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# STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF AMOCO PRODUCTION COMPANY FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

CASE NO. 11093 Order No. R-10216

> DEGEIVTA N oct 1 7 1894

OIL CON. DIV.

## ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 29, 1994, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 14th day of October, 1994, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Amoco Production Company, seeks approval to downhole commingle Basin-Dakota Gas Pool and Armenta-Gallup Pool production within the wellbore of its Sullivan Gas Com "C" Well No. 1 located 940 feet from the South line and 1450 feet from the West line (Unit N) of Section 28, Township 29 North, Range 10 West, NMPM, San Juan County, New Mexico.
- (3) The S/2 of Section 28 is currently dedicated to the subject well in the Basin-Dakota Gas Pool, and the SE/4 SW/4 of Section 28 is currently dedicated to the subject well in the Armenta-Gallup Pool forming standard 320-acre gas and 40-acre oil spacing and proration units, respectively, for said pools.
- (4) According to applicant's testimony, the working interest ownership between the two pools is common, however, due to the different proration units, the royalty interest is not common.
- (5) The subject well was drilled in 1964 and completed in the Basin-Dakota Gas Pool at an initial producing rate of approximately 500 MCF gas per day. The Basin-Dakota Gas Pool was temporarily abandoned in 1981, and the subject well was recompleted to the Armenta-Gallup Pool which produced at an initial rate of

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approximately 50 BOPD and 92 MCF gas per day. The well has produced from the Armenta-Gallup Pool from 1981 to the present time.

- (6) The subject well is currently producing from the Armenta-Gallup Pool at a rate of approximately 15 MCF gas per day.
- (7) During its last year of production in the Basin-Dakota Gas Pool (1981), the subject well produced at an average rate of approximately 145 MCF gas per day.
- (8) The evidence indicates that the construction of the Sullivan Gas Com "C" Well No. 1 precludes a dual Dakota/Gallup completion within the wellbore.
- (9) The proposed downhole commingling is necessary in order to economically recover the remaining oil and gas reserves in the Dakota and Gallup formations.
  - (10) The applicant further demonstrated through its evidence and testimony that:
    - a) there will be no crossflow between the two commingled pools;
    - b) neither commingled zone exposes the other to damage by produced liquids;
    - c) the fluids from each zone are compatible with the other;
    - d) the bottomhole pressure of the lower pressure zone should not be less than 50 percent of the bottomhole pressure of the higher pressure zone adjusted to a common datum; and,
    - e) the value of the commingled production is not less than the sum of the values of the individual production.
- (11) No interest owner and/or offset operator appeared at the hearing in opposition to the application.
- (12) In the interest of prevention of waste and protection of correlative rights, the subject application should be approved.
- (13) According to applicant's evidence and testimony, it will conduct a 30-60 day production test on the Dakota formation after completion in order to gather sufficient data to determine an accurate allocation of production.

- (14) Subsequent to conducting said production test, the applicant should consult with the supervisor of the Division's Aztec District Office in order to determine a proper allocation of production from the subject well.
- (15) To afford the Division an opportunity to assess the potential of waste and to expeditiously order the appropriate remedial action, the operator should notify the Aztec District Office of the Division any time the subject well is shut-in for seven consecutive days.

### IT IS THEREFORE ORDERED THAT:

- (1) The applicant, Amoco Production Company, is hereby authorized to downhole commingle Basin-Dakota and Armenta-Gallup Pool production within the wellbore of its Sullivan Gas Com "C" Well No. 1 located 940 feet from the South line and 1450 feet from the West line (Unit N) of Section 28, Township 29 North, Range 10 West, NMPM, San Juan County, New Mexico.
- (2) The S/2 of Section 28 shall be dedicated to the subject well in the Basin-Dakota Gas Pool, and the SE/4 SW/4 of Section 28 shall be dedicated to the subject well in the Armenta-Gallup Pool forming standard 320-acre gas and 40-acre oil spacing and proration units, respectively, for said pools.
- (3) The applicant shall conduct a 30-60 day production test on the Dakota formation after completion in order to gather sufficient data to determine an accurate allocation of production.
- (4) Subsequent to conducting said production test, the applicant shall consult with the supervisor of the Division's Aztec District Office in order to determine a proper allocation of production from the subject well.
- (5) The operator shall immediately notify the supervisor of the Aztec District Office of the Division any time the subject well has been shut-in for seven consecutive days and shall concurrently present, to the Division, a plan for remedial action.
- (6) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

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# State of New Mexico Energy, Minerals and Natural Resources Department

