



AMOCO PRODUCTION COMPANY

Application for Qualification of Well
Workover Project

Armenta Gas Com "C" No. 1E Well

NMOCD CASE NO. 11559
JUNE 27, 1996

CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
LAWYERS

MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN

MICHAEL H. FELDEWERT
TANNIS L. FOX
TANYA M. TRUJILLO
PAUL R. OWEN

JACK M. CAMPBELL
OF COUNSEL

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 22013
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043

June 5, 1996

HAND DELIVERY


William J. LeMay, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: Application of Amoco Production Company for Qualification of the
Armenta Gas Com C No. 1E Well Workover Project and Certification of
Approval, San Juan County, New Mexico

Dear Mr. LeMay:

Enclosed in triplicate is an Application of Amoco Production Company in the above-referenced case. Also enclosed is a draft of a legal advertisement for this case. Amoco Production Company requests that this case be set for hearing before a Division Examiner on June 27, 1996.

Very truly yours,


Legal Assistant to
WILLIAM F. CARR

WFC:jar
Enclosures

cc: Ms. Pam Staley (w/enclosures)
Amoco Production Company
Mr. Frank Chavez, District Supervisor (w/enclosures)
Oil Conservation Division, District III

BEFORE THE

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES

IN THE MATTER OF THE APPLICATION
OF AMOCO PRODUCTION COMPANY FOR
QUALIFICATION OF A WELL WORKOVER
PROJECT AND CERTIFICATION OF APPROVAL,
SAN JUAN COUNTY, NEW MEXICO.

CASE NO. _____

APPLICATION

AMOCO PRODUCTION COMPANY ("Amoco"), through its undersigned attorneys, hereby seek an order from the Division pursuant to the Rules and Procedures for Qualification of a Well Workover Project and Certification for the Well Workover Incentive Tax Rate promulgated by Division Order No. R-10505, entered in Case 11273 on November 1, 1995, and in support hereof states:

1. Amoco is the operator of the Armenta Gas Com C No. 1E, Unit C, 435 feet from the North line and 1590 feet from the West line, Section 27, Township 29 North, Range 10 West, located in San Juan County, New Mexico, upon which it has undertaken procedures that have been approved by the Division which are intended to increase the production therefrom.

2. The workover procedure on the subject well commenced after June 16, 1995.

3. Amoco filed an Application for Qualification of Well Workover Project and Certification of Approval For the subject well on April 25, 1996, to which it attached a

straight line estimate of the production rate of the well and table showing monthly gas project production from the well based on at least twelve months of established production which shows the future rate of production based on well performance prior to performing the workover.

4. The use of a straight line estimate of the future production rate for the well prior to performing the workover should be another acceptable method of projecting the future production rate for workover projects for:

- A. it will be easy for operators to prepare;
- B. it will be easy for the Division and the Department of Taxation and Revenue to read and confirm the accuracy of the data contained therein;
and
- C. it does not violate the intent of the "Natural Gas and Crude Oil production Incentive Act" for it will result in an estimate of future production that will limit the amount of oil or gas which will qualify for the Incentive Tax Rate authorized therein.

5. The application filed for the subject well was complete, accurate and properly verified as required by Division rules.

6. The Division's Aztec District Office declined to approve this application within thirty days of the date it was filed and advised Amoco that, if it desired to utilize a straight line estimate of production prior to performing the workover, it would have to request that

the application be set for hearing before a Division hearing Examiner in accordance with the rules of the Division.

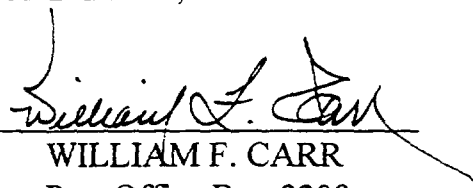
7. Approval of this application and the use of straight line estimates of production prior to performing the workovers on the subject well will be consistent with law, the prevention of waste and the protection of correlative rights.

