

CASE 5792: DUGAN PROD. CORP. FOR *tip*
HONN HOLE COMMINGLING, SAN JUAN
COUNTY, NEW MEXICO

CASE NO.

5792

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

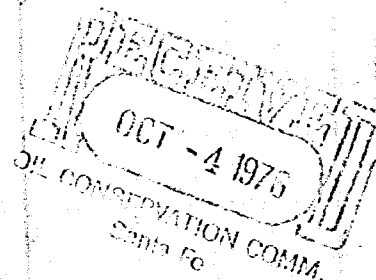
ETC.

Case 5792



dugan production corp.

September 30, 1976



Joe D. Ramey
Secretary-Director
New Mexico Oil Conservation Commission
Box 2088
Santa Fe, NM 87501

Re: Application for Approval for Downhole Commingling
of the McAdams #3 Well (Gallup and Dakota) in
San Juan County, New Mexico

Dear Mr. Ramey:

Enclosed are the following items regarding the application for downhole commingling of the McAdams #3 Well located in the NE/4 of Section 34, Township 27 North, Range 10 West, NMPM, San Juan County, New Mexico.

1. Two copies of the Application for Approval for Downhole Commingling of the McAdams #3 Well (Gallup and Dakota).
2. Two copies of the Certificate of Mailing stating that all operators of leases offsetting the dedicated acreage for this well, the USGS, and the Supervisor of the District III Office of the Oil Conservation Commission have been notified of this Application.

Please set this Application for hearing on October 27, 1976, if possible.

Sincerely,

Richard T. C. Tully

Richard T. C. Tully
General Counsel

cb

Enclosures

xc: Al R. Kendrick
Supervisor, District III
1000 Rio Brazos Road
Aztec, NM 87410

Phil T. McGrath, District Engineer
U. S. Geological Survey
Box 959
Farmington, NM 87401

D. N. Canfield, Director of Land
El Paso Natural Gas Company
Box 1492
El Paso, TX 79978

T. S. Yancey, Division Landman
Amoco Production Company
Security Life Building
Denver, CO 80202

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. 5792
Order No. R-5313

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 October 27, 1976, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 4th day of November, 1976, 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 McAdams Well No. 3, located in Unit H of Section 34, Township 27 North, Range 10 West, NMPM, San Juan County, New Mexico.

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

(4) That from the Angels Peak-Gallup zone, the subject well is capable of low marginal production only.

(5) That from the Basin-Dakota 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. 5792

Order No. R-5313

(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, 80 percent of the commingled oil production should be allocated to the Angels Peak-Gallup zone and 20 percent to the Basin-Dakota zone, and 20 percent of the commingled gas production to Angels Peak-Gallup zone and 80 percent to the Basin-Dakota zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, Dugan Production Corporation, is hereby authorized to commingle Angels Peak-Gallup and Basin-Dakota production within the wellbore of the McAdams Well No. 3, located in Unit H of Section 34, Township 27 North, Range 10 West, NMPM, San Juan County, New Mexico.

(2) That 80 percent of the commingled oil production shall be allocated to the Angels Peak-Gallup zone and 20 percent to the Basin-Dakota zone, and 20 percent of the commingled gas production shall be allocated to the Angels Peak-Gallup zone and 80 percent to the Basin-Dakota 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.

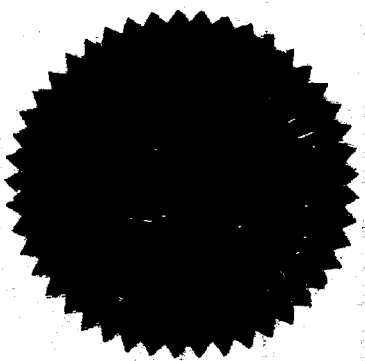
-3-

Case No. 5792

Order No. R-5313

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



PHIL R. LUCERO, Chairman

Emery C. Arnold
EMERY C. ARNOLD, Member

Joe D. Ramey
JOE D. RAMEY, Member & Secretary

S E A L

dr/

CASE 5776: (Continued & Readvertised)

Application of Continental Oil Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its James Ranch Unit Well No. 8 to be drilled at a point 1980 feet from the North line and 660 feet from the West line of Section 31, Township 22 South, Range 31 East, Los Medanos-Morrow Gas Pool, Eddy County, New Mexico, the N/2 of said Section 31 to be dedicated to the well.

CASE 5794: Application of Continental Oil Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 31, Township 22 South, Range 31 East, Los Medanos Field, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location in Unit L of said Section 31. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5795: Application of Continental Oil Company for an exception to the provisions of Order No. R-1670, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 21(A) of the General Rules and Regulations for the prorated gas pools of Northwestern New Mexico contained in Order No. R-1670, to permit the reporting of Basin Dakota production from wells on its Northeast Haynes Lease in Township 24 North, Range 5 West, Rio Arriba County, New Mexico, without the necessity of separately measuring the production from each well.

CASE 5777: (Continued & Readvertised)

Application of Gifford & Mitchell and M. B. Wisenbaker for pool creation, pool rules, and a non-standard gas spacing unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new gas pool for Pennsylvanian production for its Horse Back Well No. 1 located 1000 feet from the South line and 1980 feet from the East line of Section 33, Township 26 South, Range 36 East, Lea County, New Mexico, the promulgation of pool rules therefor, including a provision for 640-acre spacing and approval for a 589.52-acre non-standard gas spacing unit comprising all of partial Sections 33 and 34 of the aforesaid township.

Docket No. 30-76

Dockets Nos. 31-76 and 32-76 are tentatively set for hearing on November 10 and November 23, 1976. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - THURSDAY - NOVEMBER 4, 1976

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

CASE 5743: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit John W. Adams, Executor of Estates of R. W. and June Adams; and Ruth McGahey, Fred McGahey and David McGahey dba Adams & McGahey, American Employers' Insurance Company, and all other interested parties to appear and show cause why the following wells located in Township 21 North, Range 30 East, Harding County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program:

Gonzales Well No. 2, located in Unit P of Section 9; Adams & McGahey Well No. 1, located in Unit B of Section 16; and Gonzales "A" Well No. 1, located in Unit H of Section 32.

Upon application of John W. Adams, this case will be heard De Novo pursuant to the provisions of Rule 1220.

Dockets Nos. 31-76 and 32-76 are tentatively set for hearing on November 10 and November 23, 1976. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 27, 1976

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

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

CASE 5768: (Continued from September 29, 1976, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Service Drilling Company, The Travelers Indemnity Company, and all other interested parties to appear and show cause why the Gonzales-Pittman Well No. 1, located in Unit M of Section 24, Township 21 North, Range 21 East, Mora County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5785: (Continued from October 13, 1976, Examiner Hearing)

Application of Doyle Hartman for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Seven Rivers-Queen formation underlying the NE/4 NE/4, NW/4 NE/4, SW/4 NE/4, and SE/4 NE/4 of Section 19, Township 24 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico, to form four 40-acre proration units to be dedicated to four oil wells to be drilled at standard locations on said tracts. Also to be considered will be the cost of drilling and completing said wells and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.

CASE 5574: (Reopened) (Continued from October 13, 1976, Examiner Hearing)

In the matter of Case 5574 being reopened pursuant to the provisions of Order No. R-5118 which order established a temporary special depth bracket allowable of 750 barrels of oil per day for the Eagle Mesa-Entrada Oil Pool, Sandoval County, New Mexico. All interested parties may appear and show cause why said special depth bracket allowable should not be rescinded.

CASE 5789: Application of Amoco Production Company for salt water disposal well, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Fusselman formation through the perforated interval from 8313 feet to 8538 feet in its Swearingen "C" Well No. 2 located in Unit M of Section 18, Township 5 South, Range 33 East, Petersen-Fusselman Pool, Roosevelt County, New Mexico.

CASE 5790: Application of Dome Petroleum Corporation for pool creation and assignment of a discovery allowable, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Entrada production and the assignment of approximately 58,770 barrels of oil discovery allowable to the discovery well, being the Federal 21 Well No. 1 located in Unit K of Section 21, Township 20 North, Range 5 West, McKinley County, New Mexico.

CASE 5791: Application of Texaco Inc. for a non-standard gas proration unit and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 320-acre non-standard Eumont gas proration unit comprising the E/2 SE/4, SW/4 SE/4, and SE/4 SW/4 of Section 23; the W/2 NW/4 of Section 25; and the E/2 NE/4 of Section 26, all in Township 19 South, Range 36 East, Lea County, New Mexico, to be simultaneously dedicated to applicant's William Weir Wells Nos. 1 and 2 at unorthodox locations in Unit E of said Section 25 and Unit N of said Section 23, respectively.

CASE 5792: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Angels Peak-Gallup and Basin-Dakota production in the wellbore of its McAdams Well No. 3 located in Unit H of Section 34, Township 27 North, Range 10 West, San Juan County, New Mexico.

CASE 5793: Application of Dugan Production Corporation for an unorthodox gas well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Sherman Edward Well No. 2A, to be drilled at a point 2500 feet from the North line and 510 feet from the West line of Section 3, Township 29 North, Range 5 West, Blanco Mesaverde Gas Pool, Rio Arriba County, New Mexico, the N/2 of said Section 3 to be dedicated to the well.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 27, 1976

EXAMINER HEARING

IN THE MATTER OF:

Application of Dugan Production Corpora-) CASE
tion for downhole commingling, San Juan) 5792
County, New Mexico.)

