



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 June 4, 1984

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

Gentlemen:

I have examined the application dated May 31, 1984
for the Amoco Prod Co. L.C. Kelly #4/E D-3-30a-12w
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Operate

Yours truly,

Frank D. Perry



Amoco Production Company
501 Airport Drive
Farmington, NM 87401

S. D. Blossom
District Manager

May 24, 1984

New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

File: TKA-169-400.1

Dear Sirs:

Commingling Application for the L.C. Kelly No. 4E
Section D3, T30N, R12W, San Juan County, New Mexico

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DIST. 3

Amoco Production Company requests approval to commingle production from the Flora Vista Gallup and Basin Dakota horizons in the subject well. Commingling is necessary due to producing rates from the Gallup that are too low to economically dual complete the well. There will be no crossflow between the two zones as neither zone is sensitive to produced liquids, and there will be no loss of value of production. Finally, the working interest and royalty of both zones are the same, and the bottom hole pressure of the Gallup is more than 50 percent of the bottom hole pressure of the Dakota. We therefore request approval of our commingling application.

As required by Rule 303C, we have attached two copies of the following:

1. Acreage plat
2. Form C-116
3. Bottom hole pressures
4. Gas analyses of two offsetting Gallup-Dakota commingled wells.
5. Recommended allocation formula
6. Completion history
7. Copy of notification to offset operators

This well is a new completion, and thus no production decline curves are supplied. Neither zone makes any condensate and there is no fluid compatibility problem. In conclusion, production from the Gallup is too

Page 2
May 11, 1984
TKA-169-400.1

low to warrant dual completion with the Dakota. Therefore, please approve our application to commingle at your earliest convenience.

Yours very truly,

A. D. Blossom
RA

DSR/ct

Attachment

AM8

R12W

33 Thompson #5 (Southland)	34 Thompson #11 (Southland)	35 Federal G#1 Rawson #1 (Beta Dev.) (UnionTex)
Thompson #12 (Southland)	Thompson #7 (Southland)	2 clayton #1 clayton #1E (Consolidated) (Consolidated) (Oil + Gas) (Oil + Gas)
4 L.C. Kelly #3 L.C. Kelly #3E L.C. Kelly #4E	3 L.C. Kelly #5 L.C. Kelly #4	10 Chickman #1E Gas Com #1E
Thompson #12 (Southland)	Thompson #7 (Southland)	11 Chickman #1E Gas Com #1E

● AMOCO OPERATED

● OUTSIDE OPERATED

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P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78NEW MEXICO
MINERALS DEPARTMENT

All distances must be from the outer boundaries of the Section.

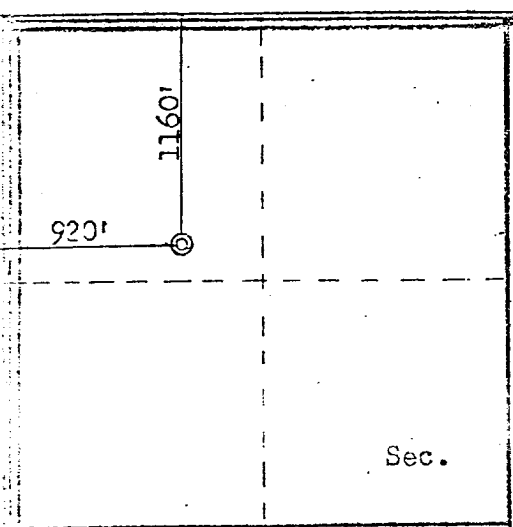
AYOCO PRODUCTION COMPANY			Lease L. C. KELLY		Well No. 4E
Unit Letter D	Section 3	Township 30N	Range 12W	County San Juan	
Actual Footage Location of Well:					
1160 feet from the North line and		920 feet from the West line			
Ground Level Elev: 5939	Producing Formation Dakota/Gallup		Pool Basin Dakota/Flora Vista Gallup	Dedicated Acreage: 320/160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

	RECEIVED MAY 31 1984 OIL CON. DIV. DIST. 3

CERTIFICATION

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

Original Signed By

Name

Darrell D. Lawson

Position

District Admin. Super.