WHEREFORE, Amoco Production Company requests that this application be set for hearing before a duly appointed Examiner of the Oil Conservation on June 27, 1996 and that, after notice and hearing as required by law, the Division enter its Order (1) granting this application, (2) qualifying the subject well as a Well Workover Project and (3) certifying the production projection for the project.

Respectfully submitted,

CAMPBELL, CARR, BERGE &
SHERIDAN, P.A.

By:


WILLIAM F. CARR

Post Office Box 2208
Santa Fe, New Mexico 87504-2208
Telephone: (505) 988-4421

ATTORNEYS FOR AMOCO PRODUCTION
COMPANY

CASE ____: Application of Amoco Production Company for qualification of a well workover project and certification of approval, San Juan County, New Mexico. Applicant seeks an order qualifying the Armenta Gas Com C No. 1E, Unit C, 435 feet from the North line and 1590 feet from the West line, Section 27, Township 29 North, Range 10 West, N.M.P.M., as a well workover project for the incentive tax rate authorized by the Natural Gas and Crude Oil Production Incentive Act and the Rules and Procedures for Qualification of Well Workover Projects and Certification for the Well Workover Incentive Tax Rate promulgated by Division Order No. R-10505. Said well is located approximately _____ miles _____ of _____, New Mexico.



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178 Fax (505) 334-6170

GARY E. JOHNSON
GOVERNOR

JENNIFER A. SALISBURY
CABINET SECRETARY

May 10, 1996

Patricia J. Haefele
Amoco Production Company
PO Box 800
Denver CO 80201

Re: C-140 Application for Armenta Gas Com C #1E C-27-29N-10W 30-045-23856

Dear Patricia:

The referenced application is hereby denied. The method of determining the future rate of production is not acceptable.

As per Rule 1140 you may request a hearing on this application.

Sincerely,

A handwritten signature in black ink, appearing to read "F.T. Chavez".

Frank T. Chavez
District Supervisor

FTC\sh

cc: well file

District I - (305) 393-6161
PO Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV

New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-140
Originated 11/1/95

Submit Original
Plus 2 Copies
to appropriate
District Office

APPLICATION FOR
QUALIFICATION OF WELL WORKOVER PROJECT
AND CERTIFICATION OF APPROVAL

THREE COPIES OF THIS APPLICATION MUST BE FILED WITH THE APPROPRIATE DISTRICT OFFICE OF THE OIL CONSERVATION DIVISION.

- I. Operator: Amoco Production Company OGRID #: 000778
Address: P.O. Box 800, Denver, Colorado 80201
Contact Party: Patricia J. Haeefe Phone: (303) 830-4988
- II. Name of Well: Armenta Gas Com C #1E API #: 3004523856
Location of Well: Unit Letter C, 435 Feet from the North line and 1590 Feet from the West line, Section 27, Township 29N, Range 10W, NMPM, San Juan County.
- III. Date Workover Procedures Commenced: 8/4/95
Date Workover Procedures were Completed: 8/14/95
- IV. Attach a description of the Workover Procedures undertaken to increase the projection from the Well.
- V. Attach an estimate of the production rate of the Well (a production decline curve or other acceptable method, and table showing monthly oil and/or gas Project Production) based on at least twelve (12) months of established production which shows the future rate of production based on well performance prior to performing Workover.
- VI. Pool(s) on which Production Projection is based:
Blanco Mesaverde
- VII. AFFIDAVIT:
State of Colorado)
) ss.
County of Denver)

