



AMOCO PRODUCTION COMPANY

Application for Qualification of Well  
Workover Project

Gallegos No. 8 Well

NMOCD CASE NO. 11556  
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 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 983-6043

June 5, 1996

**HAND DELIVERY**

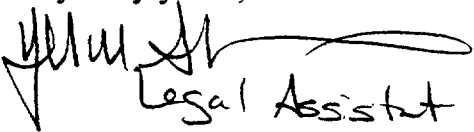
William J. LeMay, Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

Re: Application of Amoco Production Company for Qualification of the  
Gallegos No. 8 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 Gallegos No. 8, Unit M, 933 feet from the South line and 880 feet from the West line, Section 34, Township 26 North, Range 11 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 Gallegos No. 8, Unit M, 933 feet from the South line and 880 feet from the West line, Section 34, Township 26 North, Range 11 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. Haeefe  
Amoco Production Company  
PO Box 800  
Denver CO 80201

Re: C-140 Application for Gallegos #8 M-34-26N-11W 30-045-21317

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 - (505) 393-6161  
PO Box 194  
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: Gallegos #8 API #: 3004521317

Location of Well: Unit Letter M, 933 Feet from the South line and 880 Feet from the West line, Section 34, Township 26N, Range 11W, NMPM, San Juan County.

III. Date Workover Procedures Commenced: 8/17/95

Date Workover Procedures were Completed: 9/22/95

IV. Attach a description of the Workover Procedures undertaken to increase the production 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.

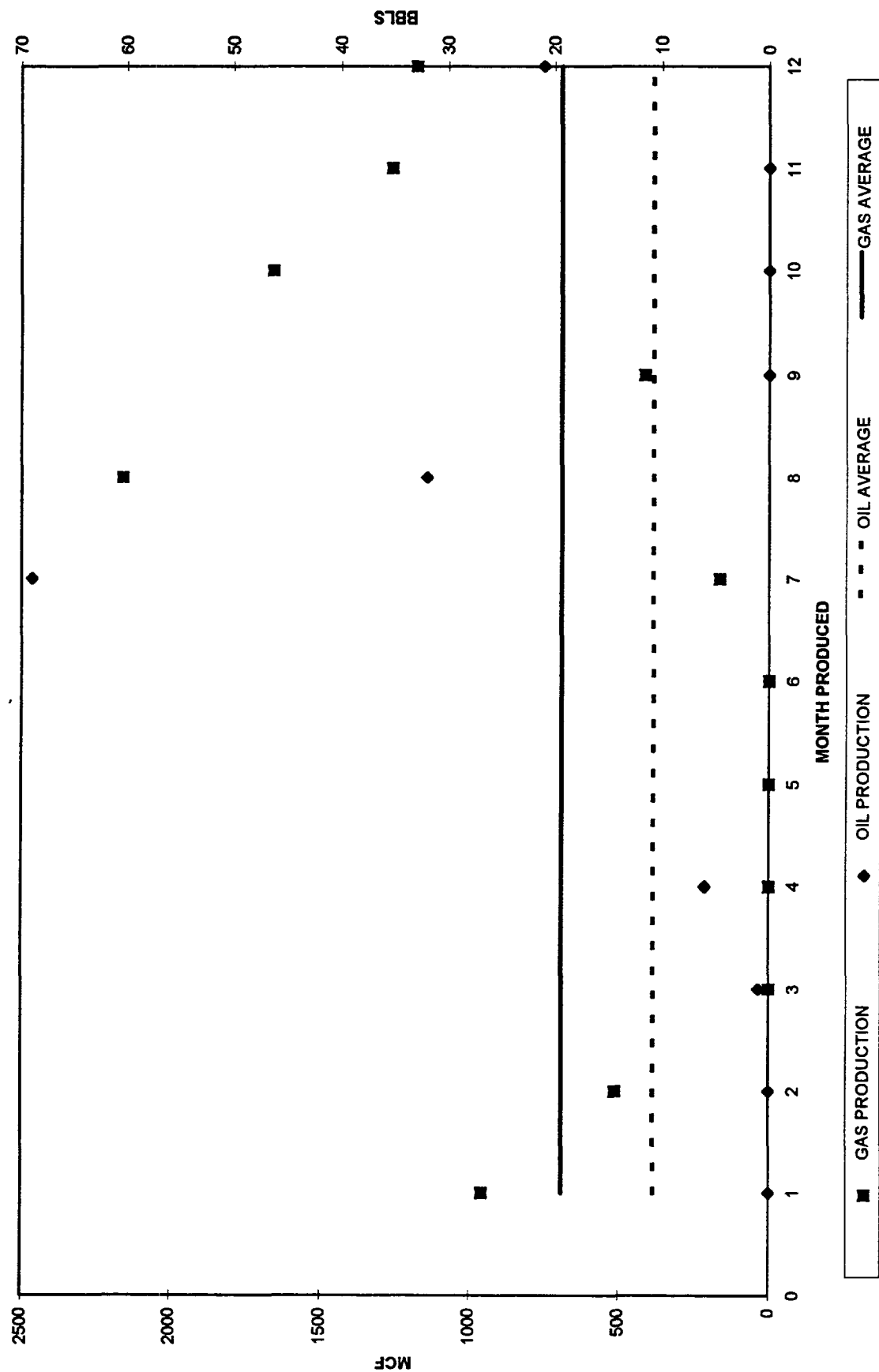
Patricia J. Haeefe  
(Name)  
Staff Assistant  
(Title)

