

dugan production corp.

May 12, 1998

Ms. Lori Wrotenbery, Director
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Mr. Duane Spencer
Bureau of Land Management
1235 La Plata Highway
Farmington, NM 87401

RECEIVED
MAY 13 1998
OIL CON. DIV.
DIST. 3

Re: Application for Administrative Approval to Downhole Commingle
Dugan Production's Garrett Federal Com No. 1E
API No. 30-045-24302 (B-12-29N-11W)
Blanco Mesaverde & Basin Dakota Gas Pools
San Juan County, NM

Dear Ms. Wrotenbery & Mr. Spencer:

Attached is NMOCD Form C-107A and it's associated attachments where in we are requesting your approvals to downhole commingle natural gas and condensate production from the Blanco Mesaverde and Basin Dakota gas pools in the currently dually completed Garrett Federal Com No. 1E well operated by Dugan Production Corp. Dugan Production holds 100% of the working interest and all interest in each spacing unit is common.

This well is currently dually equipped with two strings of 2-1/16" tubing and the Mesaverde completion requires a wellhead compressor to produce into the pipeline which averages 175-200 psia. It is also necessary to vent the Mesaverde tubing two to four times a month to unload a small amount of accumulated water.

The Dakota completion does not use wellhead compression but is equipped with a plunger lift which is necessary to lift the associated condensate production along with a small amount of water. Even with the plunger, it is necessary to vent the Dakota tubing four to seven times a month to keep the liquids from logging the Dakota off.

The proposed downhole commingling will allow the installation of larger tubing and both completions to be produced with a plunger. In addition we plan to use the Mesaverde compressor for the commingled production. If all goes well, we hopefully will eliminate (or at least reduce) the need to blow the well to unload accumulated liquids and will have a much more efficient operation and possibly some increased gas production.

Should you have questions or need additional information, please let me know.

Sincerely,

John D. Roe

John D. Roe
Engineering Manager

JDR/tmf

cc: NMOCD - Aztec

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

Rt 11 South First St., Artesia, NM 88210-2835

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Dugan Production Corp.

P. O. Box 420, Farmington, NM 87499-0420

Operator

Address

Garrett Federal Com

1E

B-12-T29N-R11W

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 006515

Property Code 003690

API NO. 30-045-24302

Federal ☒ State ☐(and/or) Fee ☒

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Blanco Mesaverde 72319		Basin Dakota 71599
2. Top and Bottom of Pay Section (Perforations)	4091-4664		6638-6743
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing with wellhead compression		Flowing with plunger lift
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 357 PSIA @ 4378' (calculated) (Original) b. 1509 PSIA @ 4378' (calculated)	a. b.	a. 346 PSIA @ 4378' (calculated @ MV datum) b. 1403 PSIA @ 4378' (calculated MV datum)
6. Oil Gravity (°API) or Gas BTU Content	1237 BTU/CF		1192 BTU/CF
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		Yes
* If Shut-In, give date and oil/gas/water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Date: Rates:	Date: Rates:	Date:
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 3/98 Average Rates: 57 MCFD + 0 BC/D + 0.25 BWP	Date: Rates:	Date: 3/98 Average Rates: 46 MCFD + 0.55 BC/D + 0.25 BWP
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0% Gas: 56%	Oil: % Gas: %	Oil: 100% Gas: 44%

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☐ No
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No11. Will cross-flow occur? ☒ Yes ☐ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☒ Yes ☐ No (If No, attach explanation)12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)14. If this well is on, or communized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOC Reference Cases for Rule 303(D) Exceptions: ORDER NO(S).

16. ATTACHMENTS:

- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication. -Attachments 1 & 2
- * Production curve for each zone for at least one year. (If not available, attach explanation.) -Attachments 3 & 4
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation method or formula. -Attachment No. 5
- * Notification list of all offset operators. -Attachments 6 & 7
- * Notification list of working, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

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

SIGNATURE John Roe TITLE Engineering Manager DATE May 12, 1998TYPE OR PRINT NAME John Roe TELEPHONE NO. (505) 325-1821

☐ AMENDED REPORT

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-24302	² Pool Code 71599	³ Pool Name Blanco Mesaverde
⁴ Property Code 003690	⁵ Property Name Garrett Federal Com	⁶ Well Number 1E
⁷ OGRID No. 006515	⁸ Operator Name Dugan Production Corp.	⁹ Elevation 5828'

¹⁰ Surface Location

U.L. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	12	29N	11W		1170	North	1470	East	San Juan

¹¹ Bottom Hole Location If Different From Surface

U/L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code C	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

		1170'	1470'
		Fee M.B. Garrett	Federal NM-03717B

17 OPERATOR CERTIFICATION

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

Signature John Roe

Printed Name John Roe

Title Engineering Manager

Date May 4, 1998

18 SURVEYOR CERTIFICATION

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 belief.

