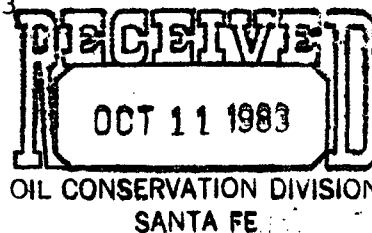


JACK A. COLE
PETROLEUM GEOLOGIST
P.O. BOX 191
FARMINGTON, NEW MEXICO 87401
(505) 325 - 1415

October 6, 1983



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

REF: Application for commingling
Chacon Amigos No. 8
Jack A. Cole, Operator

Dear Mr. Ramey,

Enclosed please find an application for commingling in the well bore of the Chacon Dakota Associated and Undesignated Gallup zone, for your review and subsequent approval.

For your information, we are enclosing Exhibits "A" through "I" as follows:

- A - Operator and Lease Name
- B - Pool Names and Well History
- C - Productivity Tests
- D - Production Decline Curve
- E - Bottom Hole Pressures
- F - Fluid Characteristics
- G - Off-set Operators
- H - Ownership
- I - Production Valves

If you should desire any additional documentation, please contact me at your earliest convenience.

Respectfully,

Dewayne Blancett

Dewayne Blancett
Production Supervisor,
Cole Production Company

DB/jlw

Enclosures

EXHIBIT "A"

OPERATOR:

Jack A. Cole
P.O. Box 191
Farmington, New Mexico 87499

LEASE NAME:

Chacon Amigos No. 8
Jicarilla Contract No. 360
SW $\frac{1}{4}$ NE $\frac{1}{4}$
Section 1-T22N-R3W
Sandoval County, New Mexico

EXHIBIT "B"
Well History

Well was completed in the Chacon Dakota Associated Pool
in 3-29-82

Undesignated Gallup Pool completed 9-15-83

* Note - well was not previously dualled

CASING:

8-5/8", 24.0 lb. @ 268' with 250 sacks.

4-1/2", 11.60 and 10.50 lb. @ 7199' with 850 sacks.

PERFORATION:

Dakota - completed 3-29-82

6942' - 6979'

1 shot per foot, treated with
64,000 gallons water and 77,500
lbs. sand.

7044' - 7051'

2 shots per foot, treated with
25,000 gallons water and 25,000
lbs. sand.

Gallup - completed 9-15-83

6079' - 6098'

1 shot per foot, treated with
40,000 gallons Nitrified Gel
and 40,000 lbs. sand.

5962' - 5978'

5986' - 5990'

6000' - 6004'

1 shot per foot, treated with
40,000 gallons Nitrified Gel
and 40,000 lbs. sand.

6010' - 6016'

EXHIBIT "C"
Productivity Tests

A - 24 hour Productivity Test

Dakota - C-116 (Attached)

Gallup - C-116 (Attached)

B - Production

1. Dakota

I P Test 120 bblspd Oil
110 mcfpd Gas

Present Production 12 bblspd Oil
14 mcfpd Gas

2. Gallup

I P Test and 9 bblspd Oil
Present Production Gas TSTM

	<u>GAS</u>	<u>OIL</u>
Dakota	14 mcfpd	12 bblspd
Gallup	TSTM mcfpd	9 bblspd
TOTAL	14 mcfpd	21 bblspd

FLOW RATE (percentage)

	<u>GAS</u>	<u>OIL</u>
Dakota	100%	57%
Gallup	0%	43%

C - Projected Production

Dakota

Oil - 9,000 bbls
Gas - 10,500 mcf

Gallup

Oil - 7,500 bbls
Gas - 15,000 mcf

GAS-OIL RATIO TESTS

Jack A. Cole		P.O. Box 191, Farmington, New Mexico 87499		Chacon Dakota Associated		County		Sandoval						
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW. ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT/BBLS	
		U	S	T						R	WATER BBLS	GRAV. OIL		OIL BBLS
Chacon Amigos	8	G	I	22N	3W	8-26-83	P 3/4"	190	24	-0-	46.2	12	14	1.166

TYPE OF TEST - (X) ☒ Completion ☐ Scheduled ☐ Spent: ☒

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 0.63.

