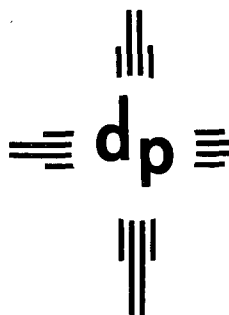


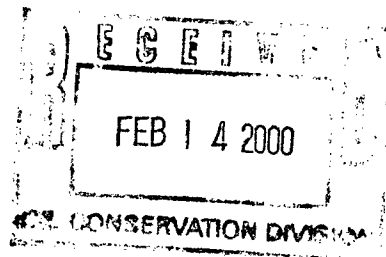
DHC

3/6/00

**dugan production corp.**

February 11, 2000

2673



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

Mr. Lee Otteni, Manager
Bureau of Land Management - FFO
1235 LaPlata Highway
Farmington, NM 87401

Re: Application for Downhole Commingling and Unorthodox Location
Basin Fruitland Coal and Bisti Chacra Gas Pools
Dugan Production's Zappa No. 3 (API No. 30-045-29908)
Unit P, Section 27, T-22N, R-8W
Federal Lease NM 57445
San Juan County, New Mexico

Dear Ms. Wrotenbery and Mr. Otteni:

Dugan Production Corp. requests your approval to downhole commingle production from the Basin Fruitland Coal and Bisti Chacra gas pools within the wellbore of our recently drilled Zappa No. 3. In addition, we request approval for a non-standard location of the proposed Fruitland Coal completion since the subject well is in the SE/4. The Zappa No. 3, located 790' FSL and 1190' FEL of Section 27, is otherwise at an orthodox location for both pools. NMOCD form C-107-A is attached. The proposed Fruitland Coal spacing unit consists of the South half and the Chacra spacing unit is the SE/4 of Section 27. Federal Lease NM 57445 covers the entire south half and Dugan Production Corp. holds 100% of the working interest. The anticipated production from both formations will be natural gas and possibly some water. We do not anticipate oil production from either pool.

The Zappa No. 3 was completed on 12-2-99 in the Chacra formation as an extension to the Bisti Chacra gas pool. The completion and production testing to date are presented on Attachment No. 3 and based upon this work, combined with our extensive experience with other Chacra completions in the general area as well as the Rusty Chacra gas pool to the east, it is our belief that the Chacra completion in the Zappa No. 3 is indicated to be productive of natural gas and it is our intention to fracture stimulate the Chacra to improve the well's productivity.

In addition, we propose to complete and fracture stimulate the Fruitland Coal interval in conjunction with our frac job in the Chacra completion. This will allow us to maximize the gas productivity from the Zappa No. 3 and will help keep our completion costs as low as possible which is important to the overall economics of developing marginal gas areas.

The Zappa No. 3 is located in an area that Dugan Production has been developing since 1993 and to date has completed 17 wells, (16 Chacra and 1 Fruitland Coal) all of which are currently shut in as there is no gas gathering system in place. Attachment No. 5 presents a map of this area and

Attachment No. 6 presents a summary of the individual wells. We anticipate that most of these wells will produce at fairly low rates once connected to a gas gathering system.

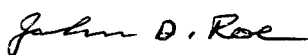
Dugan Production Corp. is currently evaluating our options to place each of these wells on production and is considering the installation of a gas gathering system which will deliver gas to existing systems ± 5 miles east, ± 11 miles northwest or into PNM's main line to Albuquerque. As with most things, there are pros and cons to each option, but no matter which option is chosen, a substantial work effort and investment will be needed to install the gas gathering lines and facilities necessary to place these wells on production. The proposed Fruitland Coal completion and downhole commingling in our Zappa No. 3 will aid in developing the gas production rates needed to support moving ahead with installation of a gas gathering system.

Attachment No. 8 is a copy of our letter (sent certified-return receipt) to the owners of offsetting leases all of which are undeveloped. Dugan Production Corp. holds the leasehold interest on $\pm 73\%$ of the offsetting acreage and is the operator of all wells offsetting the Zappa No. 3. Attachment No. 4 presents the offset acreage ownership information.

In summary, Dugan Production corp. is requesting approval from the BLM and the NMOCD for the proposed downhole commingling of Bisti Chacra and Basin Fruitland Coal gas production in our Zappa No. 3. The Fruitland Coal has not been completed and will require an unorthodox location approval since the Zappa No. 3 Chacra well was drilled in the SE/4 of Section 27. Upon receiving the requested approvals, we intend to complete the Fruitland Coal and fracture stimulate both formations which hopefully will develop sufficient productivity in the Zappa No. 3 such that we can then move forward with the planning and installation of a gas gathering system not only for the Zappa No. 3 but for 17 other shut in Dugan Production gas wells in the general vicinity of the Zappa No. 3. The Chacra and Fruitland Coal formation in this general area are on the southern edge of the San Juan Basin and all wells are believed to be capable of producing gas only at low rates (50 mcf/d or less). Dugan Production Corp. holds 100% of the working interest, the same federal lease covers both spacing units and all interest in both zones is common.

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

Sincerely,



John D. Roe
Engineering Manager

JDR/mm
Attachments

cc: NMOCD - Aztec
All Offset Interest Owners

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Attachment
No. 1
Pg 1 of 1

Form C-102
Revised February 21, 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 29908		1 Pool Code 96166		1 Pool Name Bisti Chacra Ext.	
4 Property Code 013361		5 Property Name Zappa			6 Well Number 3
7 OGRID No. 006515		8 Operator Name Dugan Production Corporation			9 Elevation 6738'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	27	22N	8W	P	790	South	1190	East	San Juan

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 160		13 Joint or Infill		14 Consolidation Code		15 Order No.			