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil Conservation Commission: Lynn Teschendorf, Esq.
Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico

For the Applicant: Richard Tully, Esq.
Attorney at Law
Farmington, New Mexico

sid morrish reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

sid morrish reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

Page 2

I N D E X

Page

3	<u>THOMAS A. DUGAN</u>	
4	Direct Examination by Mr. Tully	3
5	Cross Examination by Mr. Nutter	13

EXHIBIT INDEX

Offered Admitted

11	Dugan's Exhibit One, Map	4	13
12	Dugan's Exhibit Two, Production Figures	5	13
13	Dugan's Exhibit Three, Production Figures	5	13
14	Dugan's Exhibit Four, Decline Curve	6	13
15	Dugan's Exhibit Five, Decline Curve	6	13
16	Dugan's Exhibit Six, Production Figures	7	13
17	Dugan's Exhibit Seven, Resume	7	13
18	Dugan's Exhibit Eight, Diagrammatic Sketch	8	13
19	Dugan's Exhibit Nine, Written Report	9	13

1 MR. NUTTER: We will call the next Case Number
2 5792.

3 MS. TESCHENDORF: Case 5792, application of Dugan
4 Production Corporation for downhole commingling, San Juan
5 County, New Mexico.

6 MR. TULLY: May it please the Commission, I'm
7 Richard Tully, general counsel for Dugan Production Corporation.
8 I have one witness to call in Case Number 5792, Thomas A.
9 Dugan.

10 (THEREUPON, the witness was duly sworn.)

11 MR. TULLY: Prior to getting started I will go
12 ahead and give you our exhibits.

13
14 THOMAS A. DUGAN
15 called as a witness, having been first duly sworn, was
16 examined and testified as follows:

17
18 DIRECT EXAMINATION

19 BY MR. TULLY:

20 Q Please state your name for the record?

21 A Thomas A. Dugan.

22 Q And your address, Mr. Dugan?

23 A 907 Hallett Circle, Farmington, New Mexico.

24 Q And what is your occupation, Mr. Dugan?

25 A I'm a petroleum engineer and President of Dugan

1 Production Corporation.

2 Q Have you previously testified before the New Mexico
3 Oil Conservation Commission?

4 A Yes, I have.

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

7 MR. NUTTER: Yes, they are.

8 Q (Mr. Tully continuing.) Mr. Dugan, I'll hand you
9 a copy of the application in this case. Are you familiar
10 with this application?

11 A Yes.

12 Q What is the purpose of this application?

13 A The McAdams 3 Well, which is a dually completed well
14 in the Basin-Dakota Pool and the Angel Peak-Gallup Pool, has
15 ceased to produce on the Gallup side. The reason that it has
16 ceased to produce is that the bottom-hole pressure and the
17 gas volume is not sufficient to lift the produced fluids.

18 Q Is Dugan Production Corporation the operator of
19 this well?

20 A Yes.

21 Q Please identify Exhibit One?

22 A Exhibit One is just a map showing the location of
23 the well, the other wells around it and the proration unit's
24 eighty acres dedicated to the Gallup zone and the one hundred
25 and sixty acres dedicated to the Dakota zone.

1 Q Are there other wells that are dually completed in
2 the same two zones in this area?

3 A Yes, there are quite a few dually completed wells
4 in the Dakota and Gallup formations in the general area.

5 Q Referring now to Exhibit Number Two would you
6 identify it, please?

7 A Exhibit Number Two is the 1975 production from the
8 Angel Peak-Gallup wells in the vicinity of the McAdams 3 Well.
9 What we intended to show by this exhibit is that there are
10 several wells that have ceased to produce from the Gallup zone
11 in the area. The production is down considerably for most
12 of the wells, not all of the wells, and that the pool is
13 being rapidly depleted and is in its late stage of production.

14 Q The information contained on this exhibit, is it
15 from the annual report of the New Mexico Oil and Gas Engineering
16 Committee?

17 A Yes, it is, for 1975.

18 Q Referring now to Exhibit Number Three, would you
19 identify it, please?

20 A Exhibit Three is essentially the same except that
21 shows only July of 1976 production from the same wells. Here
22 again we wish to show that there are several wells in the
23 vicinity of the McAdams 3 Well that have ceased to produce
24 and that the overall production from most of the wells is
25 relatively low.

sid morrison reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

1 Q Was the information on this exhibit taken out of
2 the monthly statistical report of the New Mexico Oil and Gas
3 Engineering Committee?

4 A Yes, it was.

5 Q Referring now to Exhibit Number Four, would you
6 identify it, please?

7 A Exhibit Four is a decline curve on the Gallup zone
8 of the McAdams 3 Well and it shows the decline and the fact
9 that the well had ceased to produce the early part of this
10 year, mainly because we were unable to lift the produced fluids
11 from the well.

12 Q The source of the information contained on this is
13 from your corporate records and files, is that correct?

14 A Yes.

15 Q Referring now to Exhibit Number Five, would you
16 identify it please?

17 A It is a decline curve on the Dakota side of the
18 McAdams 3 Well, showing the gas and oil production and showing
19 that this well is, or the Dakota side is a relatively small
20 well that produces in the neighborhood of two thousand MCF per
21 month with half a barrel of oil per day, approximately.

22 Q Again was the source of the information contained
23 on this from your corporate records and files?

24 A Yes.

25 Q On both Exhibits Four and Five, do you feel that

sid morrish reporting service

General Court Reporting Service
825 Calle Mijia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

1 these exhibits show that both of these zones are capable of
2 low marginal production?

3 A. They should be capable of producing some time in a
4 marginal situation if we can figure out a way to economically
5 lift the produced fluids and make the Gallup zone produce.

6 Q. Referring now to Exhibit Number Six, would you
7 identify it, please?

8 A. Six is just a Xerox copy of the 1975 annual
9 New Mexico Engineering annual report showing the monthly
10 production from the Dakota side and also the Gallup side of
11 the McAdams 3 Well. We have those underlined in yellow and
12 red. It is just a matter of information is the only reason
13 that we submitted this.

14 Q. This information is also contained on Exhibit Two,
15 I believe?

16 A. Same thing, yes.

17 Q. Referring now to Exhibit Number Seven, would you
18 identify it, please?

19 A. It's just a resume of how the well was completed
20 in 1958 through '60 and it's just the background of the well,
21 the completion of the well.

22 Q. Is there anything of significance on that that you
23 wish to point out to the Commission?

24 A. Well, that the Gallup zone of this well was a very
25 good well to start with, a very outstanding well and the

1 Dakota has always been a relatively low producer and there
2 was a lot of time and effort put in in completing the well.

3 Q The source of the information for this exhibit is
4 from the New Mexico Oil Conservation Commission files as well
5 as from your corporate records and files?

6 A Yes, mainly from the New Mexico Oil Conservation
7 Commission because I wasn't working with the well on the
8 original completion.

9 Q Referring now to Exhibit Number Eight, would you
10 identify it, please?

11 A It's just a diagrammatic sketch of the wellbore,
12 showing the locations of the perforations and the packer,
13 where the tubing is set.

14 Q Are there any amendments or alterations you wish to
15 point out on this particular sketch to the Commission?

16 A Well, one of the problems that we have with this
17 particular well is that when the well was originally completed
18 they ran a combination tubing string in the Gallup with
19 fourteen hundred feet of inch-and-a-half tubing below forty-
20 eight hundred feet of two-and-three-eighths tubing which they
21 probably had very good reasons for doing that at the time
22 but we can't swab the well below forty-eight hundred feet
23 and the fluid level at this point is below that so we really
24 have no way of lifting the fluids out of the wellbore by
25 swabbing, other than that it's a relatively -- well it's not --

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

1 the sketch is a little bit erroneous in that the four-and-a-half
2 and the five-and-a-half casing were liners rather than full
3 strings, and that, of course, is one of the reasons they ran
4 that small tubing below the two-inch tubing. I guess they
5 wanted the larger string to accommodate the large flows that
6 the Gallup zones would make and the inch-and-a-half was as big
7 as they could get in the five-and-a-half liner.

8 Q The order authorizing the dual completion for this
9 particular well, was that Number DC-655 dated August 11th, 1958?

10 A That's what the records show.

11 MR. NUTTER: What was that number again?

12 MR. TULLY: DC-655, dated August 11th, 1958.

13 MR. NUTTER: Thank you.

14 Q (Mr. Tully continuing.) Referring now to Exhibit
15 Number Nine, would you identify that, please?

16 A This is just a written description of what we wish
17 to do and what we wish to accomplish by commingling the zone,
18 the two zones in the wellbore and our main premise is that
19 the well is in a marginal state of production and we have no
20 good way of lifting the produced fluids and the cheapest way
21 and most economical way that we believe that we can lift the
22 produced fluids from the Gallup zone is by perforating the
23 Dakota string and allowing the energy of the Dakota gas to
24 lift the Gallup produced fluids.

25 And we have also set out in here how we would propose

1 to allocate the production from both zones. All we did was
2 take the 1974 production from both zones and came up with a
3 percentage figure and the reason we took 1974 was we felt that
4 was the last full year of relatively normal production from
5 the well.

6 So we would recommend that eighty-one, point, two,
7 one percent of the oil production should be allocated to the
8 Gallup formation and eighteen point, seven, nine percent to
9 the Dakota zone and we would recommend that thirty-one
10 point, four, eight percent of the gas production be allocated
11 to the Gallup zone and sixty-eight point, five, two percent of
12 the gas production to the Dakota zone.