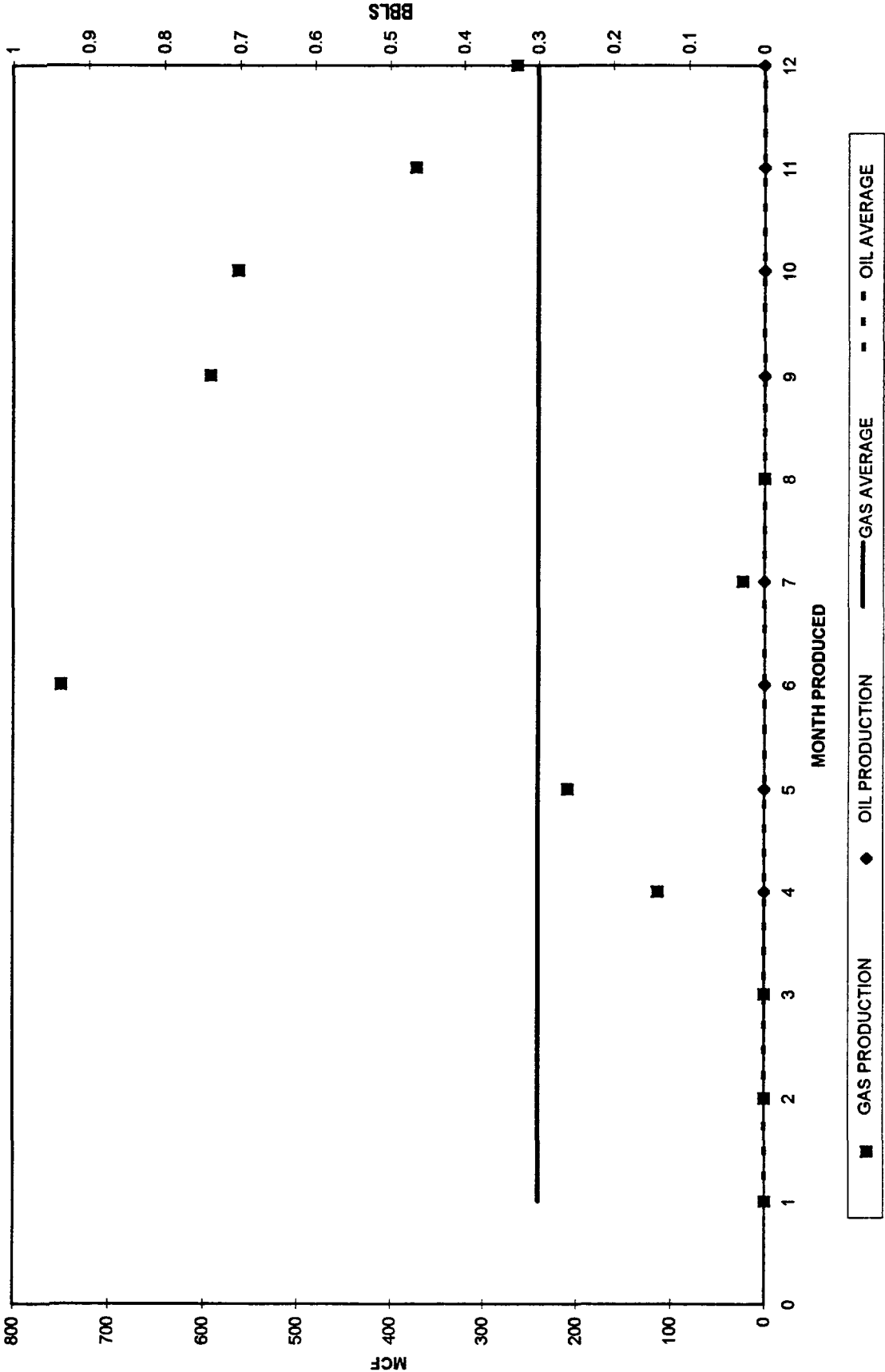
RECEIVED
APR 26 1996
OIL CON. DIV.
DIST. 3

Patricia J. Haeefe, being first duly sworn, upon oath states:

1. I am the Operator or authorized representative of the Operator of the above referenced Well.
2. I have made, or caused to be made, a diligent search of the production records which are reasonably available and contain information relevant to the production history of this Well.
3. To the best of my knowledge, the data used to prepare the Production Projection for this Well is complete and accurate and this projection was prepared using sound petroleum engineering principles.