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



# GALLEGOS 8

## DECLINE CURVE



Gallegos #8

WELLNAME	WELLNO	POOL	FLAG	API	QOSTR	MONTH	OIL	GAS
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	08/94	0	958
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	09/94	0	510
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	10/31/1994	1	0
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	11/30/1994	6	0
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	12/31/1994	0	0
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	01/31/1995	0	0
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	02/28/1995	69	164
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	03/31/1995	32	2159
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	04/30/1995	0	413
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	05/31/1995	0	1653
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	06/30/1995	0	1260
GALLEGOS	008M34	BASIN-DAKOTA-GAS	97925201	3004521317	SWSW0034026011	07/31/1995	21	1175
					12-month average - Future Rate		11	691

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

(See other instructions on reverse side)

FOR APPROVED  
OMB NO. 1004-0137  
Expires: December 31, 1991

WELL COMPLETION OR RECOMPLETION REPORT AND LOGBOOK

1. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>		2. NAME OF OPERATOR AMOCO PRODUCTION COMPANY		Attention: Patty Haefele	
3. ADDRESS AND TELEPHONE NO. P.O. Box 800, Denver, Colorado 80201		(303) 830-4988		7. UNIT AGREEMENT NAME Gallegos 8	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 933' FSL 880' FWL UNIT M At top prod. interval reported below At total depth		14. PERMIT NO.		DATE ISSUED	
15. DATE SPUDDED 09/01/73		16. DATE T.D. REACHED 09/11/73		17. DATE COMPL. (Ready to prod.) 9/22/95	
18. ELEVATIONS (DE, RKB, RT, GR, ETC.)* 6268' GR		19. ELEV. CASINGHEAD		20. TOTAL DEPTH, MD & TVD 5965'	
21. PLUG, BACK T.D., MD & TVD 5890'		22. IF MULTIPLE COMPL., HOW MANY* 2		23. INTERVALS DRILLED BY ROTARY TOOLS YES CABLE TOOLS NO	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* Fruitland Coal 1262-1266		25. WAS DIRECTIONAL SURVEY MADE No		26. TYPE ELECTRIC AND OTHER LOGS RUN GR CCL	
27. WAS WELL CORED No		28. CASING RECORD (Report all strings set in well)		29. LINER RECORD	
30. TUBING RECORD		31. PERFORATION RECORD (Interval, size and number) See attachment		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED See attachment	
33. PRODUCTION DATE FIRST PRODUCTION 08 20 1995 PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) Flowing WELL STATUS (Producing or shut-in) SI-W/O 1st delivery		34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold		35. LIST OF ATTACHMENTS Perf and frac page	
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records		37. SIGNED Patty Haefele ADMINISTRATIVE GROUP TITLE Staff Assistant		38. FARMINGTON DISTRICT OFFICE BY DATE	

OCT 03 1995

SEP 28 1995

RECEIVED

ACCEPTED FOR RECORD

Gallegos #8

30-045-21317

Sec. 34 T26N R11W

MIRUSU 8/17/95. Set RBP at 2006 ft to isolate Dakota. Load and pressure test casing to 3000 psi, held. Ran GR and CCL. Perforate Fruitland 1262-1266 with 8 JSPF, diameter .880", 32 total shots fired, gun size 4", 120 degree phasing, 23 gms. Frac 1262-1266 ft with 36,266 lbs 20/40 sand, max pressure 3564 psi, max rate 71.4 bpm. Flow well. RDMOSU 8/23/95. MIRUSU 9/8/95. Cleanout 1498-2006 ft. CP 320 psi. TP 160 psi. Tag at 1498 ft, 507' fill. Tag tight spot at 1260 ft, mill out to 1268 ft. Work through tight spot with casing swedge. Tag at 5870 ft. Cleanout 5860-5890 ft with nitrogen. Pull RBP. Land 2-1/16" tubing at 5877 ft. Land 2-1/16" short string at 1266 ft. Set permanent production packer at 1320 ft. RDMOSU 9/22/95.

