CASE 5986: J. GREGORY MERRIOS FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO

ase Number Application Transcripts. Small Exhibits

age	1		
•			

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico 20 July 1977

EXAMINER HEARING

IN THE MATTER OF:

Application of J. Gregory Merrion)
for downhole commingling, Rio)
Arriba County, New Mexico.)

5986

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil
Conservation Commission:
Lynn Teschendorf, Esq.
Lega Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico 87501

For the Applicant: J. Gregory Merrion, Pro se

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

Page2	-
-------	---

$\overline{\mathbf{I}}$ $\overline{\mathbf{N}}$ $\overline{\mathbf{D}}$ $\overline{\mathbf{E}}$ $\overline{\mathbf{X}}$

Statement by Mr. J. Gregory Merrion Questions by Mr. Stamets

EXHIBITS

Applicant's Exhibit One, Plat Applicant's Exhibit Two, Diagram Applicant's Exhibit Three, Resume Applicant's Exhibit Four, Document

·20

MR. STAMETS: We'll call the next case, 5986.

MS. TESCHENDORF: Case 5986. Application of J. Gregory Merrion for downhole commingling, Rio Arriba County, New Mexico.

MR. MERRION: Mr. Examiner, I'm J. Gregory Merrion, the owner and operator of the well which is the subject of this hearing, and I'm a petroleum engineer and I've previously given my qualifications to the Commission. They're a matter of record.

MR. STAMETS: Will you stand and be sworn, please? (Witness sworn.)

MR. MERRION: Mr. Examiner, I've prepared four exhibits for presentation in this case. They've been personally prepared by me and I am familiar with the well, planned the workover and supervised the completion thereof.

I'd like to present the first exhibit. The exhibit which you have before you is a plat of a portion of the Devils Fork Field of Rio Arriba County, New Mexico. The well which is the subject of the hearing is circled. Also, adjacent wells producing from the Gallup horizon, the Mesaverde horizon, and commingled wells producing from the two zones are indicated thereon.

As you can see, there are four other wells in the immediate area which have been previously approved for commingled production from the Gallup and Mesaverde. The Edna

sid morrish reporting service

General Court Reporting Service

Calle Mejia, No. 122, Santa Fe, New Mexico 8750

Phone (SOS) 982-9212

Two is the south offset of one of these wells, the Edna Four.

I have no further presentation on this exhibit.

If there are any questions on that I'll be happy to answer them.

The second exhibit is a diagrammatic sketch of the Edna Number Two well completion. This well was originally -- completed in 1961 as a dual completion with a Pictured Cliffs flowing through 2-7/3ths casing, which was set along 4-1/2 in the same wellbore. The Gallup was originally completed in the 4-1/2 casing. The recent workover opened up the Mesaverde and we are now commingling the production from the Mesaverde and Gallup perforations in the 4-1/2 casing.

The Mesaverde -- the Pictured Cliffs was unaffected by this workover. The Mesaverde was perforated 4602 to 12; 4692 to 94; 4700 to 4703; 4777 to 4780; 4798 to 4404; was acidized with a thousand gallons and tested after acidizing which indicated to be small volume gas productive. It was subsequently fraced with 17,000 gallons of jelled oil and 11,000 pounds of 40/60 sand. There's no further testing after the fraced treatment.

The Gallup horizon, and incidentally, this well had ceased to produce from the Gallup and had not pumped any after the last pump change, so the Gallup seemed to be sick and we cleaned it out and acidized the lower Gallup with 500 gallons and swabbed back mud and water with no show of

2

6

7

8

9

10

11

12

13

16

17

18

19

20

21

22

23

24

25

oil or gas. We subsequently fraced that zone, 7500 gallons of oil and 700 pounds of 40/60 sand. The Upper Gallup 5694 to 5706; 5744 to 5768, was swab tested at an estimated rate of 10 Mcf per day, plus 2 barrels of oil per day and was not fraced.

I have no further comments on the exhibit. If there are any questions?

The exhibit, third exhibit, which you have before you, is a resume of the test data on the subject well, which is somewhat sketchy. The Mesaverde was tested by swab after acidizing and before frac; indicated it to be small volume gas productive; no test after frac. I've estimated the production moderate volume of gas, approximately 50 Mcf per day after frac. The lower zone of the Gallup was making only mud and acid water after acidizing; was not tested after frac. The upper zone tested approximately 10 Mcf per day and 2 barrels of oil after acidizing; was not fraced; the well was commingled and put on production in the middle of June, and on a 49-hour test on July 15th to July 17th, 1977, the well produced at the rate of 12 barrels of oil per day plus 7 barrels of water per day, plus 54 Mcf of gas per day, and there were 350 barrels of load oil yet to recover.

