CASE 7120: DUGAN PRODUCTION CORPORATION application
FOR DOWNHOLE COMMINGLING, SAN JUAN
COUNTY, NEW MEXICO

CASE NO.

7120

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

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

February 13, 1981

Re: CASE NO. _____
ORDER NO. 7120
R-6571

Mr. Tommy Roberts, Attorney
Dugan Production Corporation
P. O. Box 208
Farmington, New Mexico 87401

Applicant:

~~Dugan Production Corporation~~

Dear Sir:

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

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD ____x____
Artesia OCD ____x____
Aztec OCD ____x____

Other _____
_____

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 7120
Order No. R-6571

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on January 13, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 10th day of February, 1981, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Dugan Production Corporation, is the owner and operator of the Merry May Well No. 1, located in Unit I of Section 24, Township 24 North, Range 10 West, NMPM, San Juan County, New Mexico.

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

(4) That from the Undesignated Gallup zone, the subject well is capable of low rates of production only.

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

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

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

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

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, 85 percent and 15 percent of the commingled oil and gas production, respectively, should be allocated to the Undesignated Gallup zone, and 15 percent and 85 percent of the commingled oil and gas production, respectively, to the Basin-Dakota zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, Dugan Production Corporation, is hereby authorized to commingle Undesignated Gallup and Basin-Dakota production within the wellbore of the Merry May Well No. 1, located in Unit I of Section 24, Township 24 North, Range 10 West, NMPM, San Juan County, New Mexico.

(2) That 85 percent and 15 percent of the commingled oil and gas production, respectively, shall be allocated to the Undesignated Gallup zone and 15 percent and 85 percent of the commingled oil and gas production, respectively, shall be allocated to the Basin-Dakota zone.

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

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

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

JOE D. RAMEY,
Director

S E A L

dr/

Case 7120

WAIVER OF OBJECTION AND CONSENT TO

THE DOWNHOLE COMMINGLING OF THE MERRY MAY #1 WELL

The undersigned, as an Operator of a lease offsetting the S/2 of Section 24, Township 24 North, Range 10 West, N.M.P.M., San Juan County, New Mexico, does hereby acknowledge receipt of the Application for Downhole Commingling of the Merry May #1 Well.

The Undersigned hereby waives any objection to this Application and voluntarily consents to the commingling of the Merry May #1 Well as stated in the above mentioned Application.

Dated this 15 day of January, 1981.

Signed:

James G. Ellis

Southern Union Exploration
Company Suite 400
Texas Federal Building
1217 Main Street
Dallas, Texas 75202

OK JDR 1/22/81

Please send one executed copy to Joe D. Ramey, Division Director, New Mexico Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico, 87501, and return one executed copy to Dugan Production Corp., P.O. Box 208, Farmington, NM 87401. The remaining copy is for your files.

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
14 January 1981

EXAMINER HEARING

IN THE MATTER OF:

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

CASE 7120

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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

For the Applicant: Tommy Roberts, Esq.
DUGAN PRODUCTION CORPORATION
BOX 208
Farmington, New Mexico 87501

I N D E X

E X H I B I T S

MR. STAMETS: We'll call next Case 7120.

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

MR. STAMETS: Call for appearances in this case.

MR. ROBERTS: Tommy Roberts, in house counsel for Dugan Production Corporation, P. O. Box 208, Farmington, New Mexico, and I have one witness.

(Witness sworn.)

THOMAS A. DUGAN

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

DIRECT EXAMINATION

BY MR. ROBERTS:

Q. Will you state your name and your address and your occupation for the record, please?

A. Thomas A. Dugan. I live at 907 Hallett Circle, Farmington, New Mexico, and I'm a petroleum engineer with Dugan Production Corp.

Q. Are you familiar with the contents of

the application in this matter?

A. Yes, I am.

Q. Have you previously testified before the Commission?

A. Yes.

MR. ROBERTS: Are the witness' qualifications as an expert in the field of petroleum engineering acceptable?

MR. STAMETS: They are.

Q. Mr. Dugan, what's the purpose of this application?

A. The purpose of this application is to secure downhole commingling in the Gallup and Dakota formations in our Merry May No. 1 Well, in Unit I of Section 24, Township 24 North, Range 10 West, San Juan County, New Mexico.

Q. Okay, Mr. Dugan, would you refer to what's been marked as Exhibit Number One and identify that exhibit and explain its significance?

A. All right. The exhibit is just an area map of the -- showing where the wells are located in relationship to other pools and wells in the area.

It shows that the well in question, is, along with two other wells just south of Bisti Field, southwest of the White Wash Mancos Dakota Pool, and several miles

south of any other Dakota producing wells in the area.

Q. On that exhibit there is a well located in Section 25 of 24 North, 10 West. Who operates that well?

A. That's a Dugan Production Corporation well, the June Joy No. 1, and it's commingled in the wellbore in the Gallup and Dakota formations and it's a pumping oil well.

Q. For the record, I think that's the June Joy No. 2.

A. Oh, excuse me, you're right.

Q. Would you refer to what's been marked as Exhibit Number Two and identify that and explain its significance?

A. All right. That shows the Merry May No. 1 Well location, along with the ownership of offsetting leases in the area.

Q. Please refer to Exhibit Number Three and identify that exhibit.

A. All right, Number Three is our daily morning drilling report on the Merry May No. 1 Well, and it shows the method in which the well was drilled and completed.

Q. Mr. Dugan, would you briefly summarize the method of completion?

A. All right. The well was drilled in Sep-

tember of 1980 and 8-5/8ths casing was set at 244 feet. We generally drill with mud to a TD of 6180. We logged the well and ran 4-1/2 inch casing to that depth and it was cemented in two stages back to the surface, or near the surface, and then the well was completed by perforating both Dakota and Gallup formations and stimulating them together.

The tubing was run in the well and the well was kicked off and production test run.

Q. And what is the current status of the well?

A. The well is shut-in at the present time waiting approval to commingle it and a market for the gas, gas line.

Q. Would you refer to Exhibit Number Four and identify it and explain its relevance to this application?

A. All right. Exhibit Number Four is a cross section of the logs of the three wells which are originally shown on Exhibit Number One.

Starting from the right, going left, the April Surprise No. 2 Well was completed in the Dakota formation and not completed in the Gallup formation. It is a fairly decent little gas well.

The June Joy No. 2 was attempted -- an attempt was made in the same horizon that the April Surprise 2

well was completed in, and we didn't get any significant gas, so that zone was plugged and then the uppermost zone in the Dakota was completed, along with several zones in the Gallup formation, and an application was made to commingle it in the wellbore and that application was approved and the well is now producing something -- 5 barrels of oil a day with a small amount of gas.