13 We have also pointed out in here that the only other
14 alternative to lifting the produced fluids from the Gallup
15 zone, the only practical approach or other approach, would be
16 equip the Gallup zone to pump and this would be very expensive
17 because the Gallup is sixty-two hundred, we would be only
18 handling in the neighborhood of a barrel or barrel and a half
19 of oil per day and I don't think it would be economical because
20 pumping a well that deep for that small amount of oil is not
21 too practical.

22 Q Do you have any monetary figures that you think it
23 would take to pump this well?

24 A I would estimate that it would cost approximately
25 fifty thousand dollars to equip the Gallup zone to pump and it

sid norrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

1 doesn't seem like a practical approach to me at this particular
2 time.

3 Q Referring back to Exhibit Number Eight, now, would
4 you use it and explain to the Commission how you propose to
5 commingle this well?

6 A Well, the only thing I would propose to do would be
7 to go in and perforate the Dakota tubing string at approximately
8 sixty-two, eighty so that we could commingle the Gallup
9 production and the Dakota production. It would probably be
10 necessary to swab the well through the Dakota inch-and-a-half
11 tubing to get it to flowing and that would be all that we would
12 have to do. And we believe that the Dakota, the energy from
13 the Dakota gas would then lift the barrel or barrel and a
14 half a day of Gallup oil and allow both zones to continue
15 to produce for sometime.

16 This would cost in the neighborhood of fifteen
17 hundred dollars, so it would be a minor expense as compared
18 to trying to lift the Gallup produced fluid by pumping.

19 Q Because of the age of this well, as well as its
20 production history, do you feel that this is the most reasonable
21 approach under the circumstances?

22 A Yes, of course, it is the most economical approach
23 and which with the depleted status of the well would surely
24 be the most reasonable approach.

25 Q Just some general questions now. Is the ownership

sid morrison reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

sid morrish reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 987-9212

Page 12

1 of these two zones, the Angel Peak-Gallup and the Basin-Dakota
2 common?

3 A Yes.

4 Q In your opinion will the total value of the production
5 in this well be increased or reduced by commingling?

6 A It should be increased considerably.

7 Q This is a result of producing the liquids better by
8 lifting?

9 A Lifting the produced liquids from the Gallup zone
10 and allowing some additional gas to be produced from the
11 Gallup zone.

12 Q In your opinion will the approval of this application
13 conserve natural resources of the State of New Mexico?

14 A Yes, in that it will allow us to produce additional
15 hydrocarbons.

16 Q Will it prevent waste then?

17 A Yes.

18 Q And you do not feel it would impair or interfere with
19 the correlative rights of any other owners in this area?

20 A I would hope not, seeing as how we don't anticipate
21 getting all that much production from the well. As I have
22 stated before, it is a well pretty well depleted.

23 MR. TULLY: At this time I move for the introduction
24 of Exhibits One through Nine into evidence.

25 MR. NUTTER: Dugan's Exhibits One through Nine will

1 be admitted into evidence.

2 (THEREUPON, Dugan's Exhibits One through
3 Nine were admitted into evidence.)

4 MR. TULLY: I have nothing further.

5 CROSS EXAMINATION

6
7 BY MR. NUTTER:

8 Q Mr. Dugan, Exhibit Number Two and Exhibit Number Six
9 indicate that the well produced approximately five hundred and
10 twenty-seven barrels of oil during the year 1975. Exhibit
11 Number Three shows no production for the well in July of 1975,
12 when did the well cease producing from the Gallup formation?

13 A It started declining along about in July of '75 but
14 we got some production out of it through, I believe, April of
15 '76.

16 Q Has the well ever been pumped in the Gallup?

17 A No, sir.

18 Q What was the gas-oil ratio on the well during its
19 last few months of production there?

20 A From the Gallup side?

21 Q Yes.

22 A It's approximately thirty thousand to one. It's
23 classified as an oil well in the Angel Peak Pool.

24 Q But it has a high ratio so subsequently it has
25 been able to lift those fluids for most of its life then?

1 A. Yes, it was lifting the fluids well up to the
2 middle of '75 and then since that time we were struggling to
3 keep it going and we haven't been able to keep it going as of
4 the middle of this year.

5 Q. Well, now, from Exhibit Number -- well, no, it's not
6 from Exhibit Number Eight -- but your testimony was that the
7 Dakota tubing string is one-and-a-half inch all of the way,
8 is that right?

9 A. Yes, sir, that's right.

10 Q. So if the tubing strings had been reversed and it
11 was one-and-a-half inch for the Gallup the thing still might
12 be flowing from the Gallup?

13 A. It might, it sure might. And also we could have
14 swabbed it where with the setup now we can't.

15 Q. With that tapered tubing there is no way?

16 A. No, you can't.

17 Q. Who drilled and completed this well?

18 MR. TULLY: I believe it was A. N. Brown.

19 A. A. N. Brown, was he the operator? It's had several
20 changes.

21 Q. (Mr. Nutter continuing.) I see. Now, this allocation
22 that you have got proposed here for oil to the Gallup and the
23 Dakota and gas to the Gallup and Dakota, that's based on 1974
24 production. Is that going to be fairly representative of
25 future production from the two zones if they're commingled?

sid morrish reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

1 A. I felt that it would because I felt that 1974 was
2 the last year, full year, that the well was performing in
3 the manner in which it should perform if it were adequately
4 lifting the produced fluids from both zones.

5 Q Actually the Dakota formation, according to
6 Exhibit Number Five, is a relatively flat decline curve?

7 A. Yes.

8 Q And it's making more gas than the Gallup was by quite a
9 bit and according to the decline curves would continue to
10 make substantially more gas but we are only going to allocate
11 sixty-eight percent of the total gas production to the Dakota,
12 don't you think that --

13 A. Now, let's see. Yeah, okay, I guess that's --

14 Q Don't you think these decline curves indicate that
15 future production, while it may be a current basis, that
16 future production might be greater from the Dakota as far as
17 gas production is concerned than than sixty-eight percent?

18 A. Well, I'm sure you're right, yeah. Of course you have
19 to go to a sliding factor in there considering the decline
20 curves which we didn't try to arrive at.

21 Q That is just based on current production in 1974?

22 A. 1974 total production is all we did.

23 MR. NUTTER: Are there any further questions of
24 Mr. Dugan? He may be excused.

25 (THEREUPON, the witness was excused.)

1 MR. NUTTER: Do you have anything further, Mr. Tully?

2 MR. TULLY: No, sir.

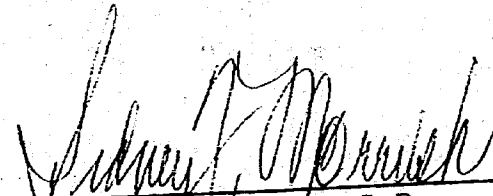
3 MR. NUTTER: Does anyone have anything they wish to
4 offer in Case Number 5792?

5 We will take the case under advisement.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

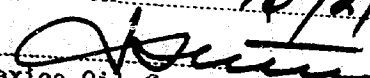
sid morrish reporting service
General Court Reporting Service
825 Calle Mirja, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-5212

REPORTER'S CERTIFICATE

1
2 I, SIDNEY F. MORRISH, a Certified Shorthand Reporter,
3 do hereby certify that the foregoing and attached Transcript
4 of Hearing before the New Mexico Oil Conservation Commission
5 was reported by me, and the same is a true and correct record
6 of the said proceedings to the best of my knowledge, skill and
7 ability.

8
9 
10 Sidney F. Morrish, C.S.R.