Form C-103

Submit 3 Copies to Appropriate District Office

Revised	1-1-8

DISTRICT I	OIL CONSEDUATION	DIVICION	<i>(</i>	
OIL CONSERVATION DIVISION P.O. Box 1980, Hobbs, NM 88240 P.O. Box 2088		WELL API NO.		
DISTRICT II P.O. Drawer DD, Artesia, NM 88210	Santa Fe. New Mexico 87504-2088			004507781
·			5. Indicate Type of I	STATE FEE X
DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410			6. State Oil & Gas L	
(DO NOT USE THIS FORM FOR PRO DIFFERENT RESER	ICES AND REPORTS ON WODOSALS TO DRILL OR TO DEEPE VOIR. USE "APPLICATION FOR P-101) FOR SUCH PROPOSALS.)	N OR PLUG BACK TO A		nit Agreement Name
1. Type of Well:  OIL WELL GAS WELL X			Sulliv	van Gas Com C
2. Name of Operator	Attention:		8. Well No.	
Amoco Production Company	Gail M. Jeff	erson, Rm 1295C		1
Address of Operator     P.O. Box 800 Denver	Colorado 80201	(303) 830-6157	9. Pool name or Wil Gal	dcat lup & Dakota
4. Well Location Unit Letter N : 940	Feet From The South	Line and 14	50 Feet From TI	he West Line
Section 28	Township 29N R	ange 10W N	impm S	an Juan County
	10. Elevation (Show wheth	ner DF, RKB, RT, GR, etc.)		
11. Check Apr	propriate Box to Indicate I	Nature of Notice, Re	eport or Other	Data
NOTICE OF INT		1	BSEQUENT REPO	
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK		TERING CASING
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRILLING		UG AND ABANDONMENT
PULL OR ALTER CASING		CASING TEST AND CEI		
OTHER:		OTHER:	Repair & Comr	mingle
12. Describe Proposed or Completed Oper work) SEE RULE 1103.	rations (Clearly state all pertinent deta	ils, and give pertinent dates,	including estimated dat	e of starting any proposed
Amoco Production Company ha	as repaired and commingled the	e above referenced well	per the attached.	
If you have any questions pleas	se contact Gail Jefferson at (30	03) 830-6157	*****	and the second second
			100 mm	N pinte
			\$ 2° . D	John JV.
I hereby certify that the information above	/e is true and complete to the best of n	•		
SIGNATURE Xally,	Efferson	Sr. Admin. S	taff Asst.	06-29-1995
TYPE OR PRINT NAME Gail M.	Jefferson, Rm 1295C		TEI	LEPHONE NO. (303) 830-6157
(This space for State Use)				
APPROVED BY Original Signed by	FRANK T. CHAVEZ	SUPERVISOR DI	STRICT#3	DATE JUN 3 0 1991

Sullivan Gas Com C # 1 - Subsequent - Repair and Commingle

MIRUSU 12/28/94. TOH w/tbg, rods and pumps. TIH set RBP @ 5258'. Tested csg to 1000#. Held ok.

Ran CBL from 100'-4492'. TOC @ 3900'. Perforated from 1,199-1200' w/2jspf, .500 inch diameter, 189-190' w/2 jspf, .500 inch diameter, total 4 shots fired.

Set pkr at 824' squeeze perfs at 1200' with 170 sxs Class B cmt. Cmt squeeze at 700#. Squeeze upper perf @ 190' w/13 sxs Class B cmt. Squeeze perf to 2000# displacing .5 bbls cmt into leak.

Drill out squeeze cmt 94-208', test squeeze to 500#. Held ok. Tag next squeeze @ 1052', drill to 1352', drilling hard cement. Drill out cmt squeeze to 1721'.

Drll cmt, SD, cmt too soft. Drill to 1229', test squeeze at 1200'. Drill out to 1917', drill out cmt to 2200'. Drill out cmt to 2511'. Drill out cmt to 2886'. Drill from 2886-3341'. Circ hole clean, test csg to 600PSI, leaked off 250 PSI in 3 min. Test failed.

Squeeze from 3316-3527' w/25 sxs Class B cmt. Squeeze to 1000#, displ 1/2 bbl cmt into leak.

Drill out cmt to 3580' and press test. Test failed. Squeeze w/20 sxs Class B cmt from 3338-3590' to 750#, bled off 130# in 3 min. Test failed. TIH w/pkr test csg could not find a leak. TIH w/bit, tag cmt @3393'. Drill cmt to 3427'. Circ hole clean.

Drill CIBP set at 6100' to isolate Dakota zone, TIH to tag fill @ 6359'. Clean out fill to 6364'. TOH lay down drill equip. TIH land tbg @ 6350'.

RDMOSU 2/1/95.