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

<div style="position: relative; height: 300px;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%);"> Section 27 </div> <div style="position: absolute; bottom: 10%; left: 10%;"> Dugan Prod. NM 57445 </div> <div style="position: absolute; bottom: 10%; left: 45%;"> </div> </div>				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature Sherman E. Dugan Printed Name Vice-President Title 4/19/99 Date	
				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. April 6, 1999 Date of Survey Signature and Seal of Surveyor: Edgar L. Risenhoover Certified Professional Surveyor	

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Attachment
No. 2
PS 1061

Form C-102
Revised February 21, 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 29908		2 Pool Code 71629		3 Pool Name Basin Fruitland Coal		
4 Property Code 013361		5 Property Name Zappa			6 Well Number 3	
7 OGRID No. 006515		8 Operator Name Dugan Production Corporation			9 Elevation 6738'	

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	27	22N	8W		790	South	1190	East	San Juan

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres 320	13 Joint or Infill	14 Consolidation Code	15 Order No.
---------------------------	--------------------	-----------------------	--------------

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

16				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief John D. Roe Signature John D. Roe Printed Name Engineering Manager Title January 7, 2000 Date	
Section 27					
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. April 6, 1999 Date of Survey Signature and Seal of Professional Surveyor: EDGAR L. RISENHOOVER NEW MEXICO 5979 Certificate Number: 5979					
Dugan Prod. NM 57445				1190' 790'	

Attachment No. 3
Well Completion & Production Potential Summary
Dugan Production Corp.'s Zappa No. 3
Unit P, Section 27, T-22N, R-8W
San Juan County, New Mexico

Spud: 7-6-99
Completed: 12-2-99
Drilled TD: 1405' Plugged back TD: 1362'
Casing: 7", 20# @ 120'
4½", 10.5# @ 1398'
Tubing: 2 3/8", 4.7# @ 1198'
Perforations: Bisti Chacra – 1130', 1137', 1144', 1153', 1163', 1172', 1180', 1195', 1207', 1213', 1220', 1222', 1230', 1237', 1242', 1252'. Total 16 holes.

Stimulations: 1. Breakdown 1130'-1252' w/100 gallons 15% HCL @1000 psi. Pumped in @ 5 bpm & 800 psi. ISDP = 520 psi.
2. Breakdown 1130' – 1252' w/650 gallons 15% HCL & 32 ball sealers. Had good ball action & balled out @ 3500 psi.

Production

Testing: 12-2-99 Swab tubing dry following acid breakdown.
12-3-99 SITP = 5 psig, SICP = 50 psig
12-4-99 SITP = 50 psig, SICP = 200 psig
Check fluid level @ 750'.
Swab 1 time & well unloaded. Recovered approximately 2 bbl water.
Shut well in.
Check fluid level after 1 hr. No fluid entry. Shut well in.
12-7-99 SITP = 207 psig SICP = 242 psig
Opened well to pit. Unloaded small amount of fluid. Tubing pressure bled to 0 psig & casing to 60 psig with well flowing gas at a steady blow - gas would burn. Shut well in pending frac stimulation.

Production

Potential: Bisti Chacra Perforations 1130' – 1252'
Completion and testing to date in the Zappa No. 3 indicates the Chacra is productive of dry natural gas plus a small amount of water and has a shut-in pressure of 254 psia which is similar to the initial shut-in pressures of other Chacra completions in the general area (see Attachment No. 6). The Chacra will need to be fracture stimulated to establish

commercial gas rates. Although there are eight shut-in Chacra completions within T22N, R8W (ref attachment No. 6), there are no wells that have produced beyond the completion testing since a pipeline connection is currently not available. The nearest Chacra production is in Dugan Production's Dome Rusty 20-22-7 No. 1, located ± 4 miles to the east (P-20-22N-7W). The production history for this well is presented on page no. 4 of this attachment. A total of 31.1 million cubic feet of gas have been produced over an 18 year period for an overall average of 4.75 mcf/d. Initial production averaged approximately 33 mcf/d, and the well currently averages ± 3 mcf/d.

Within T22N, R7W, there are a total of 27 Chacra completions with cumulative production ranging from 9.4 to 113.5 mmcf and averaging ± 50 mmcf per well. (Ref. pg no. 5 of this attachment).

Basin Fruitland Coal

The Fruitland Coal occurs in the Zappa No. 3 wellbore from 752 to 775', and, based upon cased hole logs plus sample analysis, is believed to be a 23' continuous coal interval. To date the nearest test of the Fruitland Coal is in Dugan's Zappa No. 2 (F-20-22N-8W) approximately 3 miles to the northwest which was completed 9-12-94 testing methane gas and water following a foam frac job which screened out after pumping $\pm 15,000$ lbs of sand. A shut-in surface pressure of 187 psia has been measured which is representative of the pressure anticipated for the Fruitland Coal @ $\pm 750'$. The nearest established production from the Fruitland Coal is from Dugan Production's Sapp No. 90 (B-29-24N-8W) approximately 12 miles to the north. The production history for the Sapp No. 90 is presented on page No. 6 of this attachment. A total of 122.4 million cubic feet of gas have been produced over a 5 year period for an overall average of ± 65 mcf/d. Initial production averaged approximately 300 mcf/d and the typical incline of gas production from the Fruitland Coal has not been exhibited. Production had declined to ± 3 mcf/d and $\pm \frac{1}{2}$ to 1 bwpd when rod pump equipment was installed increasing production to ± 60 mcf/d and 5 bwpd.

Within T24N-R8W there are a total of 10 Fruitland Coal completions with cumulative production ranging from 631 mcf to 225.9 mmcf and averaging ± 68 mmcf per well.

With reference to Attachment No. 7, it can be seen that the Zappa No. 3 is within ± 8 miles of the southern outcrop of the Fruitland Coal in the San Juan Basin. This combined with the fact that the nearest Fruitland Coal production is ± 12 miles to the north and a test of the Fruitland Coal ± 3 miles to the northwest did confirm that production potential does exist in the Fruitland Coal, however since a pipeline connection is not currently available, sufficient testing has not occurred and we can only say that the Fruitland Coal does appear to be productive of methane gas plus water.

Thus at this time, we expect to develop marginal gas rates from the Chacra and Fruitland Coal in the Zappa No. 3, averaging 15-30 mcf/d from each zone. Based upon an analysis

of production from 27 Chacra wells one township to the east and 10 Fruitland Coal wells two townships to the north, we anticipate developing 50 to 60 mmcf of gas from each zone.