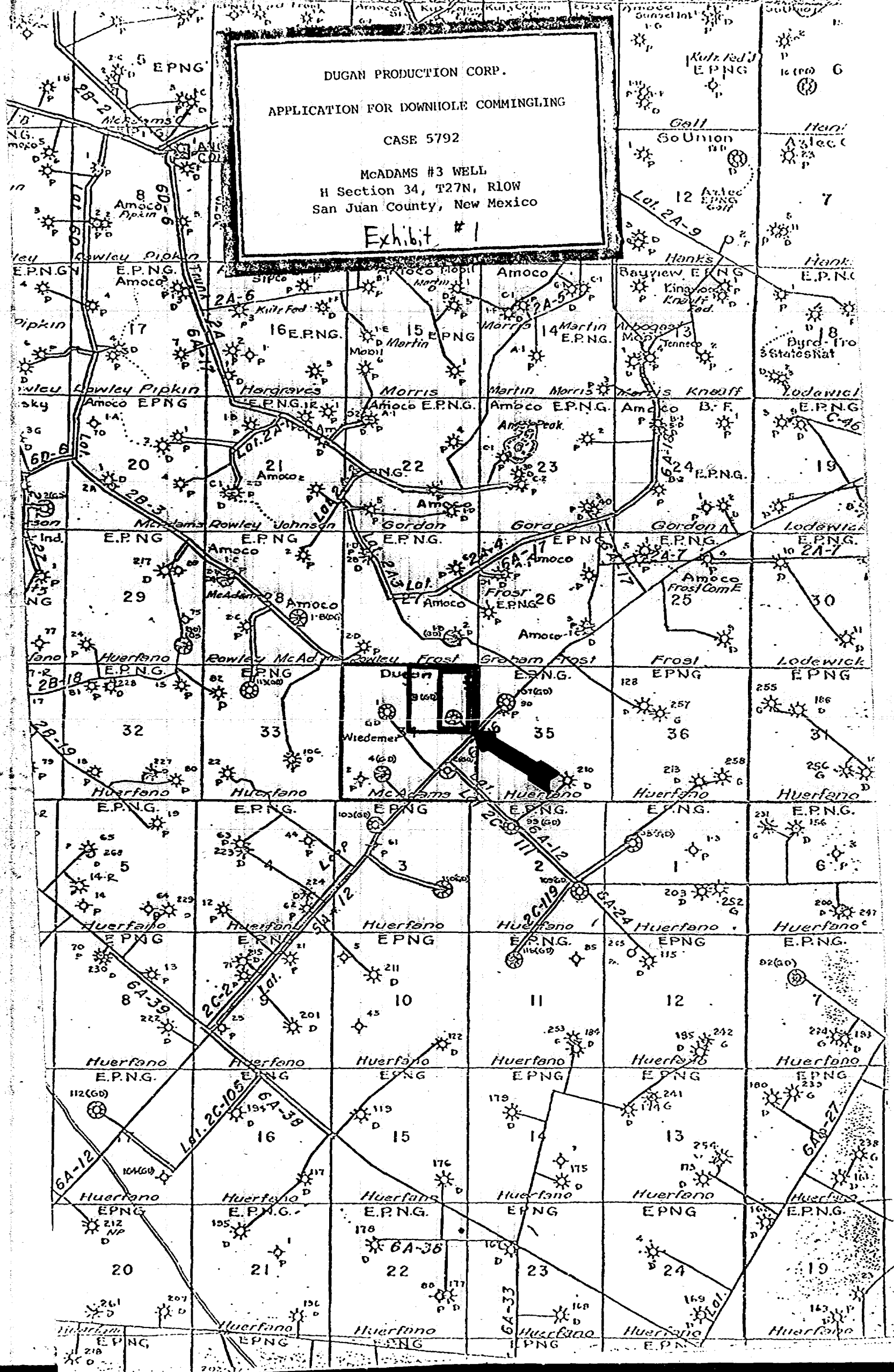
sid morrish reporting service
General Court Reporting Service
825 Calle Morija, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

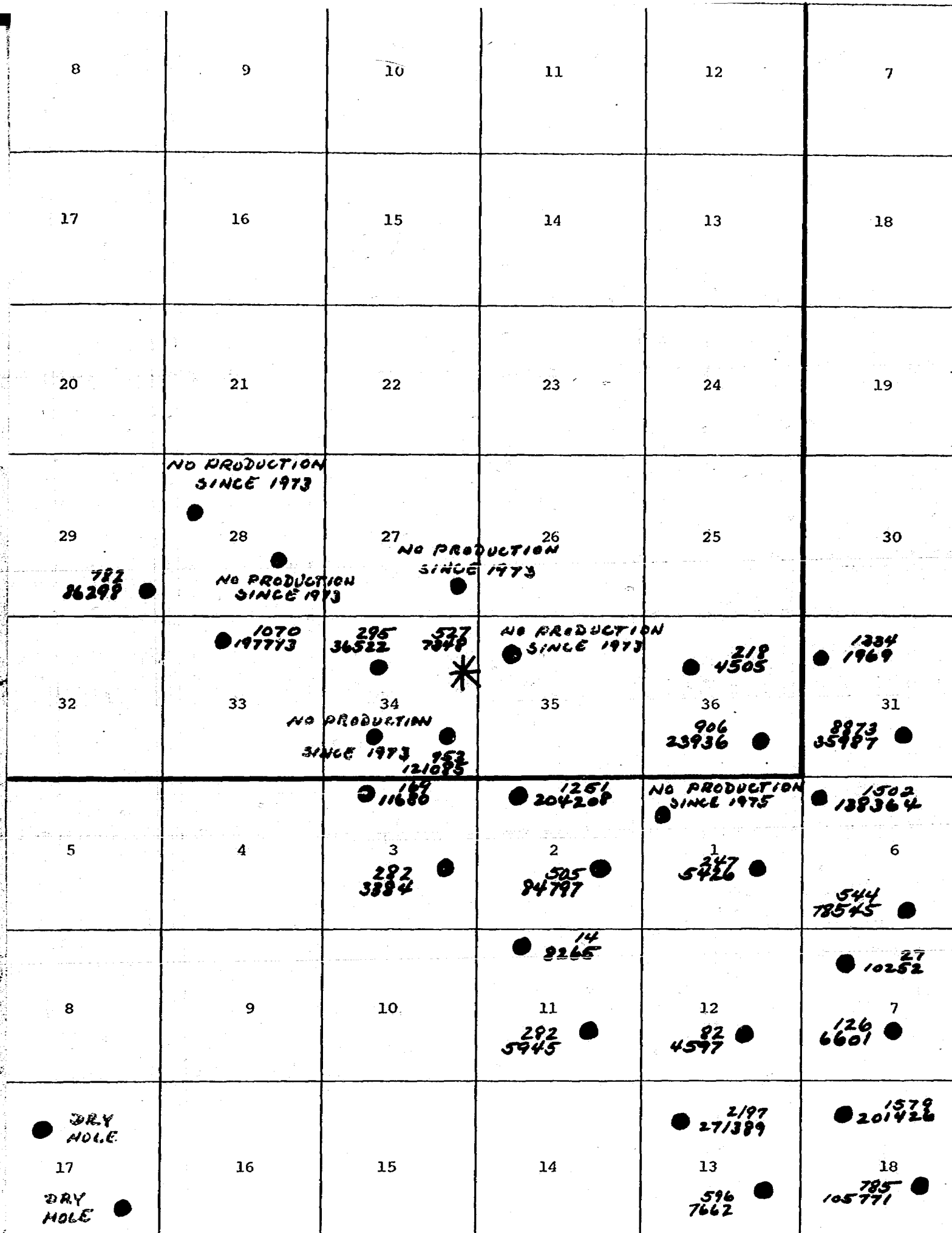
11
12
13
14
15 I do hereby certify that the foregoing is
16 a complete record of the proceedings in
17 the Examiner hearing of Case No. 5792
18 heard by me on 10/27, 1974
19 
20 New Mexico Oil Conservation Commission
21
22
23
24
25

DUGAN PRODUCTION CORP.
APPLICATION FOR DOWNHOLE COMMINGLING
CASE 5792

McADAMS #3 WELL
H Section 34, T27N, R10W
San Juan County, New Mexico

Exhibit #1



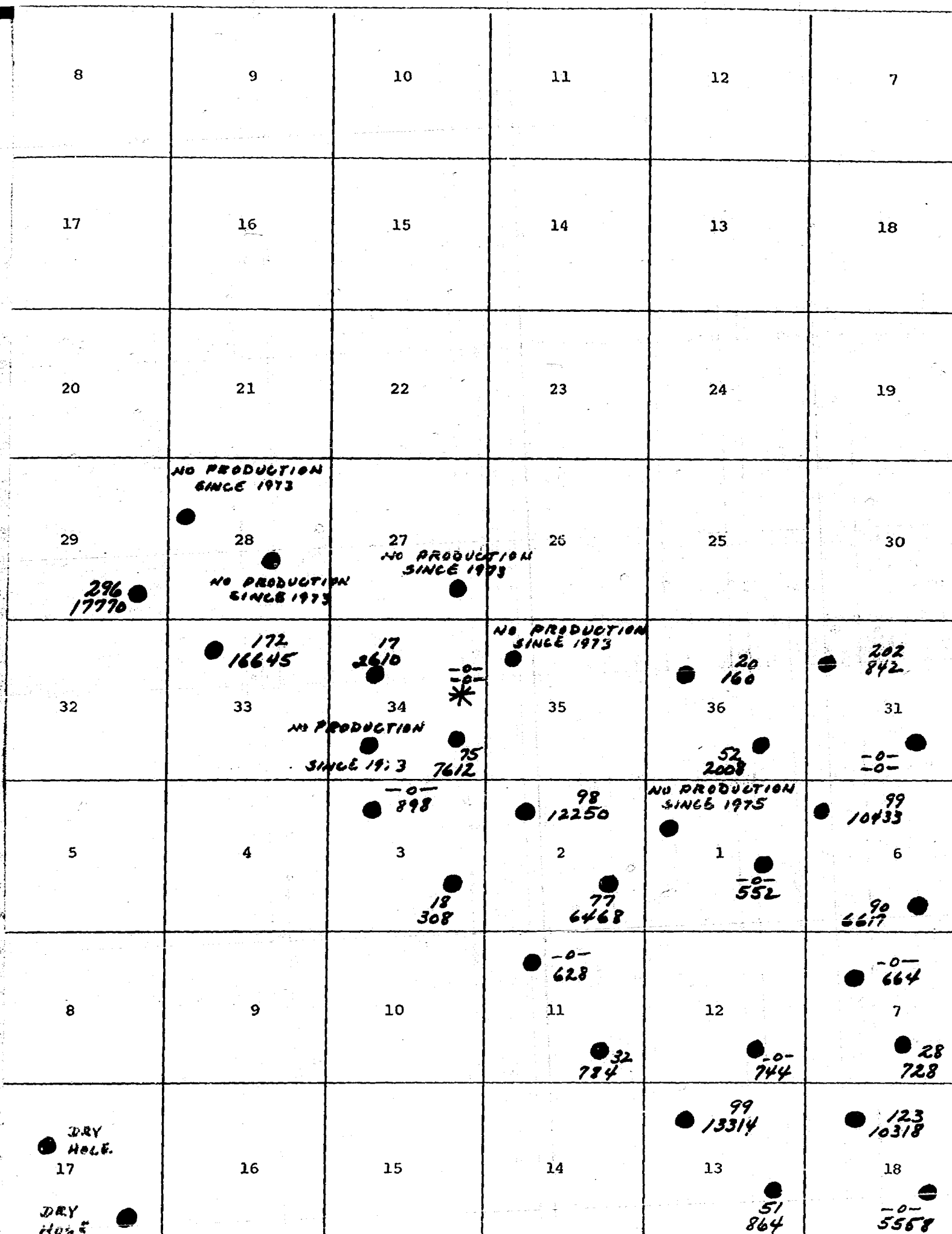


DUGAN PRODUCTION CORP.
APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5792

