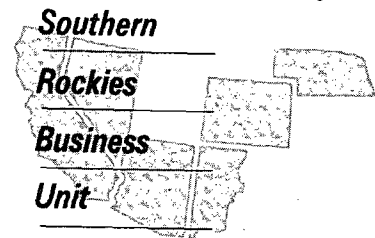




December 22, 1994

Mr. William J. LeMay, Director  
New Mexico Oil Conservation Division  
2040 S. Pacheco Street  
P.O. Box 6429  
Santa Fe, NM 87505



**Application for Exception to Rule 303-A  
Downhole Commingling  
C. A. McAdams B #1E Well  
1670' FSL, 790' FWL, Section 28-T27N-R10W  
Angels Peak Gallup Ext., Basin Dakota Pools  
San Juan County, New Mexico**

Amoco Production Company hereby requests administrative approval to downhole commingle production from the Angels Peak Gallup Ext. and Basin Dakota Pools in the C. A. McAdams B #1E Well referenced above. The ownership (WI, RI ORRI) of these pools is identical in this wellbore. Downhole commingling will offer an economical method of production while protecting against reservoir damage, waste of reserve and violation of correlative rights. A copy of this application will be sent to the offset operators and the BLM (Fed. Ls. SF-077941-A).

Sincerely,

*J. W. Hawkins*  
J. W. Hawkins

Enclosures

cc: Mike Kutas

Frank Chavez, Supervisor  
Amoco District III  
1000 Rio Brazos Road  
Aztec, NM 87410

Meridian Oil Inc./  
El Paso Nat. Gas  
P.O. Box 4289  
Farmington, NM 87499

Dugan Production Corp.  
PO Box 420  
Farmington NM 87499-0420

Duane Spencer  
Bureau of Land Management  
1235 La Plata Hwy  
Farmington, NM 87401

Jerry Hoover  
Conoco Inc.  
10 Desta Dr., Ste. 100W  
Midland, TX 79705-4500

**Application for Exception to Rule 303: SEGREGATION OF PRODUCTION FROM POOLS**

**Requirements**

- (1) Name and address of the operator:

Amoco Production Company  
P.O. Box 800  
Denver, CO 80201

- (2) Lease name, well number, well location, name of the pools to be commingled:

Lease Name: C. A. McAdams B  
Well Number: 1E  
Well Location: 1670' FSL & 790' FWL  
Section 28, T27N-R10W  
San Juan County, New Mexico  
Pools Commingled: Angels Peak Gallup Ext.  
Basin Dakota

- (3) A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases.

**Attached**

- (4) A current (within 30 days) 24-hour productivity test on Division Form C-116 showing the amount of oil, gas and water produced from each zone.

The Dakota has produced since 1986 and is currently averaging about 100 mcf/d. The Gallup is completed but has never produced.

- (5) A production decline curve for both zones showing that for a period of at least one year a steady rate of decline has been established for each zone which will permit a reasonable allocation of the commingled production to each zone for statistical purposes. (This requirement may be dispensed within the case of a newly completed or recently completed well which has little or not production history. However, a complete resume of the well's completion history including description of treating, testing, etc., of each zone, and a prognostication of future production from each zone shall be permitted.)

Dakota Completion: Historical production curve attached.

Gallup Completion: Completed as a dual but never been first delivered.

- (6) Estimated bottomhole pressure for each artificially lifted zone. A current (within 30 days) measured bottom hole pressure for each zone capable of flowing.

	BH Pressure	SI Tubing Press.	Fluid Level
Gallup Completion:	882 psi	392 psi	0
Basin Dakota Completion	780psi	294 psi	0'

- (7) A description of the fluid characteristics of each zone showing that the fluids will not be incompatible in the wellbore.

The fluids have no abnormal components that would prohibit commingling, or promote the creation of emulsions or scale. These horizons are currently being downhole commingled in several offset wells in the immediate area.

