAS 41425N 3W GAS JICARILLA E 12126N 3W GAS	1605 272]?] 2632	340 63 3195	990 35 3451	2150 99 1991	2183 118	2722 137 2420	2575 20 3028	1495 498 3444	701 118 2012	1764 671 3478	2122 3237	19360 2737 30987	1059896 504650 447479
CONTANT TOTAL GAS	1854	4473	1116	3856	3361	3367	6502	1611	1783	3033	3478 7318	1715	67232	2330516
EL PASO NATURAL GAS CARSON 133427N 4H GAS GARONER			4451	10850	5266	4319	7026	7233		14547	7611	7475	69218	69218
2K2325N 3N GAS MALL 6X1525N 3N GAS	951 267	72 8 193	932 215	964 214	1019 247	243	983 236	731 184	1000 254	956 258	924 263	886 271	31018 2845	470632 2268 28
492325N SH GAS	1013	423 179	1087	1103	572 1160	1022	584 1140	474 852	676 1160	581 1089	1110	1140	12655	509329 1215709
SAN JUAN 27 4 UNIT 6M3127N 4W GAS 8N3227N 4W GAS 9N3327N 4W GAS 1073227N 4W GAS 1103127N 4W GAS 12M3027N 4W GAS 12M3027N 4W GAS 12M3027N 4W GAS	2712 945 1034 1561 1567 2627 1278	2816 1101 1182 1090	2663 882 2168 1037	2337 1614 1176	2277 1996 1226 1145	1352 1774 1190 1318 1217	1277 933 976 985	1656 200 906 1022	2703 863 797 1096	1873 663 623 929	1811 643 695 954	2042 554 495 1017	25519 9816 12706 13332	1242896 265046 299566 273498
1103127N 4W GAS 1243027N 4W GAS 1362027N 4W GAS 1742927N 4W GAS	1567 2627 1278	1101 1182 1090 1362 1635 1434 660 338	1302 2676	2868 1167 778 275	1296 1245 1245 1292 1751 2187 318	1217 704 2135 520 244	1195 1835 1313 544 142	2099	1230 1551 2056	1038 1992 1802 652 324	643 695 954 1368 1603 1575 570	2042 554 495 1017 1307 1072 707 251	14971 22813 19079 8459 3742	532887 435833 391616 249146
198 527N 43 685 016 2052927N 49 685	455 455 3979	336 3527	830 395 659	273	316 4115	244 1980	2245	871 295 184	686 289	324 3661	418 4586	251 4419	3742 29361	93646 108 -526986
2183027N 4H GAS 01L 23M1927N 4H GAS	1103	966	1111 466	2626 336	913	621 251	466 211	685 607	642 300	1039 295	1251 231	1514 369	11937	24 081 2 24 081 2 34 9 31 6 1 8 7
3542627N 4H GAS 3643627N 4H GAS 6102227N 4H GAS	180 1194 1683	1247	1440	336 1137 2284	407 1118 1690 8213	1409 2253 7241	818 1096 6329	1599 5823	1409 4763	1325 1167	1228 1794 2011	1543	3662 15789 18344 42295	206382 302562
62E2527N 44 GAS 61E2727N 48 GAS 64E1927N 48 GAS 65E3927N 48 GAS	2285 1118	1904 2505	7439 2076 3004	11008 1950 1346	12721 2056 2114	7362 438 1336	6275 1573 1322	7102 1666 2959	3533 5944 1504 2026	5815 5552 2004 2426	4328 4479 1529 1401	5393 5379 1494 2965	63645 54814 20429 24526	63645 54814 53913 52509
6653127N 4N GAS 6763527N 4N GAS 64673527N 4N GAS 72N1627N 4N GAS					1976 2842 17960	6902	4343 4094 14655 3657	3618 5561 15520 3437 2833	2729	3834	721 2956 6787 1862	3163 4149 9944 975 2229	24838 32146 109929 17970 15073 57459 40355	24888 32146 109929
66P3627N 4# GAS 72N1627N 4# GAS 74P1727N 4W GAS 75D2127N 4W GAS 76H2127N 4W GAS						18109 3334 2736 7973 4151 1970	2561 10408 9804	2833 10966 9396	12448 2516 2561 9549 5755 4969	1170 7672 5171	383 5858 2059	2229 4933 4009 776	15073 57459 40355	17970 15073 57458 40355
77J2127N 4W GAS 78L2127N 4W GAS 75L2227N 4W GAS E002427N 4W GAS				1128	4722	1321	6392 5030 6353 8415	6728 2476 9873 8010	4447	4351 4623 8990 6972	2864 3417 1496 4712	3053 6707 5003	27956 27471 41393 52300	27966 27471 41393 52300
E002427N 4H GAS B1M2427N 4H GAS B2M2627N 4H GAS B3J2627N 4H GAS					0013	11606 19698 16078 7444 4344	8492 11876 10213	10966 9328 6728 248763 879107 120975 67760 383150 152366 37753 92466 183462	8575 7727 10553 7633 5547	115302115302115539 1167711130229114554135448997591344899759134489975913457489975913457489979913457489	47056 47096 47096 47096 47096 47096 57766 57766 57766 57766	\$653 \$7551 \$7551 \$7551 \$7551 \$7551 \$7551	52007	52300 52007 18976 60844
82H2627N 44 GAS 83J2627N 44 GAS 85921271N 44 GAS 85127277N 44 GAS 8522727N 44 GAS 852827N 44 GAS 852827N 44 GAS 852827N 44 GAS 8513827N 44 GAS 8513827N 44 GAS			5136	8665	9813 7670 15159	11094 11094 18996 7843	11876 10213 6260 6467 8979 14553 4061 8073	3076 8300 15315	6987 13532 4418	6925 6825 9193	4960 5294 13591	5051 6058 9570	60944 69365 52294 63697 95129 347834 37323 62234	49365 52294 68697 95120