The Merry May No. 1 Well was drilled and we made a completion in the same horizon as the April Surprise No. 2 Well is producing from, along with the Gallup zone, and the well was completed and came in surprisingly well for the looks of the log.

Q. In what way does this cross section map support a decision to commingle the production from the zones in the wellbore?

A. I think it's fairly obvious by looking at the logs that all of the zones are thin and/or very low quality sands that have -- would probably have relatively low productivity, and so from an economic standpoint it's desireable to commingle them in the wellbore.

Q. Okay, Mr. Dugan, would you refer to what's been marked as EXhibit Number Five and identify it?

A. All right, Exhibit Number Five is a one point back pressure test which was taken on the Merry May No.

1 Well. It indicates a shut-in pressure of 1740 pounds after seven days. The well was flowed through a separator for four days. At the end of four days the well was making 700 Mcf of gas per day, along with 16 barrels of oil per day. The calculated absolute open flow after four days was 723 Mcf of gas per day.

So it's a surprisingly good well.

Q. Please refer to Exhibit Number Six and identify that exhibit and explain its relevance to this application.

A. This is the same information that was on Exhibit Five, except it's a calculation of the gas/oil ratio. It shows that the well was making 700 Mcf of gas per day, 16 barrels of oil per day, which calculates to 43,750 cubic feet of gas per barrel of oil.

Q. All right, Mr. Dugan, from an economical standpoint, is it necessary to commingle the production from these zones in the wellbore?

A. Yes, it would be uneconomical to dually complete the well. If the wells weren't commingled, you'd have to complete one zone before you attempted to complete in the other zone. And I believe for the long run it will be -- the only way that you'll be able to drill wells down in this area is to commingle them in the wellbore.

Q. If this application is granted by the Oil Conservation Division, do you propose a formula for the allocation of the production from this well to the zones?

A. Yes. I would propose that 15 percent of the gas and 85 percent of the oil be attributed to the Gallup zone, and 85 percent of the gas and 15 percent of the oil be attributed to the Dakota zone.

Q. To your knowledge is the ownership of both zones common?

A. Yes.

Q. Mr. Dugan, were Exhibits One through Six either prepared by you or at your direction and under your supervision?

A. Yes.

MR. ROBERTS: Move for the admission of Exhibits One through Six into the record.

MR. STAMETS: These exhibits will be admitted.

Q. In your professional opinion, Mr. Dugan, will the granting of this application result in the recovery of additional hydrocarbons and the prevention of waste and the protection of correlative rights?

A. Yes.

MR. ROBERTS: I have no other questions

of this witness.

CROSS EXAMINATION

BY MR. STAMETS:

Q. Mr. Dugan, on Exhibit Number Three, which is the daily report, page three of that shows the 15 minute shut-in after this --- after frac, at 1800 psi, which ties in pretty well with your 1740 psi pressure on the single point test that you took. Then, on the next page, when the Gallup was treated, the shut-in pressure was 800 psi, and those pressures are greater than the pressure difference between the Dakota and the Gallup more than 100 percent, which is the --

A. Yeah, but I don't believe that those shut-in pressures following frac is indicative of the bottom hole pressure.

Q. Do you have some evidence to show that there's not a 100 percent variation between the Gallup and the Dakota pressures in the area?

A. I have pretty good evidence as to the pressure in the Dakota formation, as we can secure from the April Surprise No. 2 Well, since it's just a single -- it's a single Dakota well.

Q. Uh-huh.

A. No other horizons are perforated. I don't have any real good information as to the bottom hole pressure in the Gallup formation, other than going back to wells like in the original wells in the Bisti Pool, and I would anticipate that the bottom hole pressure is going to be in the neighborhood of 1500 pounds in the Gallup formation, and that the bottom hole pressure in the Dakota formation is going to be around 2000 pounds.

But I really don't have any strong information as to what the Gallup actually is.

Q. On your June Joy No. 2, where is the top of the Dakota in that well?

A. I'm calling it -- I would call it where we perforated there at 5882 or 5880.

Q. And that well, then, is producing commingled Gallup and Dakota?

A. Yes.

Q. Production?

A. Yes.

Q. But it's not the same zone that is producing in the two offset wells.

A. That's correct.

Q. However, you have no reason to believe that the pressures would be significantly different.

A. No, I don't. I think the -- the shut-in pressure of the April Surprise 2 and the shut-in pressure of the Merry May 1 are about the same.

I don't think I'm pumping much gas back into the Gallup there, if that's what you're worrying about. It's -- that Gallup is pretty hard and tight.

Q. Okay, and so even if you did have a fairly substantial pressure differential you wouldn't expect the Gallup to take any gas out of the Dakota.

A. I don't think so.

Q. And that --

A. Very little.

Q. -- would be the lower pressure zone.

A. Yes. Yeah, the Gallup would be the lower pressure zone.

MR. STAMETS: Any other questions of this witness?

MR. CHAVEZ: Yes, I have some.

MR. STAMETS: Mr. Chavez.

CROSS EXAMINATION

BY MR. CHAVEZ:

Q. Where are you deriving your production allocation formula from?

A. Just experience, because I didn't have any tests, separate tests, on each zone.

Q. Was this well intended to be a dual completion or a multiple completion for oil and gas?

A. No. Well, I didn't intend to dual -- to separate the zones, no.

Q. Is there any way, to your knowledge, to make a dual completion in 4-1/2 inch casing?

A. Oh, yes, there has been, but it would be pretty difficult to make a pumping dual out of it, if it was necessary and I'm sure it would be necessary to pump the Gallup.

But really, I, when I started out to drill these wells, I really had in mind that they would -- that they're similar wells to the White Wash Mancos Dakota Pool where -- where we -- where we were able to secure approval from the Commission to treat the entire Mancos and Dakota formation as one horizon, so you can see back on Exhibit One the proximity of -- of the White Wash Mancos Dakota Pool to this area.

You know, that's really what I -- I think when I start out to drill a well, that, well, we're dealing with one horizon. What I really hope is that we're going to run into something that's exceptionally good, but

I never seem to do that.

MR. STAMETS: Are there any other questions of the witness? He may be excused.

Anything further in this case?

The case will be taken under advisement.

(Hearing concluded.)

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

C E R T I F I C A T E

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

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 7120, heard by me on 1-14 1981.

Richard L. Stamets, Examiner
Oil Conservation Division

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

14 January 1981

EXAMINER HEARING

IN THE MATTER OF:

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

CASE 7120

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

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Legal Counsel to the Division
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Santa Fe, New Mexico 87501

For the Applicant: Tommy Roberts, Esq.
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(Witness sworn.)

THOMAS A. DUGAN

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

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Q. Will you state your name and your address and your occupation for the record, please?

A. Thomas A. Dugan. I live at 907 Hallett Circle, Farmington, New Mexico, and I'm a petroleum engineer with Dugan Production Corp.