- (8) A computation showing that the value of the commingled production will not be less than the sum of the values of the individual streams:

Since the BTU content of the produced fluids are very similar, we would expect the commingled production to have the same value as the sum of the individual streams.

- (9) A formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such formula:

We propose a fixed percentage allocation using the recent average Dakota rate as a percentage of the commingled rate.

- (10) A statement that all offset operators and, in the case of a well on federal land, the United States Bureau of Land Management, have been notified in writing of the proposed commingling.

All offsetting operators and the BLM will receive a copy of this application by certified mail. The offsetting operators are:

Meridian, P.O. Box 4289, Farmington, NM 87499  
Conoco Inc., 10 Desta Dr. Ste. 100W, Midland TX 79705  
Dugan Production Corp, PO Box 420, Farmington NM 87499-0420

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

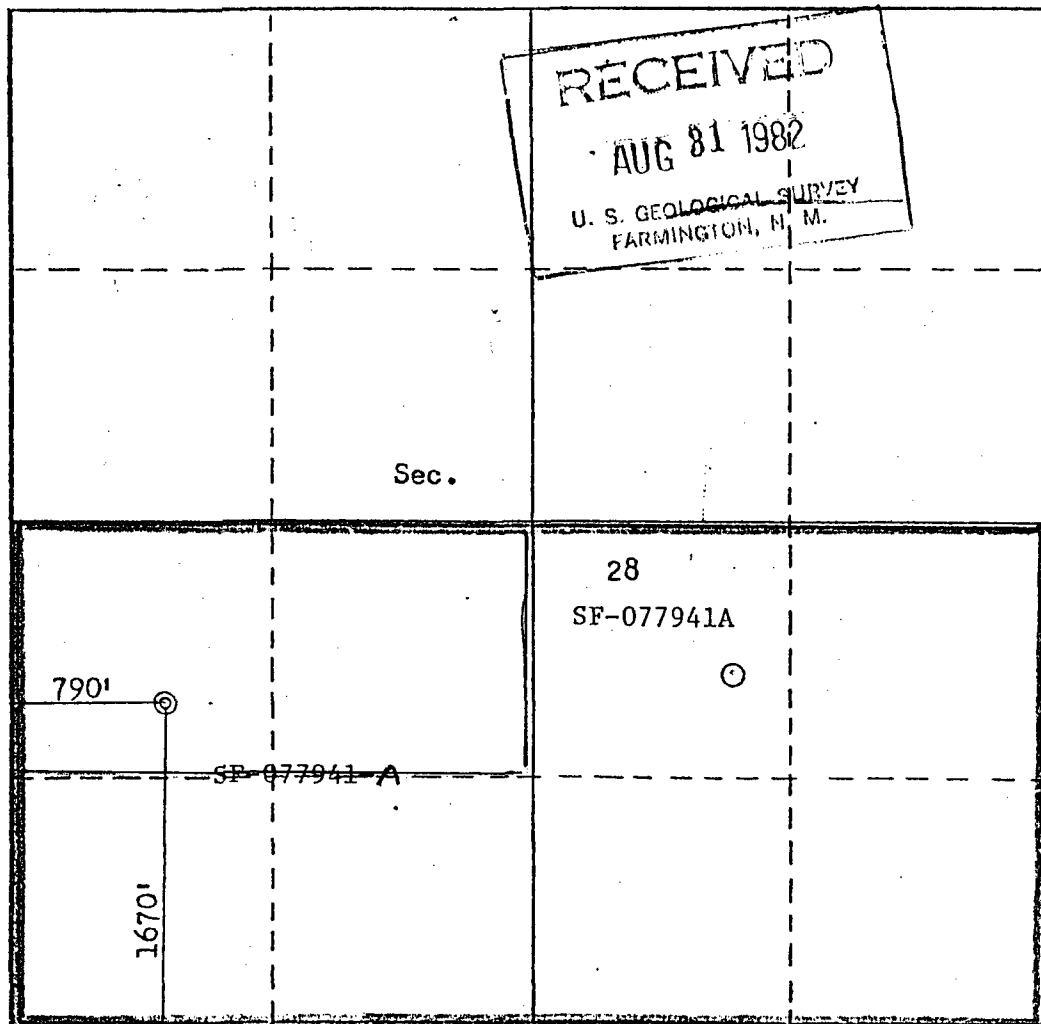
Operator <b>AMOCO PRODUCTION COMPANY</b>			Lease <b>C. A. McADAMS "B"</b>		Well No. <b>1E</b>
Unit Letter <b>L</b>	Section <b>28</b>	Township <b>27N</b>	Range <b>10W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1670</b> feet from the <b>South</b> line and <b>790</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6061</b>	Producing Formation <b>Dakota/Gallup</b>		Pool <b>Angels Peak Gallup Ext. Basin Dakota</b>	Dedicated Acreage: <b>320/80</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 Communitization