85J3827N 4W GAS 85J3827N 4W GAS 91J3327N 4W GAS 92A3427N 4W GAS				1442	4976 11210 5252		5765	5240 3756 5939 9241	4418 4558 7953	3881 7855 3578 5763	3730 5261 3258 6003	3671	38139 47834 37323 62934	58697 95129 38139 478323 679334 1024492
93C3627N 4N GAS 125C2027N 4N GAS 125C2027N 4N GAS	310	210	304	815 207	7078	6346 18120 20286 2976	15943		34483		8316 4566	6149 12351 5404	35592	35052
442927N 5H GAS 1541627N 5H GAS 1643627N 5H GAS 2043527N 5H GAS	260 9089 1120 982 2657	219 6748 1920 4493 3673 5208 7630	306 9312 1958 8334 6795 10062 13388	9618 2251 6508	5437 1972 2539 2454 4983	95 1572 1341 1012	2016 433	244 2076	187 2025	198 7402 2054 2001 2297 2247	357 10919 1442 4709	357 7622 2024 3580	257430500 2574305000 257430500 25743050 25743050 2770304 2770304 2770304 37460	101455 1464172 1569704 1655823
2681727N 5H GAS 27M2627N 5H GAS 28M2527N 5H GAS 25M1327N 5H GAS	2647 10815 7327 546		4094 6795 10042		6138	1012 3960 6545 339	433 1370 230 3601 249	2721 1424 6437 450	2976 4251 5674 426	2297 2247 6352		3577 5775 9157 9507 9507	32520 56070 87613	1170901 2872617 2372516 164022
3522127N 5N 525 312227N 5N 625 3262527N 5N 625 3362527N 5N 625		10499 155 343 2076 1303 579	13360 168 1413	5662 9529 467 12434 608 1105	6093 423 1593	302 1069 1359 1129			343	11657 384 1255	4724 6981 671 14104 353 998	9507 354 1277	92155 4115 13320	110648 369384
3352627N 5W GAS 36G3627N 5W GAS 37A2027N 5W GAS 3AG1A27N 5W GAS	495 2958 664 730 5154 426	1303 579	1105	621 713 4520	255 587 3897	203	153 1077 1567 37 37	454 1502 2125 235 677 336	1196 2732 271 621	211 556 6262	1052 719 5269	111	7001 7304 32541	1000882 602529 167508 972593
38G1627N 5H GAS 37N1227N 5H GAS 41K2127N 5H GAS 42M2227N 5H GAS	426 914 2950	305 883 2185	396 1176 2672	315 1116 2146	6 457558983115564 3 12 15 15 15 15 15 15 15 15 15 15 15 15 15	298 769 944 154 214 473	273 841 1476 1202 133 599	1060 3033	\$20 1229 2314 1359 320 627	487 1162 2523	1400 2971	6070 215 635 2218 1774	12559 26055 11516 3305 7285	166745 336778 717026
33526277N 5H GASS 3252627N 5H GASS 3252627N 5H GASS 3252627N 5H GASS 3252627N 5H GASS 427227N 5H GASS 427227N 5H GASS 427247N 5H GASS 5274 4271N 5H GASS 5274 4271N 5H GASS 5274 5277N 5H GASS	2950 854 214 739 713 498	7553 3538 2538 2538 2538 2538 2538 2538 2	147170499777855564	2421305 43114227868 1114227868	205 741 739 420	274 473 632 407	133 599 531 354	336 444 1060 3030 1457 367 684 853	320 627 848 410	6.5527.45.91.627.45.19.7 11.325.91.627.25.45.19.7 12.25.25.45.19.7 12.25.25.19.7 12.25.19.7	2165. 10529 52699 26001 1273 1273 13515 1360	314 651 486 384	3335 7285 8069 4892	1972593 164743 334778 717028 273428 179286 1333344 91846
58N2027N 5W GAS 62A 627N 5W GAS 63N 827N 5W GAS 63N 827N 5W GAS	4001	1012	4729	5107	594			401	7386	3167	7562	6158	43493	921149 921149 376265 590407
64M 92TN 5W GAS 65C172TN 5W GAS UTL 7142827H 5W GAS	2155 2512 ,627	1886	1970 1973 627	1696 2022 599	1414 3089 522 947 2335	1372 2610 533	2141 2141 454 917	1846 2633 725	1451 2229 574	1815 2117 614	1745 2621 487 1143	1240 2412	19212 28243 6844 12623	590407 17 112664 215955
440 927N 54 GAS 53C1727N 54 GAS 51C1727N 54 GAS 74G2327N 54 GAS 74G2327N 54 GAS 74G2327N 54 GAS 74G2327N 54 GAS 81C2327N 54 GAS 81C2327N 54 GAS 81C2327N 54 GAS	827 1351 1604 2304 3840 117 1802	1113 1251 1090 2776	1103 1516 2026 3626	599 1055 1555 1535 1233	2335 1753 3153 438 1323	1463 1376 2431 266	1959 927 3039 438 1037 439	725 2557 1741 2937 612 1378	891 2597 1748 2871 686	893 1987 1411 3598 562	1480 1480 3041	621 1227 2026 2131 2646	22849 19915 37622 5910	217955 443254 392210 701760 21709 220570
81C2727N 5W GAS 9203627N 5W GAS 9401527N 5# GAS	1852	1090 2776 163 1942 381	2026 3626 933 1762 543	1233	1323 456	2065	1037 439	1373	1273	1244 438	939 458	28.46 367 997 329	17522 5303	21709 220570 102875

APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5688

JICAPILLA E #1 WELL
M Section 21, T26N, R3W
Rio Arriba County, New Mexico

			5.75		- T	FE 1	C 74.5	3. KE	4	***	(1) (1) (1)		100 m	To the		
	2												-			
	A ANCO M	FSAVER DE	(GAS)											:	P4GE 101	
	SEL TIMES PLANCO H	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	021	NOV	DEC Y	re-prod M		
	Selling on Cas	#31	782	240	*17	423	645	6 73	844 16	772	790 15	952	3478 15	12689 137	285527	
	2011-24 SAS	3946	2738	2923	17 3658	13 3335	3210	15 3547	3085	15 2765	15 3520	15 3278	3344	137 39339	1108967	
	STA SH GAS	1865	1637	1426	1070	1713	1583	1016	477	1276	1907	2032	1295	17297	322 288874	
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TLX ELPHATGAS ELP

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PMS OIL CONSERVATION COMMISSION

RE

STATE LAND OFFICE BLD6

Can 5688

JUN 9 - 1976

ATTENTION: MR. W F CARR

SANTA FE, NEW WEXICO

WE HAVE NO OBJECTION TO THE APPLICATION OF DUGAN PRODUCTION CORPORATION FOR DOWNNOLE COMMINGLING IN CASE NO. 5678.

MORTHWEST PRODUCTION CORPORATION
To We BITTICK

DUGAN PRODUCTION CORP.

APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5688

JICARILLA E #1 WELL M Section 21, T26N, R3W Rio Arriba County, New Mexico

RESUME OF JICARILLA E #1 WELL'S COMPLETION HISTORY

5-19-58 thru	Spud 3:30 a.m. 5-19-58. Drilled 15" hole to 265'. Ran
6-19-58	7 jts 10-3/4" 32.75# E-40 csg w/larkin guide shoe and
	larkin centralizer; TE 252' set @ 264', cemented w/200
•	sx neat plus 2% CaCl. Drilled 9-7/8" hole to 4110'. Ran
	99 jts 7-5/8" csg, cemented @ 4100' w/250 sx 8% gel and
	1/4# gel flow seal per sack w/2% CaCl. Drilled 6-3/4"
	hole to 6300', ran 5-1/2" liner TE 2152' set @ 6162'

w/burns liner hanger @ 4010', cemented w/100 sx reg 100 diamix, 8% gel, 2% CaCl. Tested top of liner, failed to hold. Squeezed w/100 sx neat. Tested top of liner, failed to hold. Resqueeze w/150 sx neat. Tested top of liner, failed to hold; squeeze #3 w/100 sx, tested top of liner

w/2000#, held OK.

6-22-58 thru Perforate w/2 bullets per foot 6146-38, 6124-14, 6104-6088, 6-27-58 6078-74, 6067-63. Frac 1/100,000 gal. water and 100,000# 20-40 sd BD 800# Min. 800#. Max. 3100#. Ave. 1800#. Dropped 95 RB, good pressure increase. AIR 62 BPM. Went on vacuum. Moved rig off hole. Rig up CPS, found sand @ 6093'. Cleared

out hole, running to swab MV. Run 2-3/4" tbg.

6-29-58 thru Set Baker cement retainer @ 6012' and squeezed perfs w/100 6-30-58 sx 2% CaCl plus 1/4# gel flake/sx. Broke down. Max pressure 900#, final 100#. Resqueeze perfs w/150 sx 2% CaCl plus 1/4# gel flake/sx. Squeeze 60 sx into formation. Break down 900#. Max. sq. press. 2000. Drilling cement