Q. Are you familiar with the contents of

the application in this matter?

A. Yes, I am.

Q. Have you previously testified before the Commission?

A. Yes.

MR. ROBERTS: Are the witness' qualifications as an expert in the field of petroleum engineering acceptable?

MR. STAMETS: They are.

Q. Mr. Dugan, what's the purpose of this application?

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A. Yes.

MR. ROBERTS: I have no other questions

of this witness.

CROSS EXAMINATION

BY MR. STAMETS:

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But I really don't have any strong information as to what the Gallup actually is.

Q. On your June Joy No. 2, where is the top of the Dakota in that well?

A. I'm calling it -- I would call it where we perforated there at 5882 or 5880.

Q. And that well, then, is producing commingled Gallup and Dakota?

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Q. But it's not the same zone that is producing in the two offset wells.

A. That's correct.

Q. However, you have no reason to believe that the pressures would be significantly different.

A. No, I don't. I think the -- the shut-in pressure of the April Surprise 2 and the shut-in pressure of the Merry May 1 are about the same.

I don't think I'm pumping much gas back into the Gallup there, if that's what you're worrying about. It's -- that Gallup is pretty hard and tight.

Q. Okay, and so even if you did have a fairly substantial pressure differential you wouldn't expect the Gallup to take any gas out of the Dakota.

A. I don't think so.

Q And that --

A. Very little.

Q. -- would be the lower pressure zone.

A. Yes. Yeah, the Gallup would be the lower pressure zone.

MR. STAMETS: Any other questions of this witness?

MR. CHAVEZ: Yes, I have some.

MR. STAMETS: Mr. Chavez.

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BY MR. CHAVEZ:

Q. Where are you deriving your production allocation formula from?

A. Just experience, because I didn't have any tests, separate tests, on each zone.

Q. Was this well intended to be a dual completion or a multiple completion for oil and gas?

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A. Oh, yes, there has been, but it would be pretty difficult to make a pumping dual out of it, if it was necessary and I'm sure it would be necessary to pump the Gallup.

But really. I, when I started out to drill these wells, I really had in mind that they would -- that they're similar wells to the White Wash Mancos Dakota Pool where -- where we -- where we were able to secure approval from the Commission to treat the entire Mancos and Dakota formation as one horizon, so you can see back on Exhibit One the proximity of -- of the White Wash Mancos Dakota Pool to this area.

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I never seem to do that.

MR. STAMETS: Are there any other questions of the witness? He may be excused.

Anything further in this case?

The case will be taken under advisement.

(Hearing concluded.)

C E R T I F I C A T E

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

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. _____, heard by me on _____ 19____.

_____, Examiner
Oil Conservation Division

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

Case 7120

WAIVER OF OBJECTION AND CONSENT TO

THE DOWNHOLE COMMINGLING OF THE MERRY MAY #1 WELL

The undersigned, as an Operator of a lease offsetting the S/2 of Section 24, Township 24 North, Range 10 West, N.M.P.M., San Juan County, New Mexico, does hereby acknowledge receipt of the Application for Downhole Commingling of the Merry May #1 Well.

The Undersigned hereby waives any objection to this Application and voluntarily consents to the commingling of the Merry May #1 Well as stated in the above mentioned Application.

Dated this 5th day of January, 1981.

Signed:

R. K. Cramer
410 17th Street
Suite 1340
Denver, CO 80202

Please send one executed copy to Joe D. Ramey, Division Director, New Mexico Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico, 87501, and return one executed copy to Dugan Production Corp., P.O. Box 208, Farmington, NM 87401. The remaining copy is for your files.

Case 7120

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The Undersigned hereby waives any objection to this Application and voluntarily consents to the commingling of the Merry May #1 Well as stated in the above mentioned Application.

Dated this 5TH day of January, 1981.

Signed:

Joan Chorney

Joan Chorney
401 Lincoln Tower Bldg.
1860 Lincoln Street
Denver, CO 80295

Please send one executed copy to Joe D. Ramey, Division Director, New Mexico Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico, 87501, and return one executed copy to Dugan Production Corp., P.O. Box 208, Farmington, NM 87401. The remaining copy is for your files.

DOWNHOLE COMMINGLING
duction Corp.
May #1 Well
24, T-24-N, R-10-W
unty, New Mexico
No. 7120
No. 1

White Wash
Mancos Dakota Pool

R-11-W

R-10-W

R-9-W

R-8-W

APPLICATION FOR DOWNHOLE COMMINGLING
Dugan Production Corp.
Merry May #1 Well
Unit I, Sec. 24, T-24-N, R-10-W
San Juan County, New Mexico
Case No. 7120
Exhibit No. 2