Date of Survey 4-21-80

Signature and Seal of Professional Surveyor: _____

Original survey made & signed by Fred B. Kerr, Jr.
Certificate Number 3950

District I
 P.O. Box 1980, Hobbs, NM 88241-1980
 District II
 811 South First, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

Form C-102
 Revised October 18, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-24302	² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code 003690	⁵ Property Name Garrett Federal Com	⁶ Well Number 1E
⁷ OGRID No. 006515	⁸ Operator Name Dugan Production Corp.	⁹ Elevation 5828'

¹⁰ Surface Location

¹ L. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	12	29N	11W		1170	North	1470	East	San Juan

¹¹ Bottom Hole Location If Different From Surface

¹ L. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code C	¹⁵ Order No.
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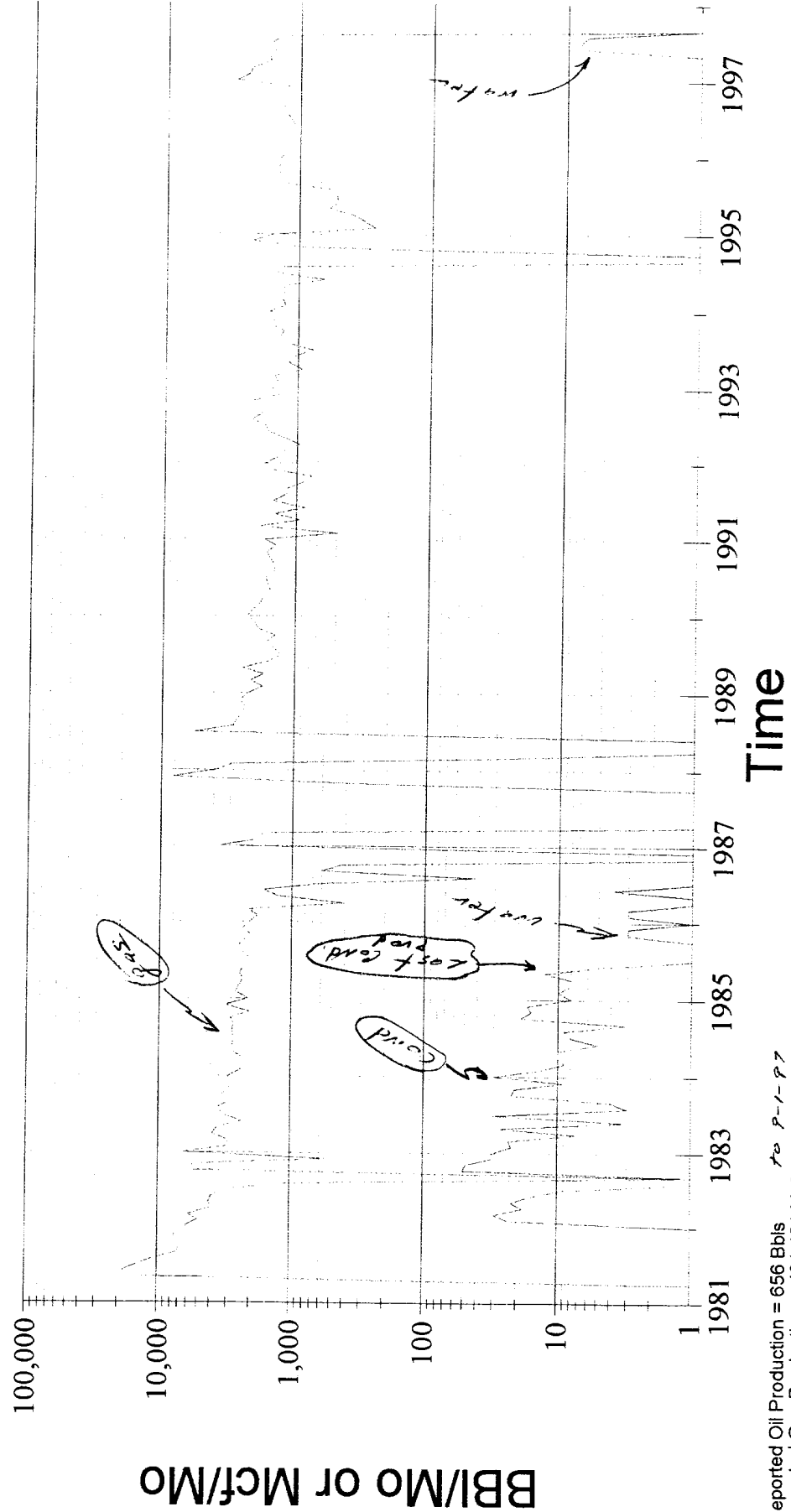
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