Company

Amoco Production Co.

Date

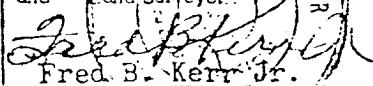
10-4-83

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

September 2, 1983

Registered Professional Engineer
and Land Surveyor


Fred B. Kerr Jr.

Certificate No. 10000

GAS-OIL RATIO TESTS

LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	BOG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROC. DURING TEST				GAS - OIL RATIO CU.FT/BBL
		U	S	T						R	WATER BBL'S.	GRAV. OIL	OIL BBL'S.	
L C Kelly	4E	D	3	30	12	0.75	72		3				120	
Dakota Gallup						0.75	16		3				40	

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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 the 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. Testific gravity base will be 0.80.

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

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 301 and appropriate pool rules.

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

(Signature)

District Manager

(Title)

May 25, 1984

WELL NAME LCKELLY 4-1F DATE 5-8-84
FIELD Cattop
SHUT-IN TUBING 1060 SHUT-IN CASING 1080
TYPE OF INSTRUMENT USED AMERADA XPG-3
PRESSURE RANGE OF ELEMENT 0-2500
DATE ELEMENT CALIBRATED _____
BHP 1306
SI DATE _____
COMMENTS BOMB FOR CO-MINGLING

[illegible]

WELL NAME Lc KELLY 4-E DATE 4-4-84

SHUT-IN TUBING 1620 SHUT-IN CASING 830

TYPE OF INSTRUMENT USED AMERADA RPG-3

PRESSURE RANGE OF ELEMENT 0-300 C

DATE ELEMENT CALIBRATED _____

BHP 2231

SI DATE 3-28-84

COMMENTS BOMB PRIOR TO POT TEST

[illegible]

EL PASO NATURAL GAS COMPANY
INTELLIGENCE DEPARTMENT
P.O. BOX 1492
EL PASO, TEXAS 79999

CHROMATOGRAPHIC GAS ANALYSIS REPORTS

ILLEGIBLE

EL PASO PRODUCTION CO.
ATTN: R. A. CONNER
501 AIRPORT DRIVE
FARMINGTON, N. M. 87411

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DIST. 3

ANAL DATE 05 22 82

METER STATION NAME
L O NELLY CNGLD #5 GL

METER STA 75074
OPER 0203

TYPE CODE	SAMPLE DATE	EFF. DATE	USE NOS.	SCALE	H2S GRAINS	LOCATION
00	05 21 82	05 24 82	06			4 F (4)

NORMAL
MEX

GPM

C 1 E	1.11	.000
H 2 S	.00	.000
N2	.07	.000
METHANE	75.40	.000
ETHANE	14.30	3.822
PROPANE	6.60	1.816
ISOBUTANE	.85	.278
NORM-BUTANE	1.04	.580
ISOPENTANE	.34	.198
NORM-PENTANE	.49	.177
HEAVY PLUS	.30	.218

TOTALS

100.00

7.089

SPECIFIC GRAVITY

.775

WATKINS HEATING VALUE
(WATKINS 14.75 PSIA, 0. DEGREES, DRY) 1,325

WATKINS SPECIFIC HEAT

1.269

10/25/84

EL PASO NATURAL GAS COMPANY
MEASUREMENT DEPARTMENT
POST OFFICE BOX 1492
EL PASO, TEXAS 79999

CHROMATOGRAPHIC GAS ANALYSIS REPORTS

ARCO PRODUCTION CO.
ATTN: R. A. CORNER
511 AIRPORT DRIVE
FARMINGTON, N. M. 87401

RECEIVED
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OIL CON. DIV.
DIST. 3

ILLEGIBLE

ANAL DATE 06 22 82

METER STATION NAME
L C KELLY CMOID #5 DK

METER STA 75075
OPER 0203

TYPE CODE	SAMPLE DATE	EFF. DATE	USE MOS.	SCALE	H2S GRAINS	LOCATION
00	06 21 82	06 24 82	06			4 F 04

	NORMAL MOL%	GPM
C C 2	1.11	.000
n 2 S	.00	.000
RE	.37	.000
METHANE	73.40	.000
ETHANE	14.30	3.822
PROPANE	0.60	1.816
ISOBUTANE	.33	.278
NORM-BUTANE	1.84	.580
ISOPENTANE	.04	.198
NORM-PENTANE	.49	.177
HEXANE PLUS	.50	.218

