Amoco Production Company (USA)
Petroleum Center Building
501 Airport Drive
Farmington, New Mexico 87401
505-325-8841

R. W. Schroeder
District Superintendent

September 29, 1982

New Mexico Oil Conservation Division
Attn: Michael E. Stogner,
Petroleum Engineer
P. O. Box 2088
Santa Fe, NM 87501

File: DHS-443-986.510.1

Dear Mr. Stogner:

Commingling Application for the Jicarilla Gas Com 35 D No. 1

Enclosed find two copies of the commingling application for the subject well. This is in response to your notice that the original application was never received in the Santa Fe office of the NMOCD.

The well was completed in the Gallup horizon to determine if development of our Gallup acreage is economically feasible. Prior to evaluating further Gallup potential in this area, we need to have commingling approval for this well. A timely response would be greatly appreciated.

Yours very truly,

R. W. Schroeder

AMM/tk

Enclosures

Amoco Production Company (USA)

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

R. W. Schroeder
District Superintendent

July 12, 1982

New Mexico Oil Conservation Division
Box 2088
Santa Fe, NM 87501

File: DHS-299-986.510.1

Commingling Application for the Jicarilla Gas Com 35 D No. 1
1650' FSL x 1040' FWL, Section 12, T24N, R5W
Rio Arriba County, New Mexico

Amoco Production Company requests approval to commingle production from the Otero Gallup and Basin Dakota pools in the subject well. The Dakota formation was first delivered in this well on January 29, 1980. The Gallup formation was completed in May 1982 to offset marginal Dakota production and prevent drainage of Amoco's Gallup acreage. This commingling will utilize a production packer set between the two zones at 6900' and a sliding sleeve set a 6895' to produce up a 2-3/8" tubing string landed at 7036'.

The commingling of the Gallup and Dakota in this area is necessary to justify development of our Gallup acreage. Due to the low initial producing rates (132 MCFD and 22 BOPD) and the anticipated steep production decline of the Gallup, drilling and completing a Gallup well cannot be economically justified. Production from the Dakota formation is also marginal in this area. The Dakota gas production in Jicarilla Gas Com 35 D No. 1 has declined to 90 MCFD in only two years. Therefore, it is economically attractive to commingle the Basin Dakota and Otero Gallup pools on the Jicarilla Contract 35A lease.

The proposed commingling will not adversely effect either zone. The following information is provided in support of our application.

1. The total combined oil production from the two horizons is 26 BOPD. This satisfies the 40 BOPD maximum set for a producing depth of 6000 feet to 6999 feet.

2. During the post-frac production test the Gallup formation was flowing on its own. We intend to flow the two formations together until liquid loading becomes a problem. At that time, some means of deliquefication will be implemented.

3. Formation water samples collected from the Gallup and Dakota formations were analyzed and found to be compatible with each other. The Gallup produced two barrels of water on the first day of the post-frac production test. During the remainder of the test, the Gallup did not produce any water. Although we do not believe the Gallup will produce any water once commingled with the Dakota, water samples were collected from both formations to check for compatibility. The two waters were commingled and allowed to set for several days in National Cementers' laboratory. During this time, the chemists did not observe any formation of precipitates. The total dissolved solids in the Gallup and Dakota waters are very similar, 21708 and 18514 ppm, respectively. This indicates that there will be no formation damage in the Dakota formation due to swelling clays once the water is commingled.

4. Neither zone has a history of senstivity to liquid hydrocarbons. This is evidenced by the Dakota's favorable response to gelled oil fracs performed in the past. Amoco routinely stimulates Basin Dakota wells with frac fluid containing 5 percent condensate.

5. The measured bottom hole pressure of the Dakota and Gallup formation is 1423 psig and 1304 psig respectively. These figures represent the bottom hole pressure of each formation at the end of a seven day shut-in period. The bottom hole pressure of the lower pressure zone is 92 percent of the bottom hole pressure of the higher pressure zone which is well within the 50 percent required by the State.

6. The total value of the crude will not be reduced by commingling. This is substantiated by the fact that all crude having a gravity of 40°API or greater receives the same price per barrel. The API gravity of the Gallup crude was measured at 46°API and the Dakota condensate at 53°API.

7. There is no evidence that the Gallup and Dakota gases are not compatible based upon the compositional gas analysis (see Attachments 12 and 13). The base gas price of both horizons is the same since they share a common wellbore. Also since the BTU price adjustment is "directly" related to the BTU of the gas, the value of the commingled gas production will be equal to the sum of the values of the individual streams.

8. Amoco operates both the Gallup and Dakota formations with a 100 percent working interest. The royalty ownership is also identical for both formations.

9. The Gallup and Dakota formations are commingled in several wells offsetting Amoco's acreage. The nearest such offset is Dugan Production Company's A New Dawn No. 1 located approximately 1.5 miles southwest of the Jicarilla Gas Com 35 D No. 1 (see Attachment 16).

In compliance with NMOCD Rule 303C, "Downhole Commingling," please find attached two copies of each of the following:

Attachment No.	
1	"Well Location and Dedication Plat" (NMOCD Form C-102) for the Gallup formation.
2	"Well Location and Dedication Plat" (NMOCD Form C-102) for the Dakota formation.
3	List of names and addresses of operators of all outside operated wells.
4	A "Well Completion Report" (USGS Form 9-330) for the Gallup formation.
5	A "Well Completion Report" (USGS Form 9-330) for the Dakota formation.
6	Production decline history for the Basin Dakota from January 1980 to April 1981.
7	Results of the five day post-frac flow test obtained on the Otero Gallup.
8	NMOCD Form C-116 for the Gallup showing the results of a 23 hour flow test. State rules require current (within 30 days) productivity tests. Due to the time involved in receiving reservoir fluid analysis, we were unable to prepare and submit the commingling application within 30 days of the Gallup productivity test. The Gallup formation has not produced since the post-frac flow test; therefore, the productivity of this horizon is unchanged. For this reason, we request an exception be granted to the 30-day limit required for the Gallup.
9	NMOCD Form C-116 for the Dakota showing the results of a 24 hour flow test prior to completing the Gallup. Amoco also requests that an exception be granted to the 30-day limit required for the Dakota. Again, the Dakota has not been produced since the time the

Attachment No.