NMOCD Case No. 11556

Gallegos #8 Well

Orig. Compl. 1977 in Basin Dakota.

Workover 8/17/95 - 9/22/95

Perf and Frac Basin Fruitland Coal;

Complete as dual well with surface commingle

\* Avg 12 month production has some months with 0 mcf production included in calculation.

Basin Dakota zone was loading up with condensate and needed smaller tubing to improve production. This would likely have continued to be a problem in the future. Dual completion uses smaller tubing string

# Dwights

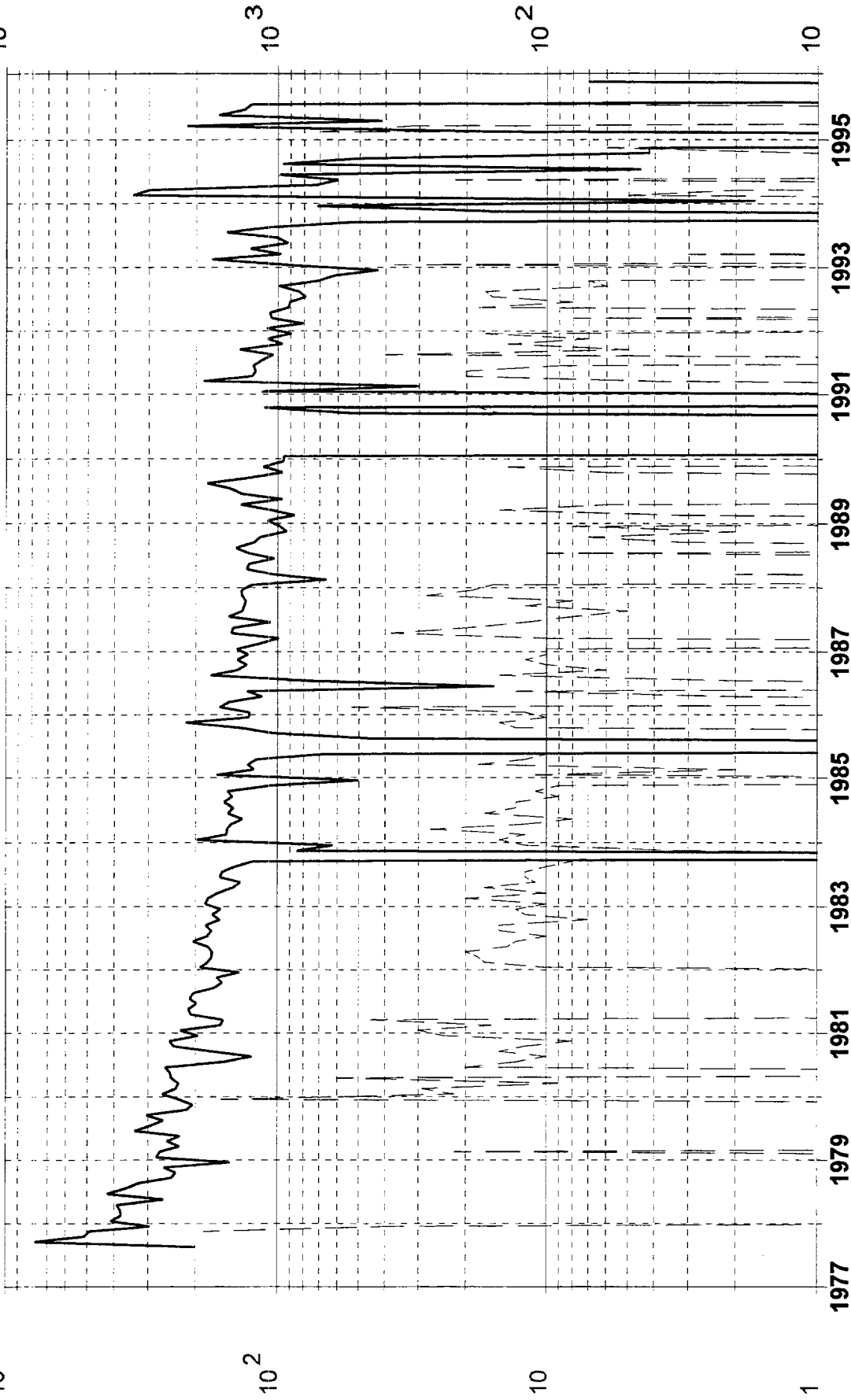
Lease: GALLEGOS 000008

Retrieval Code: 251,045,26N11W34M00DK

06/18/96

10<sup>4</sup>

10<sup>3</sup>



Oil (bbl/mo)