McADAMS #3 WELL
H Section 34, T27N, R10W
San Juan County, New Mexico

Exhibit # 2

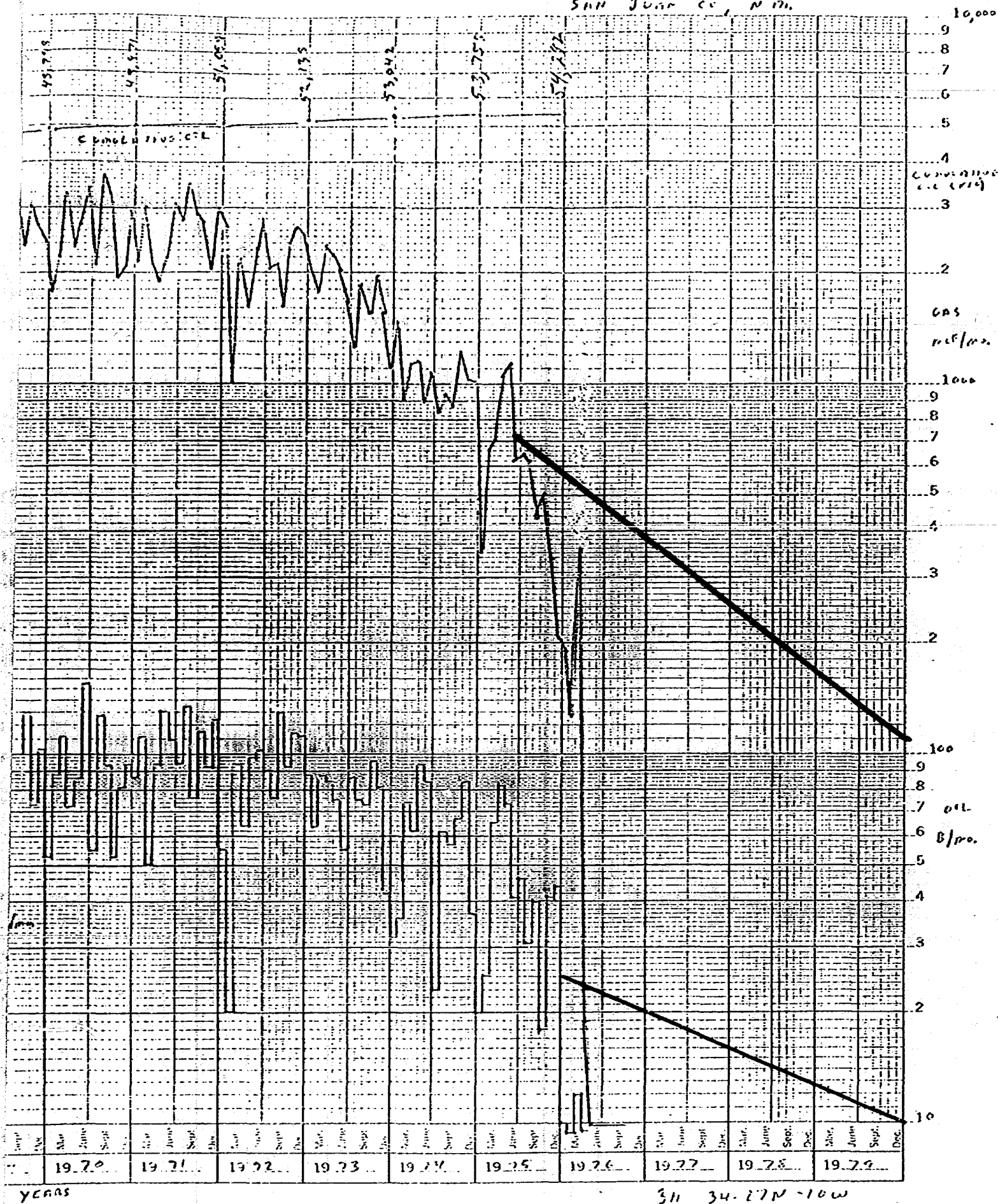


- Angels Peak Gallup Wells
- * McAdams #3 Well
T27N, R10W, N10E
Section 34: E/2 NE/4
- Oil Production (July 1976 BBLS)
- Gas Production (July 1976 MCF)

DUGAN PRODUCTION CORP.
APPLICATION FOR DOWNHOLE COMMINGLING
CASE 5792
McADAMS #3 WELL
H Section 34, T27N, R10W
San Juan County, New Mexico

Exhibit #3

McADAMS #3 WELL
 ANGELES PEAK GROUP
 SAN JUAN CO., N.M.

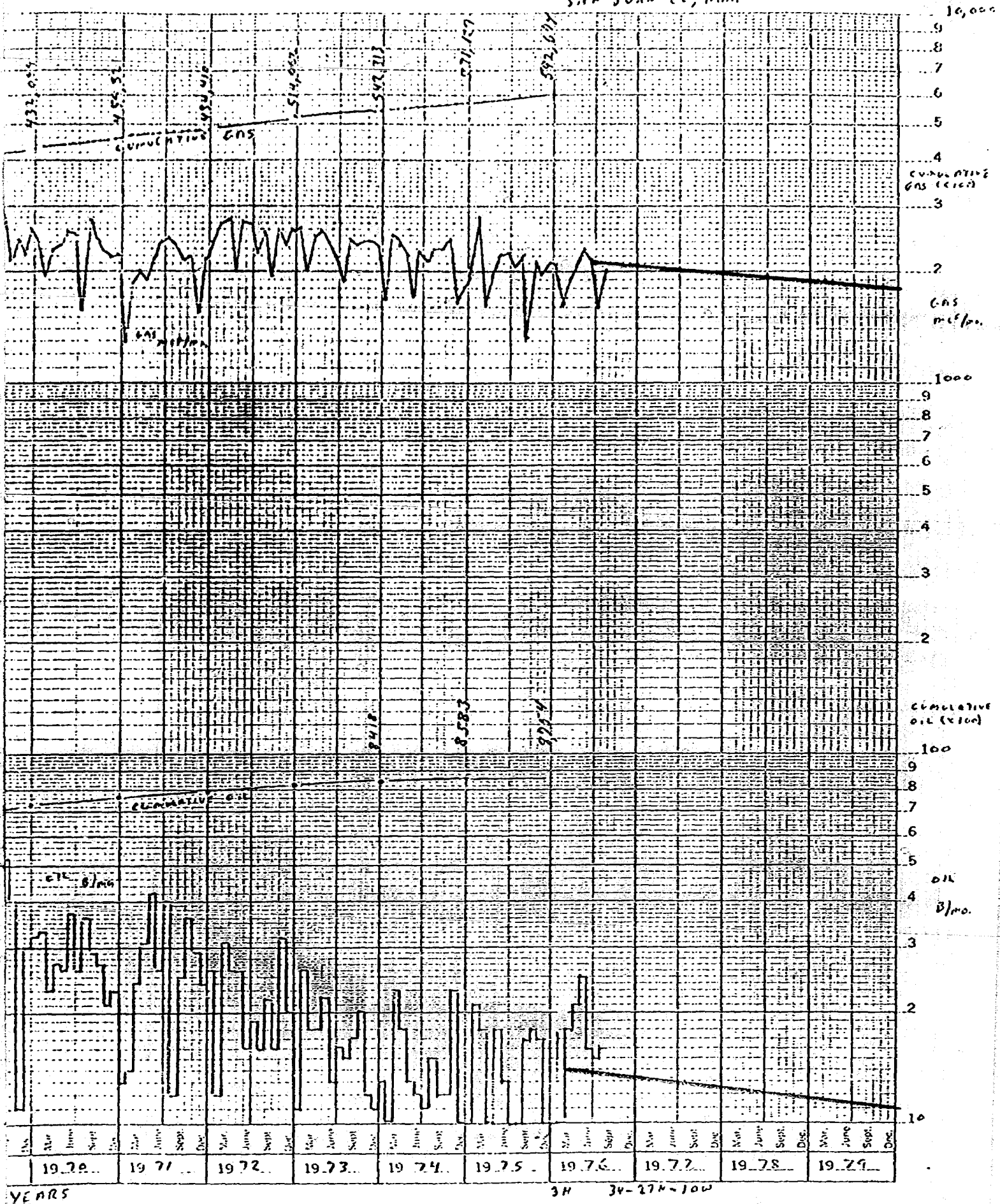


— Anticipated Production

DUGAN PRODUCTION CORP.
 APPLICATION FOR DOWNHOLE COMMINGLING
 CASE 5792
 McADAMS #3 WELL,
 H Section 34, T27N, R10W
 San Juan County, New Mexico

Exhibit #4

FORT COLLINS CONSOLIDATED ROYALTY
 McADAMS WELL NO. 3
 BASIN DAKOTA
 SAN JUAN CO., N.M.