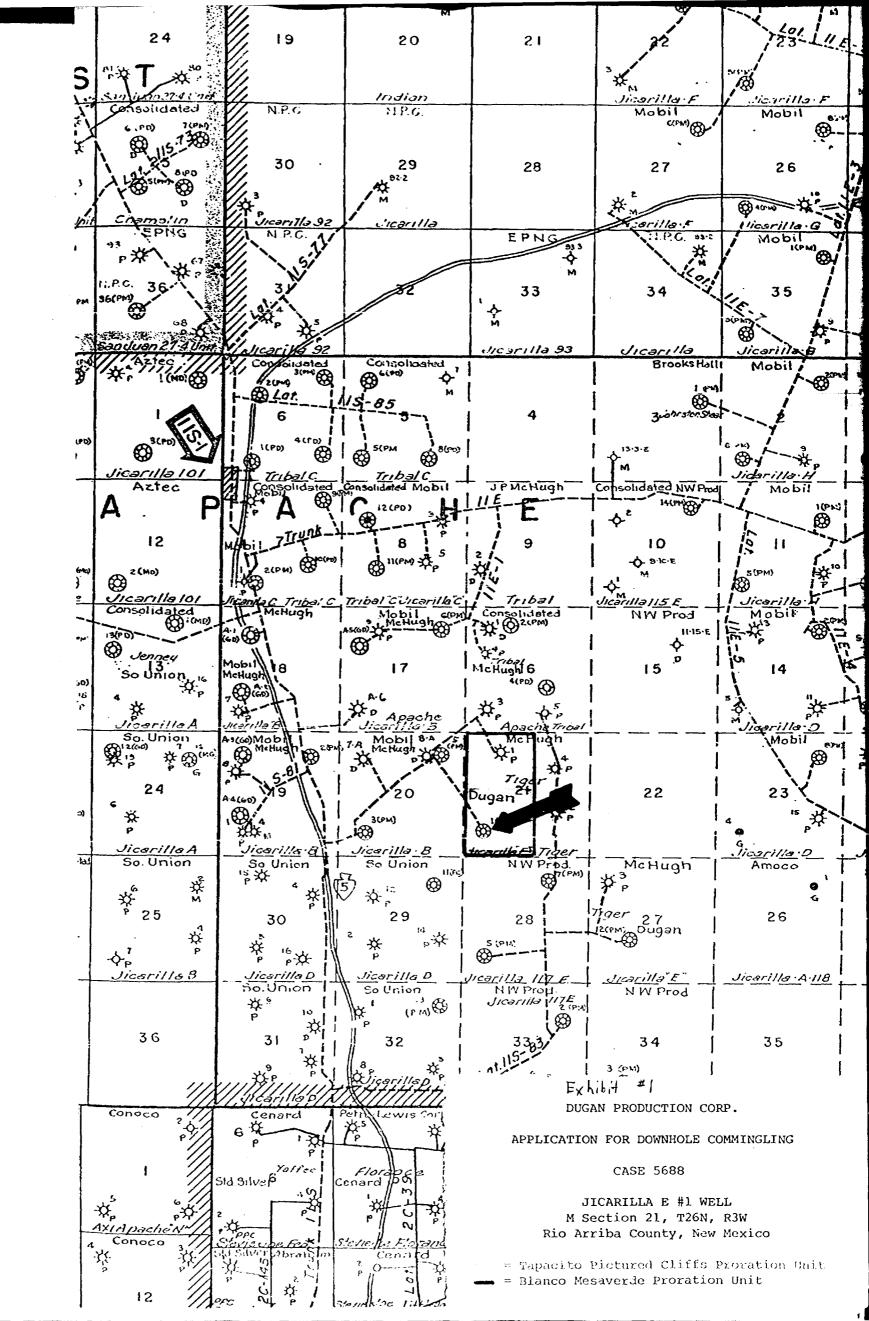
to 6148'. Tested hole w/2000#. Did not break down.

7-1-58 thru Reperforate w/2 bullets per foot 6146-38, 6124-14, 6104-6088, 7-2-58 6078-74. Frac w/80,000 gal water, 75,000# 20-40 sd and 50 RB BD 2200#. Max. 3400#. Ave. 2600#, Min. 2000#. Ave. IR 36.4 BPM. Ran 2" tbg to 6012'. Swabbed well.

10-10-58 thru Pulling tubing. Preparation to perf. and frac Pictured 10-11-58 Cliffs formation. Perforate w/2 bullets per foot 3908-13, 3954-64, 3949-52. Set BP @ 4025". Frac w/34,000 gal water, 25,000# 20-40 sd, and 30 RB. BD 1500# IP 1200# A'e. 1400# Max. and final 1900#. Ave. IR 72 B/M. Ran tubing, swabbed well.

10-22-58 thru Plan to run tubing and complete. Running tubing. Pulled 11-7-58 bridge plug from 4025', cleaning out to complete PC form. Retrieved bridge plug. Plan to retrieve bridge plug from 4025' and complete MV form. Baker Model D @ 6056' w/2-3/8" OD 4.7# J-55 8R EUE tbg. 2-3/8" OD 4.7# J-55 8R ECT tbg set @ 3885'. Rig released. Well completed.

Exhibit #2



Dockets Nos. 17-76 and 15-76 are tentatively set for hearing on June 16 and June 23, 1976. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 9, 1976

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

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

- Application of Mobil Oil Corporation for amendment of Order No. R-5120, Lea County, Mew Mexico. Applicant, in the above-styled cause, seeks ancident of Order No. R-5120, which order provided for the simultaneous dedication of a 320-acre non-standard gas proration unit, comprising the W/2 SW/4 and SE/4 SW/4 of Section 28 and the NW/4 and the SW/4 NF/4 of Section 33, Township 21 South, Range 37 Fast, Eumont Gas Pool, Lea County, New Mexico, to applicant's E. O. Carson Wells Nos. 4 and 22, located at unorthodox locations in Units N and L, respectively, of said Section 28. Applicant seeks amendment of said Order No. R-5120 by authorizing the simultaneous dedication of said unit to the previously approved E. O. Carson Wells Nos. 4 and 22 and to its E. O. Carson Well No. 23 located 1980 feet from the North line and 2640 feet from the West line of Section 33, Township 21 South, Range 37 East, Lea County, New Mexico.
- CASE 5689: Application of Dalport Oil Corporation for an unorthodox oil well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Jones Federal Well No. 4 to be drilled 990 feet from the South line and 1477 feet from the West line of Section 22, Township 15 South, Range 29 East, South Lucky Lake-Queen Pool, Chaves County. New Mexico.

CASE 4843: (Reopened)

In the matter of Case 4843 being reopened pursuant to the provisions of Order Mo. R-4435-A, which order extended the special pool rules for the Southeast Chaves Queen Gas Area, Chaves County, New Mexico, including a provision for 320-acre spacing and provision units for gas wells. All interested parties may appear and show cause why said Order Mo. R-4435 should not be rescinded.