Summary of Anticipated Zappa No. 3 Production

	<u>Initial Production</u>		<u>Gas Reserves</u>
	<u>MCFD</u>	<u>BWPD</u>	<u>MMCF</u>
Basin Fruitland Coal	15 to 30	5 to 10	50 to 60
Bisti Chacra	15 to 30	1 to 2	50 to 60

Proposed allocation of Commingled Production*

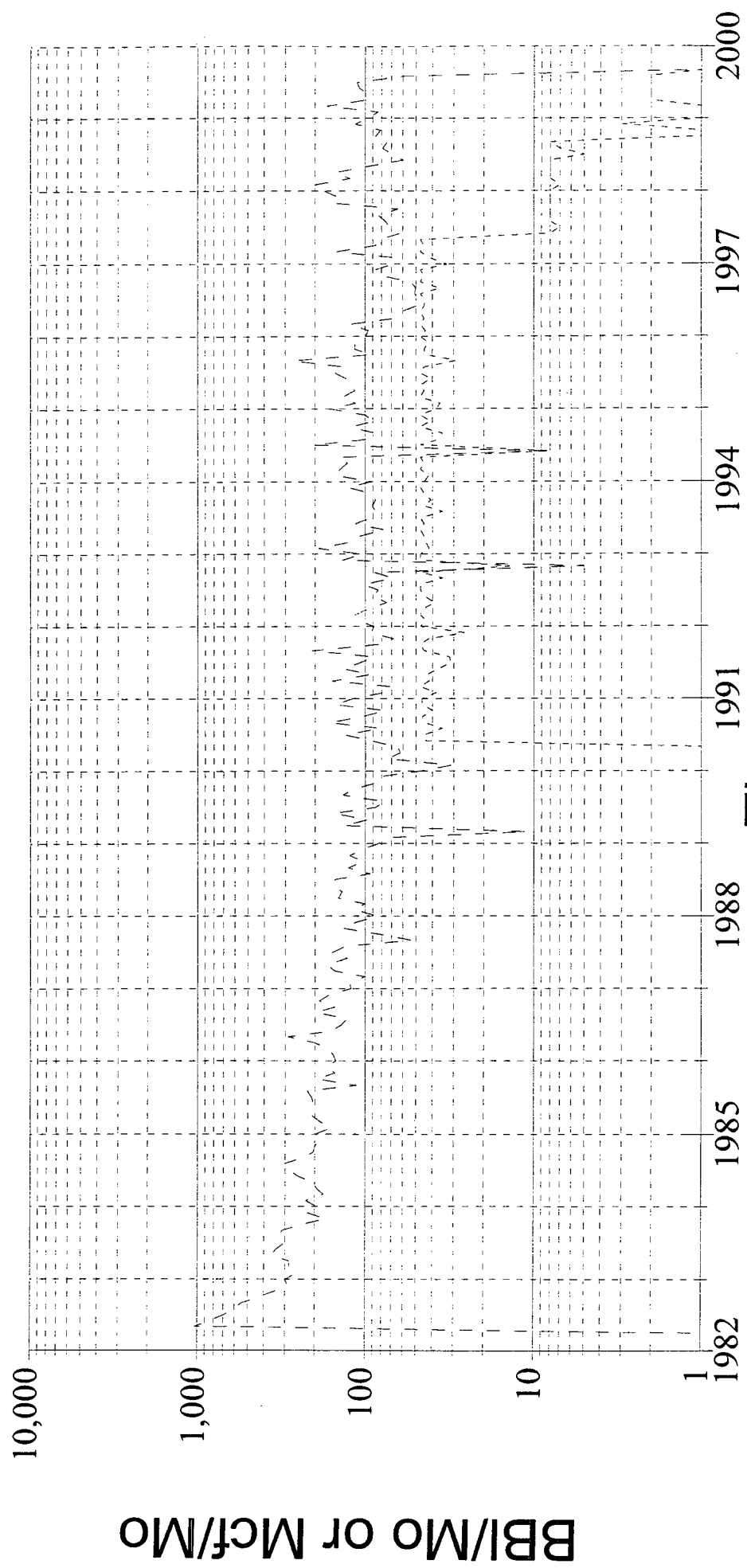
	<u>Gas</u>	<u>Water</u>
Basin Fruitland Coal	50%	80%
Bisti Chacra	50%	20%

***NOTE:** If the commingled production after 12 months of continuous production exceeds 60 mcf/d indicating that at least one of the zones is producing at higher than anticipated rates, Dugan Production will consider additional testing of the Zappa No. 3 in order to verify the appropriate production allocation factors.

Attachment No. 3
Pg 4 of 7

Oil
Gas
Water
Wells

Field: RUSTY Chaga
Lease: DOME RUSTY 20-22-7 | Well #1 (P-20-22N-7W)
Operator: DUGAN PRODUCTION CORPORATION
Production Rate vs Time
For the Period 01/1982 to 12/1999 | API: 30043203190000



Reported Oil Production = 0 Bbls
Reported Gas Production = 31,116 Mcf to 8-1-99
Reported Water Production = 3,697 Bbls "

Attachment
No. 3
Pg 5 of 7

12 operated by
Dugan Production Corp.