A. USA NM 25842
Southern Union Exploration

B. USA NM 4958
Dugan Production Corp.

C. USA NM 4958
Dugan Production Corp.

D. USA NM 5991
Dugan Production Corp.

E. USA NM 30019
Joan Chorney (50%)
R. K. Cramer (50%)

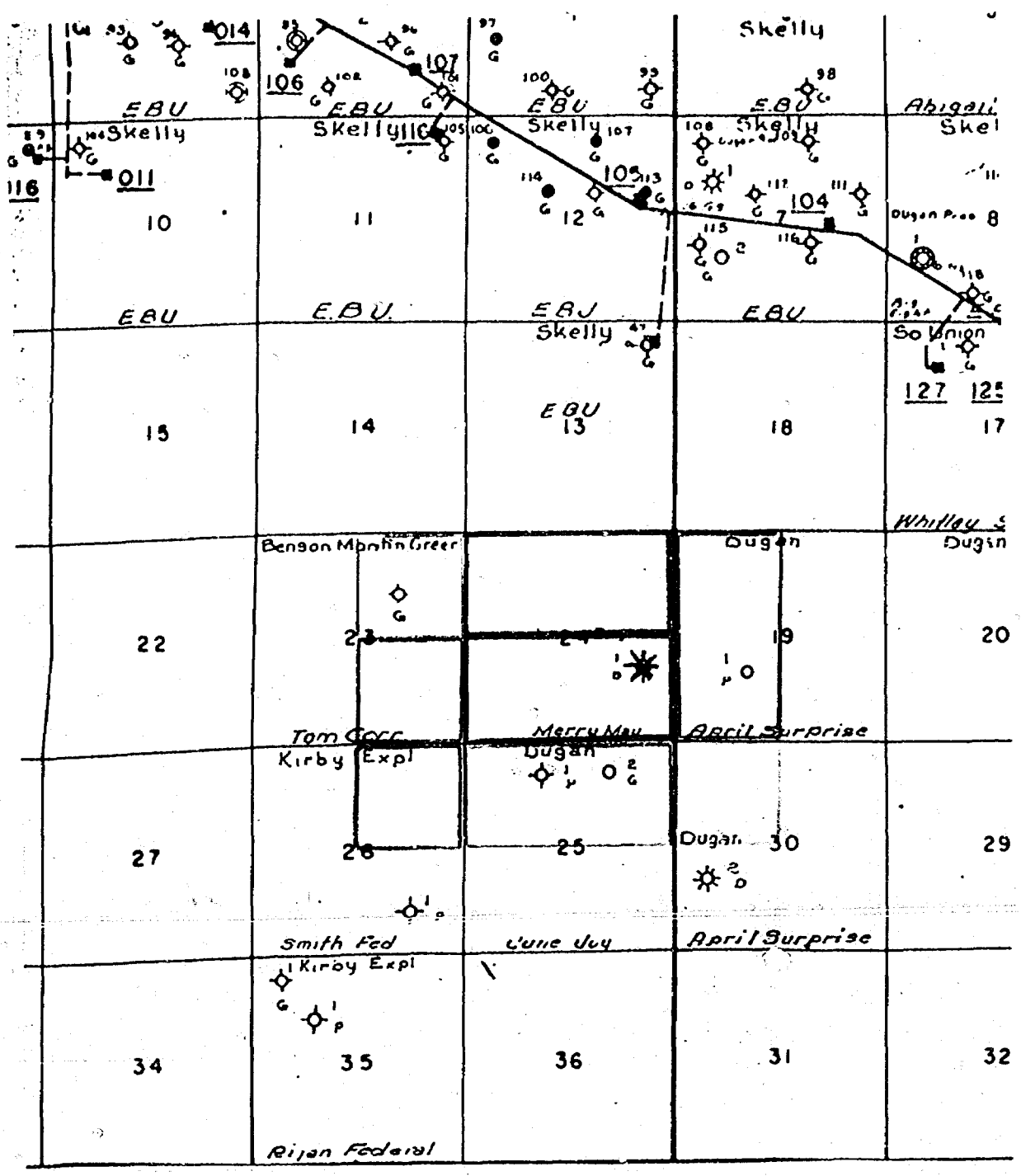
F. UNLEASED FEDERAL ACREAGE - US GEOLOGICAL SURVEY

G. USA NM 30019
Joan Chorney (50%)
R.K. Cramer (50%)

H. DEDICATED ACREAGE
USA NM 25842
Merry May #1 Well
Dugan Production Corp.

MERRY MAY #1 WELL

OFFSETTING LEASES AND OPERATORS



dugan production corp.

APPLICATION FOR DOWNHOLE COMMINGLING
Dugan Production Corp.
Merry May #1 Well
Unit I, Sec. 24, T-24-N, R-10-W
San Juan County, New Mexico
Case No. 7120
Exhibit No. 3

DUGAN PRODUCTION CORP.
Merry May #1
1850' FSL - 790' FEL
Sec 24 T24N R10W
San Juan County, NM

MORNING REPORT

9-20-80 Spud 11:15 p.m. 9-19-80. Drilled 12-1/4" hole to 252'. 1/2° @ 252'
Ran 6 jts 8-5/8" O.D. 24# J-55, 8R, ST&C csg. T.E. 232.94 set at 244' RKB; Cementers, Inc. cemented w/ 150 sx Class "B", 2% CaCl. POB 2 a.m. 9-20-80

9-21-80 1820' - drlg. Wt. 818 Vis 32 W.L. 10.0 1/2° @ 750', 3/4° @ 1340', 1° @ 1690'.

1-1/2 hrs - trip
12-1/4 hrs - drlg.
3/4 hr - survey
8 hrs - W.O.C.
1/4 hr - W back to btm.

9-22-80 3330' drlg. wtr 1° @ 2198'. 1° @ 2700', 1-1/4° @ 3273'

2-1/2 hrs - trip
19-1/2 hrs - drlg.
3/4 hr - rig serv.
3/4 hr - survey
1/2 hr - wash 90' to btm.

9-23-80 4140' - drlg. w/ wtr. 1° @ 3377'; 3/4° @ 3820'.

4-1/2 hrs - trip
18 hrs - drlg.
1/2 hr - rig service
1/2 hr - survey
1/2 hr - wash 110' to btm.

9-24-80 4764' - Trip - water and Benex 1° @ 4430 1° @ 4764

4-1/2 hrs - trip
18-1/4 hrs - drlg.
3/4 hr - rig serv.
1/2 hr - survey

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87401 • PHONE: 505-325-[redacted]
1821

9-25-80 5568' - drlg. wt. 8.7 Vis 30 1° @ 4768'; 1-3/4° @ 5298'

1/4 hr - trip
22-1/4 hrs - drilling
3/4 hr - rig service
1/4 hr - survey
1/2 hr - wash to btm.

9-26-80 6094' - drlg. wt. 9.0 Vis 75 1-3/4° @ 5980'

20-1/2 hrs - drilling
1/2 hr - rig ser.
1/4 hr - survey
2-3/4 hrs - lost circ.

9-27-80 6180' T.D. Cleaning out Bridge. Wt. 9.1 Vis 120 1° @ 6180'

11-3/4 hrs - trip
7-3/4 hrs - drlg.
1/4 hr. - rig ser.
2-1/4 hrs - circ.
2 hrs - attempt to log . Stopped @ 700'.

9-28-80 TD 6180' - conditioning hole for logging - unable to get below 450'.

9-29-80 TD 6180' - trip to btm w/ drill pipe. Attempt to log three times before getting to TD. and running I.E.S. and C.D.L. logs. Now going in hole with drill pipe.

9-30-80 Finish T.I.H. w/ drill pipe. Laid down drill pipe and collars. Rigged up and ran 151 jts 4½" O.D., 10.5#, K-55, 8 Rd, ST&C csg. T.E. 6216.07' set @ 6210' RKB. Cemented first stage w/ 10 bbls mud flush followed by 250 sx class "B" 40% gel and ¼# celloflake per sx followed by 150 sx class "B" neat w/ ¼# celloflake per sx. Reciprocated pipe OK and had good returns while cementing. (Total slurry 557 cu. ft.) Float failed to hold. Left shut in 30 minutes and released - held OK. Dropped opening bomb and opened stage tool @ 4228' w/ 1400 psi. Circulated 3 hrs w/ rig pump. Cemented 2nd stage w/ 10 bbls mud flush followed by 400 sx 65-35 w/ 12% gel & ¼# celloflake per sx followed by 50 sx class "B" w/ ¼# celloflake per sx. Closed stage tool w/ 2500 psi.(Total slurry second stage 1203 cu. ft.)

9-31-80 thru 11-20-80 Waiting on completion.

DAILY REPORT

11-21-80 M.I.R.U. MTK double pulling unit. Go in hole w/ tbg and bit. Ran 75 jts 2-7/8" tbg. Slips wouldn't hold. Shut down.