Patricia J. Haeefe
(Name)
Staff Assistant
(Title)

DECLINE CURVE



WELLNAME	WELLNO	POOL	FLAC	API	QO8TR	MONTH	OIL	GAS
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	08/94	0	0
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	09/94	0	0
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	10/94	0	0
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	11/94	0	113
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	12/94	0	209
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	01/95	0	750
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	02/95	0	23
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	03/95	0	0
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	04/95	0	592
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	05/95	0	563
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	06/95	0	372
ARMENTA GAS COM /C/	E001C27	BASIN-DAKOTA-GAS	97596901	3004523856	NENW0027029010	07/95	0	263
					12-month average - Future Trend		0	240

Submit to: Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-105
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL API NO.

3004523856

5. Indicate Type of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name
Armenta Gas Com C

8. Well No.

1E

9. Pool name or Wildcat

Blanco Mesavordo

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:

OIL WELL ☐

GAS WELL ☒

DRY ☐

OTHER

b. Type of Completion:

NEW
WELL ☒

WORK
OVER ☐

DEEPIEN ☐

PLUG
BACK ☐

DIFF
RESVR ☒

OTHER

Recompletion

2. Name of Operator

Amoco Production Company

Attention

Gail Jefferson

3. Address of Operator

P.O. Box 800

Denver

Colorado

80201

(303) 830-6157

4. Well Location

Unit Letter C

: 435

Feet From The

North

Line and

1590

Feet From The

West

Line

Section 27

Township 29N

Range 10W

NMIM

San Juan

County

10. Date Spudded

01-01-80

11. Date T.D. Reached

01-17-80

12. Date Compl. (Ready to Prod.)

08-14-95

13. Elevations (DF & RKB, RT, GR, etc.)

5506' GL

14. Elev. Casinghead

15. Total Depth

6564'

16. Plug Back T.D.

6540'

17. If Multiple Compl. How

Many Zones?

18. Intervals

Drilled By

Rotary Tools

YES

Cable Tools

NO

19. Producing Interval(s), of this completion - Top, Bottom, Name

Blanco Mesavordo

3827-4355'

20. Was Directional Survey Made

No

21. Type Electric and Other Logs Run

GR, CCL, CBL '13-6100'

22. Was Well Cored

No

23.

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	32.3#	292'	12-1/4"	300 sxs	
7"	20.0#	2198'	8 3/4"	475 sxs	
4-1/2"	11.8#	6564'	6-1/4"	520 sxs	

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
	None			

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2 3/8"	4255'	

26. Perforation record (interval, size, and number)

See Attached

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL

AMOUNT AND KIND MATERIAL USED

See Attached

28. DIST. 3 PRODUCTION

Date First Production 08 13 1995		Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing				Well Status (Prod. or Shut-in) Shut-in	
Date of Test 8/13/95	Hours Tested 24 hrs	Choke Size 1/2"	Prod'n For Test Period	Oil - Bbl. 0	Gas - MCF 1200 mcf	Water - Bbl. 7 bbls	Gas - Oil Ratio
Flow Tubing Press. 188#	Casing Pressure 300#	Calculated 24- Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

To Be Sold

Test Witnessed By

30. List Attachments

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature

Gail M. Jefferson

Printed
Name

Gail Jefferson

Title

Sr. Admin. Staff Asst.

Date

08-22-19

Armenta Gas Com C IE - Recompletion

MIRUSU 8/7/95. ND wellhead. NUBOP.

Pull 2 3/8" tbg. TIIH & set cmt retainer @ 6275'. Cmt squeeze Dakota with 37 sacks Class B "Neat".
Dakota perfs 6321-6490'.

Spot cmt plug 6175-6275'. TOOH w/tbg. Run CR/CCL/CBL from 13'-6100'. Top of cmt @ 350'.