- CASE 5691: Application of Hanson Oil Corporation for an unorthodox oil well location, Eddy County, New Mexico.

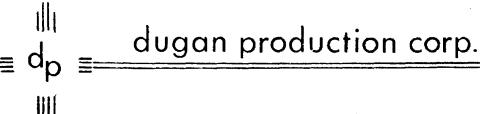
 Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 990 feet from the Morth line and 2600 feet from the West line of Section 25, Township 26 South, Range 31 East, North Mason-Delaware Pool, Eddy County, New Mexico.
- CASE 5692: Application of Cities Service Oil Company for a dual completion and downhole commingling, Lee County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Owen "A" Well No. 1 located in Unit " of Section 35, Township 21 South, Range 37 East, Lea County, New Mexico, completing said well in such a manner as to commingle Blinebry and Drinkard oil production and to dually complete said zones with the Wantz-Granite Wash Pool

CASE 5670: (Continued from May 12, 1976 Examiner Hearing)

Application of Read & Stevens, Inc. for an unorthodox location and directional drilling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to deviate its Farris-Federal Well No. 3, the surface location of which is 660 feet from the South line and 1980 feet from the Fast line of Section 27, Township 15 South, Range 28 Fast, Chaves County, New Mexico, by directionally drilling said well from a kick-off point at approximately 6000 feet and bottoming it at an unorthodox location in the Pennsylvanian formation within 250 feet of a point 990 feet from the South line and 1650 feet from the East line of said Section 27, the S/2 of the Section to be dedicated to the well.

- CASE 5688: Application of Dugan Production Corporation for downhole commingling, Rio Arriba County, New Mexico.

 Applicant, in the above-styled cause, seeks authority to commingle Tapacito-Pictured Cliffs and Blanco-Mesa Verde production in the wellbore of its Jicarilla E Well No. 1, located in Unit M of Section 21, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.
- Application of Jerome P. McHugh for downhole commingling, San Juan County, New Mexico. Applicant, in the abc.e-styled cause, seeks authority to downhole commingle Fruitland and Pictured Cliffs production in that area described as being all of Township 24 through 28 North, Ranges 9 through 15 West, San Juan County, New Mexico, excluding however, those lands within the boundaries of the Ballard-, Fulcher Kutz-, and West Kutz- and also those lands within the boundary of the Gallegos Canyon Unit Area.



May 25, 1976



W. F. Carr General Counsel New Mexico Oil Conservation Commission State Land Office Building Santa Fe, NM 87501

Re: Application for Approval for Down-Hole Commingling of the Jicarilla E #1 Well (PC and MV)

Dear Bill:

Enclosed are the following items regarding the application for approval for down-hole commingling of the Jicarilla E #1 Well located in the SW/4 of Section 21, Township 26 North, Range 3 West, NMPM, Rio Arriba County, New Mexico:

- 1) Three copies of the Application for Approval for Down-Hole Commingling of the Jicarilla E #1 Well (PC and MV).
- 2) Three copies of a Certificate of Mailing stating that all operators of leases offsetting the dedicated acreage for this well and the USGS have been notified of this Application for the proposed commingling.

We would appreciate it if you would place this Application for hearing on June 9, 1976, if one is needed. We would also appreciate it if our hearing would be placed after Jerome P. McHugh's Application for down-hole commingling of the Fruitland-Pictured Cliffs formations in a large area is heard on the same date.

Thank you in advance for your assistance.

Sincerely,

Richard Tully
General Counsel

cb

Enclosures

APPLICATION FOR APPROVAL FOR DOWN-HOLE COMMINGLING OF THE JICARILLA E #1 WELL (PC AND MV)

Applicant Operator:

Dugan Production Corp.

Box 234

Farmington, NM 87401

Lease:

Jicarilla Apache Tribal Contract #116, insofar

as it covers the following described lands: Township 26 North, Range 3 West, NMPM

Section 21: All

Rio Arriba County, New Mexico

Well Name and Location:

Jicarilla E #1 Well (PC and MV)

Township 26 North, Range 3 West, NMPM
Section 21: 995' FSL - 825' FWL
Rio Arriba County, New Mexico

Names of the Pools the Well is Completed in:

Tapacito Pictured Cliffs Pool

Blanco Mesa Verde Pool

Both zones are classified as gas zones

New Mexico Oil Conservation Commission Order Authorizing Dual Completion:

Order No. DC-721 dated January 22, 1959

Ownership of the Two Zones to be Commingled:

Common

Current 24-Hour Productivity
Test on Commission Form C-116:

See attached Exhibit "A"

Production Decline Curve for Both Zones for a Period of at Least One Year and Anticipated Future Production:

See attached Exhibit "B"

Resume of Well's Completion History and Prognosis of Future Production from Each Zone:

See attached Exhibit "C"

Current Measured Surface Pressure for Each Zone:
 3-Day Shut-In Pressures
 7-20-75
 5-3-74
 1-28-74

 Tapacito Pictured Cliffs:
 330
 305
 288

 Blanco Mesa Verde:
 360
 440
 418

Offsetting Leases and Operators:

A. Jicarilla Apache Triba! Contract #116 (Same Lease)

Township 26 North, Range 3 West, NMPM

Section 21: All

Operators:

Dugan Production Corp.

Box 234

Farmington, NM 87401

Jerome P. McHugh

60C South Cherry Street, Suite 1225

Denver, CO 80222

Nassau Resources, Inc.

