CASE NO. 5452: DUGAN PRODUCTION CORP. FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

# CHSE/10.

Application,

Trans cripts,

Small Exhibts

Dogo	1
rage	

# BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 2, 1975

### EXAMINER HEARING

IN THE MATTER OF:

Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico.

Case No. 5452

BEFORE: Richard L. Stamets, Examiner.

TRANSCRIPT OF HEARING

 $\underline{A} \ \underline{P} \ \underline{P} \ \underline{E} \ \underline{A} \ \underline{R} \ \underline{A} \ \underline{N} \ \underline{C} \ \underline{E} \ \underline{S}$ 

For the New Mexico Oil Conservation Commission:

William Carr, Esq.
Legal Counsel for the
Commission
State Land Office Bldg.
Santa Fe, New Mexico

For the Applicant:

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

CASE 5452

INDEX PAGE THOMAS DUGAN 3 Direct Examination by Mr. Kellahin 10 Cross Examination by Mr. Stamets

# EXHIBITS

Admitted Marked Applicant's Exhibits Nos. 1 and 2 10

MR. STAMETS: Call the next case, 5452

MR. CARR: Case 5452. Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico.

MR. KELLAHIN: Tom Kellahin of Kellahin & Fox, Santa Fe, New Mexico, appearing on behalf of the Applicant, and I have one witness to be sworn.

MR. STAMETS: He will stand and be sworn, please.

(Witness sworn.)

### THOMAS DUGAN

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

### DIRECT EXAMINATION

### BY MR. KELLAHIN:

- Q Please state your name, by whom you are employed and in what capacity.
- A Thomas Dugan, Dugan Production Corporation; I'm an engineer.
- Q Mr. Dugan, have you previously testified before the Commission and had your qualifications as an expert witness accepted?

A Yes.

Q Are you familiar with the facts surrounding this particular Application?

A Yes.

MR. KELLAHIN: If the Examiner please, are the Witness' qualifications acceptable?

MR. STAMETS: They are.

## BY MR. KELLAHIN:

O Mr. Dugan, would you refer to what has been marked as Applicant's Exhibit No. 1, identify it, and state what Dugan Production Corporation is seeking?

the vicinity of Federal I lease and the lease is outlined there, or colored in brown. We have also shown the boundaries of the Totah-Gallup Pool and the Chacha-Gallup Pool to the south and the Dakota Formation is in the Basin-Dakota Pool. The Federal I No. 1 is in the north-west quarter of Section 11 and that's Township 29 North, Range 14 West, and it was a well drilled in 1957 by Sunray Midcontinent. They attempted a completion in the Dakota Formation and were unsuccessful. They then recompleted the well in the Gallup Formation, which produced about two barrels of oil per day. The found the lease uneconomical to produce sometime in the mid '60s and put

it up for sale and I purchased the lease. At this time Henry Arnold is pushing me to plug the well or do something with it.

Q At this point the subject well is temporarily abandoned?

A Yes, temporarily abandoned, and has been for a number of years, probably ten or more.

Q Instead of abandoning the well, what is your proposed solution?

A Well, I'd like to attempt to complete the well in the Dakota Formation and use the energy from the Dakota gas to lift the two or three barrels of oil per day from the Gallup Formation.

Q How is the well currently completed?

A The Dakota Formation is plugged; it was plugged by Sunray, and then they had completed it as a Gallup well. I set a bridge plug above the Gallup and attempted a Mesaverde completion some six or eight years ago and so the Gallup Formation is temporarily abandoned with the bridge plug and the Mesaverde completion was unsuccessful, so that is the way it sets at this point.

Q Okay.

A I would have planned if we get approval for the

commingling in the wellbore, to go in and squeeze off the Mesaverde Formation, drill out the bridge plug, drill out the cement in the Dakota, covering the Dakota Formation, and attempt another zone that Sunray did not attempt to complete. We might refer to the log there.

Q See Exhibit 2, and why don't you refer to that and identify it.

A Okay. That is a log of the Sunray well that was run; the log was run in '57. In the Dakota Formation they attempted to complete the well at the intervals 5830 to 40 and 5840 to 50. This zone made some oil and gas, but it made quite a little water, so they found it uneconomical and abandoned it. I would attempt to complete the zone that is 5634 to 44, which is really a graneros sand, upper Dakota sand, and is the zone which does produce in the off-set wells.