9 Cont'd	24 hour productivity test was taken. The test is therefore representative of the well's present producing potential.
10	Results of the bottom hole pressure readings taken in the Dakota.
11	Results of the bottom hole pressure readings taken in the Gallup.
12	A copy of the gas analysis performed on the Dakota gas in the subject well.
13	A copy of the gas analysis performed on the Gallup gas in the subject well.
14	A copy of the letter sent to all offset operators and the Minerals Management Services notifying them of our intent to commingle.
15	Wellbore diagram of the proposed Gallup/Dakota commingling.
16	Map showing all wells offsetting the Jicarilla Gas Com 35 D No. 1 in a nine section block.

To allocate production to the individual Gallup and Dakota horizons, we recommend the following based on the 24 hour productivity tests:

1. Allocate 59.5 percent of the toal gas production to the Gallup horizon.

2. Allocate 40.5 percent of the total gas production to the Dakota horizon.

3. Allocate 81.5 percent of the total oil production to the Gallup horizon.

4. Allocate 18.5 percent of the total oil production to the Dakota horizon.

5. The Gallup gas production is expected to decline at a steeper rate than the Dakota formation. Once the commingled production is stabilized, a new apportionment recommendation for the two horizons will be made based upon the stabilized Dakota production decline history.

In order to evaluate additional Gallup potential in this area, we would like to obtain commingling approval for this well as soon as possible. Your handling of this application in a timely manner is appreciated.

Sincerely,

R. W. Schroeder
DHR

RFV/tk

Attachments

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

Minerals Management Service
Drawer 600
Farmington, NM 87401

ATTACHMENT NO. 1

Operator	Lease	Well No.
AMOCO PRODUCTION COMPANY	JICARILLA GAS COM 35-D	1

Unit Letter	Section	Township	Range	County
L	12	24N	5W	Rio Arriba

Actual Footage Location of Well:
1650 feet from the South line and 1040 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6687	Dakota /Gallup	Basin Dakota /Otero Gallup	320 /160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

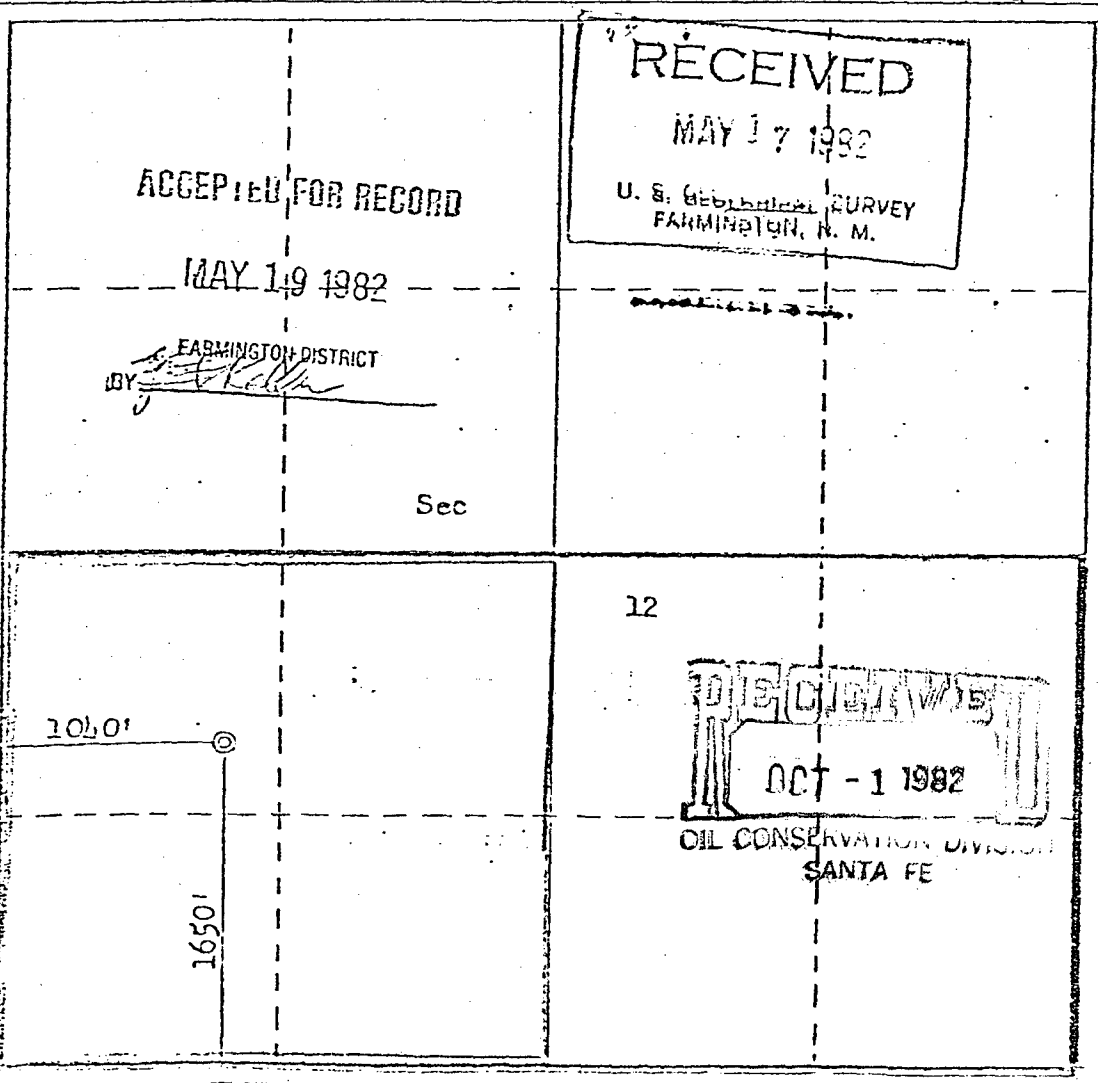
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 _____

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.