600 South Cherry Street, Suite 1225

Denver, CO 80222

B. Jicarilla Contract #98

Township 26 North, Range 3 West, NMFM

Section 20: E/2

Operator:

Jerome P. McHugh

600 South Cherry Street, Suite 1225

Denver, CO 80222

Mobil Oil Corporation

Box 5444

Denver, CO 80217

C. Jicarilla Contract #100

Township 26 North, Range 3 West, NMPM

Section 29: NE/4

Operator:

Southern Union Production Company

Suite 1700, 8350 North Central Expressway

Dallas, TX 75206

Aztec Oil & Gas Company

2000 First National Bank Building

Dallas, TX 75202

D. Jicarilla Contract #117

Township 26 North, Range 3 West, NMPM

Section 28: N/2

Operator:

Northwest Pipeline Corporation

Box 1526

Salt Lake City, UT 84110

3 - NMOCC1-File

EXHIBIT "A" NEW MEXICO OIL CONSERVATION COMMISSION GAS-OIL RATIC TESTS

C-116 Revised 1-1-65

						io Arr	iba									
Bos 234, Farmington, NM 87401							TYPE OF TEST + (X) Schoduled [oduled	Completion				Special 💯	
L EACE NAME	WELL		LOCATION			DATEOS	e.	CHOKE Stze	TEG.	DAILY		· · · · · · · · · · · · · · · · · · ·				
LEASE NAME	ΝО.	U	s	۲	R	TEST	473	StZE	PRESS.	ALLOW- ABLE	TEST HOURS	WATER BSLS.	GRAV.	BBLS	GAS M.C.F.	CU.FT/BBL
Jicarilla E	1	М	21	26N	3W	5-19-76	1		194		24,	5 gal	_	0	121	
														ı		
											-					
No well will be assigned an allo	No well will be assigned an allowable greater than the amount of oil produced on the official lest.										I he	ereby ce	ertify the	it the abov	e information	

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tourance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15,025 pala and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Molt original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 391 and appropriate pool rules.

is true and complete to the best of my knowledge and belief.

(Title)

(Date)

EXHIBIT "A" NEW MEXICO OIL CONSERVATION COMMISSION GAS-OIL RATIO TESTS

C-118 Revised 1-1-65

Operation (900)						· 				Co	inty					
Dugan Production Corp.				Blanco Mesa Verde							Rio Arriba					
Address Box 234, Farmington, NM 87401								YPEOF EST - {X} Scheduled Completion Special XX					eiai [X]K			
		L LOCATION . DAT				DATEOF	= 3 0	CHOKE	TBG.	DAILY	LENGTH				TEST	GAS - OIL
LEASE NAME	ΝО.	U	s	7		TEST	1 ATA	CHOKE	PRESS.	ALLOW-	TEST NOURS	WATER BOLS	GRAV.	01L 88LS	gas M.C.F.	CU.FT/8BL
Jicarilla E	1	M	21	26N	3W	5-19-76	Ł		187		24	5 gal		0	93	
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No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gaz-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15,025 pals and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

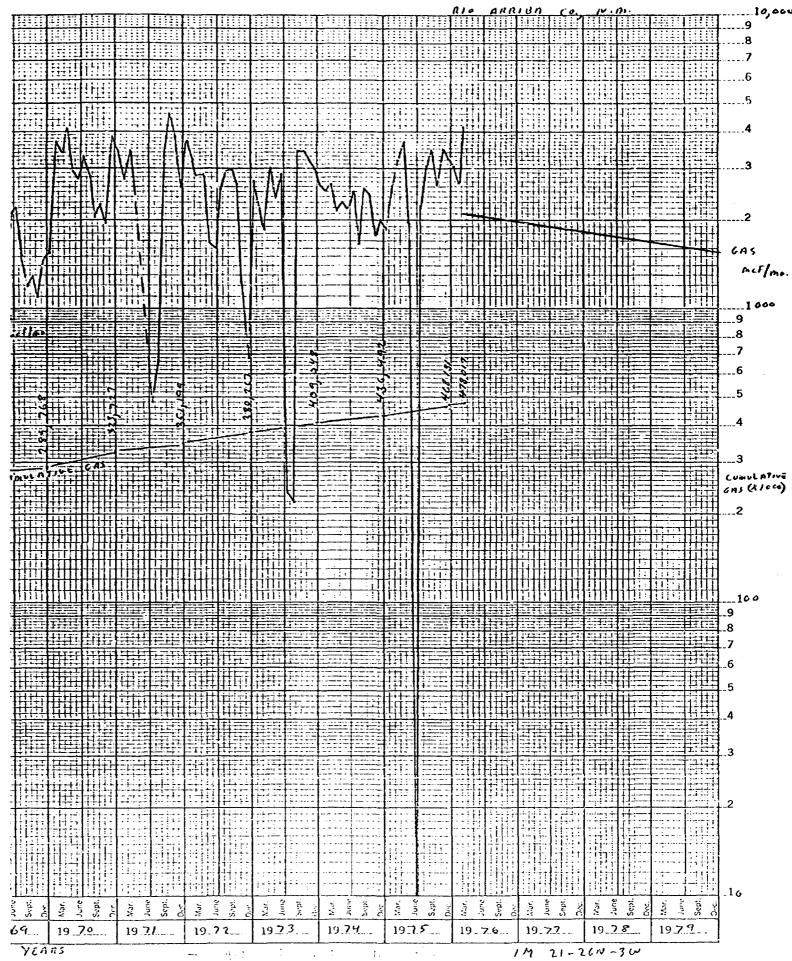
Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