11-22-80 Shut down

11-23-80 Shut down - Sunday

11-24-80 Finish going in hole - tag D.V. tool @ 4268'. Drlg. D.V. tool. Go in hole, tag up @ 6117'.

11-25-80 Drlg. cement out to 6190'. Came out of hole. Tbg. count wrong - 1 jt. off.

11-26-80 Strap pipe going in hole - T.D. only 6098'. Drlg. cement out to 6190'. Circulate hole for 45 minues. Came out of hole. Shut in.

11-27-80 Shut down - Thanksgiving day.

11-28-80 Rig up Jetronics. Ran GR-CCL from PBTD 6191' to 5800' and 5350' to 4800'. Perforate Dakota formation 6169'-6175' w/ 2 shots per ft. Total 12 holes. Go in hole w/ Baker Model "R" packer and tbg. Set @ 6147'. Rig up Western Co. Load annulus w/ 1000 psi. Breakdown perfs w/ 300 gals 15% HCL as follows: Initial Breakdown 3500 psi, Ave. treating press 3200 psi, ISDP 1900 psi. 10 min shut in 1200 psi. Rig down Western Co. Start swabbing; well flowing back slightly. Swabbed down to about 500'. No gas show. Shut in.

11-29-80 TBG press 200 psi. Fluid level 2500' from top - swabbed down - small show of gas in front of fluid. Came out of hole w/ tbg and packer.

11-30-80 Sunday - shut down.

12-1-80 Rig up Western Co. Fraced Dakota perfs 6169'-6175' as follows:

5000 gal pad - Mini Max III 40# gel
5000 gal - 1# per gal 20-40 sand Mini Max III - 40# gel
5000 gal - 1½# per gal 20-40 sand Mini Max III - 40# gel
5000 gal - 2# per gal 20-40 sand Mini Max III - 40# gel
4116 gal slick wtr flush
Initial breakdown 3800 psi on pad; Ave. treating press 3000 psi @ 15 bbl/min; ISDP 2100 psi. 15 min - shut in - 1800 psi

Lost 1 pump - press drop from 3400 psi to 3000 psi and rate drop from 22 bbl/min. to 15 bbl/min. Rig up Jetronics. Perf Gallup formation as follows: 5024'-30'; 5038'-48'; 5066'-5076'; 5112'-5124'; 5130'-36', 5188'-5196'; 5226'-32'. 1 shot/ft. Total 56 holes. Has 375 psi on well after perforating Gallup formation.

12-1-80 (Cont.) Fraced Gallup formation as follows:

Spearheaded 300 gal 15% HCL acid
5000 gal slick water pad
55000 gal slick water w/ 1# per gal 20-40 sand
3360 gal. slick water flush
Initial breakdown 2800 psi
Ave. treating press 2700 psi @ 40 bbl/min.
ISDP 1000 psi
15 min shut in 800 psi

Left well shut in over night.

12-2-80 Opened well up - small amount of pressure. Went in hole w/ tbg (open end); tag solid sand about 6170'. Couldn't break circulation. Pick up on tbg. Dragging 10-12 points on weight ind. Pull 18 stands. Ran 10 stands in hole. Circulate bottom up. No sand. Ran 4 stands. Circulate. No sand. Ran 2 stands - circulating out sand. Clean out to 6090'. Ran out of water. Shut down.

12-3-80 Finished cleaning out sand to PBTD 6191'. Pulled 32 jts tbg. Landing tbg @ 5242' RKB. Total of 172 jts 2-3/8" O.D., 4.7#, J-55, 8 Rd, EUE tbg. Seating nipple top of bottom joint. Nipple up well head. Swab rest of day.

12-5-80 M.I.&R.U. Farmington Well Service swabbing unit. Csg. Pressure 350 p.s.i.. Made three swab runs; well kicked off to pit. Left flowing over night.

12-6-80 Checked well and rigged down swabbing unit. Left well open. Gauged well after flowing to pit for 22 hrs. Making 1400 MCFGPD w/ spray of oil and frac wtr. Shut in for IP.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: (XX) Initial ( ) Annual ( ) Special — Test Date: 12-17-80

Company: DUGAN PRODUCTION CORP.	Connection:		
Pool: Undesignated-Gallup · Basin-Dakota	Formation: Gallup-Dakota		Unit:
Completion Date: 12-6-80	Total Depth:	Plug Back TD:	Elevation:
Farm or Lease Name: Merry May			
Csg. Size: 4-1/2 / Wt.: 10.5# / d: 4.052" / Set At: 6210	Perforations: 5024 - 5232 From 6169 To 6175		Well No.: 1
Tbg. Size: 2-3/8 / Wt.: 4.7# / d: 1.95 / Set At: 5242	Perforations: From Open End To		Unit: I / Sec.: 24 / Twp.: 24N / Rge.: 10W
Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At		County: San Juan
Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a
			State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps

	FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						1740		1740		7 days
1.										
2.										
3.						50		350		4 days

APPLICATION FOR DOWNHOLE COMMINGLING
Dugan Production Corp.
Merry May #1 Well
Unit I, Sec. 24, T-24-N, R-10-W
San Juan County, New Mexico
Case No. 7120
Exhibit No. 5

ULATIONS

	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
			* 700

n Ratio _____ Mcf/bbl.
d Hydrocarbons _____ Deg.
ator Gas _____ XXXXXXXXXX
ng Fluid XXXXX
_____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

4.				
5.				

P_c 1752 P_c^2 3,069,504

NO	P_t^2	P_w	R_w^2	$P_c^2 - P_w^2$
1				
2				
3		362	131,044	2,938,460
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0446$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^{n} = .75 = 1.0333$

or • Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^{n} =$ 723

Absolute Open Flow 723 Mcfd @ 15.025 — Angle of Slope θ _____ — Slope, n .75

Remarks: * Q - is pito tube gauge at end of 4 days - well making 16 Bbls. Oil per day at end of test.

Approved By Division	Conducted By:	Calculated By:	Checked By:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-116
Revised 10-1-78

GAS – OIL RATIO TESTS

Operator	Pool	County
Dugan Production Corp.	Basin Dakota - Undesignated Gallup	San Juan

Address	TYPE OF TEST – (X)	
P.O. Box 208, Farmington, NM 87401	Scheduled [ ]	Completion [X] Special [ ]

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS – OIL RATIO CU.FT/BBL
Merry May	1	I	24	24N	10W	12/6/80	F	1"	50	---	24	4*	45	16	700	43,750

*Note this is Frac Water.

APPLICATION FOR DOWNHOLE COMMINGLING
Dugan Production Corp.
Merry May #1 Well
Unit I, Sec. 24, T-24-N, R-10-W
San Juan County, New Mexico
Case No. 7120
Exhibit No. 6

No well will be assigned an allowable greater than the amount of oil produced on the official test.