Name: W. L. Peterson

Position: DISTRICT ENGINEER

Company: AMOCO PRODUCTION COMPANY

Date: May 13, 1982

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: November 29, 1978

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr, Jr.

Certificate No. 3950

ATTACHMENT NO. 2

N. MEXICO OIL CONSERVATION COMMISS.

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

Operator	Lease	Well No.
AMOCO PRODUCTION COMPANY	JICARILLA GAS COM 35-D	1

Unit Letter	Section	Township	Range	County
I	12	24N	5W	Rio Arriba

Actual Footage Location of Well:
1650 feet from the South line and 1040 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6687	Dakota	Basin Dakota	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

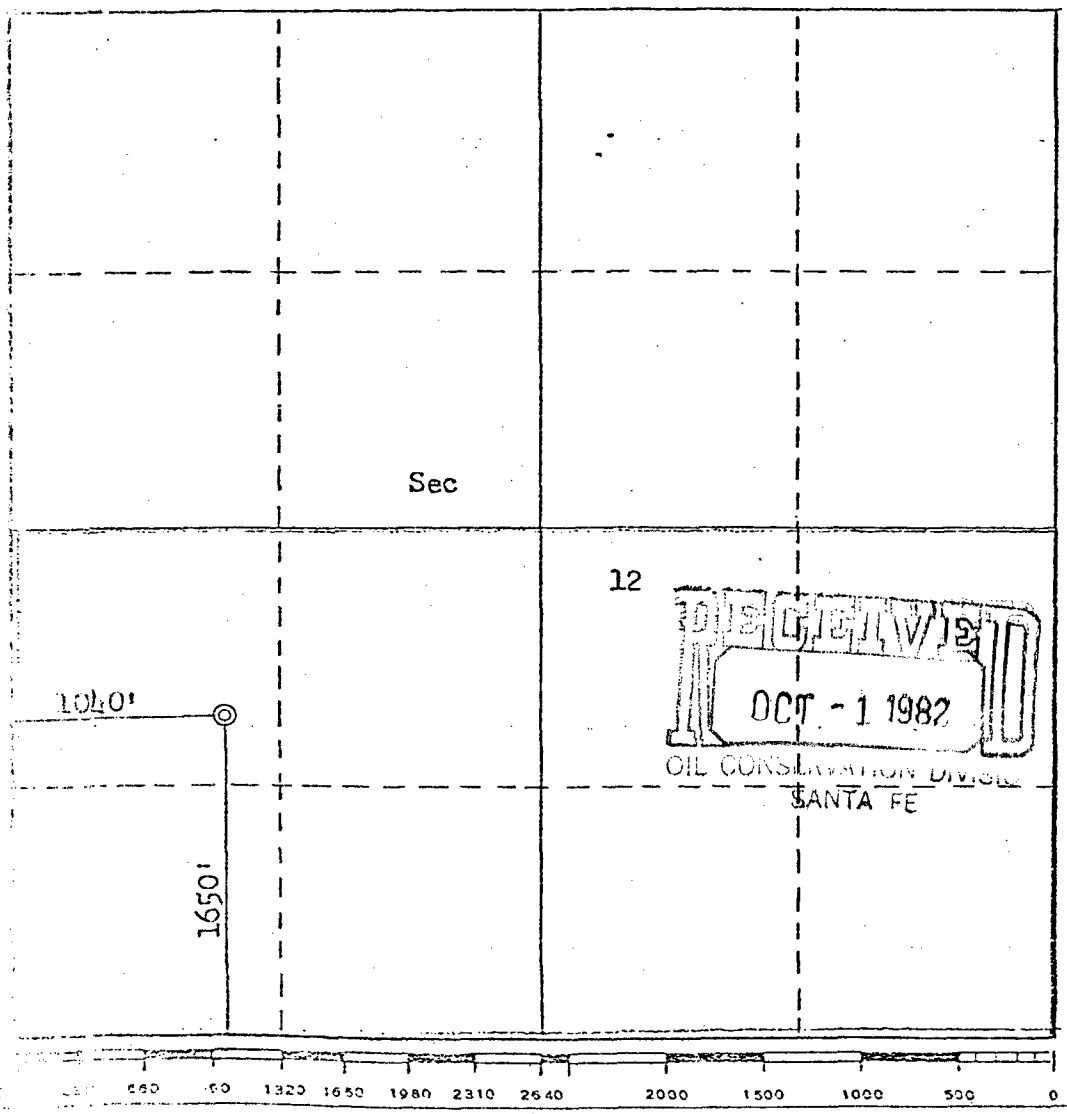
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 _____

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.

Name
J. L. KRUPKA

Position
DISTRICT ENGINEER

Company
AMOCO PRODUCTION COMPANY

Date
DECEMBER 12, 1978

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
November 29, 1978

Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr Sr.

Certificate No.
3950

ATTACHMENT NO. 3

List of names and addresses of operators of all outside operated wells.