Gas (mcf/mo)

F.P. Date: 08/77

County: SAN JUAN, NM

Field: BASIN (DAKOTA) DK

Oil Cum: 2091 bbl

Reservoir: DAKOTA

Gas Cum: 319.1 mmcf

Operator: AMOCO PRODUCTION CO

Location: 34M 26N 11W

Aug 1995  
July 1995

DWIGHTS ENERGYDATA, INC.  
 GAS WELL HISTORY  
 NEW MEXICO GAS NORTHWEST

RUN DATE: 05/09/96  
 Published 4/96  
 (#251,045,26N11W34M00DK )

OPERATOR (#19922)	WELL NAME	WELL #
AMOCO PRODUCTION CO	GALLEGOS	000008

LOCATION	STATE	DIST	COUNTY (#045)	LEASE #
34M 26N 11W	NM	004	SAN JUAN	39926

API #	FIELD (#8004974)	RESERVOIR
30-045-2131700	BASIN (DAKOTA) DK	DAKOTA

TOTAL DEPTH	UPPER PERF	LOWER PERF	GAS GATH	LIQ GATH	GAS GRAV	LIQ GRAV	TEMP GRAD	N-FACTOR
			WFS	G R	0.70		1.750	0.750

COMP DATE	1ST PROD DATE	LAST PROD DATE	STATUS DATE	STATUS
	7708	9511		ACT

CUM THRU LPD GAS/MCF	GAS CUM SINCE DATE	CUM THRU LPD COND/BBLs	COND CUM SINCE DATE
319142	FPDAT	2091	FPDAT

DWIGHTS ENERGYDATA, INC.  
 AMOCO PRODUCTION CO  
 GALLEGOS

RUN DATE: 05/09/96  
 Published 4/96  
 (#251,045,26N11W34M00DK )

\*\*\* MONTHLY PRODUCTION HISTORY \*\*\*

MONTH	GAS MCF	CUM GAS MCF	COND BBLs	CUM COND BBLs	WATER BBLs	DAYS ON
JAN	1096	281811	0	1813	0	31
FEB	803	282614	0	1813	0	27
MAR	1053	283667	8	1821	0	24
APR	1069	284736	0	1821	0	30
MAY	911	285647	18	1839	0	31
JUN	902	286549	8	1847	0	30
JUL	788	287337	16	1863	0	31
AUG	836	288173	17	1880	0	31
SEP	986	289159	6	1886	0	29
OCT	712	289871	7	1893	0	25
NOV	615	290486	0	1893	0	22
DEC	426	290912	0	1893	0	11
1992	10197 (850)	290912	80	1893	0	
JAN	939	291851	37	1930	0	17
FEB	1743	293594	0	1930	0	27
MAR	976	294570	3	1933	0	31
APR	1264	295834	0	1933	0	30
MAY	919	296753	0	1933	0	24
JUN	1009	297762	0	1933	0	30
JUL	1545	299307	0	1933	0	31
AUG	1077	300384	0	1933	0	31
SEP	524	300908	0	1933	0	28
OCT	0	300908	0	1933	0	0
NOV	159	301067	0	1933	0	99
DEC	716	301783	0	1933	0	31
1993	10871 (906)	301783	40	1933	0	
JAN	17	301800	0	1933	0	12
FEB	3421	305221	5	1938	0	16
MAR	2984	308205	2	1940	0	31
APR	721	308926	0	1940	0	30
MAY	598	309524	22	1962	0	31
JUN	981	310505	0	1962	0	30
JUL	45	310550	0	1962	0	31
AUG	958	311508	0	1962	0	25
SEP	510	312018	0	1962	0	27
OCT	42	312060	1	1963	0	30
NOV	42	312102	6	1969	0	30
DEC	0	312102	0	1969	0	0
1994	10319 (860)	312102	36	1969	0	



DWIGHTS ENERGYDATA, INC.  
AMOCO PRODUCTION CO  
GALLEGOS

RUN DATE: 05/09/96  
Published 4/96  
(#251,045,26N11W34M00DK )