Perforate Mesaverde:

3827', 3891', 3959', 4060', 4179', 4187', 4210', 4223', 4235', 4241', 4271', 4277', 4321', 4355' w/
1 jspf, .340 inch diameter, 180 degree phasing, 12 gins, total 14 shots fired.

Frac Mesaverde w/21,420 gal 70 quality foam & 140,000# 16/30 sand, 947 mcf N2. Max treating
pressure 3907 psi & max treating rate 34 bpm.

SI 24 hrs: SICP = 1750 psi

Flow tst'd Mesaverde 8/9-8/13

Tstd on 1/2 inch choke 24 hrs FCP = 300 psi, FTP=188 psi recovered 7 bbls water and 1200 mcf.

TIIH tag sand. Cleanout. TOH w/tbg. TIIH w/tbg. Land @ 4255'. NDBOP. NU wellhead.

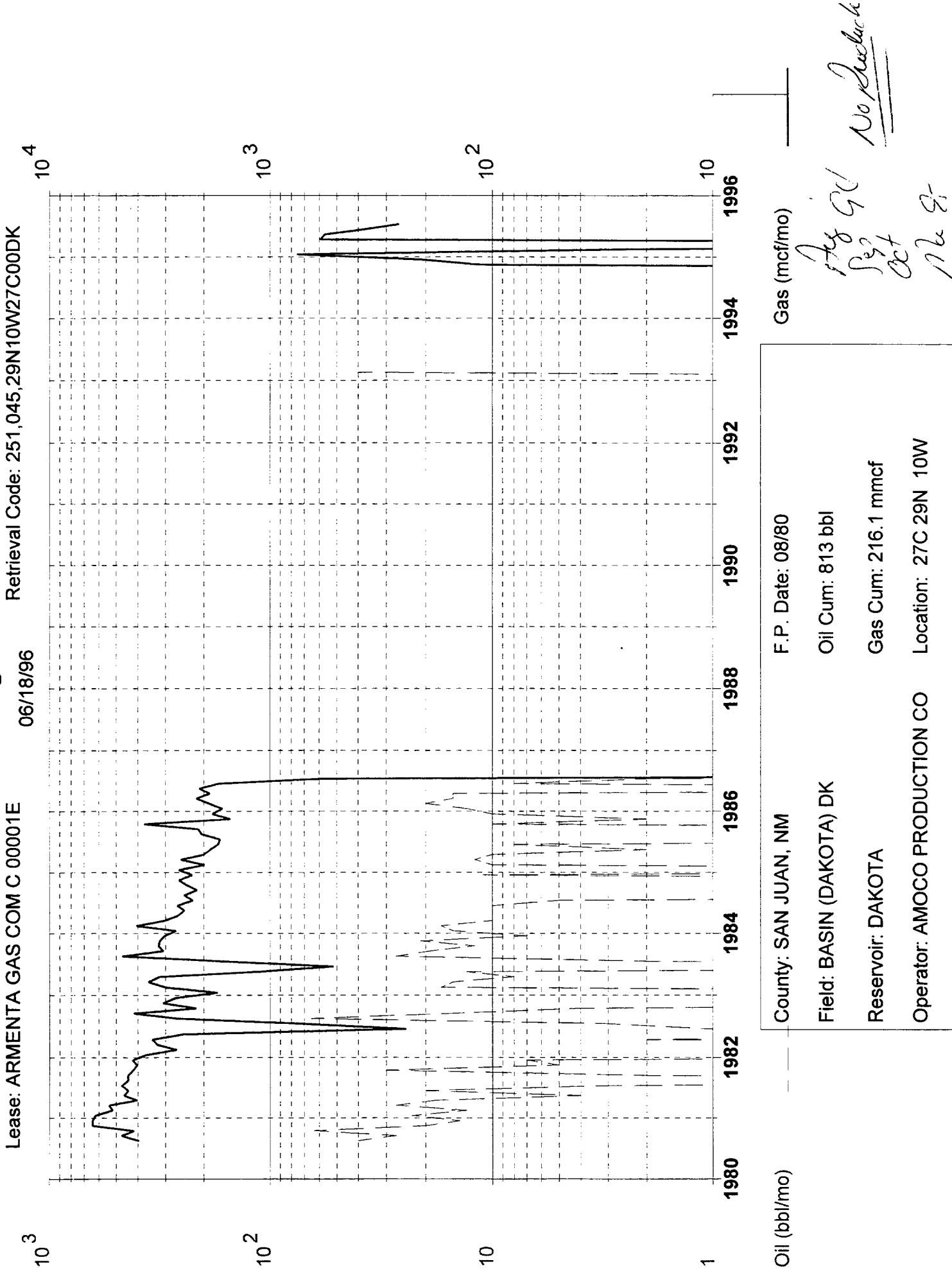
RDMOSU 8/15/95 SITP = 320 psi, SICP 320 psi.