Dugan Production Company
P. O. Box 208
Farmington, NM 87401

El Paso Natural Gas Company
P. O. Box 990
Farmington, NM 87401

Energy Reserves Group, Inc.
P. O. Box 977
Farmington, NM 87401

ATTACHMENT NO. 4

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: Jicarilla Tribal DP No.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Jicarilla Apache

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

7. UNIT AGREEMENT NAME

b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [ ] DEEP EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other: Recomplete

8. FARM OR LEASE NAME: Jicarilla Gas Com 35-D

2. NAME OF OPERATOR: Amoco Production Company

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: 501 Airport Dr., Farmington, NM 87401

10. FIELD AND POOL, OR WILDCAT: Otero Gallup

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1650' FSL x 1040' FWL
At top prod. interval reported below: Same
At total depth: Same

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: NW/4, SW/4, Section 12, T24N, R5W

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
		Rio Arriba	New Mexico

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
2-12-79	2-28-79	5-15-82	6687' GL, 6700' KB	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
7150	7115	2	→	0 - TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
5826'-6031' Otero Gallup

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN
GR, IEL, SP, CNL, FDC

27. WAS WELL CORED: No

OCT - 1 1982
OIL CONSERVATION DIV.
SANTA FE

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	414'	12-1/4"	300 sx	
4-1/2"	10.5#	7159'	7-7/8"	1730 sx	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	7036'	6900'

31. PERFORATION RECORD (Interval, size and number)
5984'-6031', with 2 spf, 5826'-5836', 5842'-5864', 5892'-5912', 5918'-5924' 5928'-5934', with 2 spf, a total of 222 .40" holes

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5826'-6031'	90,000 gallons of frac fluid and 132,500# 20-40 sand

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
5-27-82	Flowing	S. I.

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
5-27-82	23	1.25		21	127	0	.6048

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
40 psig	300 psig		22	132	0	46.0

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)
To be sold

TEST ACCEPTED FOR RECORD

35. LIST OF ATTACHMENTS

JUN 16 1982

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [signature] TITLE Administrative Supervisor DATE 6-14-82

FARMINGTON DISTRICT
BY

*(See Instructions and Spaces for Additional Data on Reverse Side)

OPERATOR

(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE (See other instructions on reverse side)

ATTACHMENT NO. 5
Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: Jicarilla Tribal DP #35A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Jicarilla Apache

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Jicarilla Gas Com 35D

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Basin Dakota

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: NW/4 SW/4 Section 12, T-24-N, R-5-W

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

RECEIVED
OCT 3 1979
FARMINGTON, N. MEX.
DISTRICT

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: 501 Airport Drive Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1650' FSL x 1040' FWL, Section 12, T-24-N, R-5-W
At top prod. interval reported below: Same
At total depth: Same

14. PERMIT NO.

DATE ISSUED

12. COUNTY OR PARISH: Rio Arriba

13. STATE: NM

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
2/12/79	2/28/79	4/18/79	6687' GL, 6700' KB	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
7150'	7115'		→	0-TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 6946'-6998', Dakota

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Induction Gamma-Ray, Compensated Densilog and Neutron

27. WAS WELL CORED: No

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	414'	12-1/4"	300 sx	
4-1/2"	10.5#	7159'	7-7/8"	1730 sx	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)*	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	7006'	None

31. PERFORATION RECORD (Interval, size and number): 6946'-6952', 6974'-6998', 2 SPF, total of 60 holes

OCT - 1 1982
OIL CONSERVATION DIV.

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6946'-6998'	94,182 gallons frac fluid
	190,000 pounds sand

33.* SANTA FE PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
	Flowing	SI

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
4/28/79	3 hours	.75"			137		

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
83 psig	435 psig			1098		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): To be sold

TEST WITNESSED BY: [illegible] 1979

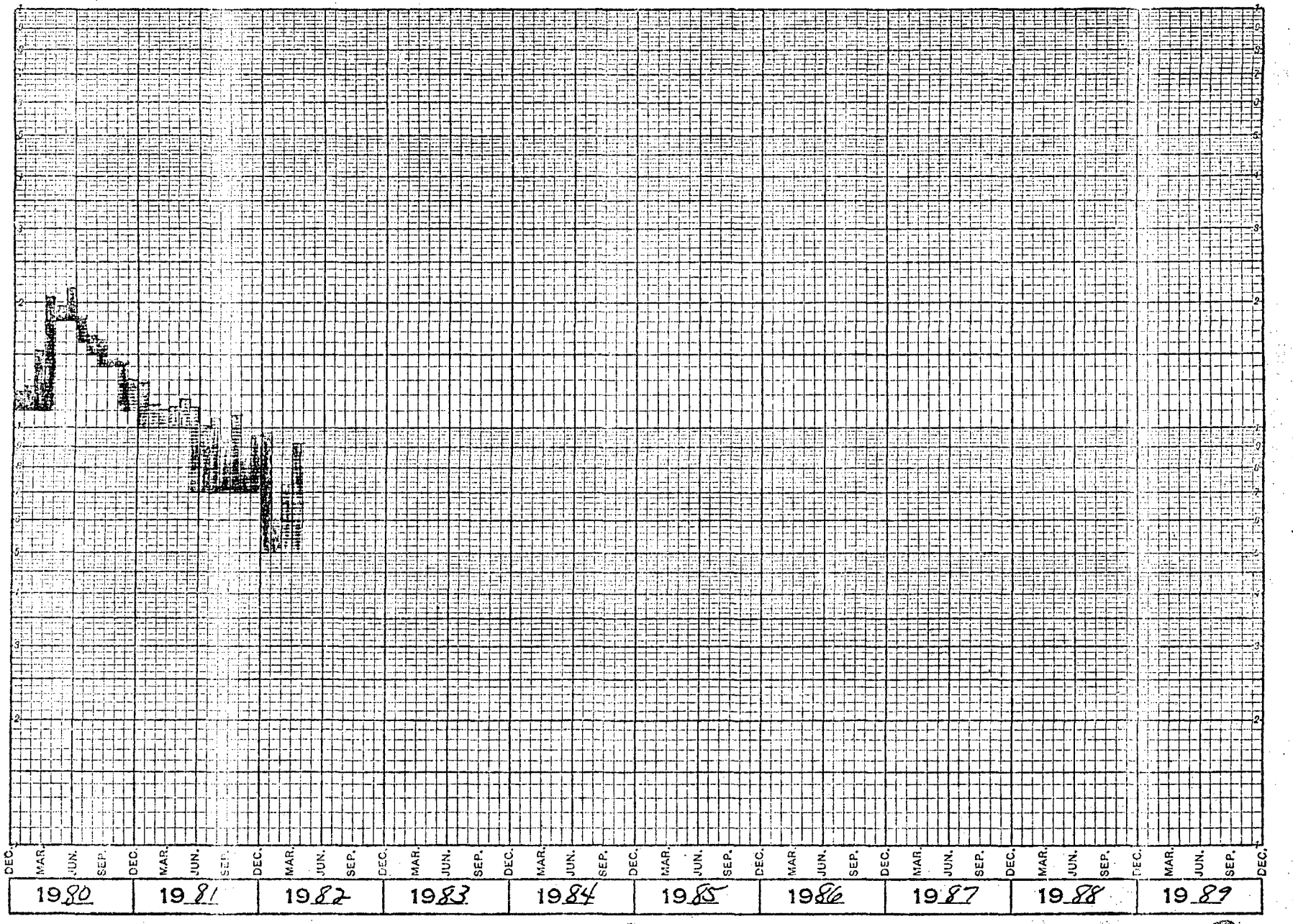
35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED F. E. SVOBODA TITLE Dist. Adm. Supervisor DATE 5/4/79