Agent (Tide)
5-25-76

(Date)

TICARILLA 'E' WELL NO. 1
TAPACITO PICTURCO CLIFFS



BLANCE MESAVERDE

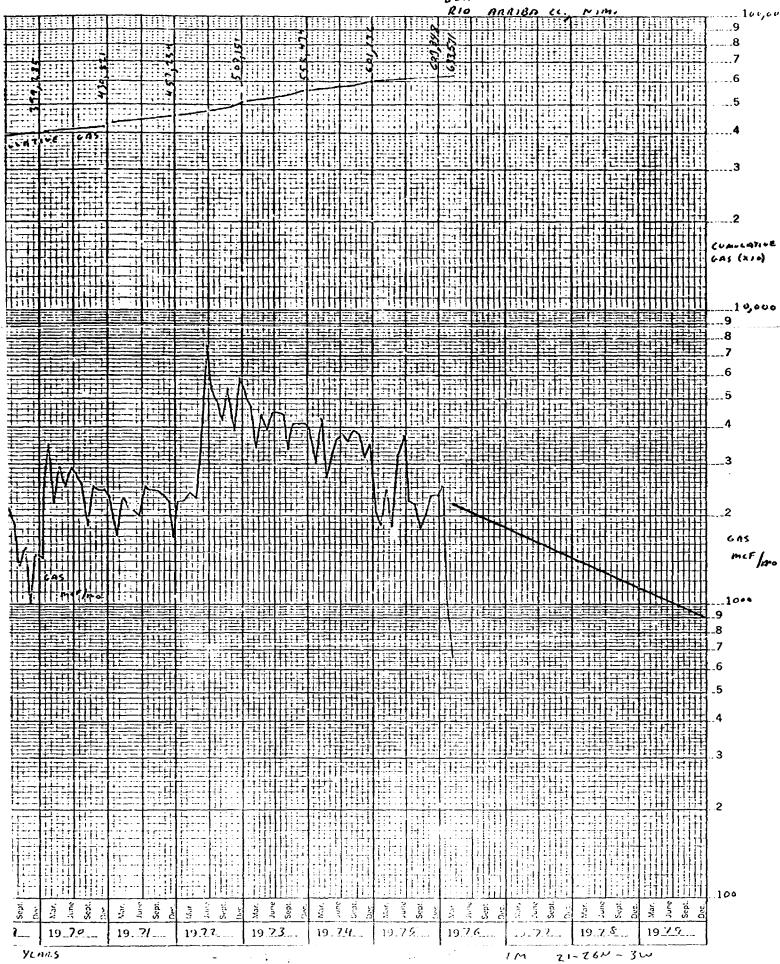


EXHIBIT "C"

RESUME OF JICARILLA E #1 WELL'S COMPLETION HISTORY

5-19-58 thru 6-19-58	Spud 3:30 a.m. 5-19-58. Drilled 15" hole to 265'. Ran 7 jts 10-3/4" 32.75# E-40 csg w/larkin guide shoe and larkin centralizer; TE 252' set @ 264', cemented w/200 sx neat plus 2% CaCl. Drilled 9-7/8" hole to 4110'. Ran 99 jts 7-5/8" csg, cemented @ 4100' w/250 sx 8% gel and 1/4# gel flow seal per sack w/2% CaCl. Drilled 6-3/4" hole to 6300', ran 5-1/2" liner TE 2152' set @ 6162'
	w/burns liner hanger @ 4010', cemented w/100 sx reg 100 diamix, 8% gel, 2% CaCl. Tested top of liner, failed to hold. Squeezed w/100 sx neat. Tested top of liner, failed to hold. Resqueeze w/150 sx neat. Tested top of liner, failed to hold; squeeze #3 w/100 sx, tested top of liner w/2000#, held OK.
6-22-58 thru 6-27-58	Perforate w/2 bullets per foot 6146-38, 6124-14, 6104-6088, 6078-74, 6067-63. Frac w/100,000 gal. water and 100,000# 20-40 sd BD 800# Min. 800#. Max. 3100#. Ave. 1800#. Dropped 95 RB, good pressure increase. AIR 62 BPM. Went on vacuum. Moved rig off hole. Rig up CPS, found sand @ 6093'. Cleared out hole, running to swab MV. Run 2-3/4" tbg.
6-29-58 thru 6-30-58	Set Baker cement retainer @ 6012' and squeezed perfs w/100 sx 2% CaCl plus 1/4# gel flake/sx. Broke down. Max pressure 900#, final 100#. Resqueeze perfs w/150 sx 2% CaCl plus 1/4# gel flake/sx. Squeeze 60 sx into formation. Break down 900#. Max. sq. press. 2000. Drilling cement to 6148'. Tested hole w/2000#. Did not break down.
7-1-58 thru 7-2-58	Reperforate w/2 bullets per foot 6146-38, 6124-14, 6104-6083, 6078-74. Frac w/80,000 gal water, 75,000# 20-40 sd and 50 RB BD 2200#. Max. 3400#. Ave. 2600#. Min. 2000#. Ave. IR 36.4 BPM. Ran 2" tbg to 6012'. Swabbed well.
10-10-58 thru 10-11-58	Pulling tubing. Preparation to perf. and frac Pictured Cliffs formation. Perforate w/2 bullets per foot 3908-13, 3954-64, 3949-52. Set BP @ 4025'. Frac w/34,000 gal water, 25,000# 20-40 sd, and 30 RB. BD 1500# IP 1200# Ave. 1400# Max. and final 1900#. Ave. IR 72 B/M. Ran tubing, swabbed well.
10-22-58 thru 11-7-58	Plan to run tubing and complete. Running tubing. Pulled bridge plug from 4025', cleaning out to complete PC form.