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

Well original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 331 and appropriate pool rules.

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

Dorothy Blumett
District Office (District) Production

GAS-OIL RATIO TESTS

Well		County													
Undesignated Gallup		Sandoval													
O. Box 191, Farmington, New Mexico 87499		TYPE OF TEST - (X)													
		Scheduled ☐ Completion ☒													
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBC. PRESS.	DAILY ALLOW. ABLE	NUMBER OF TEST RUNS	PROD. DURING TEST				GAS - OIL RATIO CU.FT/02L	
		U	S	T						R	WATER 02L	GRAV. OIL	OIL 02L		GAS M.C.F.
Lacon Amigos	8	G	I	22N	3W	9/23/83	P 3/4"	160	-0-	24	6	40.3	9	-0-	-0-
											Frac				
											Water				

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 assigned more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned and allowable when authorized by the Division.
Gas volumes must be reported in MCF measured at a pressure base of 14.73 psia and a temperature of 60° F. Specific gravity base is 0.82.
Report casing pressure in flow tubing pressure for any well producing through casing.

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

EXHIBIT "D"

Production Decline Curve

1. Dakota - Attached
2. Gallup - Not sufficient production to develop decline curve.

Tr. 2. A.C. de Charam ¹diviso = 8

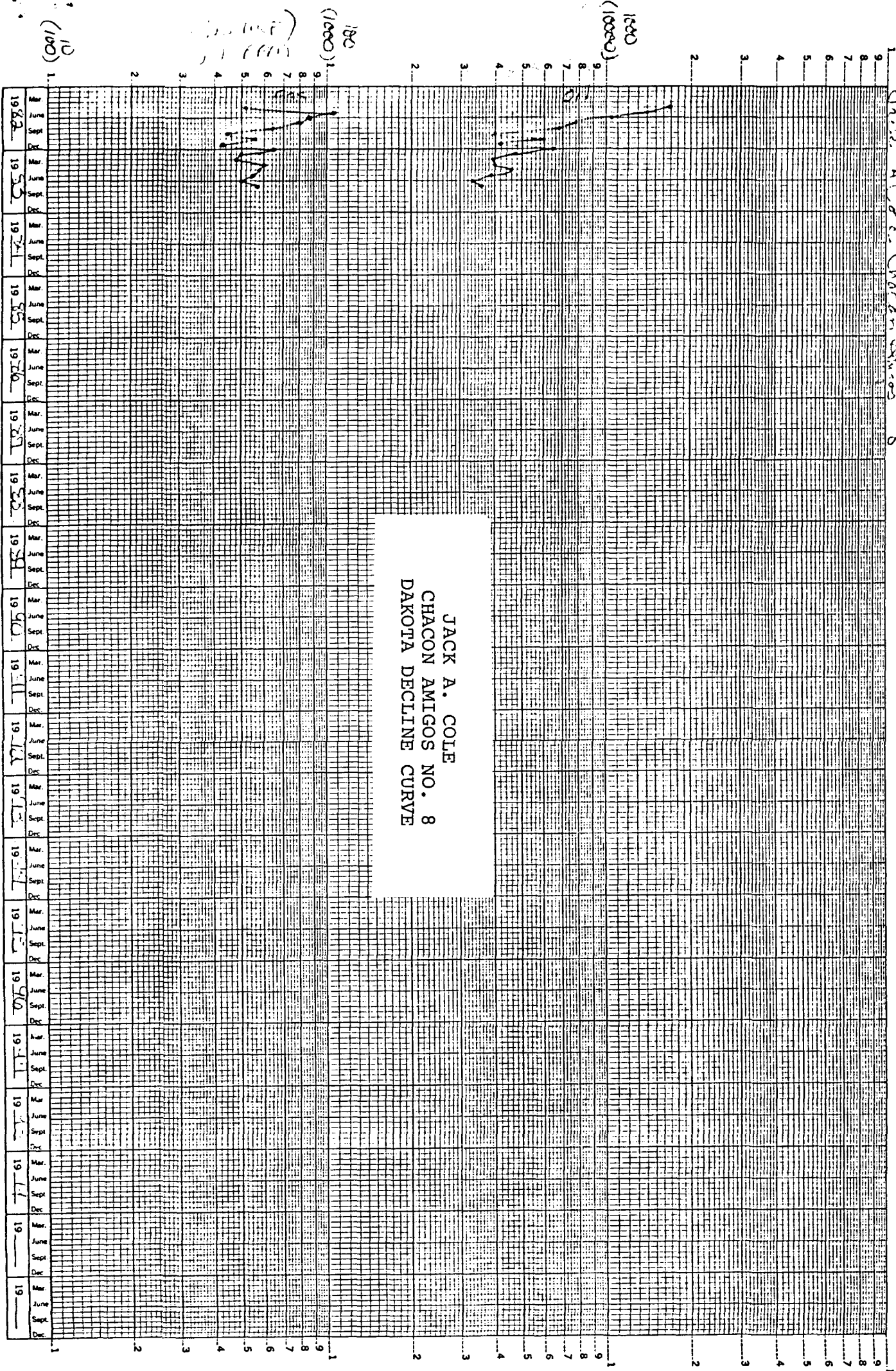


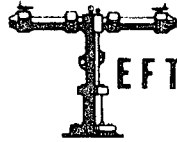
EXHIBIT "E"

Bottom Hole Pressures

Dakota - 700 psig

(Also bottom hole pressure
from off-set well)

Gallup - 850 psig

**EFTELLER, INC.**

reservoir engineering data

MIDLAND, TEXAS

Page 1 of 1
File 2-13882-P

Company JACK A. COLE PRODUCTION COMPANY Lease CHACON AMIGO Well No. 1
 Field Chacon Dakota County SANDOVAL State NEW MEXICO