		1170'	1470'	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i></p> <p>Signature <u>John Roe</u></p> <p>Printed Name <u>John Roe</u></p> <p>Title <u>Engineering Manager</u></p> <p>Date <u>May 4, 1998</u></p>
		Fee M.B. Garrett	Federal NM-03717B	
				<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>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 belief.</i></p> <p>Date of Survey <u>4-21-80</u></p> <p>Signature and Seal of Professional Surveyer:</p> <p>Original survey made & signed by Fred B. Kerry, Jr. Certificate Number 3950</p>

Attachment No. 3

Oil
Gas
Water
Wells

Field: BLANCO *Mesa Verde*
 Lease: GARRETT FEDERAL COM | Well #1E
 Operator: DUGAN PRODUCTION CORPORATION
 Production Rate vs Time
 For the Period 01/1981 to 12/1997 | API: 30045243020000

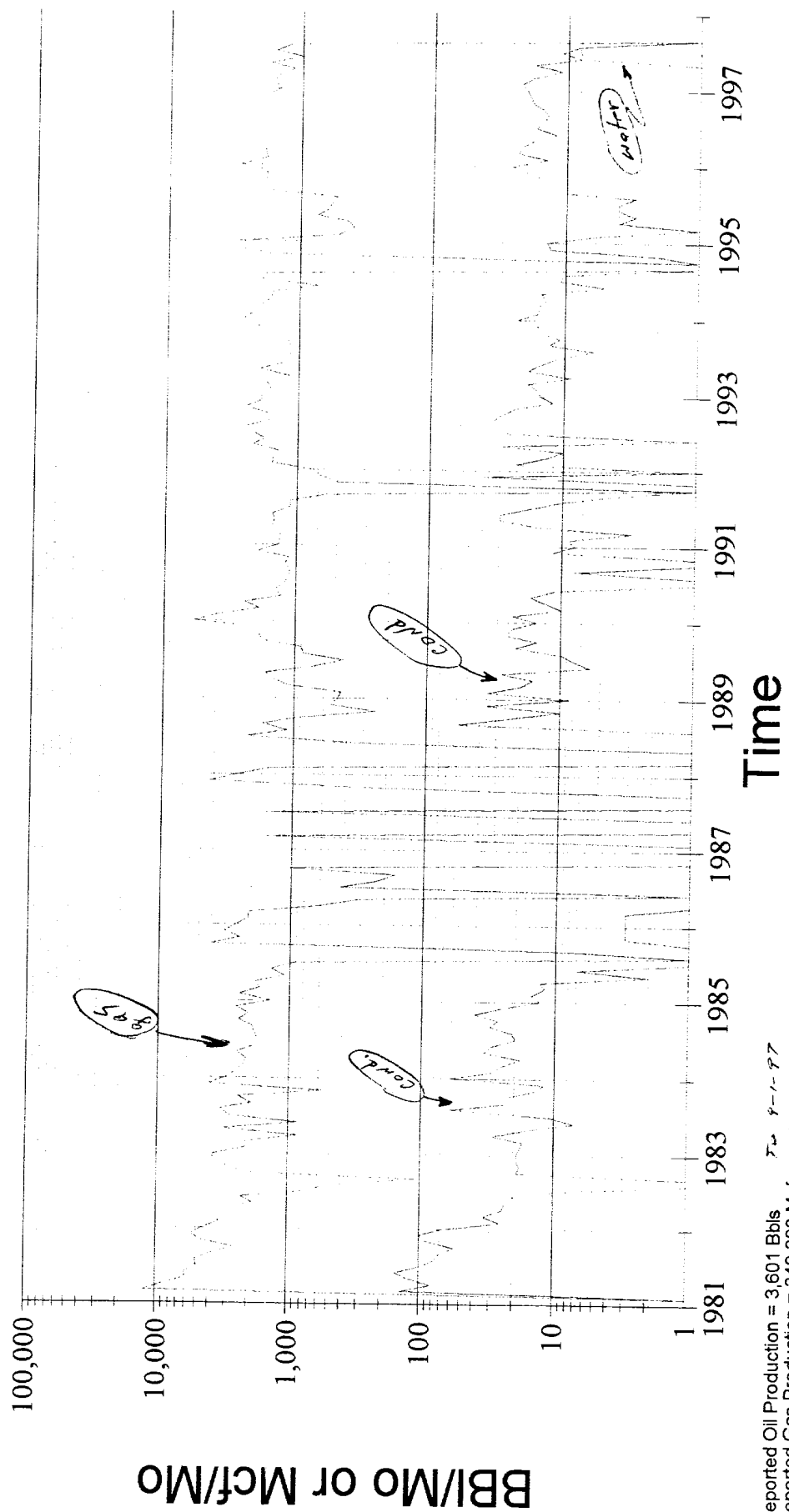


Reported Oil Production = 656 Bbls
 Reported Gas Production = 431,421 Mcf
 Reported Water Production = 40 Bbls

Attachment No. 4

Oil
Gas
Water
Wells

Field: BASIN Dakota
Lease: GARRETT FEDERAL COM | Well #1E
Operator: DUGAN PRODUCTION CORPORATION
Production Rate vs Time