TOTALS 100.00 7.089

SPECIFIC GRAVITY .775

HEATING VALUE
(BTU/GAL AT 14.7 PSIA, 60 DEGREES, DRY) 1,325

WATTS OF SPECIFIC GRAVITY 1.269

12/18/81

EL PASO NATURAL GAS COMPANY
 MEASUREMENT DEPARTMENT
 POST OFFICE BOX 1492
 EL PASO, TEXAS 79999

CHROMATOGRAPHIC GAS ANALYSIS REPORTS

ILLEGIBLE

AMOCO PRODUCTION CO.
 ATTN: D. N. THURSTON
 501 AIRPORT DRIVE
 FARMINGTON, NM 87401

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 MAY 31 1984
 OIL CON. DIV.
 DIST. 3

ANAL DATE 12 10 81

METER STATION NAME
 L C KELLY CMGLD #3 GL

METER STA 75963
 OPER 0203

TYPE CODE	SAMPLE DATE	EFF. DATE	USE MOS.	SCALE	H2S GRAINS	LOCATIO.
00	12 09 81	12 14 81	06			4 F 2

	NORMAL MOL%	GPM
C B 2	1.50	.000
H 2 S	.00	.000
N2	.56	.000
METHANE	86.41	.000
ETHANE	5.64	1.175
PROPANE	2.83	.779
ISO-BUTANE	.50	.164
NORM-BUTANE	.74	.233
ISO-PENTANE	.29	.106
NORM-PENTANE	.24	.087
HEXANE PLUS	.29	.127

TOTALS

100.00

3.271

SPECIFIC GRAVITY

.665

MIXTURE HEATING VALUE

(BTU/CF AT 14.73 PSIA, 60 DEGREES, DRY) 1.143

RATIO OF SPECIFIC HEATS

1.290

02-196-01

EL PASO NATURAL GAS COMPANY

REF-NSL 175 CHROMATOGRAPHIC GAS ANALYSIS REPORT

REF. DATE 06 17 80
ANAL. DATE 06 13 80

METER STATION NAME
L C KELLY CMBLD #3 OK

METER STA 67463
OPER 0203

TYPE CODE SAMPLE DATE REF. DATE USE MDS. SCALE H2S GRAINS LOCATION
06 06 13 80 06 17 80 06 1 0000* 4 F 04

NORMAL
MOL% GPM

C C 2

ILLEGIBLE

01.05 0.000

M 4 S

01.00% 0.000

N2

00.60 0.000

METHANE

75.47 0.000

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ETHANE

11.04 3.111

PROPANE

05.08 1.390

ISC-BUTANE

00.65 0.213

NORM-BUTANE

01.42 0.447

ISC-PENTANE

00.35 0.137

NORM-PENTANE

00.34 0.123

HEXANE PLUS

00.37 0.162

TOTALS

100.00 5.593

SPECIFIC GRAVITY 0.728

MIXTURE HEATING VALUE
(BTU/CF @ 14.73 PSIA, 50 DEGREES, DRY) 1247

RATIO OF SPECIFIC HEATS 1.279

NO TEST SECURED FOR DETERMINATION H2S CONTENT.

Completion History

Dakota

Perforated 6780-6804 & 6822-6842.

Frac w/26,000 gal 40 lb gel and 41,000 gal 20 lb gel containing 1 gal/1000 surfactant, 2% KCL and 86,000 lbs 20-40 sand.

Gallup

Perforated 5865-6136 with 1 jsp2f. Frac w/14,000 gal 40 lb gel and 49,966 gal 20 lb gel containing 1 gal/1000 surfactant, 2% KCL and 71,938 lbs 20-40 sand. Frac sanded off. Refractured w/33,000 gal 30 lb gel containing 1 gal/1000 surfactant, 2% KCL and 52,000 lbs 20-40 sand.