Q Is the ownership the same with regard to working interest and royalty interest in the Gallup and in the Dakota?

A Yes. It's the same on that Federal I lease, which covers a rather large area.

Q What acreage would be dedicated to the Gallup production?

- A Well --
- Q (Interrupting) That would be the west half of Section-11?
- A Yes. Gallup-wise I guess we would have to dedicate 40 acres -- whatever the rules; I'm not sure what the rules in the Totah Pool are; it might be 80 acres. I presume it would be a Totah Pool extension.
  - Q r believe it is a 40 acre.
  - A It's a 40 acre.
- Q And you would propose to dedicate the 40 acres around the well location?
- A Right, and Dakota-wise we would dedicate the west half of Section 11, 320 acres.
- Q In your opinion, unless the Application as requested is approved, you would have to plug and abandon the well?
- A Henry is going to make me plug and abandon it if I don't do something with it.
- Q Conversely, if the Application is granted it would extend the life of the well?
- A Yes, and if my ideas are successful, which we hope that they are. You can see from Exhibit 1 that we're pretty well on the edge of the Basin Dakota Pool

CASE 5452

, 8

and pretty well on the edge of the Totah-Gallup Pool also, so it's not a real hot prospect.

Q Have you had similar experience with this type of downhole commingling?

A Yes. I got permission from the Commission to do the same thing on what I called the Fullerton No. 1, which is just to the south and east of this well about five miles, and in Case No. 4804, Order No. R-4418, the Commission granted approval to commingle in the wellbore. This was another well that was pretty marginal, and since I completed it in this manner it has turned out to be quite successful. The well didn't make a lot of gas or oil, but at least it is making a profit.

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

A Yes. I believe, with a little luck, we can make this into a producing well that would make a profit where it has been sitting there for 18 years and hasn't made a profit yet.

Q Were Exhibits 1 and 2 either prepared by you directly or under your direction and supervision?

	^
_	V/
Dago	
rage	

(Reporter's Note: Page 9 inadvertently skipped in transcribing; text of Deposition is in tact.)

DUGAN-DIRECT CROSS

CASE 5452
Page 10

A Yes.

MR, KELLAHIN: We move the introduction of Exhibits 1 and 2.

MR. STAMETS: These Exhibits will be admitted.

(Whereupon, Applicant's

Exhibits Nos. 1 and 2 were admitted into evidence.)

MR. KELLAHIN: That concludes our direct examination.

### CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Dugan, would you be willing to work with Mr. Arnold at our Aztec office to develop a plan for the allocation -- determination of proper allocation for the production of these two zones?

A Yes, I would be happy to work with him. In the Order of R-4418 all of the oil production was credited to the Gallup and all of the gas production was credited to the Dakota, which -- of course both zones are going to make a little bit of gas and a little bit of oil, but I feel it is rather insignificant and cuts down on the paper work if you just do it that way, but I'd be happy to work with Henry and come up with any suitable split that he

CASE 5452 Page 11

wanted. I don't really think it is going to be a serious problem.

MR. STAMETS: Any other questions of the

Witness?

MR. KELLAHIN: No, sir.

MR. STAMETS: He may be excused. Anything

We'll take the case under advisefurther in this case?

ment.

STATE OF NEW MEXICO () SS. COUNTY OF SANTA FE ()

I, RICHARD L. NYE, Court 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.

RICHARD L. NYE, Court Reporter

New Mexico Oil Conservation Commission



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501

April 16, 1975

I. R. TRUJILLO CHAIRMAN

LAND COMMISSIONER PHIL R. LUCERO MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY BECTOR

Mr. Tom Kellahin	Re:	CASE NO	5452
Kellahin & Fox		ORDER NO.	R-5001
Attorneys at Law			
Post Office Box 1769 Santa Fe, New Mexico	Applicant:		
		Dugan Pro	duction

Dear Sir:

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

A. L. PORTER, Jr. Secretary-Director

ALP/ir			
Copy of orde	er also sen	t to:	
Hobbs OCC Artesia OCC	Х	<del></del>	
Aztec OCC	ж		
Other			
*****			