For the Period 01/1981 to 12/1997 | API: 30045243020000



Reported Oil Production = 3,601 Bbls
Reported Gas Production = 349,390 Mcf
Reported Water Production = 39 Bbls

Attachment No. 5
Proposed Allocation of Downhole Commingled Production
Dugan Production's Garrett Federal Com 1E (B-12-29N-11W)
Blanco Mesaverde & Basin Dakota Gas Pools
API No. 30-045-24302

	<u>Gas-MCF</u>	<u>Condensate-bbl</u>	<u>Water-bbl</u>
<u>Cum. Prod. 1-1-98 & (% of total)</u>			
Blanco MV	438,175 (55.2%)	656 (15.3%)	57 (44.9%)
Basin DK	<u>356,192 (44.8%)</u>	<u>3632 (84.7%)</u>	<u>70 (55.1%)</u>
Total	794,367	4288	127

<u>1997 Production - 12 month & (% of total)</u>			
Blanco MV	22,420 (56.3%)	0 (0%)	39 (42%)
Basin DK	<u>17,386 (43.7%)</u>	<u>180 (100%)</u>	<u>54 (58%)</u>
Total	39,806	180	93

<u>Production - 3/98 & (% of total)</u>			
Blanco MV	1775 (55.6%)	0 (0%)	8 (50.0%)
Basin DK	<u>1418 (44.4%)</u>	<u>17 (100%)</u>	<u>8 (50.0%)</u>
Total	3193	17	16

Proposed commingled allocation - based upon 1997 annual production:

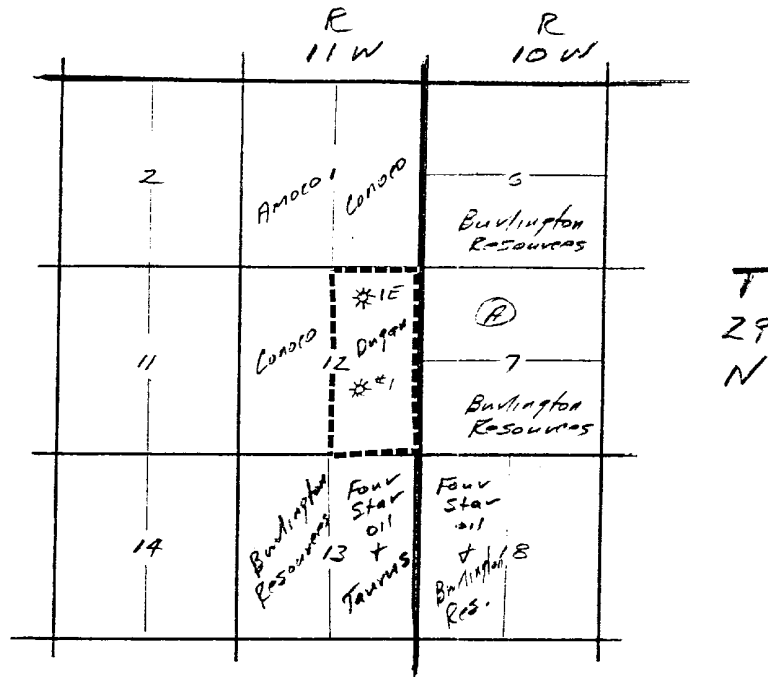
	<u>Gas</u>	<u>Condensate</u>	<u>Water</u>
Blanco MV	56%	0%	50%
Basin DK	44%	100%	50%