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 tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia 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 Division 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.

Jim Jacobs (Signature)
Vice-President (Title)

APPLICATION FOR DOWNHOLE COMMINGLING
Dugan Production Corp.
Merry May #1 Well
Unit I, Sec. 24, T-24-N, R-10-W
San Juan County, New Mexico
Case No. 7120
Exhibit No. 2

A. USA NM 25842
Southern Union Exploration

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Dugan Production Corp.

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D. USA NM 5991
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E. USA NM 30019
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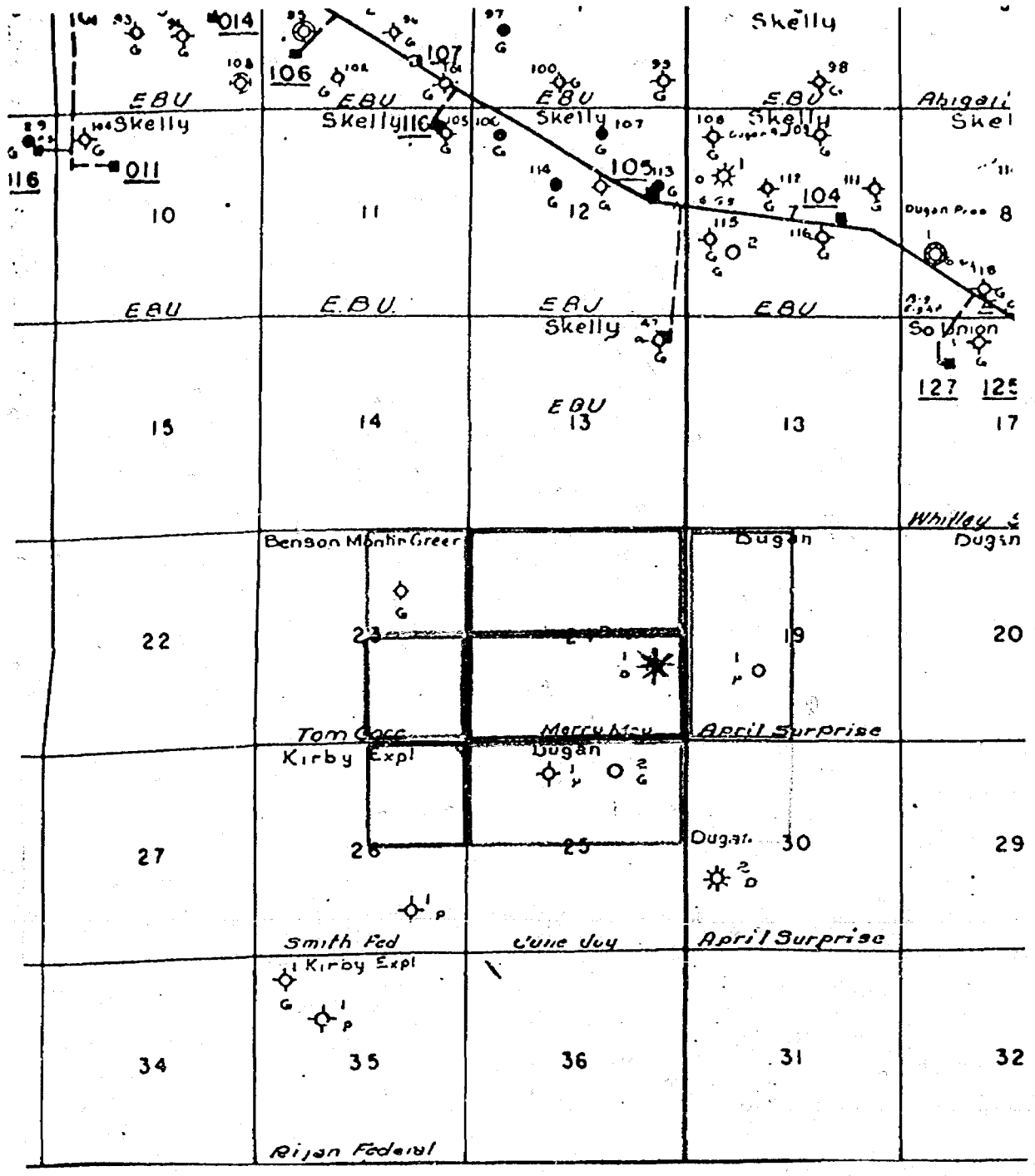
MERRY MAY #1 WELL

OFFSETTING LEASES AND OPERATORS



dugan production corp.

APPLICATION FOR DOWNHOLE COMMINGLING
Dugan Production Corp.
Merry May #1 Well
Unit I, Sec. 24, T-24-N, R-10-W
San Juan County, New Mexico
Case No. 7120
Exhibit No. 3

DUGAN PRODUCTION CORP.
Merry May #1
1850' FSL - 790' FEL
Sec 24 T24N R10W
San Juan County, NM

MORNING REPORT

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Initial breakdown 3800 psi on pad; Ave. treating press 3000 psi @ 15 bbl/min; ISDP 2100 psi. 15 min - shut in - 1800 psi

Lost 1 pump - press drop from 3400 psi to 3000 psi and rate drop from 22 bbl/min. to 15 bbl/min. Rig up Jetronics. Perf Gallup formation as follows: 5024'-30'; 5038'-48'; 5066'-5076'; 5112'-5124'; 5130'-36', 5188'-5196'; 5226'-32'. 1 shot/ft. Total 56 holes. Has 375 psi on well after perforating Gallup formation.

12-1-80 (Cont.) Fraced Gallup formation as follows:

Spearheaded 300 gal 15% HCL acid
5000 gal slick water pad
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3360 gal. slick water flush
Initial breakdown 2800 psi
Ave. treating press 2700 psi @ 40 bbl/min.
ISDP 1000 psi
15 min shut in 800 psi

Left well shut in over night.

12-2-80 Opened well up - small amount of pressure. Went in hole w/ tbg (open end); tag solid sand about 6170'. Couldn't break circulation. Pick up on tbg. Dragging 10-12 points on weight ind. Pull 18 stands. Ran 10 stands in hole. Circulate bottom up. No sand. Ran 4 stands. Circulate. No sand. Ran 2 stands - circulating out sand. Clean out to 6090'. Ran out of water. Shut down.

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12-5-80 M.I.&R.U. Farmington Well Service swabbing unit. Csg. Pressure 350 p.s.i.. Made three swab runs; well kicked off to pit. Left flowing over night.

12-6-80 Checked well and rigged down swabbing unit. Left well open. Gauged well after flowing to pit for 22 hrs. Making 1400 MCFGPD w/ spray of oil and frac wtr. Shut in for IP.