\*\*\* MONTHLY PRODUCTION HISTORY \*\*\*

MONTH	GAS MCF	CUM GAS MCF	COND BBLs	CUM COND BBLs	WATER BBLs	DAYS ON
JAN	0	312102	0	1969	0	0
FEB	164	312266	69	2038	0	28
MAR	2159	314425	32	2070	0	31
APR	413	314838	0	2070	0	30
MAY	1653	316491	0	2070	0	30
JUN	1332	317823	0	2070	0	30
JUL	1249	319072	21	2091	0	31
AUG	0	319072	0	2091	0	0
SEP	0	319072	0	2091	0	0
OCT	0	319072	0	2091	0	0
NOV	70	319142	0	2091	0	-
1995	7040 (640)	319142	122	2091	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: Gallegos #8 API #: 3004521317

Location of Well: Unit Letter M, 933 Feet from the South line and 880 Feet from the West line, Section 34, Township 26N, Range 11W, NMPM, San Juan County.

III. Date Workover Procedures Commenced: 8/17/95

Date Workover Procedures were Completed: 9/22/95

IV. Attach a description of the Workover Procedures undertaken to increase the production 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

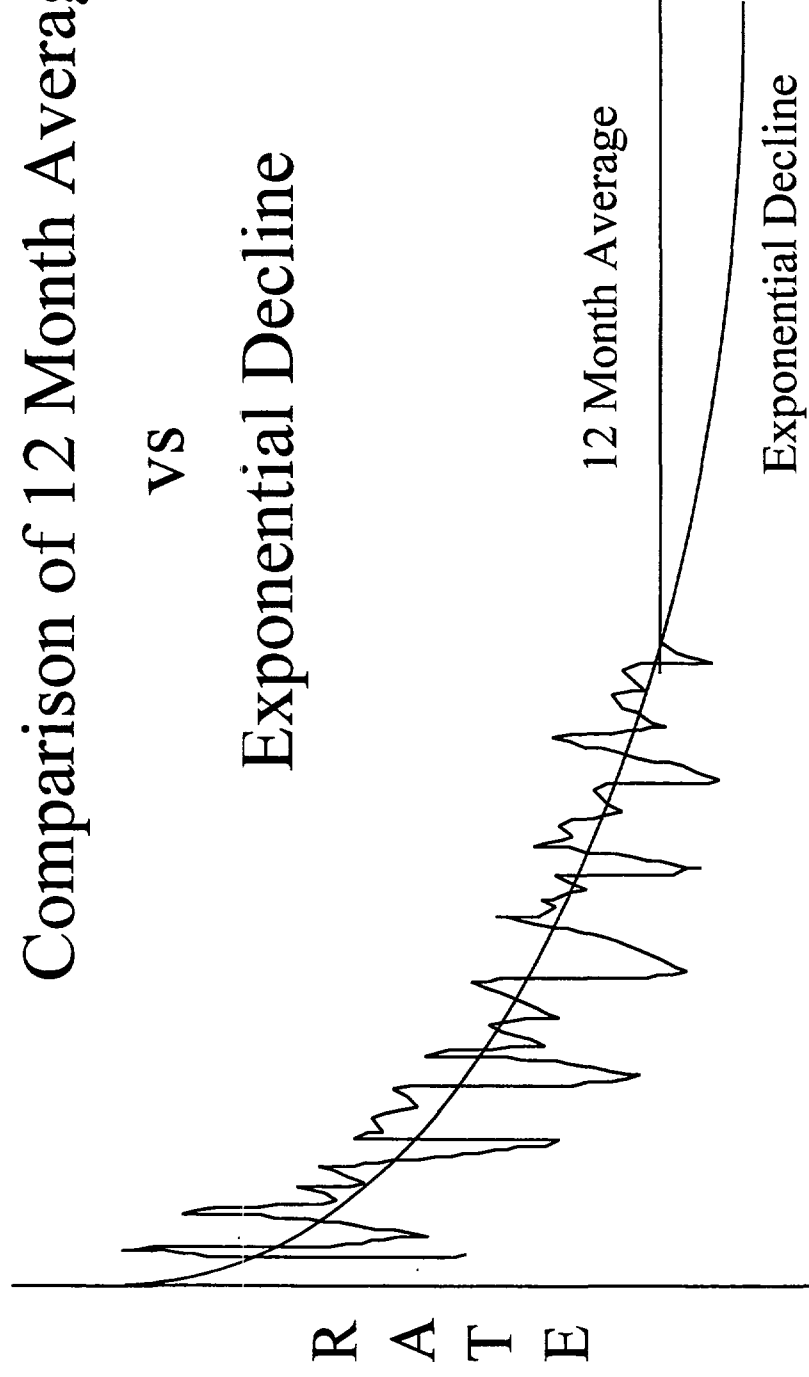
(Title)

# 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.