Attachment NO. 6

Operators offsetting Dugan production's

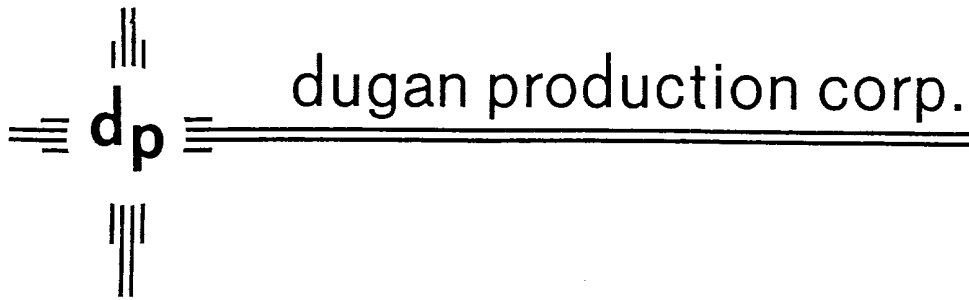
GARRETT Fed. Com. No. 1E (B-12-29N-11W)

E/2-320 A Spacing unit - Blanco MV + Basin DK



(A) - N/2 Section 7 = Spacing unit for Beta Development's Potter Canyon No. 1 which was P&A 4/77. There are no Active Blanco MV or Basin Dakota wells in the N/2-7-29N-10W

The current Leasehold Interest for NW/4-7-29N-10W: Burlington Resources, Elizabeth T. Calloway, Damsen oil, C.W. Murchison Est., Pioneer Natural Resources, Frank A. Schultz, Frank A. Schultz Trust, Schultz Management Ltd, Fred E. Turner, Glenn J. Turner Jr, John Lee Turner, Mary E. Turner Trust, William Webb.



Attachment
No. 7
pg 1 of 2

May 12, 1998

To: Operators and owners of undeveloped leases (address list attached)
Offsetting Dugan Production's
Garrett Federal Com No. 1E
Unit B, Section 12, Township 29N, Range 11W
Blanco Mesaverde and Basin Dakota Gas Pools
San Juan Co., New Mexico

Dear Offset Operator or Lease Owner:

Attached is a copy of our application to the NMOCD and BLM requesting administrative approval to downhole commingle the existing Blanco Mesaverde and Basin Dakota completions in the captioned dually completed well.

Notice is being sent to you as an offsetting operator or holder of undeveloped offset leasehold interest. If you have objections to this proposal, you should notify the NMOCD at 2040 South Pacheco, Santa Fe, NM 87505 within 20 days of this letter date, with a copy to Dugan at our letterhead address.

Should you have questions or need additional information, please let me know.

Sincerely,

A handwritten signature in cursive script that reads 'John D. Roe'.

John D. Roe
Engineering Manager

JDR/tmf

cc: NMOCD

**OFFSET OPERATOR NOTIFICATION
DUGAN PRODUCTION CORP.'S GARRETT FED. COM NO. 1E
BLANCO MESAVERDE & BASIN DAKOTA GAS POOLS
E/2 SPACING UNIT, SECTION 12, T-29N, R-11W
SAN JUAN COUNTY, NEW MEXICO**

Amoco Production
P. O. Box 800
Denver, CO 80201-0800

Frank A. Schultz
500 N. Akard #2160
Dallas, TX 75201

Beta Development
238 Petroleum Plaza
Farmington, NM 87401

Frank A. Schultz Trust
500 N. Akard #2160
Dallas, TX 75201

Burlington Resources
P. O. Box 4289
Farmington, NM 87499-4289

Schultz Management Ltd.
500 N. Akard #2160
Dallas, TX 75201

Elizabeth T. Calloway
4801 St. Johns
Dallas, TX 75205

Taurus Exploration
2198 Bloomfield Highway
Farmington, NM 87401

Conoco
10 Desta Drive Suite 100W
Midland, TX

Fred E. Turner
4925 Greenville Ave.
Dallas, TX 75206-4079

Damson Oil Corp.
Box 4391
Houston, TX 77210-4391

Glenn J. Turner Jr.
3131 Turtle Creek 1201
Dallas, TX 75219

Four Star Oil Co.
3300 N. Butler
Farmington, NM 87401

John Lee Turner
8585 N. Stemmons #925
Dallas, TX 75247

C. W. Murchison Estate
6116 N. Central Expressway 1300
Dallas, TX 75206

Mary F. Turner Trust
Box 2320
Dallas, TX 75221-2320

Pioneer Natural Resources, Inc.
Box 3178
Midland, TX 79702-3178

William Webb
1900 Mercantile Bldg
Dallas, TX 75247