NMOCD Case No. 11559
Armenta Gas Com C #1 Well

Orig. Compl. 1980 in Basin Dakota.
Workover 8/4/95 - 8/14/95
Plug Dakota perfs; Perf and Frac Blanco Mesaverde.

* Avg 12 month production data from 8/94-7/95 includes 0 production for 4 months.
Well did not produce from mid 1986 until late 1994. Well was then opened up to resume production but was very low rate which would have been expected to continue if well had not been recompleted.

Dwights



Lease: ARMENTA GAS COM C 00001E

Retrieval Code: 251,045,29N10W27C00DK

06/18/96

County: SAN JUAN, NM	F.P. Date: 08/80
Field: BASIN (DAKOTA) DK	Oil Cum: 813 bbl
Reservoir: DAKOTA	Gas Cum: 216.1 mmcf
Operator: AMOCO PRODUCTION CO	Location: 27C 29N 10W

Aug 96
Sept
Oct
No 9-

No Production

OPERATOR (#19922)	WELL NAME	WELL #
AMOCO PRODUCTION CO	ARMENTA GAS COM C	00001E

LOCATION	STATE	DIST	COUNTY (#045)	LEASE #
27C 29N 10W	NM	004	SAN JUAN	96525

API #	FIELD (#8004974)	RESERVOIR
30-045-2385600	BASIN (DAKOTA) DK	DAKOTA

TOTAL DEPTH	UPPER PERF	LOWER PERF	GAS GATH	LIQ GATH	GAS GRAV	LIQ GRAV	TEMP GRAD	N-FACTOR
6564			ELNAT	G R			1.750	

COMP DATE	1ST PROD DATE	LAST PROD DATE	STATUS DATE	STATUS
	8008	9507		ACT

CUM THRU LPD GAS/MCF	GAS CUM SINCE DATE	CUM THRU LPD COND/BBLs	COND CUM SINCE DATE
216061	FPDAT	813	FPDAT

DWIGHTS ENERGYDATA, INC.
 AMOCO PRODUCTION CO
 ARMENTA GAS COM C

RUN DATE: 06/02/96
 Published 5/96
 (#251,045,29N10W27C00DK)