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.



#### CERTIFICATION

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

*B. E. Fackrell*

Name

**B. E. FACKRELL**

Position

**DISTRICT ENGINEER**

Company

**AMOCO PRODUCTION COMPANY**

Date

**MAY 21, 1980**

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

**May 13, 1980**

Registered Professional Engineer, and/or Land Surveyor

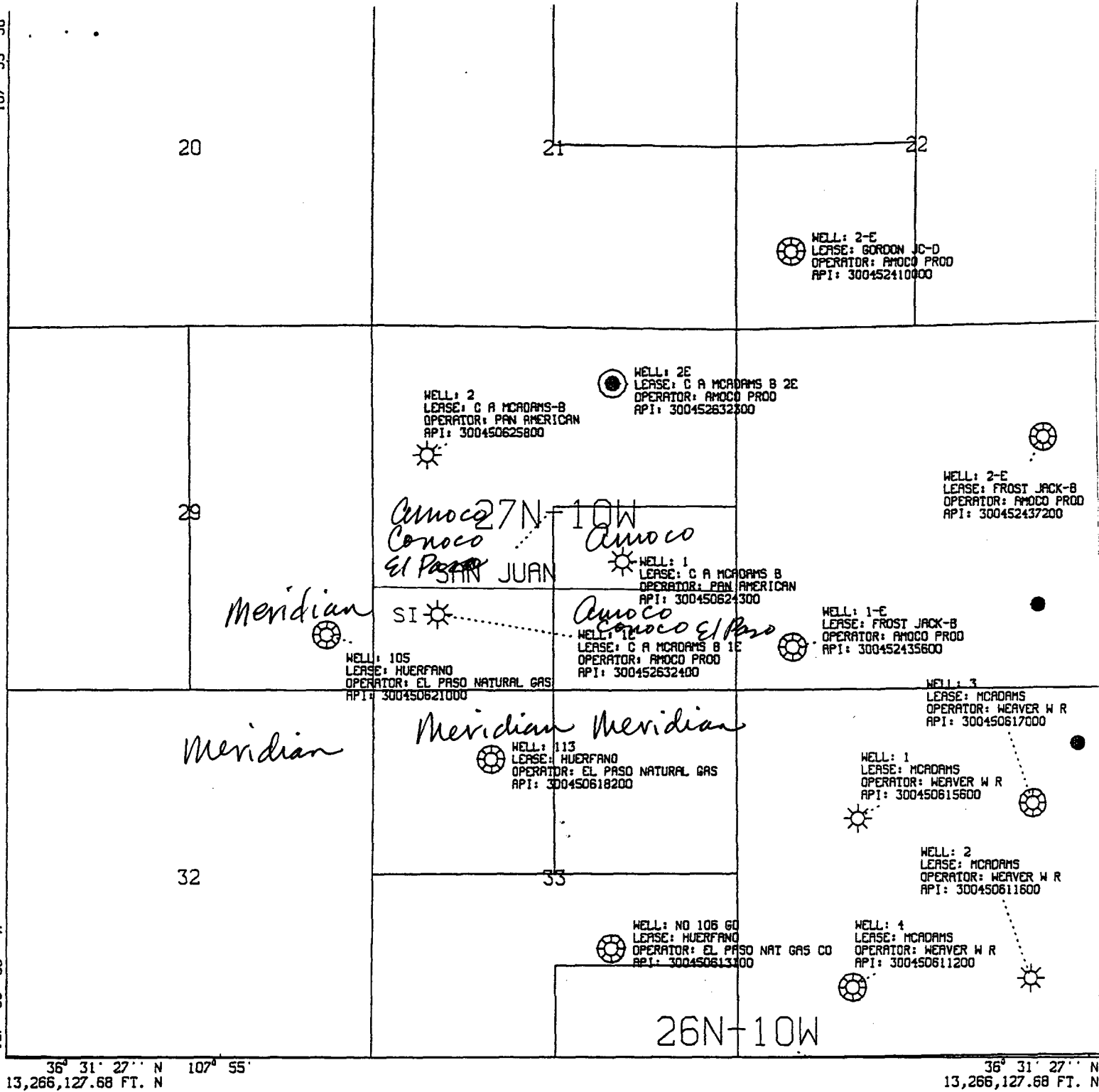
*Fred B. Kerr Jr.*  
**Fred B. Kerr Jr.**