Dockets Nos. 4-81 and 5-81 are tentatively set for January 28 and February 11, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 14, 1981

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

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

ALLOWABLE: (1) Consideration of the allowable production of gas for February, 1981, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.

(2) Consideration of the allowable production of gas for February, 1981, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 7117: Application of Gulf Oil Corporation for a non-standard gas proration unit, unorthodox location, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a previously approved 320-acre non-standard proration unit comprising the E/2 of Section 25, Township 20 South, Range 36 East, Eumont Gas Pool, to its L. W. White (NCT-A)Wells No. 2 in Unit I and No. 7 at an unorthodox location 990 feet from the North line and 660 feet from the East line of said Section 25.

CASE 7118: Application of El Paso Exploration Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of South Blanco-Tocito and Basin-Dakota production in the wellbore of its Jicarilla 152 W Well No. 3 in Unit D of Section 7, Township 26 North, Range 5 West.

CASE 7119: Application of Shell Oil Company for a unit agreement, Bernalillo and Sandoval Counties, New Mexico. Applicant, in the above-styled cause, seeks approval for the West Mesa Unit Area, comprising 26,722 acres, more or less, of State, Federal, and fee lands in Townships 10, 11, and 12 North, Ranges 1 and 2 East.

CASE 7120: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of undesignated Gallup and Basin-Dakota production in the wellbore of its Merry May Well No. 1 in Unit I of Section 24, Township 24 North, Range 10 West.

CASE 7121: Application of Flag-Redfern Oil Co. for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Pinon-Fruitland and Fulcher Kutz-Pictured Cliffs production in the wellbores of its Aloha Wells Nos. 1 and 2 located in Units L and D, respectively, of Section 16, Township 28 North, Range 11 West.

CASE 7122: Application of Elk Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Pennsylvanian formation in the interval from 10,445 feet to 10,516 feet in its C. S. State Well No. 2 in Unit K of Section 26, Township 14 South, Range 34 East, High Plains-Pennsylvanian Pool.

CASE 7123: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal "AB" Well No. 7, a Morrow test to be drilled 1980 feet from the North line and 660 feet from the West line of Section 9, Township 18 South, Range 25 East, the N/2 of said Section 9 to be dedicated to the well.

CASE 7124: Application of Caribou Four Corners, Inc. for two non-standard proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for two non-standard oil proration units in Section 13, Township 29 North, Range 15 West, Cha Cha-Gallup Oil Pool, as follows: a 56.09-acre unit consisting of those fee lands comprising the NE/4 NW/4 and northermost 16.09 acres of the SE/4 NW/4 of said Section 13, and a 66.33-acre unit consisting of those fee lands comprising the NW/4 NW/4 and northermost 23.33 acres of the SW/4 NW/4 of said Section 13. In the alternative applicant seeks an order directing the escrowing of funds attributable to those lands in the E/2 NW/4 and W/2 NW/4, respectively, of said Section 13 which are not included in the above-described non-standard proration units.

dugan production corp.

December 29, 1980

Joe D. Ramey
Division Director
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Dugan Prod Co
Case 7120

Re: Application for Downhole Commingling
Merry May #1 Well (Basin Dakota Pool and
Undesignated Gallup Pool)
San County, New Mexico

Dear Mr. Ramey:

Enclosed please find three copies of the above referenced Application.

I previously verbally requested this matter be placed on the January 14, 1981 Docket and was advised by the New Mexico Oil Conservation Division that this request would be honored. I was also advised that a written application must be filed with the NMOCD on or before January 3, 1981.

Please advise if you are need further information.

Sincerely,

Tommy Roberts

Tommy Roberts
Attorney

TR:nw

Enclosures

RECEIVED
DEC 31 1980
OIL CONSERVATION DIVISION
SANTA FE

709 BLOOMFIELD RD. • P. O. BOX 208 • FARMINGTON, NEW MEXICO 87401 • PHONE: 505-325-1821

cc: Joan Chorney
401 Lincoln Tower Bldg.
1860 Lincoln Street
Denver, CO 80295

R. K. Kramer
410 17th Street
Suite 1340
Denver, CO 80202

Southern Union Exploration Company
Suite 400
Texas Federal Bldg
1217 Main Street
Dallas, TX 75202

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

Case 7120

IN THE Matter of the Application of
Dugan Production Corp. for Downhole
Commingling of the Merry May #1 Well
in San Juan County, New Mexico

APPLICATION

Pursuant to Rule 303 C of the Rules and Regulations of the State of New Mexico Oil Conservation Division, The Applicant, Dugan Production Corp., by and through its attorney, Tommy Roberts, hereby makes application for approval of downhole commingling in the well bore of the Merry May #1 Well in San Juan County, New Mexico.

The Applicant further states:

1. The Operator of the Merry May #1 Well will be the Applicant, Dugan Production Corp., whose address is P.O. Box 208, Farmington, New Mexico, 87401.

2. The Merry May #1 Well will be located on Federal Oil and Gas Lease Serial #NM 25842 insofar as said lease covers the following described lands:

Township 24 North, Range 10 West, NMPM
Section 24: S/2 (Basin Dakota Pool)
Section 24: S/2 (Undesignated Gallup Pool)
San Juan County, New Mexico

3. The legal location of the well will be as follows:

Township 24 North, Range 10 West, NMPM
Section 24: Unit Letter I
San Juan County, New Mexico

4. The Merry May #1 Well is not currently dually completed in the Basin Dakota Pool and the Undesignated Gallup Pool.

5. The Merry May #1 Well will be capable of only low marginal production from the Basin Dakota Pool, and will be capable of only low marginal production from the undesignated Gallup Pool.

6. The ownership of the above mentioned Pools is common.

7. The proposed commingling from the above Pools will result in the recovery of additional hydrocarbons, the prevention of waste and the protection of correlative rights.

8. All operators of leases offsetting the dedicated acreage for this well, the U. S. Geological Survey and the Supervisor of the District III Office of the New Mexico Oil Conservation Division have been mailed a copy of this Application.

WHEREFORE, the Applicant requests this Application be set for hearing on January 14, 1981, and that after said hearing the New Mexico Oil Conservation Division grant this Application by giving approval to the downhole commingling of the Merry May #1 Well in San Juan County, New Mexico.

Respectfully submitted,

Tommy Roberts

Tommy Roberts
Attorney for Applicant
P.O. Box 208
Farmington, N.M. 87401

MERRY MAY #1 WELL

Application For Approval of Downhole Commingling
Dugan Production Corp.