1711 Chacra Completions
in T-22N, R-7W
- 27 wells-

CD Current Through August, 1999

Field Name	Reservoir Name	Operator Name	Lease Name	Well Number	County	Zone	API Number	Lower Perfs	Cumulative Production Liquid	Gas	Annual Production Liquid	Gas	Production L O C A T I O N Gas T W N R N G S E C U / L
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	1	SANDOVAL	604CHCR	3004320308	1902	0	43139	0	7093	22N 7W 10 D
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	1	SANDOVAL	604CHCR	3004320484	1910	0	88872	0	2696	22N 7W 10 H
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	1	SANDOVAL	604CHCR	3004320346	1804	0	113484	high	4753	22N 7W 10 N
RUSTY	CHACRA	HICKS OIL & G	GULF FEDERAL	2	SANDOVAL	604CHCR	3004320172	1962	0	31558	0	0	22N 7W 11 G
RUSTY	CHACRA	M & M PRODUCT	RUSTY FEDERAL	1	SANDOVAL	604CHCR	3004320150	1962	0	46370	0	1088	22N 7W 11 P
RUSTY	CHACRA	HICKS OIL & G	GULF NAVAJO	2	SANDOVAL	604CHCR	3004320276	1991	0	11787	0	0	22N 7W 12 M
RUSTY	CHACRA	HICKS OIL & G	GULF FEDERAL	1	SANDOVAL	604CHCR	3004320159	2041	0	24688	0	0	22N 7W 13 C
RUSTY	CHACRA	HICKS OIL & G	GULF FEDERAL	3	SANDOVAL	604CHCR	3004320215	1980	0	37071	0	0	22N 7W 13 G
RUSTY	CHACRA	M & M PRODUCT	RUSTY FEDERAL	4	SANDOVAL	604CHCR	3004320190	1884	0	90224	0	4159	22N 7W 13 M
RUSTY	CHACRA	M & M PRODUCT	RUSTY FEDERAL	2	SANDOVAL	604CHCR	3004320157	1884	0	71129	0	3805	22N 7W 14 H
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	3	SANDOVAL	604CHCR	3004320171	1784	0	107742	0	8739	22N 7W 14 P
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	1	SANDOVAL	604CHCR	3004320281	1784	0	71129	0	4172	22N 7W 15 P
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	2	SANDOVAL	604CHCR	3004320480	1572	0	18698	0	447	22N 7W 17 K
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	1	SANDOVAL	604CHCR	3004320408	1520	0	27833	0	1203	22N 7W 20 H
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	1	SANDOVAL	604CHCR	3004320319	1600	0	31116	0	828	22N 7W 20 P
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	1	SANDOVAL	604CHCR	3004320282	1640	0	31179	0	0	22N 7W 21 A
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	2	SANDOVAL	604CHCR	3004320309	1562	0	21534	0	2186	22N 7W 21 O
RUSTY	CHACRA	CHACE OIL COM	RUSTY NAVAJO	5	SANDOVAL	604CHCR	3004320252	1918	0	31069	0	0	22N 7W 22 A
RUSTY	CHACRA	CHACE OIL COM	RUSTY NAVAJO	7	SANDOVAL	604CHCR	3004320264	1812	0	14468	0	0	22N 7W 22 M
RUSTY	CHACRA	CHACE OIL COM	RUSTY NAVAJO	1Y	SANDOVAL	604CHCR	3004320205	1763	0	56933	0	0	22N 7W 23 A
RUSTY	CHACRA	CHACE OIL COM	RUSTY NAVAJO	2	SANDOVAL	604CHCR	3004320203	1776	0	57120	0	0	22N 7W 23 C
RUSTY	CHACRA	CHACE OIL COM	RUSTY NAVAJO	3	SANDOVAL	604CHCR	3004320219	1743	0	9393	Low	0	22N 7W 23 K
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	1	SANDOVAL	604CHCR	3004320320	1699	0	106735	0	3720	22N 7W 24 J
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	1	SANDOVAL	604CHCR	3004320398	1688	0	30619	0	660	22N 7W 25 B
RUSTY	CHACRA	DUGAN PRODUCT	CHACRA	1	SANDOVAL	604CHCR	3004320363	1730	0	91503	0	3347	22N 7W 26 A
RUSTY	CHACRA	CHACE OIL COM	RUSTY NAVAJO	4	SANDOVAL	604CHCR	3004320241	1731	0	26506	0	0	22N 7W 26 F
RUSTY	CHACRA	CHACE OIL COM	RUSTY NAVAJO	6	SANDOVAL	604CHCR	3004320266	1572	0	16966	0	0	22N 7W 27 A

0 1342386 0 48896

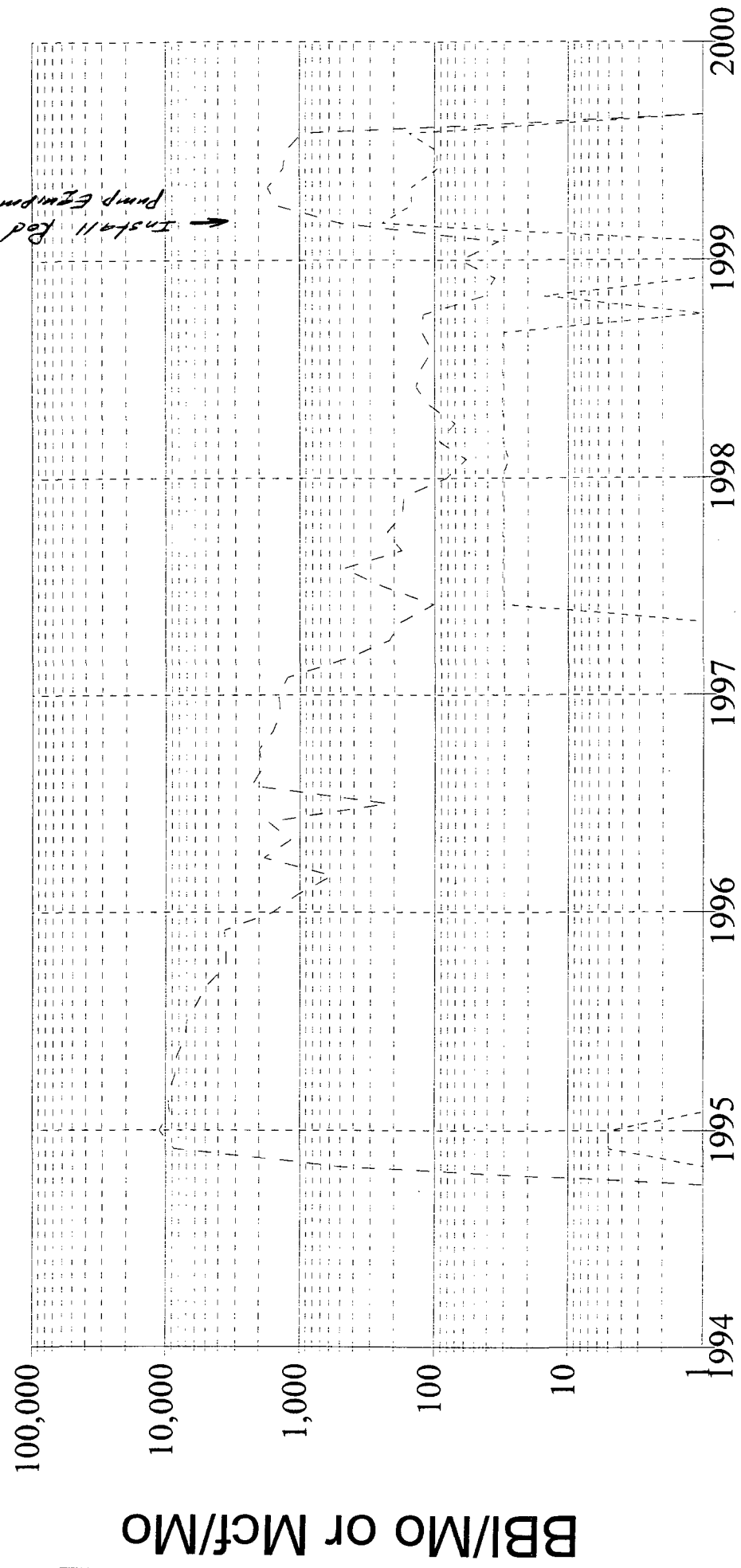
27 well Average = 49.718 mscf well

← Nearest Chacra
Production to
Zappa #3
is 4 miles East

Attachment
No. 3
Pg 6 of 7

Field: BASIN Fruitland Coal
Lease: SAPP | Well #90 (B-29-24N-8W)
Operator: DUGAN PRODUCTION CORPORATION
Production Rate vs Time
For the Period 01/1994 to 12/1999 | API: 30045291920000