 Formation DAKOTA Test Date AUGUST 29, 1983

Status of Well Shut-in 264½ hours

DEPTH Feet	PRESSURE Psig	GRADIENT Psi/Ft.
10	589	
2000	630	0.021
4000	672	0.021
6000	715	0.022
6400	725	0.025
6600	730	0.025
6800	735	0.025
6927*	738	0.025

*Mid-Perf

Datum Pressure

Psig

JACK A. COLE
 Off-set Location
 Section 2 -T22N-R3W

PRESSURE POUNDS PER SQUARE INCH GAUGE

1100
1000
900
800
700
600
500
400
300

Elev.	Datum	Ft.
Total Depth	Perf. 6870-6916	Ft.
Tubing 2 3/8	in. to	Ft.
Casing	in. to	Ft.
Casing Press. 599	Tubing Press. 589	
Oil Level NONE	Water Level NONE	
Temperature 164 °F @	6800	Ft.
Element No. 50667	Range 0-4000	
Last Test Date		
Pressure Last Test Date		Psig
B.H.P. Change	Psig	

DEPTH: FEET

0 1000 2000 3000 4000 5000 6000 7000

EXHIBIT "F"

Fluid Characteristics

1. Dakota

A. Gas Gravity	-	.788
B. Oil Gravity	-	47.6

2. Gallup

A. Gas Gravity	-	.791
B. Oil Gravity	-	43.6

EXHIBIT "G"

Off-Set Operators
(See Attached)

Merrion Oil and Gas
501 Airport Drive
Farmington, New Mexico 87401

Dave M. Thomas, Jr.
P.O. Box 2026
Farmington, New Mexico 87499

Amoco
Amoco Building
1670 Broadway
Denver, Colorado 80202

Bureau of Land Management
P.O. Drawer 600
Farmington, New Mexico 87499

JACK A. COLE

Chacon Amigos No. 8

Sec. 1-T22N-R3W

Off-set Operators

EXHIBIT G

35 Thomas	36 Thomas	31	T23N
Amoco 2 Merrion	Cole 1 Amoco	Amoco 6	T22N
11 Merrion	Cole 12 Merrion	7 Amoco	R2W
R3W			

JACK A. COLE
PETROLEUM GEOLOGIST
P.O. BOX 191
FARMINGTON, NEW MEXICO 87401
(505) 325 - 1415

I hereby certify that the Bureau of Land Management and all Offset Operators to the following well;

Jack A. Cole
Chacon Amigos No. 8
SW $\frac{1}{4}$ NE $\frac{1}{4}$
Sec. 1, T 22 N, R 3 W
Sandoval County, New Mexico

were notified of our proposal to commingle the Gallup and Dakota zones, by letter dated October 5, 1983.