# 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. 5452 Order No. R=5001

APPLICATION OF DUGAN PRODUCTION CORPORATION FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 2, 1975, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 15th day of April, 1975, 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 Federal I Well No. 1, located in Unit E of Section 11, Township 29 North, Range 14 West, NMPM, San Juan County, New Mexico.
- (3) That the applicant seeks authority to recomplete said well in such a manner as to commingle Totah-Gallup Oil and Basin-Dakota Gas production within the wellbore of the above-described well.
- (4) That from the Totah-Gallup Oil zone, the subject well is projected to be capable of low marginal production only.
- (5) That from the Basin-Dakota Gas zone, the subject well is projected to be capable of low marginal production only.
- (6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

-2-Case No. 5452 Order No. R-5001

- (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, 100 percent of the commingled oil production should be allocated to the Totah-Gallup Oil zone, and 100 percent of the commingled gas production to the Basin-Dakota Gas zone.

### IT IS THEREFORE ORDERED:

- (1) That the applicant, Dugan Production Corporation, is hereby authorized to commingle Totah-Gallup Oil and Basin-Dakota Gas production within the wellbore of the Federal I Well No. 1, located in Unit E of Section 11, Township 29 North, Range 14 West, NMPM, San Juan County, New Mexico.
- (2) That 100 percent of the commingled oil production shall be allocated to the Totah-Gallup Oil zone and 100 percent of the commingled gas production shall be allocated to the Basin-Dakota Gas 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.