Oil
Gas
Water
Wells



Time

Reported Oil Production = 0 Bbls
Reported Gas Production = 122,391 Mcf
Reported Water Production = 1,402 Bbls

Field Name	Reservoir Name	Operator Name	Lease Name	Well Number	County	Zone	AP#	Number	Lower Perfs	Cumulative Production	Annual Production	L O C A T I O N					
										Liquid	Gas	Gas	TWN	RNG	SEC	U/L	
BASIN	FRUITLAND COAL	DUGAN PRODUCT	OKIE	2	SAN JUAN	604FRLDC	3004522304			0	59683	0	14009	24N	8W	8	F
BASIN	FRUITLAND COAL	DUGAN PRODUCT	OKIE	1	SAN JUAN	604FRLDC	3004522307			0	9223	0	935	24N	8W	8	P
BASIN	FRUITLAND COAL	DUGAN PRODUCT	MESA	90	SAN JUAN	604FRLDC	3004529159			0	63860	0	12738	24N	8W	16	M
BASIN	FRUITLAND COAL	DUGAN PRODUCT	LEE'S FERRY	90	SAN JUAN	604FRLDC	3004529338			0	631	0	0	24N	8W	19	J
BASIN	FRUITLAND COAL	DUGAN PRODUCT	SUPAI POINT	1	SAN JUAN	604FRLDC	3004528996			0	158101	0	43110	24N	8W	20	A
BASIN	FRUITLAND COAL	DUGAN PRODUCT	KATBAB TRAIL	90	SAN JUAN	604FRLDC	3004529393			0	29854	0	8846	24N	8W	20	N
BASIN	FRUITLAND COAL	DUGAN PRODUCT	ANGELS GATE	90	SAN JUAN	604FRLDC	3004529394			0	8683	0	3746	24N	8W	21	G
BASIN	FRUITLAND COAL	DUGAN PRODUCT	SAPP	90	SAN JUAN	604FRLDC	3004529192			0	122391	0	7311	24N	8W	29	B
BASIN	FRUITLAND COAL	DUGAN PRODUCT	SAPP	91	SAN JUAN	604FRLDC	3004529238			0	1417	0	806	24N	8W	29	K
BASIN	FRUITLAND COAL	DUGAN PRODUCT	BUDDHA TEMPLE	90	SAN JUAN	604FRLDC	3004529239			0	225909	0	29408	24N	8W	30	A

Attachment
No. 3
pg 7 of 7

← Northwest Basin
Fruitland (Bgl)
Completion to
Zappa #3

All Basin Fruitland Coal
Completions in
T-24N, R-8W
- 10 wells -

0 679752 0 120909

10 well Average = 67,975 mt/well

21				22				23
A	A	A	A	A	A	A	A	A
A	A	A	A	A	A	A	A	A
C	C	A	A	A	A	A	A	A
28	C	C	A	A	A	A	A	26
C	C	A	A	A	A	A	A	A
C	C	A	A	A	A	A	A	A
B	B	A	A	A	A	A	A	A
B	B	A	A	A	D	A	A	
33				34				35

T
22
N

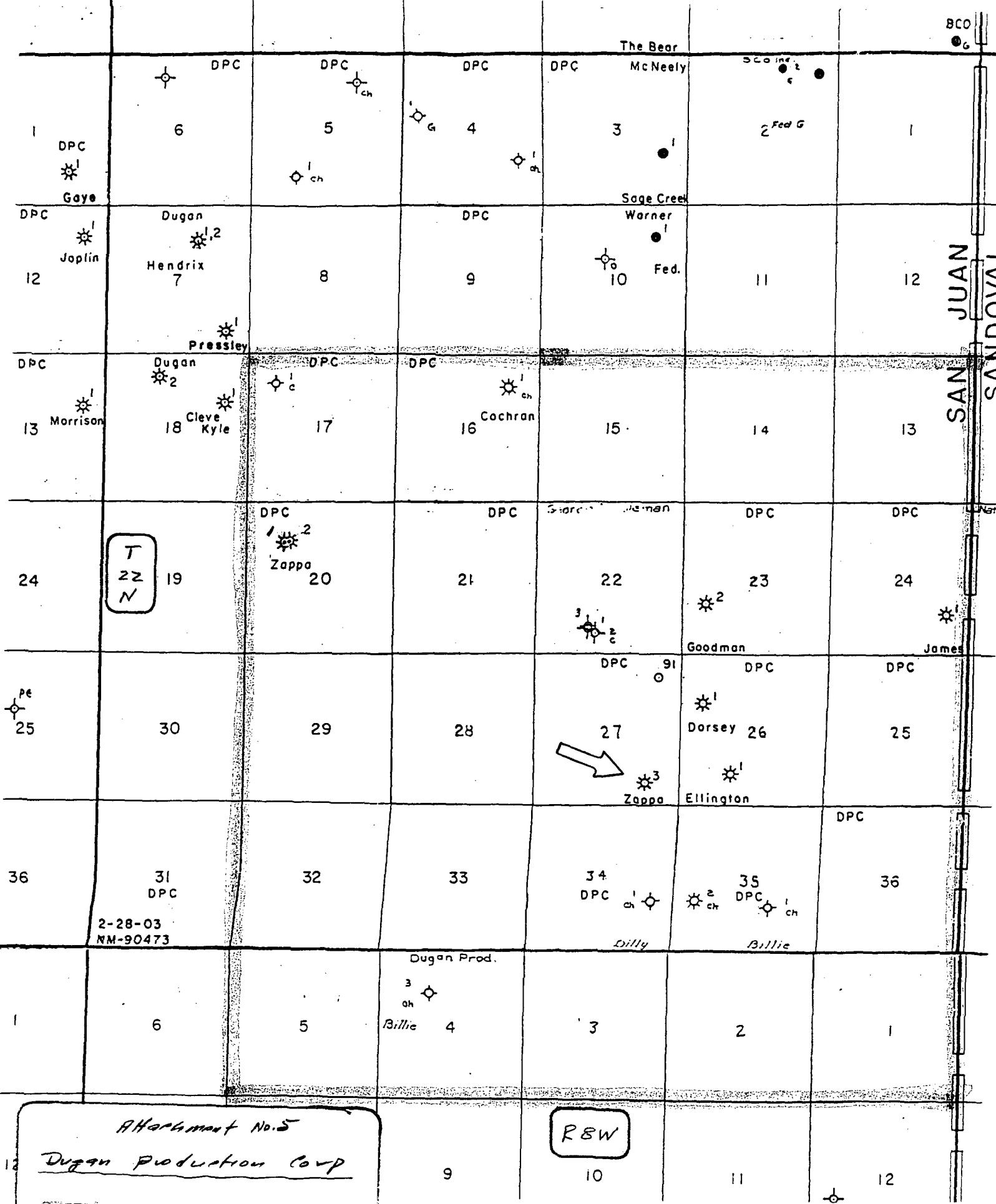
Lease Ownership

D = 4% Yates Petroleum - 105 S. 4th Street, Artesia, NM 88210
32% Myco Industries - 105 S. 4th Street, Artesia, NM 88210
32% Abo Petroleum Corp. - 105 S. 4th Street, Artesia, NM 88210
32% Yates Drilling Co. - 105 S. 4th Street, Artesia, NM 88210