Cole Production Co.

Dewayne Blancett
Dewayne Blancett, Production Supervisor

STATE OF NEW MEXICO)
) ss:
COUNTY OF SAN JUAN)

The foregoing instrument was acknowledged before me this 6th day of October, 1983, by Dewayne Blancett, Production Supervisor of Cole Production Co.

Norma Jean Schlueter
NOTARY PUBLIC

MY COMMISSION EXPIRES: 11-6-85



OFFICIAL SEAL
Norma Jean Schlueter
NOTARY PUBLIC - NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires 11-6-85

EXHIBIT "H"

Ownership

Dakota Working Interest

1. Jack A. Cole
2. Dave M. Thomas, Jr.
3. James C. Casey
4. Johnston Investments
5. Frank A. Macaluso
6. MarJac, Inc.

160 acre deduction

Dakota Overriding Royalty

1. Amoco
2. L. S. Madrid

Gallup Working Interest

1. Jack A. Cole
2. Dave M. Thomas, Jr.
3. James C. Casey
4. Johnston Investments
5. Frank A. Macaluso
6. MarJac, Inc.

40 acre deduction

Gallup Overriding Royalty

1. Amoco
2. L. S. Madrid

EXHIBIT "H"

Ownership

Dakota Working Interest

1. Jack A. Cole
2. Dave M. Thomas, Jr.
3. James C. Casey
4. Johnston Investments
5. Frank A. Macaluso
6. MarJac, Inc.

Dakota Overriding Royalty

1. Amoco
2. L. S. Madrid

Gallup Working Interest

1. Jack A. Cole
2. Dave M. Thomas, Jr.
3. James C. Casey
4. Johnston Investments
5. Frank A. Macaluso
6. MarJac, Inc.

Gallup Overriding Royalty

1. Amoco
2. L. S. Madrid

EXHIBIT "I"

Production Valves

DAKOTA

Gas - \$ 4.42 per 1000 mcf
Oil - \$ 29.60 per bbl

14 mcf
12 bbls

GALLUP

Gas - \$ 4.47 per 1000 mcf
Oil - \$ 29.60 per bbl

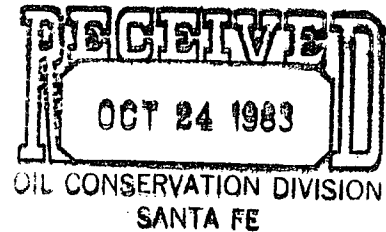
9 bbls

$$(29.6 \text{ \$/bbl}) (9 \text{ bbls}) = 266.4$$

Cole Production Co.

(505) 325-1415
P.O. Box 191
3001 Northridge Dr.
Farmington, New Mexico 87499

October 20, 1983



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

REF: Application for Commingling
Chacon Amigos No. 8
Jack A. Cole, Operator

Dear Mr. Ramey,

Enclosed please find a copy of a waiver of objection from Amoco
Production Company concerning the commingling of the captioned well.

Respectfully,

Dewayne Blancett

Dewayne Blancett
Production Supervisor

DB/jlw

Enclosure



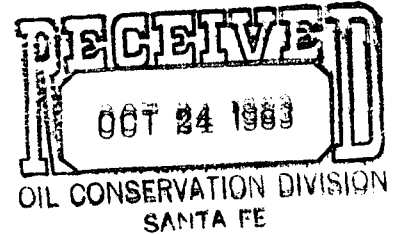
J. C. Burnside
Division Production Manager

Amoco Production Company

Far West Division
1670 Broadway
P.O. Box 800
Denver, Colorado 80201
303-830-4040

October 13, 1983

Mr. Dewayne Blancett
Cole Production Company
P. O. Box 191
3001 Northridge Drive
Farmington, NM 87499



File: DAW-539-LF (Jicarilla 358)

Proposal to Down-Hole Commingle Chacon Amigos No. 8
Section 1-T22N-R3W, Sandoval County, New Mexico

Amoco has no objections to your proposal to down-hole commingle production from the Gallup and Dakota formations in the captioned well.