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Recommended Allocation Formula

Amoco Production Company recommends the following percentages be used to allocate hydrocarbons to the Gallup and Dakota horizons in the L. C. Kelly No. 4E:

	<u>Gas</u>	<u>Condensate</u>
Gallup	25.1%	82.8%
Dakota	74.9%	17.2%

Note: The gas allocation percentages were calculated using initial potential test results. The oil allocation percentages were based on averages of allocation factors of the L. C. Kelly No. 3 and L. C. Kelly No. 5.

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Amoco Production Company

Energy Center Building
500 Airport Drive
Farmington, New Mexico 87401
505-325-8811

S. D. Blossom
District Manager

May 29, 1984

Southland Royalty
410 17th St. No. 1000
Denver, CO 80202

File: TKA-183-400.1

Dear Sirs:

Commingle Application for L.C. Kelly No. 4E
Section D3, T30N, R12W, San Juan County, New Mexico

Amoco Production Company has applied for approval to commingle the Gallup and Dakota horizons in the subject well. If you have any objections, you have 20 days to notify the New Mexico Oil Conservation Division. If you do not respond within 20 days, your approval will be assumed.

Yours very truly,

S. D. Blossom RA

DSR/ct

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AM8



Amoco Production Company

Petroleum Center Building
801 Airport Drive
Farmington, New Mexico 87401
505-325-8841

S. D. Blossorn
District Manager

May 29, 1984

Union Texas Petroleum Corp.
P. O. Box 1290
Farmington, NM 87499

File: TKA-185-400.1

Dear Sirs:

Commingling Application for L.C. Kelly No. 4E
Section D3, T30N, R12W, San Juan County, New Mexico

Amoco Production Company has applied for approval to commingle the Gallup and Dakota horizons in the subject well. If you have any objections, you have 20 days to notify the New Mexico Oil Conservation Division. If you do not respond within 20 days, your approval will be assumed.

Yours very truly,

S. D. Blossorn
TKA

DSR/ct

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DIST. 3

ANB



Amoco Production Company

Petroleum Center Building
801 Airport Drive
Farmington, New Mexico 87401
505-328-3341

S. D. Blossom
District Manager

May 29, 1984

Beta Development Co.
125 Petroleum Club Plaza
Farmington, NM 87401

File: TKA-184-400.1

Dear Sirs:

Commingling Application for L.C. Kelly No. 4E
Section D3, T30N, R12W, San Juan County, New Mexico

Amoco Production Company has applied for approval to commingle the Gallup and Dakota horizons in the subject well. If you have any objections, you have 20 days to notify the New Mexico Oil Conservation Division. If you do not respond within 20 days, your approval will be assumed.

Yours very truly,

S. D. Blossom _{TER}

DSR/ct

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Amoco Production Company

Petroleum Center Building
301 Airport Drive
Farmington, New Mexico 87401
505-325-8841

S. D. Blossom
District Manager

May 29, 1984

Consolidated Oil and Gas
P. O. Box 2038
Farmington, NM 87499

File: TKA-187-400.1

Dear Sirs:

Commingling Application for L.C. Kelly No. 4E
Section D3, T30N, R12W, San Juan County, New Mexico

Amoco Production Company has applied for approval to commingle the Gallup and Dakota horizons in the subject well. If you have any objections, you have 20 days to notify the New Mexico Oil Conservation Division. If you do not respond within 20 days, your approval will be assumed.

Yours very truly,

S.D. Blossom
TAN

DSR/ct

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DIST. 3

AN8



Amoco Production Company

Petroleum Center Building
501 Airport Drive
Farmington, New Mexico 87401
505 325-3841

S. D. Blossom
District Manager
May 29, 1984

Tenneco Oil Company
P. O. Box 3249
Englewood, CO 80155

File: TKA-186-400.1

Dear Sirs:

Commingling Application for L.C. Kelly No. 4E
Section D3, T30N, R12W, San Juan County, New Mexico

Amoco Production Company has applied for approval to commingle the Gallup and Dakota horizons in the subject well. If you have any objections, you have 20 days to notify the New Mexico Oil Conservation Division. If you do not respond within 20 days, your approval will be assumed.

Yours very truly,

S. D. Blossom TRH

DSR/ct

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