-3-Case No. 5452 Order No. R-5001

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

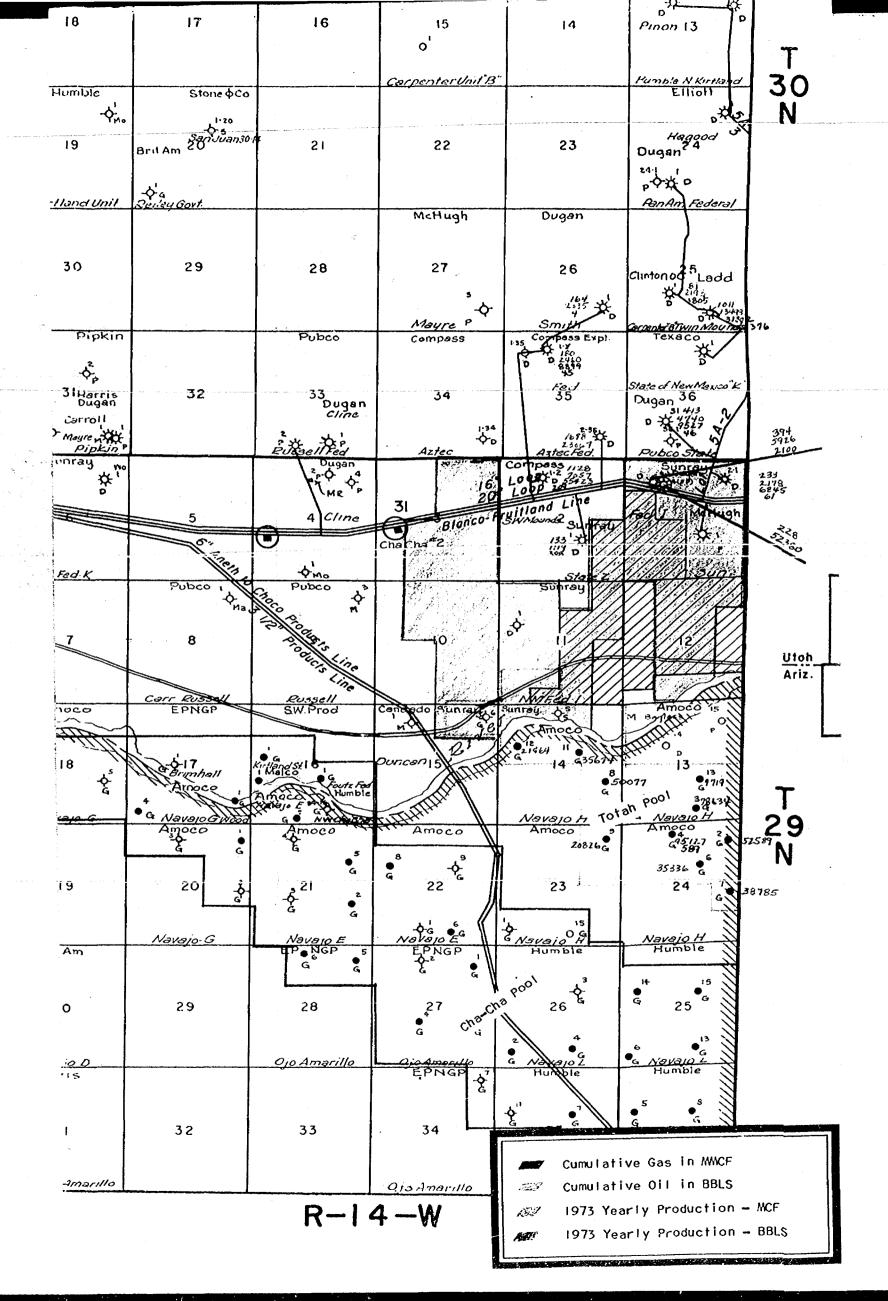
STATE OF NEW MEXICO OIL COMSERVATION COMMISSION

I R. TRUJILLO, Chairman

PHIL R. LUCERO, Member

A. L. PORTER, Jr., Member & Secretary

SEAL



### BEFORE THE

# OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE NATTER OF THE APPLICATION OF DUGAN PRODUCTION CORPORATION FOR APPROVAL OF COMMINGLING OF PRODUCTION IN THE WELL-BORE, SAN JUAN COUNTY, NEW MEXICO

### APPLICATION

Comes now Dugan Production Corporation and applies to the Oil Conservation Commission of New Mexico for approval of commingling of production from the Basin-Dakota Gas Pool, and the Tota-Gallup Oil Pool, San Juan County, New Mexico, and in support there of would show:

- 1. Applicant proposes to reenter its Federal I Well No. 1, located 790 feet from the West line, and 1850 feet from the North Line of Section 11, Township 29 North, Range 14 West, N.M.P.M., San Juan County, New Mexico, and to complete it for the production of gas from the Basin-Dakota Pool, and for the production of oil from an area that would constitute an extension of the Tota-Gallup Oil Pool, utilizing the Basin-Dakota gas to gas-lift the oil from the Tota-Gallup Pool
- 2. The W/2 of Section 11, Township 29 North, Range 14 West would be dedicated to the Gallup production, and the forty-acre tract on which the well is located would be dedicated to the Gallup pool extension.
- 3. The subject well is temporarily abandoned at the present time.
- 4. Approval of this application will enable applicant to produce oil and gas that would not otherwise be recovered, is the most economical means of producing the two zones, and will prevent waste. The correlative rights of other interest owners will not be impaired.

isto de la companya della companya d

DOCKET MAILED

WHEREFORE applicant prays that this application be set for hearing before the Oil Conservation Commission, or one of its examiners, and that after notice and hearing as required by law the Commission enter its order approving the commission of production as prayed for.

Respectfully submitted,
DUGAN PRODUCTION CORPORATION

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

ATTORNEYS FOR APPLICANT

Dockets Nos. 9-75 and 10-75 are tentatively set for hearing on April 16 and April 30, 1975. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 2, 1975

9 A.M. - OIL CONSERVATION COMMISSION 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 5408: (Continued from the March 5, 1975, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit W. E. Medlock and Reliance Insurance Company and all other interested parties to appear and show cause why the Queen Ridge No. 1 Well located in Unit M of Section 36, Township 10 South, Range 26 East, Chaves County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5449: Application of Belco Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests of Pennsylvanian age or older underlying the W/2 of Section 20, Township 22 South, Range 27 East, South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico, to be dedicated to its Belco Martin Well No. 1, to be drilled at a standard location for said unit. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs as well as actual operating costs and charges for supervision. Also to be considered will be the designation of the applicant as operator of the well and a charge for the risk involved in drilling said well.

CASE 5450: Application of Texaco Inc., for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle East Weir-Blinebry and Skaggs-Drinkard production in the wellbore of its M. B. Weir "B" Federal Well No. 9, located in Unit O of Section 12, Township 20 South, Range 37 East, Lea County, New Mexico.