*(See Instructions and Spaces for Additional Data on Reverse Side)

Jicarilla Gas Com 350 #1



ATTACHMENT NO. 6

WELL NAME JICARILLA GAS COM "35D" #1
L 12-24N 5W
BASIN DAKOTA

1980

	DAYS	BO	BW	MCF	MCFD
JAN	2			243	122
FEB	28	140		3518	126
MAR	31			3169	151
APR	30	275	2	6144	205
MAY	25	188	2	4914	197
JUNE	23	196	2	5002	217
JULY	28	105	2	5152	184
AUG	31	2	2	5167	167
SEPT	30	130	2	4914	164
OCT	31	195	2	4566	147
NOV	27	130	1	3935	146
DEC	31	72	1	4041	130

1981

	DAYS	BO	BW	MCF	MCFD
JAN	29	145		3717	128
FEB	28	85		3175	113
MAR	24	93		3189	110
APR	30	97		3363	112
MAY	23	78		2666	116
JUNE	30	73		3365	112
JULY	31	49		3113	100
AUG	31	75		3242	105
SEPT	29	82		2685	93
OCT	31	85		3330	107
NOV	16	58		1381	86
DEC	25	93		2412	96

1982

	DAYS	BO	BW	MCF	MCFD
JAN	31	88		2608	77
FEB	27	71		1632	60
MAR	26	36		1901	73
APR	23	41		2115	92
MAY					
JUNE					
JULY					
AUG					
SEPT					
OCT					
NOV					
DEC					

1983

	DAYS	BO	BW	MCF	MCFD
JAN					
FEB					
MAR					
APR					
MAY					
JUNE					
JULY					
AUG					
SEPT					
OCT					
NOV					
DEC					

ATTACHMENT NO. 6

ATTACHMENT NO. 7

The following production figures were obtained on the Otero Gallup formation following a seven day post-frac pressure build-up.

Date	Flow Time (Hrs.)	BOPD	BWPD	MCFD
5-23-82	18	73	3	318
5-24	24	27	0	247
5-25	24	22	0	177
5-26	24	22	0	177
5-27	23	22	0	132

All oil, water, and gas was measured through a three phase separator. Gas production was measured through a 1.250 inch orifice plate.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P.O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-116
Revised 10-1-78

GAS - OIL RATIO TESTS

Operator: Amoco Production Company
Pool: Otero Gallup
County: Rio Arriba
Address: 501 Airport Dr., Farmington, NM 87401
TYPE OF TEST - (X): Scheduled [ ] Completion [ ] Special [X]

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS - OIL RATIO CU.FT/BBL
Jicarilla Gas Com 35-D	1	L	12	24N	5W	5-27-82	F	1.25	40		23	0	46	21	127	6048

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 that 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. Specific gravity base will be 0.60.

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.

Dale H. Abernathy
(Signature)
District Engineer
(Title)
7-12-82

ATTACHMENT NO. 1 CO

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-116
Revised 10-1-78

GAS - OIL RATIO TESTS

Operator	Pool	County
Amoco Production Company	Basin Dakota	Rio Arriba

Address	TYPE OF TEST - (X)	Scheduled	Completion	Special
501 Airport Drive, Farmington, NM 87401		[ ]	[ ]	[X]

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS - OIL RATIO CU.FT/BBL
Jicarilla Gas Com 35-D	1	L	12	24N	5W	4-21-82	F	Open			24	.25	53.4	5	90	18,000

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 that 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. Specific gravity base will be 0.60.

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.

Dale H. Shoemaker
(Signature)

District Engineer
(Title)

7-12-82
(Date)

ATTACHMENT NO. 5

ATTACHMENT NO. 10

The following figures were taken from the pressure chart used in obtaining the 7-day Gallup bottom hole pressure.