OFFSET LEASES AND OPERATORS

1. USA NM 03245

Township 24 North, Range 10 West, NMPM
Section 24: N/2
San Juan County, New Mexico

OPERATOR: Southern Union Exploration Company
Suite 400
Texas Federal Building
1217 Main Street
Dallas, Texas 75202

2. USA NM 4958

Township 24 North, Range 9 West, NMPM
Section 19: W/2
Section 30: NW/4
San Juan County, New Mexico

OPERATOR: Dugan Production Corp.
P.O. Box 208
Farmington, New Mexico 87401

3. USA NM 5991

Township 24 North, Range 10 West, NMPM
Section 25: N/2
San Juan County, New Mexico

OPERATOR: Dugan Production Corp.
P.O. Box 208
Farmington, New Mexico 87401

4. USA NM 30019

Township 24 North, Range 10 West, NMPM
Section 26: NE/4
Section 23: NE/4
San Juan County, New Mexico

OPERATOR: Joan Chorney (50%)
401 Lincoln Tower Bldg.
1860 Lincoln Street
Denver, Colorado 80295

R. K. Kramer (50%)
410 17th Street
Suite 1340
Denver, Colorado 80202

5. Township 24 North, Range 10 West, NMPM
Section 23: SE/4
San Juan County, New Mexico

Unleased Federal Lands

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

Case 7120

IN THE Matter of the Application of Dugan Production Corp. for Downhole Commingling of the Merry May #1 Well in San Juan County, New Mexico

APPLICATION

Pursuant to Rule 303 C of the Rules and Regulations of the State of New Mexico Oil Conservation Division, The Applicant, Dugan Production Corp., by and through its attorney, Tommy Roberts, hereby makes application for approval of downhole commingling in the well bore of the Merry May #1 Well in San Juan County, New Mexico.

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Section 24: S/2 (Undesignated Gallup Pool)
San Juan County, New Mexico

3. The legal location of the well will be as follows:

Township 24 North, Range 10 West, NMPM
Section 24: Unit Letter I
San Juan County, New Mexico

4. The Merry May #1 Well is not currently dually completed in the Basin Dakota Pool and the Undesignated Gallup Pool.

5. The Merry May #1 Well will be capable of only low marginal production from the Basin Dakota Pool, and will be capable of only low marginal production from the undesignated Gallup Pool.

6. The ownership of the above mentioned Pools is common.

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WHEREFORE, the Applicant requests this Application be set for hearing on January 14, 1981, and that after said hearing the New Mexico Oil Conservation Division grant this Application by giving approval to the downhole commingling of the Merry May #1 Well in San Juan County, New Mexico.

Respectfully submitted,

Tommy Roberts

Tommy Roberts
Attorney for Applicant
P.O. Box 208
Farmington, N.M. 87401

MERRY MAY #1 WELL

Application For Approval of Downhole Commingling
Dugan Production Corp.

OFFSET LEASES AND OPERATORS

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Section 24: N/2
San Juan County, New Mexico

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Texas Federal Building
1217 Main Street
Dallas, Texas 75202

2. USA NM 4958

Township 24 North, Range 9 West, NMPM
Section 19: W/2
Section 30: NW/4
San Juan County, New Mexico

OPERATOR: Dugan Production Corp.
P.O. Box 208
Farmington, New Mexico 87401

3. USA NM 5991

Township 24 North, Range 10 West, NMPM
Section 25: N/2
San Juan County, New Mexico

OPERATOR: Dugan Production Corp.
P.O. Box 208
Farmington, New Mexico 87401

4. USA NM 30019

Township 24 North, Range 10 West, NMPM
Section 26: NE/4
Section 23: NE/4
San Juan County, New Mexico

OPERATOR: Joan Chorney (50%)
401 Lincoln Tower Bldg.
1860 Lincoln Street
Denver, Colorado 80295

R. K. Kramer (50%)
410 17th Street
Suite 1340
Denver, Colorado 80202

5. Township 24 North, Range 10 West, NMPM
Section 23: SE/4
San Juan County, New Mexico

Unleased Federal Lands

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

IN THE Matter of the Application of Dugan Production Corp. for Downhole Commingling of the Merry May #1 Well in San Juan County, New Mexico

Case 7120

APPLICATION

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San Juan County, New Mexico

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WHEREFORE, the Applicant requests this Application be set for hearing on January 14, 1981, and that after said hearing the New Mexico Oil Conservation Division grant this Application by giving approval to the downhole commingling of the Merry May #1 Well in San Juan County, New Mexico.

Respectfully submitted,

Tommy Roberts

Tommy Roberts
Attorney for Applicant
P.O. Box 208
Farmington, N.M. 87401

MERRY MAY #1 WELL

Application For Approval of Downhole Commingling
Dugan Production Corp.

OFFSET LEASES AND OPERATORS

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Section 24: N/2
San Juan County, New Mexico

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San Juan County, New Mexico

OPERATOR: Dugan Production Corp.
P.O. Box 208
Farmington, New Mexico 87401

3. USA NM 5991

Township 24 North, Range 10 West, NMPM
Section 25: N/2
San Juan County, New Mexico

OPERATOR: Dugan Production Corp.
P.O. Box 208
Farmington, New Mexico 87401

4. USA NM 30019

Township 24 North, Range 10 West, NMPM
Section 26: NE/4
Section 23: NE/4
San Juan County, New Mexico

OPERATOR: Joan Chorney (50%)
401 Lincoln Tower Bldg.
1860 Lincoln Street
Denver, Colorado 80295

R. K. Kramer (50%)
410 17th Street
Suite 1340
Denver, Colorado 80202

5. Township 24 North, Range 10 West, NMPM
Section 23: SE/4
San Juan County, New Mexico

Unleased Federal Lands

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 7120

Order No. R-6571

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on January 13, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this _____ day of January, 1981, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Dugan Production Corporation, is the owner and operator of the Merry May Well No. 1, located in Unit I of Section 24, Township 24 North, Range 10 West, NMPM, San Juan County, New Mexico.

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

(4) That from the Undesignated Gallup zone, the subject well is capable of low ~~marginal~~ rates of production only.

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

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

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

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

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, 85 percent and 15 percent, respectively, of the commingled oil and gas production should be allocated to the Undesignated Gallup zone, and 15 percent and 85 percent, respectively, of the commingled oil and gas production to the Basin-Dakota zone.

(ALTERNATE)

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Dugan Production Corporation, is hereby authorized to commingle Undesignated Gallup and Basin-Dakota production within the wellbore of the Merry May Well No. 1, located in Unit I of Section 24, Township 24 North, Range 10 West, NMPM, San Juan County, New Mexico.

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

(ALTERNATE)

(2) That 85 percent and 15 percent (respectively) of the commingled oil and gas production shall be allocated to the Undesignated Gallup zone and 15 percent and 85 percent (respectively) of the commingled oil and gas production shall be allocated to the Basin-Dakota zone.

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

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

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

Called in by Tommie Roberts
12/16/80
Hugan Production Corporation
Wellbore Commingling
San Juan County
Undesignated Gallup and
Basin-Dakota
Merry May # 1-I
24-24N-10W