I have no further comments on that exhibit. Ιf there are any questions?

The final exhibit represents a proposed allocation

 formula assuming that the Commission will approve this commingling.

Mesaverde is mainly gas productive and in the north offset of the Edna Number Four was gas productive only.

The Gallup is mainly oil productive, and therefore we propose an allocation formula identical to the north offset in Edna Four, which allocates all gas to the Mesaverde and all oil to the Gallup. This is not exactly correct but it is approximately correct and is simple and that way I'll get more money for my gas in the Mesaverde.

I have -- oh, there have been, as shown on Exhibit Number One, several commingled wells for the Mesaverde-Gallup in this area and we've had no problems with them, and therefore, we anticipate no problems here.

Mr. Examiner, I would move that Exhibits One through Four be accepted.

MR. STAMETS: These exhibits will be admitted.

QUESTIONS BY MR. STAMETS:

ANSWERS BY MR. MERRION:

Q Referring back to Exhibit Number Two, the combined Mesaverde-Gallup production, is that being produced through tubing?

A. Yes, sir, there's 2-3/8ths inch tubing set at about 5900 and very close to bottom, 5912, I think, and it's

vice

Star MOLLISH REPORTING SERVICE
General Court Reporting Service
Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-931

rod-pumped.

There's also a string of an inch and a quarter tubing in the Pictured Cliffs side. I didn't give all those details.

Q You do understand that a separate 104 is required for each zone?

A. Yes, sir.

MR. STAMETS: Okay. Any other questions of the witness?

He may be excused. Anything further in this case?

Take the case under advisement.

(Hearing concluded.)

REPORTER'S CERTIFICATE

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

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

Sally Walton Boyd; C. S. R.

I do hereby certify that the foregoins is a complete record of the proceedings in the Examiner hearing of Case No. 1977.

New Mexico Oil Conservation Commission

OIL CONSERVATION COMMISSION

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

LAND COMMISSIONER PHIL R. LUCERO



STATE GEOLOGIST EMERY C. ARNOLD

DIRECTOR JOE D. RAMEY August 11, 1977

Other

Mr. J. Gregory Merrion Petroleum Engineer P. O. Box 507	Re:	CASE NO. 5986 ORDER NO. R-5499	
Farmington, New Mexico	87401	Applicant:	
		J. Gregory Merr	ion
Dear Sir:		•	
Enclosed herewith are Commission order rece			
Yours very truly, JOE D. RAMEY Director			
JDR/fd			3.7.3m
Copy of order also sen	nt to:		
Hobbs OCC x Artesia OCC x Aztec OCC x			

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. 5986 Order No. R-5499

APPLICATION OF J. GREGORY MERRION FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 20, 1977, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 9th day of August, 1977, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, J. Gregory Merrion, is the owner and operator of the Edna Well No. 2, located in Unit O of Section 7, Township 24 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle Devils Fork-Gallup and Mesaverde production within the wellbore of the above-described well.
- (4) That from the Devils Fork-Gallup zone, the subject well is capable of low rates of production only.
- (5) That from the Mesaverde 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.

-2-Case No. 5986 Order No. R-5499

- (7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.
- (8) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Commission any time the subject well is shut-in for 7 consecutive days.
- (9) That in order to allocate the commingled production to each of the commingled zones in the subject well, 100 percent of the commingled oil production should be allocated to the Devils Fork-Gallup zone, and 100 percent of the commingled gas production to the Mesaverde zone.

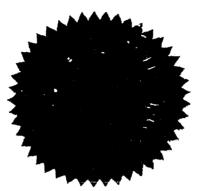
IT IS THEREFORE ORDERED:

- (1) That the applicant, J. Gregory Merrion, is hereby authorized to commingle Devils Fork-Gallup and Mesaverde production within the wellbore of the Edna Well No. 2, located in Unit O of Section 7, Township 24 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.
- (2) That 100 percent of the commingled oil production shall be allocated to the Devils Fork-Gallup zone and 100 percent of the commingled gas production shall be allocated to the Mesaverde zone.
- (3) That the operator of the subject well shall immediately notify the Commission's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-3-Case No. 5986 Order No. R-5499

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION



PHIL R. LUCERO, Chairman

MERY CARNOLD, Member

JOE D. RAMEY, Member & Secretary

SEAL

dr/

(m #	128 CLU	1 · · ·	1
McIlvaine	Merrion	Merrion & Bayless	Merrion & Bayless
	• ₃ 🕰 4	127 129 8	130 131 9
•1 Mi <u>ller B</u>	•1 Edna	118 £ 122	125 _{CLU} 126
McIlvaine ●1	Getty ●1	Merrion & Bayless 123 121	Merrion 2
Miller A	NM Fed. G	17	
		89 124 CLU	NCRA State
		EPNG 106 CLU	÷