Certificate No.

**3950**

**FRED B. KERR, JR.**

992,079.34 FT  
107° 55' 38"  
992,074.91 FT. E  
107° 55' 38"



All geological and geophysical data, including the interpretation thereof, appearing on this map is the private and confidential property of Amoco Production Company. The publication or reproduction thereof without the written permission of said Company is strictly prohibited.

POLYCONIC CENTRAL MERIDIAN - 107° 54' 1'' W LON  
SPHEROID - 6

## AMOCO PRODUCTION COMPANY PLAT MAP

GALLUP WELLS  
SEC 28-T27N-R10W  
SCALE 1 IN. = 2,000 FT. DEC 5, 1994

992,079.34 FT. E  
107° 55' 38"

992,074.91 FT. E  
107° 55' 38"

36° 31' 27" N 107° 55'  
13,266,127.68 FT. N

36° 31' 27" N  
13,266,127.68 FT. N

WELL: NO 1E  
LEASE: USA C A MCADAMS D  
OPERATOR: TRUE DRILLING COMPANY  
API: 300452563700

WELL: 2  
LEASE: J C GORDON-D  
OPERATOR: PAN AMERICAN  
API: 300450643400

WELL: 2  
LEASE: MCADAMS-D  
OPERATOR: PAN AMERICAN  
API: 300451156200

WELL: 1  
LEASE: JOHNSON GAS UNIT  
OPERATOR: PAN AMERICAN  
API: 300451304300

WELL: 1  
LEASE: MCADAMS  
OPERATOR: PAN AMERICAN  
API: 300451156100

WELL: 1  
LEASE: E J JOHNSON-C  
OPERATOR: PAN AMERICAN  
API: 300450636100

WELL: 1  
LEASE: J C GORDON D  
OPERATOR: PAN AMERICAN  
API: 300450631500

WELL: NO 2E USA  
LEASE: C A MCADAMS D  
OPERATOR: TRUE DRILLING COMPANY  
API: 300452563800

WELL: 2-E  
LEASE: GORDON JC-D  
OPERATOR: AMOCO PROD  
API: 300452410000

WELL: 2E  
LEASE: C A MCADAMS B 2E  
OPERATOR: AMOCO PROD  
API: 300452632300

WELL: 2  
LEASE: JACK FROST-B  
OPERATOR: PAN AMERICAN  
API: 300450629500

WELL: 217  
LEASE: HUERFANO UNIT  
OPERATOR: MERIDIAN OIL INC  
API: 300452081800

WELL: 2  
LEASE: C A MCADAMS-B  
OPERATOR: PAN AMERICAN  
API: 300450625800

WELL: 2-E  
LEASE: FROST JACK-B  
OPERATOR: AMOCO PROD  
API: 300452437200

WELL: 105E  
LEASE: HUERFANO UNIT 105 E  
OPERATOR: EL PASO NATURAL GAS  
API: 300452637300

WELL: 1  
LEASE: C A MCADAMS B  
OPERATOR: PAN AMERICAN  
API: 300450624300

WELL: 105  
LEASE: HUERFANO  
OPERATOR: EL PASO NATURAL GAS  
API: 300450621000

WELL: 1E  
LEASE: C A MCADAMS B 1E  
OPERATOR: AMOCO PROD  
API: 300452632400

WELL: NO 106 E  
LEASE: HUERFANO UNIT  
OPERATOR: EL PASO NATURAL GAS CO  
API: 300452634500

WELL: 228  
LEASE: HUERFANO UNIT  
OPERATOR: EL PASO NATURAL GAS  
API: 300452084400

WELL: 113  
LEASE: HUERFANO  
OPERATOR: EL PASO NATURAL GAS  
API: 300450618200

WELL: 3  
LEASE: MCADAMS  
OPERATOR: WEAVER W R  
API: 300450617000

WELL: NO 228 E  
LEASE: HUERFANO UNIT  
OPERATOR: EL PASO NATURAL GAS  
API: 300452654600

WELL: NO 106 G0  
LEASE: HUERFANO  
OPERATOR: EL PASO NAT GAS CO  
API: 300450613400

WELL: 4  
LEASE: MCADAMS  
OPERATOR: WEAVER W R  
API: 300450611200

WELL: 227  
LEASE: HUERFANO UNIT  
OPERATOR: EL PASO NATURAL GAS  
API: 300452087400

WELL: 2  
LEASE: MCADAMS  
OPERATOR: WEAVER W R  
API: 300450611600

All geological and geophysical data, including the interpretation thereof, appearing on this map is the private and confidential property of Amoco Production Company. The publication or reproduction thereof without the written permission of said Company is strictly prohibited.