Anticipated Production

DUGAN PRODUCTION CORP.
 APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5792

McADAMS #3 WELL
 H Section 34, T27N, R10W
 San Juan County, New Mexico

Exhibit #5

DUGAN PRODUCTION CORP.
APPLICATION FOR DOWNHOLE COMMINGLING
CASE 5792
McADAMS #3 WELL
H Section 34, T27N, R10W
San Juan County, New Mexico
Exhibit #6

Sherman E. Dugan

ANNUAL REPORT

OF THE

NEW MEXICO OIL & GAS ENGINEERING
COMMITTEE

HOBBS, NEW MEXICO

==
VOLUME II

Northwest New Mexico
==

1975

NDATHWEST COUNTIES OIL

PAGE 1

WELL S T R JAN FEB MAR APRIL MAY JUNE JULY AUG SEPT OCT NOV DEC VA-PROD MP ACCUM.

AKAM NEZ DEVONIAN (ABANDONED) ON TO SM

M. G. JENNERALD AND ASSOC., INC. PLUGGING APPROVED 1972 3147

KEAR-MCCEE CORPORATION PLUGGING APPROVED 1972 14032

ALAMO FARMINGTON ON TO SM

EL PASO NATURAL GAS COMPANY 67 69 58 211 254 135 106 124 109 143 79 88 1423F 15488

AMARILLO CALLUP SM TO 64

OSCAN PRODUCTION CORPORATION 23 25 32 10 24 33 44 34 3 29 253P 43858

FULL 10332N10W OIL 47 2 34 12 17 57 19 27 24 24 265P 4577

COMPANY TOTAL OIL 70 27 86 22 41 93 63 61 29 53 524 68435

ANGEL PEAK CALLUP (ASSOCIATED) 64 TO 74

AMSCO PRODUCTION CO LAST PROD. PRIOR TO 6/73 3224

C A MCLOUGHS LAST PROD. PRIOR TO 6/73 25907

COMPANY TOTAL OIL 70191

DJAN PRODUCTION CORPORATION

10332N10W OIL 22 34 29 17 24 27 35 28 25 22 19 28 295P 21774

20362N10W OIL 3153 3722 2733 2644 3189 3329 3259 2259 2961 2750 2157 3432P 27075

30362N10W OIL 994 1114 813 1078 1030 1010 905 2187 1040 1013 1044 1248P 54282

40362N10W OIL 20 23 14 6 11 6 4 4 11 11 33 734P 25219

COMPANY TOTAL 211 1541 1137 1547 1553 1511 1503 1504 1014 1427 1312 1313 14455 128352

EL PASO NATURAL GAS COMPANY

1101526N 9W OIL 45 84 91 81 81 85 89 72 81 92 84 964P 16530

1711526N 9W OIL 235 324 299 289 288 285 285 274 281 282 284 344P 3442

MUERFANITO UNIT NP 3203 4323 3720 2863 2279 2315 2876 2311 2855 2172 1760 2417 3508P 5458

MUERFANITO UNIT ZONE ABANDONED

92F 726N 9W OIL 2933 1443 1696 467 578 241 334 135 310 173 786 646 1025P 10608

99C 226N10W OIL 18658 19470 14292 19073 18537 12158 14097 19357 13645 17973 17491 17294 20420P 24394

101F192N10W OIL 4635 4679 4052 5477 4873 5372 7044 6287 5399 5358 7731 7157 7631P 17550

103C 326N10W OIL 955 416 1070 1029 1084 924 849 1134 733 371 1067 1784 1145P 76370

105P292N10W OIL 4483 7532 6438 3412 3944 3784 6055 5508 11179 11504 12234 9335 8429P 34793

106J332N10W OIL 18392 19298 21105 14449 21804 15789 21675 15792 13324 20901 20745 20919 22197P 77144

107E352N10W OIL LAST PROD. PRIOR TO 6/73 97 30 103 44 31 6571 3749 6477P 21263

108E 126N10W OIL LAST PROD. DATE 12/74 101 101 201 233 252 187 338 10122

109F 226N10W OIL 8389 4141 8295 8230 8717 4150 5134 9271 7837 6377 6571 3749 6477P 21263

110I 326N10W OIL 508 377 498 311 274 12 201 249 233 252 187 338 10122

113C332N10W OIL 13713 19363 18874 14158 18837 15271 18869 14994 14785 12314 18731 17637 19773P 971

13802226N 9W OIL 5809 4875 4884 7769 5834 4283 4842 5112 5839 6159 4164 5235 7640P 7865

16001726N 9W OIL 18894 12844 17503 14050 16739 10411 14955 13847 12294 13312 13368 8839 16447P 4265

231D 626N 9W OIL 1232 10550 13542 13716 13895 6863 9603 12888 18985 10657 11248 12019 13850P 2024

232P 826N 9W OIL 2749 2115 3327 2793 3233 2610 595 1815 1853 88 2011P 2776

233I 526N 9W OIL 2498 3424 3500 2834 2438 4255 2784 384 333 2742 3798 3938P 1527

234Q 726N 9W OIL 1426 236 627 591 478 673 450 290 421 686 521 640P 2314

236E 926N 9W OIL 2618 3228 3328 3446 2456 2104 3122 3253 3744 3333 2453 3239 3405P 1003

237C1726N 9W OIL 101 100 3373 3333 3508 2329 2882 2311 2221 2018 2907 2482 3294P 2436

238I1826N 9W OIL 14313 10940 15003 9942 10057 4812 5707 4820 6657 8171 8554 8832 10577P 3273

239C1826N 9W OIL 20479 14577 20494 19275 19242 11677 18244 12743 15532 16224 16800 15783 20142P 1031

240C2326N 9W OIL 7251 10562 10535 9991 7531 9917 9747 9632 10622 7776 9460 11276P 5541

241C1326N10W OIL 28507 22553 27887 27123 25888 124 24523 17471 21088 21825 21825 19723 27138P 1459

24201226N10W OIL 75 399 510 193 426 351 556 498 513 539 784 784P 1677

247D 626N 9W OIL 8200 6094 7763 6982 7015 3819 4138 7653 6373 6471 7631 6444 7842P 513

248E 526N 9W OIL 66 74 154 61 40 51 47 819 347 703 325 284P 402

249E 826N 9W OIL 53 421 1384 2213 2524 2209 2388 1919 2345 2193 2168 2908 2351P 247

252I 126N10W OIL 40 439 563 588 486 474 365 433 485 519 545 520 520P 282

253P1126N10W OIL 443 561 544 544 315 390 429 515 613 742 587 595P 596

254I1326N10W OIL 791 192 131 718 438 71 553 71 643 711 711 711 711P 1334

255E3127N 9W OIL 1384 656 1835 4532 4713 2537 2854 1457 1939 4184 4040 4591 3588P 9992

255O3127N 9W OIL 2043 2402 2049 2353 2145 1793 2139 2213 2254 2431 2114 23935P 606

256P362N10W OIL 3720 2214 3154 3409 2578 2467 2481 2968 2670 3295 2046 2742 3388P 452432

COMPANY TOTAL 210084 202405 227525 212102 213441 148585 175753 177592 182440 194752 202311 192577 2364853

MUSKY OIL COMPANY OF OLAJARE

36192N10W OIL 910 483 649 684 653 354 323 543 372 333 338 281 595P 18849

Y. B. WEAVER 31327N10W OIL PLUGGING APPROVED 1961 3183

8157E LOWER CALLUP ON TO SM

ATLANTIC RICHFIELD COMPANY 518 466 485 471 857 635 685 289 410 458 495 515 585P 168746

CONTINUED BASIN DAKOTA (GAS)													PAGE 2	
WELL S T R	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YR-PROD	ACCUM.
4E2124N 5W GAS	8479	8787	8633	6594	7121	7762	8019	8123	6504	8463	8285	7534	94733	1828338
5E2224N 5W GAS	435	33	34	44	27	101	30	29	34	33	31	23	274	17508
6D1524N 5W GAS	6257	5968	6378	3473	5335	5448	6583	7155	4529	6715	6238	6838	7122	1237153
7I1024N 5W GAS	7171	6522	5938	5988	6327	5722	6871	7155	4624	7324	6849	6524	76343	1288640
8P1524N 5W GAS	1365	1349	1431	1352	1328	1443	1443	1325	1465	1748	990	1352	16585	447508
COMPANY TOTAL OIL	287	280	349	351	294	367	223	250	211	213	314	255	352	92511
GAS	46482	44981	45784	35374	42574	41277	45903	44250	34781	47733	43810	43509	518255	9278881
WAT	112	358	370	415	296	427	343	200	234	333	346	296	3689	26414
CROWN CENTRAL PETROLEUM CORPORATION														
1D 327N10W GAS	11262	11383	10203	9729	7952	10362	10291	10384	7554	9507	10481	10085	119384	1708650
1A2828N10W GAS	11919	12938	9826	9630	9231	9623	10710	11101	6201	4953	12383	11288	123903	2850219
2H2728N10W GAS	23457	23122	20584	20908	16120	22560	20394	19181	15742	15828	21110	22070	244295	5970275
10G1828N10W GAS	15818	16513	13190	11362	8550	12342	12021	12919	8295	114629	13882	15890	152895	375848
11N2028N10W GAS	1443	13087	11431	11521	10131	12903	11961	12813	9813	11788	14422	14480	149711	8171131
12M2128N10W GAS	21402	21467	19225	20622	15877	21925	20652	20276	17924	18803	20377	19248	237194	4797424