CASE 5451: Application of Consolidated Oil and Gas, Inc., for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Ballard-Pictured Cliffs and Blanco-Mesaverde production in the wellbore of its Linda 1-31 Well, located in Unit M of Section 31, Township 27 North, Range 8 West, San Juan County, New Mexico.

Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Totah-Gallup Oil and Basin-Dakota Gas production in the wellbore of its Federal I well No. 1, located at a standard location in Unit E of Section 11, Township 29 North, Range 14 West, San Juan County, New Mexico.

CASE 5452:

CASE 5453: Application of Dugan Production Corporation for a non-standard gas proration unit and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard gas proration unit comprising the SW/4 of Section 14, Township 24 North, Range 5 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, to be dedicated to a well at a standard location in Unit L of said Section 14. Applicant further seeks authority to commingle Otero-Gallup Oil and Basin-Dakota Gas production in the wellbore of said well.

CASE 5448: Southeastern New Mexico nomenclature case calling for the creation, extension, and abolishment of certain pools in Lea and Chaves Counties, New Mexico:

(a) CREATE A new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the Legg-Morrow Gas Pool. The discovery well is the Brunson & McKnight, Inc. R. F. Leggett Well No. 1 located in Unit H of Section 33, Township 21 South, Hange 33 East, NMPM. Said pool would comprise:

# TOWNSHIP 21 SOUTH, RANGE 33 EAST, NMPM SECTION 33: E/2

(b) CREATE A new pool in Lea County, New Mexico, classified as an oil pool for Bone Springs production and designated as the East Lusk-Bone Springs Pool. The discovery well is the Sun Oil Company Jennings Federal Com Well No. 1 located in Unit F of Section 15, Township 19 South, Range 32 East, NMPM. Said pool would comprise:

# TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM SECTION 15: NW/4

(c) ABOLISH the East Skaggs-Drinkard Gas Pool in Lea County, New Mexico, described as:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM SECTION 19: SE/4

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

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM SECTION 18: N/2 and SE/4 SECTION 19: E/2

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

TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM SECTION 36: NW/4

(f) EXTEND the South Corbin-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM

SECTION 17: W/2 SECTION 18: E/2 SECTION 20: W/2 (g) EXTEND the D-K Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 39 EAST, NMPM SECTION 30: SW/4

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

TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM SECTION 33: NE/4

(i) EXTEND the Querecho Plains-Queen Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM SECTION 23: NW/4

(j) EXTEND the Sawyer-San Andres Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 38 EAST, NMPM SECTION 9: Lots 3 and 4 and W/2 SW/4

(k) EXTEND the North Shoe Bar-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM SECTION 14: SW/4

(1) EXTEND the Sulimar-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 30 EAST, NMPM SECTION 19: NW/4

(m) EXTEND the Wantz-Granite Wash Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM SECTION 1: NW/4

dr/

# BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

Ń

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

CASE NO. 5452

Order No. R-500/

APPLICATION OF DUGAN PRODUCTION CORPORATION FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

GJ.

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 2 , 135 at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this day of April , 1975, 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 Federal I Well No. 1, located in Unit E of Section 11, Township 29 North, Range 14 West, NMPM, San Juan County, New Mexico.

recomplete said well in such a monner as

-2-Case No. 5452 Order No. R-

- (3) That the applicant seeks authority to commingle Totah-Gallup Oil and Basin-Dakota Gas production within the wellbore of the above-described well.
- (4) That from the Totah-Gallup Oil zone, the subject project to be well is Acapable of low marginal production only.
- (5) That from the Basin-Dakota Gas zone, the subject well projected to be 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.
- (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.

### IT IS THEREFORE ORDERED:

(1) That the applicant, Dugan Production Corporation, is hereby authorized to commingle Totah-Gallup Oil and Basin-Dakota Gas production within the wellbore of the Federal I Well No. 1, located in Unit E of Section 11, Township 29 North, Range 14 West, NMPM, San Juan County, New Mexico.

Case No. 5452 Order No. R-

- production shall be allocated to the Totah-Gallup Oil zone and 100 percent of the commingled frus production shall be allocated to the Basin-Dakota Gas 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 hereinabove designated.