T-24 North

Range 6 West

LEGEND

Gallup Producer
Mesa Verde Producer
Comingled Gallup-Mesa Verde
Well which is subject of hearing

BEFORE EXA	MINER STAMETS
	TION COMMISSION
EXH	BIT NO. /
CASE NO.	= 78C
Submitted by	splicant
Hearing Date	7-20-77
Conservation of the Conser	of a STARTA TECHNOlogy and an arrangement of the start of

EXHIBIT NO.

Plat of Portion of Devils Fork Field, Rio Arriba County, N.M.

J. Gregory Merrion Edna #2

Application to Comingle Devils Fork Gallup and Devils Fork Mesa Verde 10-3/4" Css @ 213 Pictured Cliff Perfs 2374-88 2396-2407 2-7/8" Csg. @ **2516** : Mesa Verdo Perfs 4602-12 4692-94 4700-03 4777-80 4798-4804 Gallup Perfs 5694-5706

5744-5768 5872-5887

4-1/2" Csg. @

5949

PICTURED CLIFFS - Flowing through 1-1/4" tubing inside of 2-7/8" casing. Unaffected by workover.

MESA VERDE - Acidized with 1000 gallons. Test after acidizing indicated to be small volume gas productive. Fracked with 17,000 gallons gelled oil and 11,000# 40/60 sand.

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

EXHIBIT NO. Z

CASE NO. 5-986

Submitted by Caphican Hearing Date 7-20-77

GALLUP - Acidized 5872-87 with 500 gallons. Swabbed mud and water. Fracked with 7500 gallons oil and 4700# 40/60 sand.

Acidized 5694-5706 and 5744-5768. Swab tested at estimated rate of 10 MCF/day plus 2 BOPD. No frack.

J. GREGORY MERRION EDNA #2

Application to Comingle

TEST DATA

Mesa Verde. Test by swab after acidizing and before frack indicated small volume gas productive. No test after frack. Estimated production moderate volume of gas approximately 50 MCF/day.

Gallup. Lower zone making only mud and acid water after acidizing. No test after frack. Upper zone tested approximately 10 MCF/day plus 2 BOPD after acidizing. Not fracked.

On 49 hour test, July 15 to 17, 1977, well produced at rate of 12 BOPD plus 7 MWPD plus 54 MCF/day. (350 BLO to recover.) Comingled.

> BEFORE EXAMINER STAMETS OIL CONSERVATION COMMISSION EXHIBIT NO. 3

CASE NO. 5986

Submitted by Capplica Hearing Date //7-20

Exhibit No. 4

J. GREGORY MERRION EDNA #2
Application to Comingle

<u>Proposed Allocation Formula</u>

Mesa Verde is mainly gas productive -

Gallup is mainly oil productive.

Therefore, propose allocation formula identical to Edna #4.

All gas to Mesa Verde.
All oil to Gallup.

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
EXHIBIT NO. 1

CASE NO. 5986
Submitted by Capalicant
Hearing Date 17-20-77

Dockets Nos. 25-77 and 26-77 are tentatively set for hearing on August 3 and August 17, 1977. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 20, 1977

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

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

- ALLOWABLE: (1) Consideration of the allowable production of was for August, 1977, from fifteen prorated pools in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for August, 1977, from four provated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
- Application of Sam H. Snoddy for directional drilling and a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the directional drilling of two 14,000-foot Morrow gas wells in Unit P of Section 25, Township 20 South, Range 32 East, South Salt Lake-Morrow Gas Pool, Lea County, New Mexico, one of which would be vertically drilled to a depth of 4000 feet from a surface location 660 feet from the South line and 760 feet from the Fast line of said Section 25, then directionally drilled in a North-Northwesterly direction and bottomed in the approximate center of the NE/4 of said Section 25, the N/2 of the section being dedicated to the well; the other well would be vertically drilled to a depth of 4000 feet from a surface location 760 feet from the South line and 660 feet from the East line of said Section 25, then directionally drilled in a West-Northwesterly direction and bottomed in the approximate center of the SW/4 of said Section 25, which would be a 160-acre non-standard unit for said well.
- Application of Yates Petroleum Corporation for the amendment of Order No. R-5445, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-5445 to provide for a 200 percent risk factor for drilling the unit well rather than 20 percent. Said order pooled the N/2 of Section 19, Township 20 South, Range 25 Fast, Eddy County, New Mexico.
- Application of Morris R. Antweil for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in and underlying the N/2 of Section 20, Township 18 South, Range 25 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 5985: Application of Orla Petco, Inc., for an unorthodox gas well location, Eddy County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the unorthodox location of its B. K.