Depth (ft)	Pressure (psig)
0	0
1000	1
2000	1
3000	47
4000	478
5125	960
5525	1131
5925	1304

The measured bottom hole pressure of the Gallup formation in the subject well is 1304 psig.

The Gallup formation was shut-in on May 14, 1982, and the above bottom hole pressure measurement was taken on May 21, 1982.

ATTACHMENT NO. 11

The following figures were taken from the pressure chart used in obtaining the 7-day Dakota bottom hole pressure.

Depth (ft)	Pressure (PSIG)
0	1115
1000	1156
2000	1199
3000	1235
4000	1287
5000	1331
5785	1366
6185	1388
6585	1405
6985	1423

The measured bottom hole pressure of the Dakota formation in the subject well is 1423 psig.

The Dakota formation was shut-in on April 28, 1982, and the above bottom hole pressure measurement was taken on May 5, 1982.

ATTACHMENT NO. 12

07/17/81

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

CHROMATOGRAPHIC GAS ANALYSIS REPORTS

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

ANAL DATE 07 09 81 METER STATION NAME JIC GAS COM 35 D #1 METER STA 90880 OPER 0203

TYPE CODE	SAMPLE DATE	EFF. DATE	USE MOS.	SCALE	H2S GRAINS	LOCATION
00	07 09 81	07 14 81	06	1		4 F 01

	NORMAL MOL%	GPM
C O 2	.55	.000
H 2 S	.00	.000
N2	1.51	.000
METHANE	73.77	.000
ETHANE	14.42	3.854
PROPANE	6.12	1.684
ISO-BUTANE	1.14	.373
NORM-BUTANE	1.38	.435
ISO-PENTANE	.48	.176
NORM-PENTANE	.33	.120
HEXANE PLUS	.30	.131
TOTALS	100.00	6.773

SPECIFIC GRAVITY .758

MIXTURE HEATING VALUE
(BTU/CF AT 14.73 PSIA,60 DEGREES,DRY) 1,291

RATIO OF SPECIFIC HEATS 1.274

NO TEST SPECIFIED FOR H2S CONTENT

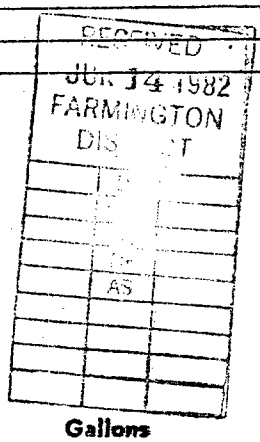
ATTACHMENT NO. 13

CHEMICAL & GEOLOGICAL LABORATORIES

P.O. Box 2794
Casper, Wyoming 82602

GAS ANALYSIS REPORT

Company AMOCO Production Co. Date 6-9-82 Lab. No. 40776-1
Well No. Jicarilla Apache Tribal 35 D-1 Location L 12-24-5
Field Gallup Formation Gallup
County Rio Arriba Depth
State New Mexico Sampling point Tubing
Line pressure 18 psig; Sample pressure 12 psig; Temperature ° F; Container number #RC 1020
Remarks
Flowing tubing pressure ---------- 18psig
(5-28-82)



Component	Mole % or Volume %	Gallons per MCF
Oxygen	0	
Nitrogen	0.95	
Carbon dioxide	0.60	
Hydrogen sulfide	NIL	
Methane	69.34	
Ethane	13.31	
Propane	6.57	1.802
Iso-butane	1.34	0.437
N-butane	2.58	0.812
Iso-pentane	1.52	0.555
N-pentane	1.69	0.611
Hexanes & higher	2.10	0.967
Total	100.00	5.184

GPM of pentanes & higher fraction 2.133

Gross btu/cu. ft. @60° F. & 14.7 psia (dry basis) 1475
Specific gravity (calculated from analysis) 0.872
Specific gravity (measured) 0.870

Remarks:

ATTACHMENT No. 14

July 12, 1982

Dugan Production Company
P.O. Box 208
Farmington, NM 87401

Energy Reserves Group Inc.
P.O. Box 977
Farmington, NM 87401

El Paso Natural Gas Company
P.O. Box 990
Farmington, NM 87401

Minerals Management Services
Drawer 600
Farmington, NM 87401

File: DHS-296-986.510.1

Dear Sir:

Proposed Downhole Commingling of the Basin Dakota and Otero Gallup Pools
In Jicarilla Gas Com 35 D No. 1, Rio Arriba County, New Mexico

This is to advise you that the Farmington District office of Amoco Production Company is requesting administrative approval from the Secretary-Director of the New Mexico Oil Conservation Division to downhole commingle production from the well below:

Jicarilla Gas Com 35 D No. 1; Unit L, Section 12, T24N, R5W

We propose to commingle production from the Dakota and Gallup formations in the subject well.

Enclosed is a wellbore diagram and a map showing location of offset operated wells.

If you, as an offset operator, have no objections to the commingled production of the Basin Dakota and Otero Gallup pools from the subject well, please sign the waiver below and send to:

New Mexico Oil Conservation Division
Attn: Mr. Joe D. Ramey
Box 2088
Santa Fe, NM 87501