▣ = Zappa No. 3 Fruitland Coal Spacing Unit. Chacra Spacing Unit = SE/4

BCO

JUAN SANDOVAL



2-28-03
NM-90473

Attachment No. 5
Dugan Production Corp

R&W

25 Section Study Area
in vicinity of Dugan's
Zappa No. 3

**ATTACHMENT NO. 6
WELL SUMMARY
WELLS IN VICINITY OF DUGAN'S ZAPPA NO. 3
CHACRA & BASIN FRUITLAND COAL FORMATIONS
SAN JUAN COUNTY, NEW MEXICO**

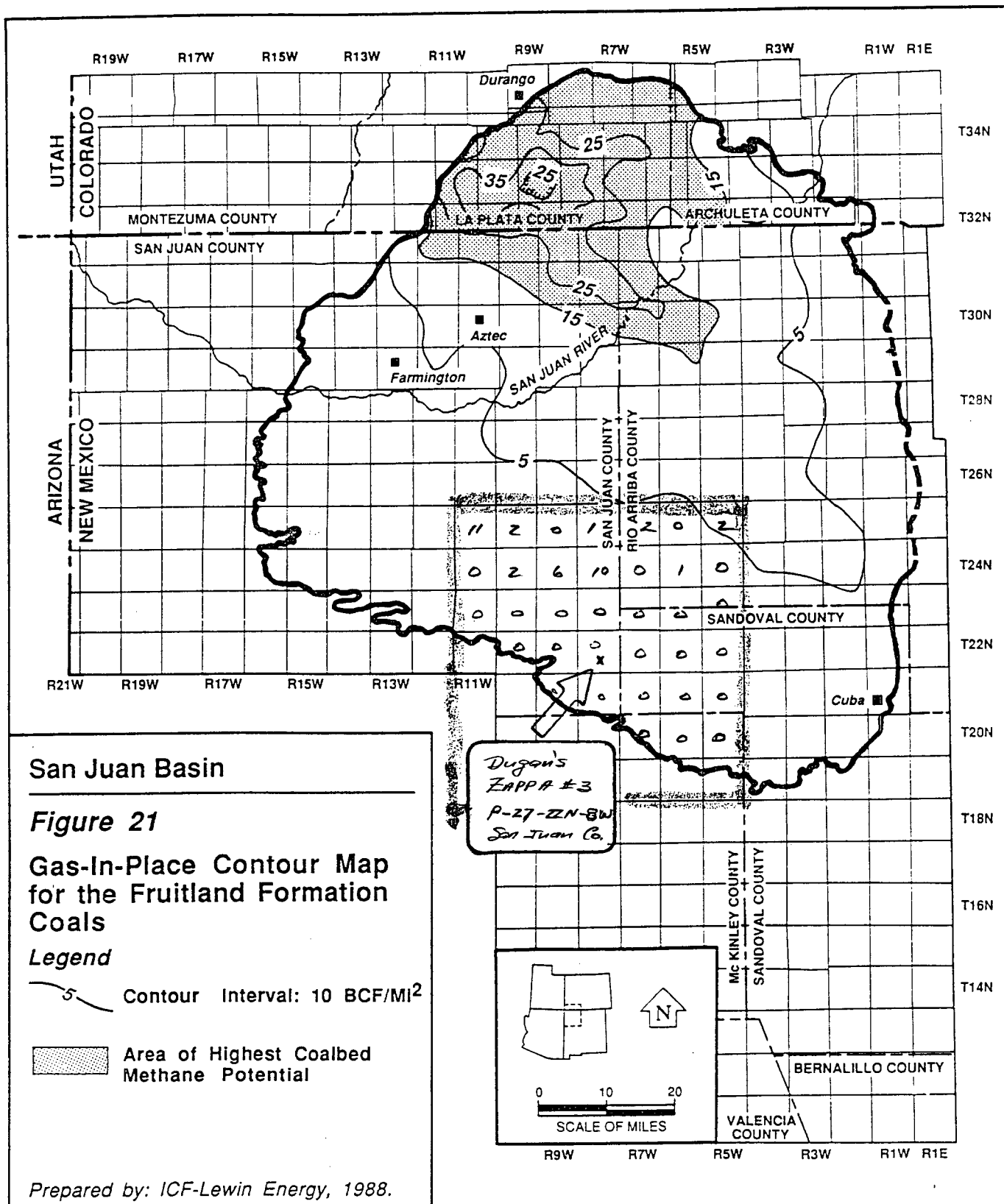
Location U-S-T-R	Operator	Well	Completion Date	Pool	IP or Compl. Test		Estimated Max. SIWHP PSIA	Remarks
					Gas Rate MCFD	Flowing Press. PSIA		
Wells Within 25 Section Study Area								
A-16-22N-8W	Dugan Production	Cochran #1	6-24-98	Bisti Chacra	75	23	312	Texaco compl.10/80 & plugged 9/88
D-17-22N-8W	Benson Mineral	Federal 17-22-8 #1	6-5-80	Undes. Chacra	P&A	—	NR	Chacra tested gas - TSTM
F-20-22N-8W	Dugan Production	Zappa #1	9-6-94	Bisti Chacra	15	12	282	
F-20-22N-8W	Dugan Production	Zappa #2	9-12-94	Basin Fruitland Coal	B		187	PC tested wet & plugged 11/94
N-22-22N-8W	San Juan Venture	Midway #1	6-21-82	A	P&A		NR	Coleman compl. P&A 11/77
N-22-22N-8W	San Juan Venture	Midway #2	6-21-82	A	P&A		NR	
N-22-22N-8W	San Juan Venture	Midway #3	6-23-82	A	P&A		NR	
L-23-22N-8W	Dugan Production	Goodman #2	1-4-95	Bisti Chacra	184	13	337	
I-24-22N-8W	Dugan Production	James #1	12-3-99	Rusty Chacra	B		352	
E-26-22N-8W	Dugan Production	Dorsey #1	12-1-99	Bisti Chacra	B		282	
N-26-22N-8W	Dugan Production	Ellington #1	10-6-99	Bisti Chacra	179	13	277	
A-27-22N-8W	Dugan Production	Zappa #91	Location	Basin Fruitland Coal	—	—	—	
P-27-22N-8W	Dugan Production	Zappa #3	12-2-99	Bisti Chacra	B		254	
I-34-22N-8W	Dugan Production	Dilly #1	4-6-82	Undes. Chacra	P&A		NR	Tested gas TSTM after foam frac
J-35-22N-8W	Dugan Production	Billie #1	4-6-82	Undes. Chacra	P&A		NR	Tested gas TSTM after foam frac
L-35-22N-8W	Dugan Production	Billie #2	1-31-81	Undes. Chacra	86	16	274	
F-4-21N-8W	Dugan Production	Billie #3	4-6-82	Undes. Chacra	P&A		NR	Tested gas TSTM from Chacra & PC
Additional Dugan Production Wells in Vicinity of Study Area								
B-7-22N-8W	Dugan Production	Hendrix #1	5-11-93	Undes. Chacra	282	20	312	
B-7-22N-8W	Dugan Production	Hendrix #2	12-20-94	Escavada PC	B		132	Initial frac screened out
P-7-22N-8W	Dugan Production	Presley #1	5-23-94	Bisti Chacra	334	24	297	
H-18-22N-8W	Dugan Production	Cleve Kyle #1	5-21-93	Bisti Chacra	36	12	296	
D-18-22N-8W	Dugan Production	Cleve Kyle #2	5-12-94	Bisti Chacra	68	13	292	
P-1-22N-9W	Dugan Production	Gayle #1	6-7-94	Bisti Chacra	381	27	297	
A-12-22N-9W	Dugan Production	Joplin #1	8-17-93	Undes. Chacra	248	18	302	
H-13-22N-9W	Dugan Production	Morrison #1	9-3-93	Undes. Chacra	70	13	287	