*** MONTHLY PRODUCTION HISTORY ***

MONTH	GAS MCF	CUM GAS MCF	COND BBLs	CUM COND BBLs	WATER BBLs	DAYS ON
JAN	0	213176	0	772	0	0
FEB	0	213176	1	773	0	-
MAR	0	213176	0	773	0	0
APR	0	213176	0	773	0	0
MAY	0	213176	0	773	0	0
JUN	0	213176	0	773	0	0
JUL	0	213176	0	773	0	0
AUG	0	213176	0	773	0	0
SEP	0	213176	0	773	0	0
OCT	0	213176	0	773	0	0
NOV	0	213176	0	773	0	0
DEC	0	213176	0	773	0	0
1990	0	213176	1	773	0	
JAN	0	213176	0	773	0	0
FEB	0	213176	40	813	0	-
MAR	0	213176	0	813	0	0
APR	0	213176	0	813	0	0
MAY	0	213176	0	813	0	0
JUN	0	213176	0	813	0	0
JUL	0	213176	0	813	0	0
AUG	0	213176	0	813	0	0
SEP	0	213176	0	813	0	0
OCT	0	213176	0	813	0	0
NOV	0	213176	0	813	0	0
DEC	0	213176	0	813	0	0
1993	0	213176	40	813	0	
JAN	0	213176	0	813	0	0
FEB	0	213176	0	813	0	0
MAR	0	213176	0	813	0	0
APR	0	213176	0	813	0	0
MAY	0	213176	0	813	0	0
JUN	0	213176	0	813	0	0
JUL	0	213176	0	813	0	0
AUG	0	213176	0	813	0	0
SEP	0	213176	0	813	0	0
OCT	0	213176	0	813	0	0
NOV	113	213289	0	813	0	30
DEC	209	213498	0	813	0	31
1994	322	(161) 213498	0	813	0	
JAN	750	214248	0	813	0	31
FEB	23	214271	0	813	0	28
MAR	0	214271	0	813	0	0
APR	592	214863	0	813	0	30
MAY	563	215426	0	813	0	31
JUN	372	215798	0	813	0	30
JUL	263	216061	0	813	0	31
1995	2563	(366) 216061	0	813	0	

District I - (305) 393-6161
PO Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV

New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-140
Originated 11/1/95

Submit Original
Plus 2 Copies
to appropriate
District Office

APPLICATION FOR
QUALIFICATION OF WELL WORKOVER PROJECT
AND CERTIFICATION OF APPROVAL

THREE COPIES OF THIS APPLICATION MUST BE FILED WITH THE APPROPRIATE DISTRICT OFFICE OF THE OIL CONSERVATION DIVISION.

I. Operator: Amoco Production Company OGRID #: 000778

Address: P.O. Box 800, Denver, Colorado 80201

Contact Party: Patricia J. Haeefe Phone: (303) 830-4988

II. Name of Well: Armenta Gas Com C #1E API #: 3004523856

Location of Well: Unit Letter C, 435 Feet from the North line and 1590 Feet from the West line, Section 27, Township 29N, Range 10W, NMPM, San Juan County.

III. Date Workover Procedures Commenced: 8/4/95

Date Workover Procedures were Completed: 8/14/95

IV. Attach a description of the Workover Procedures undertaken to increase the projection from the Well.

V. Attach an estimate of the production rate of the Well (a production decline curve or other acceptable method, and table showing monthly oil and/or gas Project Production) based on at least twelve (12) months of established production which shows the future rate of production based on well performance prior to performing Workover.

VI. Pool(s) on which Production Projection is based:

Basin Dakota

VII. AFFIDAVIT:

State of Colorado)
) ss.
County of Denver)

Patricia J. Haeefe, being first duly sworn, upon oath states:

1. I am the Operator or authorized representative of the Operator of the above referenced Well.
2. I have made, or caused to be made, a diligent search of the production records which are reasonably available and contain information relevant to the production history of this Well.
3. To the best of my knowledge, the data used to prepare the Production Projection for this Well is complete and accurate and this projection was prepared using sound petroleum engineering principles.