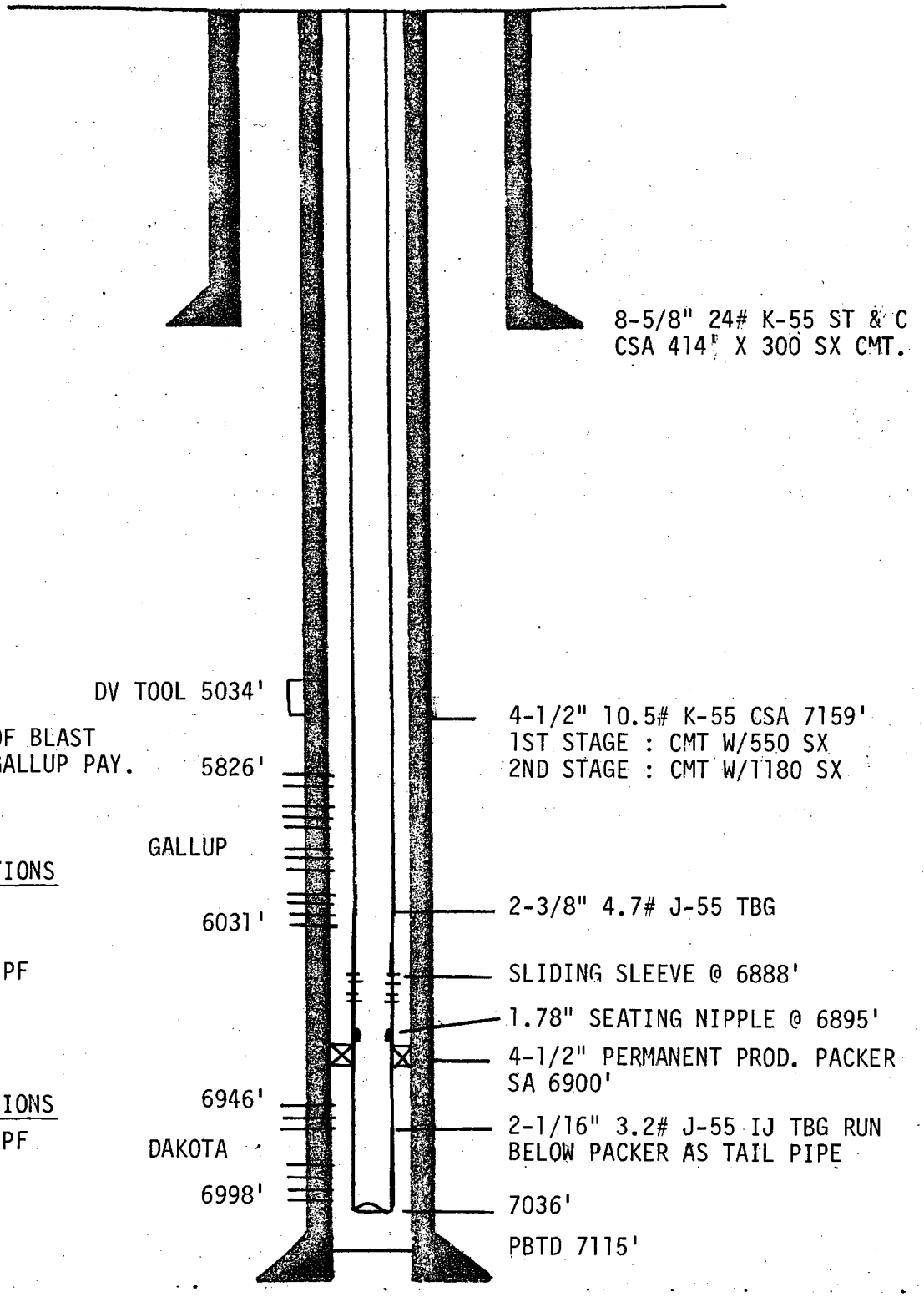
We would appreciate your sending one executed copy to the undersigned.