A - well drilled through Chacra formation - no tests reported in Chacra or Fruitland Coal

B - testing to date indicates flammable gas is being produced. Well shut in pending further testing and/or stimulation.

NR - not reported

Attachment
No. 7
Pg 1 of 2



Jan-28-2000
17:12

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Northwest New Mexico Scroll 170 List

Field Name	Reservoir Name	Operator Name	Lease Name	Well Number	County	Zone	API Number	Perfs	Lower	Cumulative Production	Annual Production	Liquid	Gas	Production L O C A T I O N	U/L
BASIN	FRUITLAND COAL	BURLINGTON RE	CANYON LARGO UNIT	263	RIO ARBA	604FRLDC	3003920981	0	15883	0	0	0	0	24N 6W	35
BASIN	FRUITLAND COAL	DUGAN PRODUCT	OKIE	2	SAN JUAN	604FRLDC	3004522304	0	59683	0	0	0	0	24N 8W	8
BASIN	FRUITLAND COAL	DUGAN PRODUCT	OKIE	1	SAN JUAN	604FRLDC	3004522307	0	9223	0	0	0	0	24N 8W	8
BASIN	FRUITLAND COAL	DUGAN PRODUCT	MESA	90	SAN JUAN	604FRLDC	3004529159	0	63860	0	0	0	0	24N 8W	16
BASIN	FRUITLAND COAL	DUGAN PRODUCT	LEE'S FERRY	1	SAN JUAN	604FRLDC	3004529159	0	631	0	0	0	0	24N 8W	19
BASIN	FRUITLAND COAL	DUGAN PRODUCT	SUPAI POINT	1	SAN JUAN	604FRLDC	3004529338	0	159101	0	0	0	0	24N 8W	20
BASIN	FRUITLAND COAL	DUGAN PRODUCT	KALBAB TRAIL	90	SAN JUAN	604FRLDC	3004529393	0	29854	0	0	0	0	24N 8W	20
BASIN	FRUITLAND COAL	DUGAN PRODUCT	ANGELS GATE	90	SAN JUAN	604FRLDC	3004529394	0	8683	0	0	0	0	24N 8W	21
BASIN	FRUITLAND COAL	DUGAN PRODUCT	SAPP	90	SAN JUAN	604FRLDC	3004529394	0	122391	0	0	0	0	24N 8W	29
BASIN	FRUITLAND COAL	DUGAN PRODUCT	SAPP	91	SAN JUAN	604FRLDC	3004529238	0	1417	0	0	0	0	24N 8W	29
BASIN	FRUITLAND COAL	DUGAN PRODUCT	BUDDHA TEMPLE	90	SAN JUAN	604FRLDC	3004529238	0	225909	0	0	0	0	24N 8W	30
BASIN	FRUITLAND COAL	DUGAN PRODUCT	BLANCO WASH	2	SAN JUAN	604FRLDC	3004522482	0	6673	0	0	0	0	24N 9W	2
BASIN	FRUITLAND COAL	DUGAN PRODUCT	MO VALLEY	3	SAN JUAN	604FRLDC	3004522939	0	1280	0	0	0	0	24N 9W	2
BASIN	FRUITLAND COAL	DUGAN PRODUCT	MERRY CHASE	90	SAN JUAN	604FRLDC	3004529549	0	61	0	0	0	0	24N 9W	5
BASIN	FRUITLAND COAL	DUGAN PRODUCT	ELWOOD P. DOMD	90	SAN JUAN	604FRLDC	3004529650	0	9982	0	0	0	0	24N 9W	10
BASIN	FRUITLAND COAL	DUGAN PRODUCT	APRIL SURPRISE	1	SAN JUAN	604FRLDC	3004523502	0	15450	0	0	0	0	24N 9W	19
BASIN	FRUITLAND COAL	DUGAN PRODUCT	MARY LOU	90	SAN JUAN	604FRLDC	3004529188	0	3438	0	0	0	0	24N 10W	32
BASIN	FRUITLAND COAL	DUGAN PRODUCT	AUGUST	90	SAN JUAN	604FRLDC	3004528026	0	5103	0	0	0	0	24N 10W	35
BASIN	FRUITLAND COAL	DUGAN PRODUCT	JICARILLA CONTRACT 1	40	RIO ARBA	604FRLDC	3003923159	8	1033	0	0	0	0	25N 5W	3
BASIN	FRUITLAND COAL	AMOCO PRODUCT	JICARILLA CONTRACT 1	12	RIO ARBA	604FRLDC	3003923159	0	5437	0	0	0	0	25N 5W	4
BASIN	FRUITLAND COAL	AMOCO PRODUCT	DONOHUE	3	RIO ARBA	604FRLDC	3003924223	0	28910	0	0	0	0	25N 7W	7
BASIN	FRUITLAND COAL	BURLINGTON RE	CANYON LARGO UNIT	172	RIO ARBA	604FRLDC	3003924223	0	90602	0	0	0	0	25N 8W	27
BASIN	FRUITLAND COAL	MERRION OIL & CUSTER FEDERAL	LATEX	1	SAN JUAN	604FRLDC	3003920403	0	9233	0	0	0	0	25N 8W	5
BASIN	FRUITLAND COAL	DUGAN PRODUCT	LATEX	1	SAN JUAN	604FRLDC	3004525974	0	4184	0	0	0	0	25N 10W	9
BASIN	FRUITLAND COAL	DUGAN PRODUCT	LATEX	2	SAN JUAN	604FRLDC	3004529244	0	37269	0	0	0	0	25N 10W	9
BASIN	FRUITLAND COAL	CENTRAL RESOU	BUENA SUERTE 3 G COM	1	SAN JUAN	604FRLDC	3004528646	0	848	0	0	0	0	25N 11W	3