13K3328N10W GAS	9382	9933	8354	7813	5718	9001	7971	7746	7533	7324	8924	9228	9843	1467181
COMPANY TOTAL OIL	11189	8614	10107	10054	9624	11221	9993	10816	8508	9883	9688	11561	120516	3180037
GAS	13212	14826	12441	11225	8980	14847	12361	13164	9355	14345	15067	15301	156156	4401707
WAT	81	68	91	108	78	94	82	87	72	113	92	69	1032	41134
1M1627N10W GAS	11393	12652	10170	11561	8991	12253	11976	11661	10381	12149	12047	13158	138417	2513146
2H 427N10W GAS	16122	13485	13249	17649	13177	13122	13507	14558	12533	15198	17013	16399	17679	3717679
COMPANY TOTAL OIL	22216	15627	19622	16618	11186	20404	17091	17071	11733	18832	18092	21370	209257	4258574
GAS	164	113	113	108	102	161	146	139	107	162	152	152	1443	43904
WAT	3475	7371	9419	8993	5921	8964	8063	7835	4627	7407	9495	8501	93434	1323994
1B 127N10W GAS	4037	3773	3573	3833	2818	3870	3599	3533	3332	3635	3723	3637	43631	1084837
COMPANY TOTAL OIL	37	34	34	34	28	34	33	30	27	23	32	30	373	11157
MARTIN C. FEDERAL 1B 327N10W GAS	15622	17542	13285	16503	13545	15030	13644	13542	13511	16702	16952	16030	180200	3479166
COMPANY TOTAL OIL	1463	1506	1493	1546	1265	1686	1715	1506	1276	1725	1599	1486	18267	609541
GAS	20603	20238	186502	167448	147581	198503	184740	185701	146439	186058	203709	208576	2247726	4783484
DELMI-TAYLOR OIL CORPORATION														
PLUGGING APPROVED 1957														
1M1627N10W GAS	13917	12940	12196	13381	12927	12936	10735	12123	10399	12445	9689	10293	143903	2031019
COMPANY TOTAL OIL	57	74	90	93	106	97	111	96	90	119	53	55	1023	26128
MILES FEDERAL 1C 526N 7W GAS	976	837	139	1456	1189	1030	815	1010	2160	855	1021	759	11247	127265
COMPANY TOTAL OIL	9	15	4	26	42	25	23	8	13	13	15	13	208	5282
GAS	4173	3201	2812	3451	3612	5642	3799	4707	4327	4130	4868	4545	49277	596773
COMPANY TOTAL OIL	103	120	113	168	202	190	207	136	167	178	114	105	1783	41227
GAS	19066	16978	15147	18278	17728	19406	15299	17840	15885	17473	15578	15617	204493	2755417
DUGAN PRODUCTION CORPORATION														
PLUGGING APPROVED 1974														
1M2123N 5W GAS	512	511	406	524	449	180	173	75	152	167	364	531	4064	92770
COMPANY TOTAL OIL	512	511	406	524	449	180	173	75	152	167	364	531	4064	92770
GAS	19066	16978	15147	18278	17728	19406	15299	17840	15885	17473	15578	15617	204493	2755417
FEDERAL 1J 229N14W GAS														
COMPANY TOTAL OIL	477	502	372	457	460	403	466	515	326	445	415	442	5280	244364
GAS	184	166	126	182	163	127	120	144	126	174	169	182	2049	398327
WAT	19	20	22	22	31	14	22	21	22	22	18	19	227	10014
COMPANY TOTAL OIL	1482	1247	1678	1758	1756	1613	1339	1815	1749	1662	1542	1246	18845	225445
GAS	143	488	782	750	558	726	491	529	552	354	533	575	6487	209684
WAT	28	14	14	14	14	14	14	14	14	14	14	14	14	14
COMPANY TOTAL OIL	3068	2256	4041	3479	3457	3414	3237	2703	3193	3660	3701	3432	39641	838939
GAS	1203	1199	913	1059	1171	1590	1425	1560	1087	1357	1503	1344	15214	289738
WAT	19	20	22	22	31	14	22	21	22	22	18	19	227	10014
COMPANY TOTAL OIL	1482	1247	1678	1758	1756	1613	1339	1815	1749	1662	1542	1246	18845	225445
GAS	143	488	782	750	558	726	491	529	552	354	533	575	6487	209684
WAT	28	14	14	14	14	14	14	14	14	14	14	14	14	14
COMPANY TOTAL OIL	3068	2256	4041	3479	3457	3414	3237	2703	3193	3660	3701	3432	39641	838939
GAS	1203	1199	913	1059	1171	1590	1425	1560	1087	1357	1503	1344	15214	289738
WAT	19	20	22	22	31	14	22	21	22	22	18	19	227	10014
COMPANY TOTAL OIL	1482	1247	1678	1758	1756	1613	1339	1815	1749	1662	1542	1246	18845	225445
GAS	143	488	782	750	558	726	491	529	552	354	533	575	6487	209684
WAT	28	14	14	14	14	14	14	14	14	14	14	14	14	14
COMPANY TOTAL OIL	3068	2256	4041	3479	3457	3414	3237	2703	3193	3660	3701	3432	39641	838939
GAS	1203	1199	913	1059	1171	1590	1425	1560	1087	1357	1503	1344	15214	289738
WAT	19	20	22	22	31	14	22	21	22	22	18	19	227	10014
COMPANY TOTAL OIL	1482	1247	1678	1758	1756	1613	1339	1815	1749	1662	1542	1246	18845	225445
GAS	143	488	782	750	558	726	491	529	552	354	533	575	6487	209684
WAT	28	14	14	14	14	14	14	14	14	14	14	14	14	14
COMPANY TOTAL OIL	3068	2256	4041	3479	3457	3414	3237	2703	3193	3660	3701	3432	39641	838939
GAS	1203	1199	913	1059	1171	1590	1425	1560	1087	1357	1503	1344	15214	289738
WAT	19	20	22	22	31	14	22	21	22	22	18	19	227	10014
COMPANY TOTAL OIL	1482	1247	1678	1758	1756	1613	1339	1815	1749	1662	1542	1246	18845	225445
GAS	143	488	782	750	558	726	491	529	552	354	533	575	6487	209684
WAT	28	14	14	14	14	14	14	14	14	14	14	14	14	14
COMPANY TOTAL OIL	3068	2256	4041	3479	3457	3414	3237	2703	3193	3660	3701	3432	39641	838939
GAS	1203	1199	913	1059	1171	1590	1425	1560	1087	1357	1503	1344	15214	289738
WAT	19	20	22	22	31	14	22	21	22	22	18	19	227	10014
COMPANY TOTAL OIL	1482	1247	1678	1758	1756	1613	1339	1815	1749	1662	1542	1246	18845	225445
GAS	143	488	782	750	558	726	491	529	552	354	533	575	6487	209684
WAT	28	14	14	14	14	14	14	14	14	14	14	14	14	14
COMPANY TOTAL OIL	3068	2256	4041	3479	3457	3414	3237	2703	3193	3660	3701	3432	39641	838939
GAS	1203	1199	913	1059	1171	1590	1425	1560	1087	1357	1503	1344	15214	289738
WAT	19	20	22	22	31	14	22	21	22	22	18	19	227	10014
COMPANY TOTAL OIL	1482	1247	1678	1758	1756	1613	1339	1815	1749	1662	1542	1246	18845	225445
GAS	143	488	782	750	558	726	491	529	552	354	533	575	6487	209684
WAT	28	14	14	14	14	14	14	14	14	14	14	14	14	14
COMPANY TOTAL OIL	3068	2256	4041	3479	3457	3414	3237	2703	3193	3660	3701	3432	39641	838939
GAS	1203	1199	913	1059	1171	1590	1425	1560	1087	1357	1503	1344	15214	289738
WAT	19	20	22	22	31	14	22	21	22	22	18	19	227	10014
COMPANY TOTAL OIL	1482	1247	1678	1758	1756	1613	1339	1815	1749	1662	1542	1246	18845	225445
GAS	143	488	782	750	558	726	491	529	552	354	533	575	6487	209684
WAT	28	14	14	14	14	14	14	14	14	14	14	14	14	14
COMPANY TOTAL OIL	3068	2256	4041	3479	3457	3414	3237	2703	3193	3660	3701	3432	39641	838939
GAS	1203	1199	913	1059	1171	1590	1425	1560	1087	1357	1503	1344	15214	289738
WAT	19	20	22	22	31	14	22	21	22	22	18	19	227	10014
COMPANY TOTAL OIL	1482	1247												

RESUME OF McADAMS #3 WELL COMPLETION HISTORY

April, 1958

Spud well on April 25, 1958. Set 10-3/4" surface pipe @ 207' with 200 sx. Set 7-5/8" casing @ 5080' with 200 sx. Set 5-1/2" liner from 4886' to 6355'. 4" flush joint set @ 7080' with 50 sx. TD 7080'. Completed May 23, 1958.

July, 1958

Perforated Dakota from 6934' to 6974' and from 6992' to 7002' with 2 shots/foot. Sand oil fraced with 450 bbls oil and 17,000# sand. Perforated Gallup from 6250' to 6272' with 6 shots/foot. Pumped in 300 bbls oil. Set Model D Baker packer at 6316'. Ran 1-1/2" upset tubing thru packer to 6873'. Ran 2-1/16" tubing to 6150'. Well tested 5800 MCF from Gallup on Pitot tube while gas drilling. Dakota made 900 MCF natural.