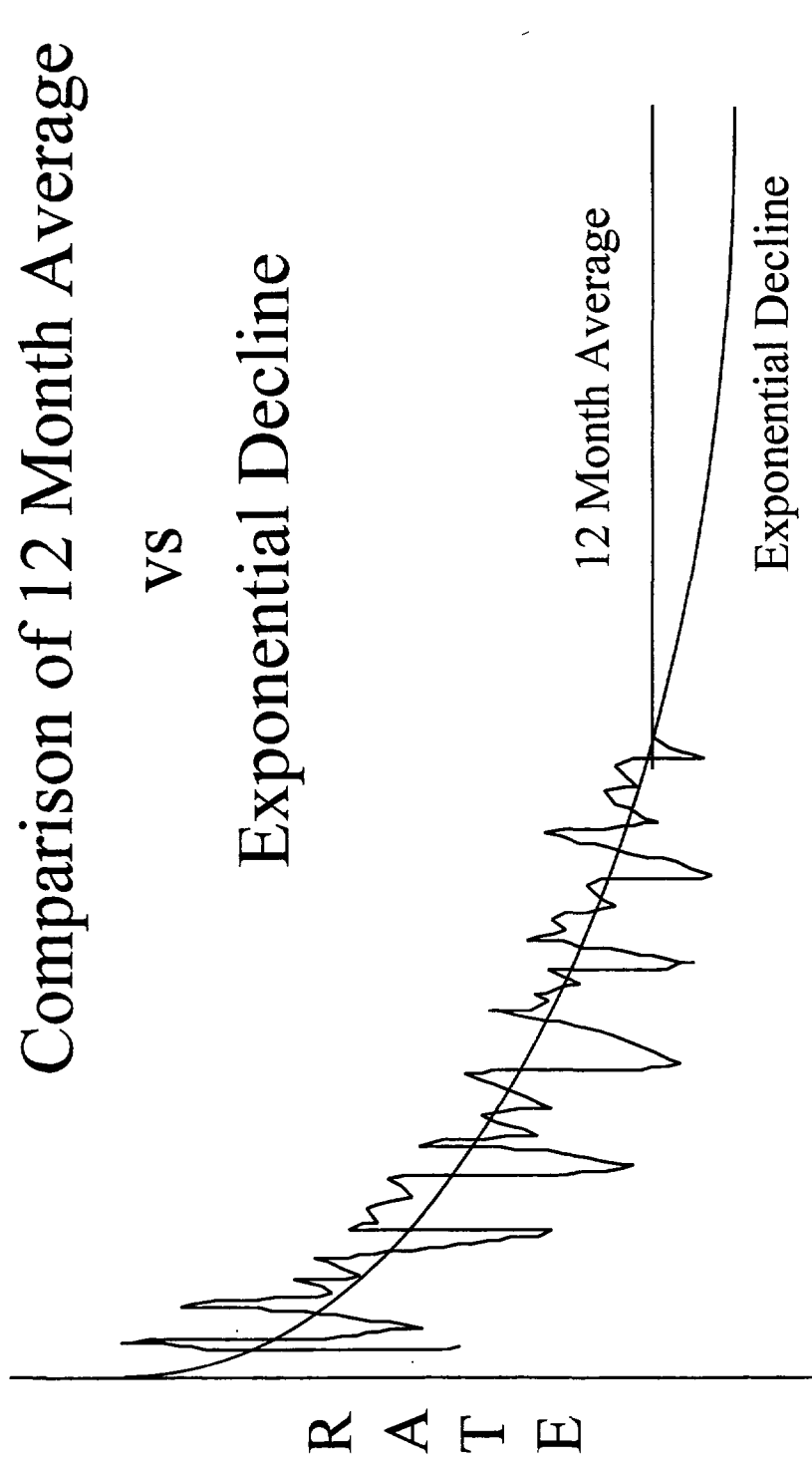
Patricia J. Haeefe
(Name)
Staff Assistant
(Title)

Production Projection Method

Comparison of 12 Month Average

vs

Exponential Decline



12 Month Average

Production Projection Method

- Reasonable estimate of the productive capacity of the well.
- Less subjective than estimated decline.
- Simple for operator to determine.
- Easy for NMOCD to verify and certify.
- Easy to manage in dual tax rate accounting.
- Limits the amount of production which will qualify for the Incentive Tax Rate.