Very truly yours,

Original Signed By
R. W. SCHROEDER

RFV/tk
Enclosures

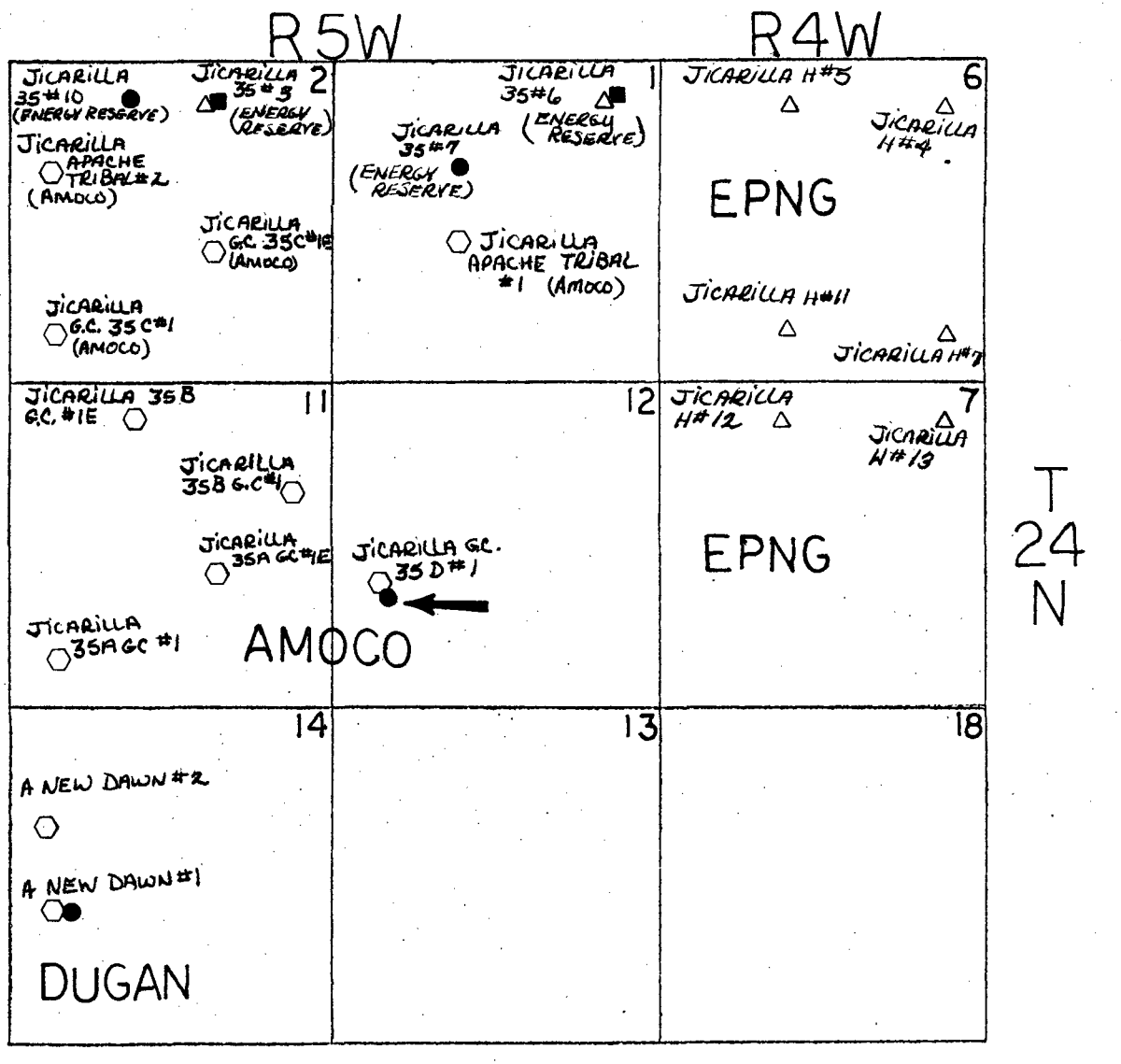
ATTACHMENT NO. 15



CENTRALIZERS RUN BETWEEN 5054' AND 7139'.

AMOCO PRODUCTION COMPANY	SCALE:
JICARILLA GAS COM 35D NO. 1	DRG. NO.

JICARILLA GAS COM "35D" #1



⬡ BASIN DAKOTA WELLS
■ OTERO CHACRA WELLS
● OTERO GALLUP WELLS
△ SOUTH BLANCO PICTURED CLIFFS WELLS

PROPOSED COMMINGLED WELL ⬡●

ATTACHMENT NO. 16

Joe

Amoco Production Company (USA)

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

R. W. Schroeder
District Superintendent

September 2, 1982

Frank Chavez, District Supervisor
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

File: DHS-396-986/510.1

Dear Mr. Chavez:

Commingling Application for the Jicarilla Gas Com 35D No. 1 L-12-24-5

Amoco Production Company would like to know the status of the commingling application for the Jicarilla Gas Com 35D No. 1 well located in Rio Arriba County. The application was submitted to the Santa Fe office of the Oil Conservation Division on July 12, 1982.

The well was completed in the Gallup to determine if development of our Gallup acreage is economically feasible. Prior to evaluating further Gallup potential in this area, we need to have commingling approval for this well. A timely response would be greatly appreciated.

Yours very truly,

R. W. Schroeder

AMM/de

9/27/82

Mr. Schroeder,

This office did not receive the downhole commingling application for this well; however we did receive waivers from Energy Reserves Group, Inc., El Paco Natural Gas Company and Dugan Production Company. Please resubmit, to my attention a copy of your application.

Michael E. Stogner
Petroleum Engineer
Santa Fe, NM

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

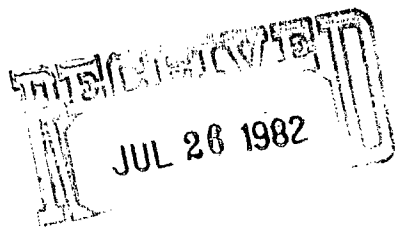
OIL CONSERVATION DIVISION

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 7/20/82



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

Gentlemen:

I have examined the application dated 7-13-82

for the Amoco Production Co. Jic. San Com 350 #1 L-12-24N-5W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve

Yours truly,

Frank T. Chavez

Amoco Production Company (USA)
Petroleum Center Building
600 Airport Drive
Farmington, New Mexico 87401
505-325-8841

R. W. Schroeder
District Superintendent

July 12, 1982

Dugan Production Company
P.O. Box 208
Farmington, NM 87401

El Paso Natural Gas Company
P.O. Box 990
Farmington, NM 87401

Energy Reserves Group Inc.
P.O. Box 977
Farmington, NM 87401

Minerals Management Services
Drawer 600
Farmington, NM 87401

File: DHS-296-986.510.1

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Box 2088
Santa Fe, NM 87501

We would appreciate your sending one executed copy to the undersigned.

Very truly yours,

R. W. Schroeder

RFV/tk
Enclosures

JUL 19 1982

W A I V E R

We hereby waive any objections to Amoco Production Company's application for commingling production as set forth above.

EL PASO NATURAL GAS COMPANY
Company

By John A. Allen
Regional Land Manager

July 15, 1982
Date

Amoco Production Company (USA)
Petroleum Center Building
501 Airport Drive
Farmington, New Mexico 87401
505-325-8841

R. W. Schroeder
District Superintendent

July 12, 1982

Dugan Production Company
P.O. Box 208
Farmington, NM 87401

Energy Reserves Group Inc.
P.O. Box 977
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R. W. SCHROEDER

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Enclosures

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Company

By

Date

Amoco Production Company (USA)
Petroleum Center Building
501 Airport Drive
Farmington, New Mexico 87401
505-325-8841

R. W. Schroeder
District Superintendent

July 12, 1982

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R. W. Schroeder

RFV/tk
Enclosures

W A I V E R

We hereby waive any objections to Amoco Production Company's application for commingling production as set forth above.

Energy Reserves Group, Inc.
Company

Lee A. McLean
By Rocky Mountain District Manager

July 19, 1982
Date