AMOCO PRODUCTION COMPANY  
PLAT MAP

DAKOTA WELLS  
SEC 28-T27N-R10W  
SCALE 1 IN. = 2,000 FT. DEC 5, 1994

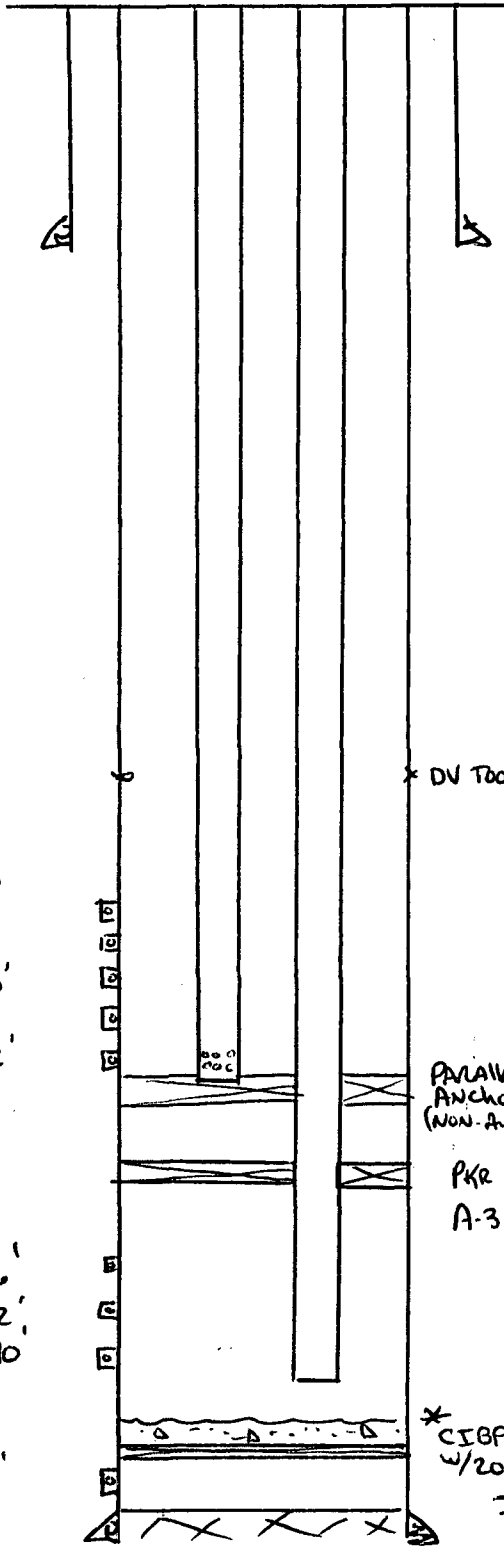
POLYCONIC CENTRAL MERIDIAN - 107° 54' 1" W LON  
SPHEROID - 6

# Amoco Production Company

## ENGINEERING CHART

SUBJECT C.A. McAdams B IE

Sheet No. \_\_\_\_\_ Of \_\_\_\_\_  
 File \_\_\_\_\_  
 Appn \_\_\_\_\_  
 Date 10-3-94  
 By Gmk



9 5/8" CSA 405'  
 36# KSS  
 CMT w/ 325 ft<sup>3</sup> B - Circled To Surf