 Morrison Well No. 1 to be located 1980 feet from the South line and 660 feet from the West line
 of Section 5, Township 19 South, Range 26 East, Eddy County, New Mexico, the S/2 of said Section
 5 to be dedicated to the well.
- CASE 5986: Application of J. Gregory Merrion for downhole commingling, Rio Arriba County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of Devils Fork-Gallup and Mesaverde production in the wellbore of his Edna Well No. 2 located in Unit O of Section 7, Township 24 North, Range 6 West, Rio Arriba County, New Mexico.
 - CASE 5987: Application of Getty Oil Company for downhole commingling, Rio Arriba County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of Gallup,

 Mesaverde, and Dakota production in the wellbore of its C. W. Roberts Well No. 5, located in

 Unit F of Section 17, Township 25 North, Range 3 West, Rio Arriba County, New Mexico. Applicant
 also seeks approval for the reopening of its C. W. Roberts Wells Nos. 3 and 4 and its Lydia

 Rentz Well No. 4 to commingle Dakota, Mesaverde, and possibly Gallup production within the

 wellbores of the above-described wells located in Units O, M, and A of Sections 18, 17, and 19,

 respectively, of the same township.
- Application of Continental Oil Company for three unorthodox locations, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 2-A of the Blanco-Mesaverde Gas Pool Rules, to permit the drilling of its AXI Apache "N" Wells Nos. 12 and 14 in the NW/4 of Sections 11 and 1, respectively, and its AXI Apache "O" Well No. 10 in the SE/4 of Section 3, all in Township 25 North, Range 4 West, Rio Arriba County, New Mexico. Each of said wells is the first Mesaverde well on its proration unit.

Cours 5986

J. GREGORY MERRION
PETROLEUM ENGINEER

8. 0. 50% 507
FARMINGTON, NEW MEXICO 87401

June 15, 1977

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

ATTENTION: Mr. Joe Ramey Director

RE: Application for Downhole Commingling, Edna #2 Well Devils Fork Gallup-Mesaverde

Gentlemen:

Request is herewith made for hearing to consider my application to produce the newly completed Mesaverde formation from perforations 4602-12, 4692-94, 4700-03, 4707-11, 4777-80, 4798-4804, along with the previously completed Gallup formation from perforations 5872-87, 5744-68, and 5694-5706 by downhole commingling inside the 4-1/2" casing in this well.

Yours very truly,

JGM/eh

0-7-24N-6W

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

CASE NO. 5986
CASE NO. 5986 Order No. R- 5499
APPLICATION OF J. GREGORY MERRION
FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.
ORDER OF THE COMMISSION
BY THE COMMISSION:
This cause came on for hearing at 9 a.m. on July 20
19 77, at Santa Fe, New Mexico, before Examiner Richard L. Stamets
NOW, on this day of July , 1977 , the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,
FINDS:
(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
(2) That the applicant, J. Gregory Merrion , is the
owner and operator of the Edna Well No. 2 , located
in Unit 0 of Section 7 , Township 24 North , Range
6 West , NMPM, Rio Arriba County, New Mexico.
(3) That the applicant seeks authority to commingle
Devils Fork-Gallup and Mesaverde production
within the wellbore of the above-described well.
(4) That from the Devils Fork-Gallup zone, the
subject well is capable of low marginal production only.
(5) That from the Mesaverde zone, the
subject well is capable of low marginal production only.
(6) That the proposed commingling may result in the recovery
of additional hydrocarbons from each of the subject pools, thereby
preventing waste, and will not violate correlative rights.

2			
Case	No.		
Order	No.	R	THE RESERVE OF THE PARTY OF THE

- (7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.
- (8) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Commission any time the subject well is shut-in for 7 consecutive days.

IT IS THEREFORE ORDERED:

- (1) That the applicant, J. Gregory Merrion , is hereby authorized to commingle Devils Fork-Gallup and Mesaverde production within the wellbore of the Edna Well No. 2 , located in Unit O of Section 7 , Township 24 North , Range 6 West , NOPM, Rio Arriba County, New Mexico.
- (2) That 100 percent of the commingled 01
 production shall be allocated to the Devils Fork-Gallup

 zone and 100 percent of the commingled
 percent of the commingled
 production shall be allocated to the Masaverde

 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.

OK-