December, 1959

Pulled Dakota and Gallup tubing strings. Set Baker "DR" plug in Baker Model "D" production packer @ 6314' KB. Old Gallup perfs 6258-6267'; perforated 6267' to 6280' KB with 3 jets/foot. Washed old and new perfs with 250 gallons of 7-1/2% MCA. Set Baker Mod EGJ retrievable prod. packer on tubing @ 6225' KB. Swabbed well in and tested. Tested 200 BOPD with a GOR of 2400 to 1. Put well back on production. Dakota zone will be T.A. for a short time.

October, 1960

Dakota zone was T.A. in December, 1959 by setting D.R. Plug in Model "D" Baker packer. D.R. Plug was retrieved and Dakota was returned to production. Tubing strings were run as follows:

Dakota zone: Ran 1-1/2" tubing, 2.7# J-55 EUE to 6823'. Tubing set through Baker Model "D" prod. packer @ 6324' K.B.

Gallup zone: Ran combination tubing string; 4867' of 2-3/8" EUE J-55 tubing on top and 1402' of 1-1/2" reg. J-55 tubing on bottom. Landed @ 6281'. Tubing open ended.

DUGAN PRODUCTION CORP.

APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5792

McADAMS #3 WELL
H Section 34, T27N, R10W
San Juan County, New Mexico

Exhibit #7

DIAGRAMATIC SKETCH OF DUAL COMPLETION

McAdams #3 Well

Township 27 North, Range 10 West, NMPM

Section 34: 1650' FNL - 990' FEL

San Juan County, New Mexico

DUGAN PRODUCTION CORP.

APPLICATION FOR
DOWNHOLE COMMINGLING

CASE 5792

Exhibit # 8

Set 10-3/4" surface pipe
@ 207' with 200 sx

Set 7-5/8" casing @
5080' with 200 sx

Ran combination Gallup
tubing string; 4867' of
2-3/8" EUE J-55 tubing
on top and 1402' of 1-1/2"
tubing on bottom.

Top of Gallup 6250'
Perforated Gallup from
6258' to 6267' with 6 shots
per foot; perforated 6267'
to 6280' with 3 shots per
foot. Washed perfs with
250 gallons of 7-1/2% MCA.

Gallup tubing landed @
6281'. Tubing open-
ended.

*4 1/2" csg should
be shown
as liner
5 1/2" csg should
be shown
as liner*

*DC 655 8/11/58
authorized dual
completion*

Baker Model "D" Packer set
@ 6324'.

Set 5-1/2" casing @ 6355'
with 100 sx.

Dakota tubing set through
Baker Model "D" Packer and
landed @ 6823'. Tubing was
1-1/2" 2.7# J-55 EUE.

Top of Dakota formation -
6934'.

Set 4-1/2" casing @ 7080'
with 50 sx.

Perforated Dakota from 6934'
to 6974' and from 6992' to
7002' with 2 shots per
foot. Sand oil fraced
with 450 bbls oil and
17,000# sand.

*would
perf DK
tubing
string at
approx
6200*

TD 7080'

*sub bath
zones in. would cost
1500 compared
4050000 to
pump Rp.*

PROGNOSIS OF FUTURE PRODUCTION FROM THE
McADAMS #3 WELL

The Angels Peak Gallup Pool and the Basin Dakota Pool have been steadily depleted for years by the McAdams #3 Well and many other wells. As you can see from the plat showing the location of other Gallup wells in the vicinity of this well, the gas and oil production from these wells has become very low. The Gallup zone of the McAdams #3 has ceased to produce because we do not have enough bottom-hole pressure and gas volume to lift the produced fluids.

We propose to commingle the Gallup production and the Dakota production in the wellbore of the McAdams #3 Well by the following method whose mechanics are feasible and in accord with good conservation practices:

Perforate the 1-1/2" Dakota tubing in the Gallup formation.

Continue producing the Dakota gas through the 1-1/2" tubing and lift the Gallup oil through the same tubing.

After perforating, swab the 1-1/2" tubing to get both zones flowing.

By using the above method, the gas from the Dakota formation will be used to lift the oil and other liquids from the Gallup zone. We feel the commingling of the gas and oil production by this method will allow the fluids to be lifted better, thereby more efficiently increasing the overall production from this well.

Since the McAdams #3 Well is capable of only marginal production from both pools, and the reservoir characteristics of the pools are such that underground waste and damage will not be caused by this method, commingling the Gallup and Dakota production in this manner will result in more efficient production from this well, and will thereby prevent waste.

DUGAN PRODUCTION CORP.

APPLICATION FOR DOWNHOLE COMMINGLING

CASE 5792

McADAMS #3 WELL

H Section 34, T27N, R10W
San Juan County, New Mexico

Exhibit #9

An alternative method we could use to try to lift the produced fluids from this well would be to pump the Gallup zone. The large costs of pulling the tubing, running rods, and installing a pumping unit on the well would not be justified when balanced against the past production and the age of the McAdams #3 Well.

In order to allocate the commingled production to each of the zones in this well, we would recommend 81.21% of the oil production should be allocated to the Gallup zone and 18.79% to the Dakota zone. We would also recommend 31.48% of the gas production should be allocated to the Gallup zone and 68.52% to the Dakota zone. We have used the 1974 production figures to arrive at the above allocation.

If you will refer to the production decline curves for this well you will see we have plotted the anticipated oil and gas production from each of these zones through the end of 1979. By taking this anticipated production into consideration it is obvious these two zones are becoming depleted and a large amount of expenditures would not be economically justified.

Therefore, the method we have stated above is the most reasonable under these circumstances.

Oil: 80% Gp
20% DK - ~~chg to 15~~

Gas: 30% Gp chg to 20%
70% DK - chg to 80%

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. 5792

Order No. R- 53/3

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 October 27,
19 76, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this day of November, 1976, 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 Corp/, is the
owner and operator of the McAdams Well No. 3, located
in Unit H of Section 34, Township 27 North, Range
10 West, NMPM, San Juan County, New Mexico.

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

(4) That from the Angels Peak-Gallup zone, the
subject well is capable of low marginal production only.

(5) That from the Basin-Dakota 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. _____
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 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, 80 percent of the commingled oil production should be allocated to the Angels Peak-Gallup ~~zone~~ and 20 percent to the Basin-Dakota zone and 20 percent of the commingled gas production to the Basin-Dakota zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, Dugan Production / _____ Corporation, hereby authorized to commingle Angels Peak-Gallup and Basin-Dakota production within the wellbore of the McAdams Well No. 3, located in Unit H of Section 34, Township 27 North, Range 10 West, NMPM, San Juan County, New Mexico.

(2) That 80 percent of the commingled oil production shall be allocated to the Angels Peak-Gallup ~~zone~~ and 20 percent to the Basin-Dakota zone and 20 percent of the commingled gas production shall be allocated to the Basin-Dakota 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.

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

In The Matter Of The Application
Of Dugan Production Corp. For
Downhole Commingling Of The
McAdams #3 Well In San Juan
County, New Mexico

APPLICATION

Pursuant to Rule 303 C of the State of New Mexico Oil Conservation Commission Rules and Regulations, the Applicant, Dugan Production Corp., by and through its general counsel, Richard T. C. Tully, hereby makes application for approval of downhole commingling in the well bore of the McAdams #3 Well in San Juan County, New Mexico.

The Applicant further states:

1. The Operator of the McAdams #3 Well is the Applicant, Dugan Production Corp.
2. The McAdams #3 Well is located on federal lease SF 081087 insofar as it covers the following described lands:

Township 27 North, Range 10 West, NMPM
Section 34: E/2 NE/4 (Gallup formation)
Section 34: NE/4 (Dakota formation)
San Juan County, New Mexico

3. The legal location of the well is as follows:

Township 27 North, Range 10 West, NMPM
Section 34: 1650' FNL - 990' FEL
San Juan County, New Mexico

4. The McAdams #3 Well is currently dually completed in the Angels Peak Gallup Pool and in the Basin Dakota Pool. The New Mexico Oil Conservation Commission Order No. DC 655 dated August 11, 1958 authorized the dual completion for this well.

5. The McAdams #3 Well is capable of only low marginal production from the Angels Peak Gallup Pool, and the well is also capable of only low marginal production from the Basin Dakota Pool.

6. The ownership of the two above mentioned pools is common.

7. The proposed commingling will result in the recovery of additional hydrocarbons from each of the mentioned pools. The recovery of additional hydrocarbons will thereby prevent waste, and will not violate correlative rights.

WHEREFORE, the Applicant requests this Application be set for hearing on October 27, 1976 for the purpose of securing the approval of the downhole commingling of the McAdams #3 Well in San Juan County, New Mexico.

Respectfully submitted,

Richard T. C. Tully

Richard T. C. Tully
General Counsel
Dugan Production Corp.
Box 234
Farmington, NM 87401

CERTIFICATE OF MAILING

I certify that I mailed a copy of the Application for Downhole
Commingling for the McAdams #3 Well in San Juan County, New Mexico to 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 Oil Conservation Commission.

Richard T. C. Tully

Richard T. C. Tully
General Counsel
Dugan Production Corp.
Box 234
Farmington, NM 87401