Retrieved bridge plug. Plan to retrieve bridge plug from 4025' and complete MV form. Baker Model D @ 6056' w/2-3/8" OD 4.7# J-55 8R EUE tbg. 2-3/8" OD 4.7# J-55 8R EUE tbg set @ 3885'. Rig released. Well completed.

10 3/4" 0.D. Casing at 264' Cemented w/200sx

TOP OF PICTURED CLIFFS: 3900'

BASE OF PICTURED CLIFFS: 3970

PERFORATIONS: 3908' - 3913',

3949' - 3952',

3954' - 3964'

2 3/8" O.D. Tubing of 3885" Burns Liner Hanger at 4010' 7 5/8" 0.D. Casing at 4100' cemented w/250 sx

TOP OF MESAVERDE: 5597'

PERFORATIONS: 6074'-6078'

6088'-6104', 6114'-6124', 6138'-6146'

DIAGRAMATIC SKETCH OF DUAL GAS COMPLETION FOR "E" WELL 1-21

2 3/8" O.D. Tubing at 6056' Baker Model "D" Production Packer at 6056

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P.B.T.D. 6146' 5 1/2" O.D. Casing at 6162' Cemented w/300 sx entire length T.D. 6300

PROGNOSIS OF FUTURE PRODUCTION FROM EACH ZONE

It is our opinion the repair of the leaking packer for the dually completed Jicarilla E #1 Well will be expensive, and the size of the well and its age will not justify this expense.

As you can see from Exhibit "B" we are estimating the Pictured Cliffs formation will average approximately 1550 MCF per month for the next three years, and the Mesa Verde formation will also average approximately 1550 MCF per month. Assuming the price of interstate natural gas increases to \$0.55 in 1979, we will receive at the most \$1,705 gross production income per month from this well.

The sum of \$1,705 per month as the highest amount of income from this well for the next several years does not allow much room for error when the costs of repairing the leaking packer, or if necessary in the future, the costs of reworking the well are taken into account.

The repair of the packer leak, if made, will constitute an excessive and improper method of operating and producing this well, thereby constituting waste.

In addition, the Tapacito Pictured Cliffs Pool and Blanco Mesa Verde Pool have been steadily depleted for many years by this well and others. The steady decline in production from these pools are illustrated in Exhibit "B". It is possible the operations we undertake to repair the leaking packer may result in irreparable damage to these reservoirs. Needless to say, the ultimate recovery of gas production from these pools would be reduced.

We feel the commingling of the gas production from these two pools in the well bore will allow the produced fluids to be lifted better, thereby more efficiently increasing the over-all gas production.

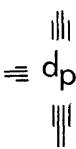
For the above reasons, the approval of this Application will result in more efficient production of gas from these two zones.

CERTIFICATE OF MAILING

I hereby certify that I mailed a true copy of the Application for Approval for Down-Hole Commingling of the Jicarilla E #1 Well (PC and MV) to each of the offsetting operators and to the United States Geological Survey on May 25, 1976.

DUGAN PRODUCTION CORP.

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dugan production corp.

May 17, 1976

OF COMMANDER COMMA

W. F. Carr General Counsel New Mexico Oil Conservation Commission State Land Office Building Santa Fe, NM 87501

Re: Application for Approval for Down-Hole Commingling of the Jicarilla E #1 Well (PC and MV)

Dear Bill:

Pursuant to our telephone conversation of this date we wish to make an application for down-hole commingling of the captioned well. We have previously furnished the exact legal location of the well and its producing formations. If you need additional information, please advise.

We request the hearing for this application be held on June 9, 1976.

Thank you for your assistance.

Sincerely,

Juck

Richard Tully General Counsel

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	Case 5688
	Lick Tully - 325-023
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	995 FSL + 825 FWL
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A)

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

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CASE NO. 5688

Order No. R- 5357

APPLICATION OF DUGAN PRODUCTION CORPERATION FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

This cause came on for hearing at 9 a.m. on June 9

BY THE COMMISSION:

NOW, on this day of January, 19 77, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Dugan Production Corperation, is the owner and operator of the <u>Jicarilla "E" Well No. 1</u>, located in Unit M of Section 21, Township 26 North, Range 3 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle Tapa.
 Cito-Pictured Cliffs and Blanco Mesawrde 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.

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Case No.	5688
Order No.	R-

- (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 Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Azicc district office of the Commission 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, 52

 percent of the commingled bydrecarbon production should be allocated to the Pictured Cliffs zone, and 48 percent of the commingled bydrecarbon production to the Mesaverde zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, $\overline{2}$	ugan Production Corporation, is
hereby authorized to commingle	
Blanco Mesaverle	production within the wellbore
of the its Jicarilla "E" We	•
of Section 21 , Township	26 North , Range 3
West , NMPM, Rio Arriba	County, New Mexico.
(2) That <u>52</u> percent	of the commingled hydrocarbon
production shall be allocated to	o the <u>Pictural</u> Cliffs
	percent of the commingled
hydrocarbon production shall be a	llocated to the Mesaverde

- (3) That the operator of the subject well shall immediately notify the Commission's Axtec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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