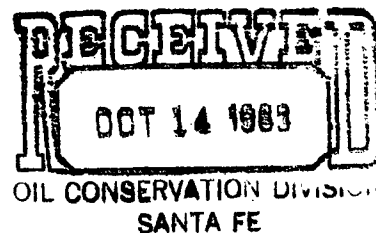
R.B. Giles
REK/mar

MERRION OIL & GAS CORPORATION

P. O. Box 1017
FARMINGTON, NEW MEXICO 87499

October 10, 1983

MHC Santa Fe
New Mexico Oil Conservation Commission
1000 Rio Brazos Road
Aztec, New Mexico 87499



Re: Jack A. Cole
Chacon Amigos No. 8
SW/4, NE/4
Sec. 1, T22N, R3W

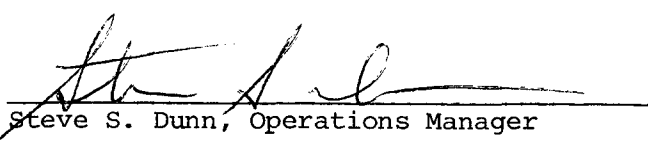
Dear Sir:

We have been advised by Cole Production Co. of their proposal to down-hole commingle the Gallup and Dakota zones of the above captioned well. We are hereby advising you that we have no objection to this action.

If any additional notice is required, please advise us.

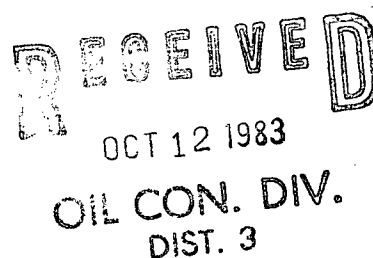
Yours very truly,

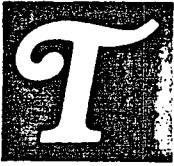
MERRION OIL & GAS CORPORATION


Steve S. Dunn, Operations Manager

SSD/am

cc: Cole Production Co.





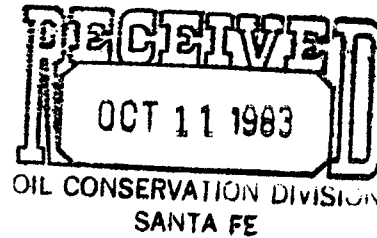
Dave M. Thomas, Jr.

Oil & Gas

P.O. Box 2026

Farmington, New Mexico 87401

October 7, 1983



Mr. Dewayne Blancett
Cole Production Company
P. O. Box 191
Farmington, New Mexico 87499

RE: Jack A. Cole
Chacon Amigos No. 8
SW NE Sec. 1, T22N, R3W
Sandoval County, New Mexico

Dear Mr. Blancett:

Pursuant to your letter dated October 5, 1983, please be advised that as an offset operator, I have no objections to the commingling of the above captioned well.

Yours very truly,

Dave M. Thomas, Jr.

DMT:jr



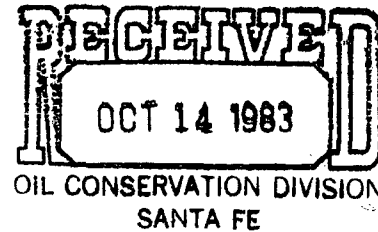
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE 10-17-83

RE: Proposed MC _____
Proposed DHC a _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____



Gentlemen:

I have examined the application dated 10-11-83
for the Jack A. Cole Chaco Amigos #2 G-1-22N-3W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve. Allocation should be calculated after production
stabilizes

Yours truly,

Frank D. Lang