\* DV TOOL @ 3260'

5376'-5400'  
 5476'-96'  
 5546'-5600'  
 5642'-90'  
 5794'-5802'

Parallel String  
 Anchor  
 (Non-Auto RH Release)  
 PKR SA 6100'  
 A-3 LOCKSET

2 3/8" DK STRING SA 6400' (TURNED DOWN COLLARS)  
 2 3/8" GP STRING SA 5806'  
 PMP SET IN SN (4.7# JSS)

JT #1: J-LATCH  
 JT #2: 6' PERF SUB  
 JT #3: SN

DK { 6266-76'  
 6320-22'  
 6362-90'

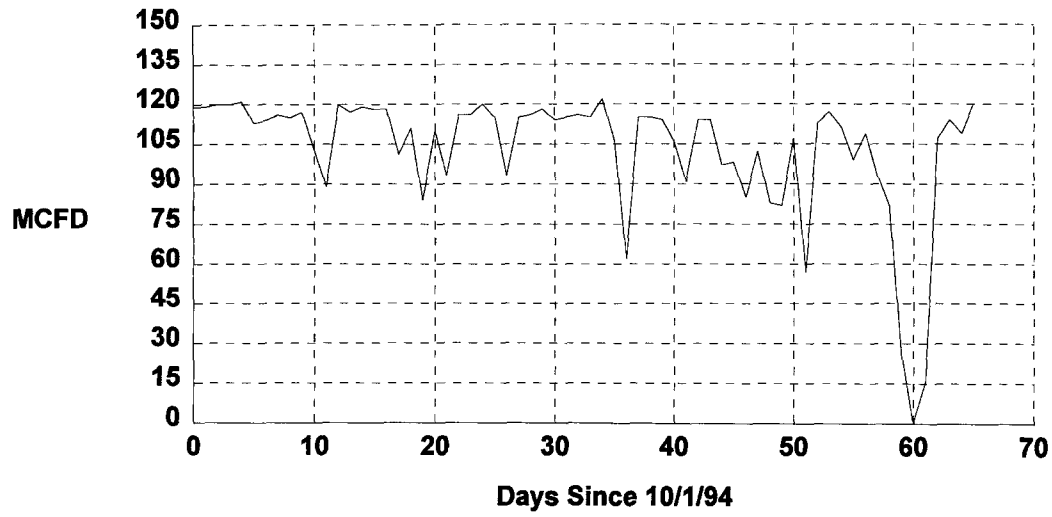
DK { 6566-80'  
 8 JSPF  
 SWAB TESTED  
 WATER @ 7 BPH

\* CIBP @ 6510'  
 w/ 20' CMT ON TOP

PBTD = 6605'  
 PBD<sub>N</sub> = 6490'

7" CSA 6618'  
 23# KSS  
 CMT: STAGE 1: 655' Class B + 813 + 679 ft<sup>3</sup> B NEAT  
 STAGE 2: 1162 ft<sup>3</sup> B  
 TEMP SURVEY TUC: 500'

**San Juan O.C.**  
**WELL: MCADAMS C A B #1E-DK (84226902)**





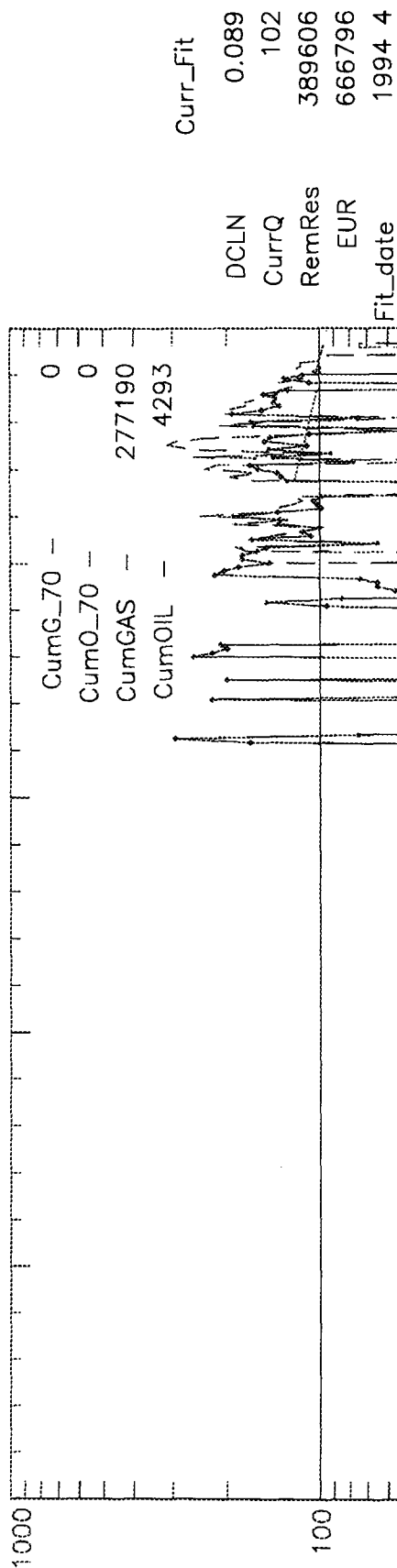
Engr: zgm04

C A MCADAMS B 1E

Operator- AMOCO PRODUCTION CO

300452632400DK M282710-001EDK

APC\_WI - 0.62500000



New\_fit

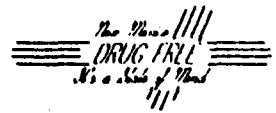
DCLN  
CurrQ  
RemRes  
EUR  
Fit\_date



STATE OF NEW MEXICO

ENERGY, MINERALS and NATURAL RESOURCES DIVISION

OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

'95 JAN 20 AM 8

4400 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-6174

Date: \_\_\_\_\_

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504-2088

DHC-1084

RE: Proposed MC \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed NSP \_\_\_\_\_

Proposed DHC \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed PMX \_\_\_\_\_  
Proposed DD \_\_\_\_\_

Gentlemen:

I have examined the application received on 12/27/95  
for the Amoco CA McAdams B #1E  
OPERATOR LEASE & WELL NO.

L-28-27N-10W and my recommendations are as follows:  
UL-S-T-R

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours truly,

S. J. [Signature]