BASIN	FRUITLAND COAL	CENTRAL RESOU	BUENA SUERTE 3 L COM	1	SAN JUAN	604FRLDC	3004528193	0	38552	0	0	0	0	25N 11W	3
BASIN	FRUITLAND COAL	CENTRAL RESOU	BUENA SUERTE 4 G COM	1	SAN JUAN	604FRLDC	3004528506	0	168580	0	0	0	0	25N 11W	4
BASIN	FRUITLAND COAL	CENTRAL RESOU	BUENA SUERTE 4 L COM	1	SAN JUAN	604FRLDC	3004528077	0	187801	0	0	0	0	25N 11W	4
BASIN	FRUITLAND COAL	CENTRAL RESOU	BUENA SUERTE 5 B COM	1	SAN JUAN	604FRLDC	3004528507	0	585245	0	0	0	0	25N 11W	5
BASIN	FRUITLAND COAL	PRO NEW MEXIC	GRACIA NAVAJO 5K	2	SAN JUAN	604FRLDC	3004528913	0	509789	0	0	0	0	25N 11W	5
BASIN	FRUITLAND COAL	CENTRAL RESOU	EAST BISTI COAL 6	1	SAN JUAN	604FRLDC	300452871	0	143781	0	0	0	0	25N 11W	6
BASIN	FRUITLAND COAL	REDWOLF PRODU	C.E.	1	SAN JUAN	604FRLDC	3004529471	0	556857	0	0	0	0	25N 11W	6
BASIN	FRUITLAND COAL	CENTRAL RESOU	EAST BISTI COAL 8	1	SAN JUAN	604FRLDC	3004527679	0	75524	0	0	0	0	25N 11W	8
BASIN	FRUITLAND COAL	GRANT EXPLORA	BUENA SUERTE 13 A CO	1	SAN JUAN	604FRLDC	3004527690	0	23319	0	0	0	0	25N 11W	13
BASIN	FRUITLAND COAL	MARALEX RESOU	GRACIA FEDERAL 26	1	SAN JUAN	604FRLDC	3004529489	0	1208	0	0	0	0	25N 11W	13
BASIN	FRUITLAND COAL	MARALEX RESOU	GRACIA FEDERAL 26	1	SAN JUAN	604FRLDC	3004529489	0	834	0	0	0	0	25N 11W	26

20 of 37 operated
by Dugan Production Corp.

CD Current Through August, 1999

8 3205658 0 385255

Total of 37 wells
Producing from the
Basin Fruitland Coal
within the ± 1764
Square mile Area
of T-19N thru T-25N
+ R-5W thru R-11W

Attachment M-7
Pg 2 of 2

1 well in 24N-2W

10 wells in 24N-8W

6 wells in 24N-9W

2 wells in 24N-10W

2 wells in 25N-5W

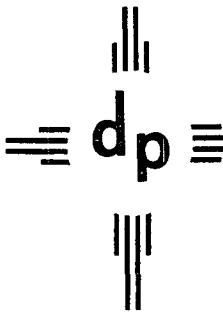
2 wells in 25N-7W

1 well in 25N-8W

2 wells in 25N-10W

11 wells in 25N-11W

Closest to Dugan's
Z-4444 at 3
± 12 miles



dugan production corp.

Attachment
No. 8
Pg 1 of 2

February 11, 2000

CERTIFIED-RETURN RECEIPT REQUESTED

To: Offset Lease Owners (Address List attached)

Re: Application to NMOCD and BLM for
Downhole Commingling and Unorthodox Well Location
Basin Fruitland Coal and Bisti Chacra Gas Pools
Dugan Production's Zappa No. 3
Unit P, Section 27, T-22N, R-8W
San Juan County, New Mexico

Dear Offset Lease Owner:

Attached is a copy of the subject application.

Our records indicate that you hold leasehold interest to acreage that is offsetting Dugan's Zappa No. 3 well located in Unit P of Section 27, T-22N, R-8W. The spacing unit for the existing Bisti Chacra completion is the SE/4 of Section 27 and the spacing unit for the proposed Basin Fruitland Coal completion will be the S/2 of Section 27.

Should you have questions or need additional information, please feel free to contact me at the letterhead address and phone number. Should you have an objection to either of our applications, you should contact the NMOCD at 2040 South Pacheco in Santa Fe, New Mexico 87505 and we would appreciate receiving a copy of your objection.

Sincerely,

John D. Roe
Engineering Manager

JDR/mm
Attachments

cc: NMOCD - Aztec and Santa Fe
BLM

Attachment
No. 8
Pg 2 of 2

Address List
Offset Lease Ownership
Dugan Production Corp.'s Zappa No. 3
Unit P, Section 27, T-22N, R-8W
San Juan County, New Mexico

Lease Ownership

Abo Petroleum Corp. - 105 S. 4th Street, Artesia, NM 88210

Daniel Gonzales - P. O. Box 2475, Santa Fe, NM 87504-2475

Myco Industries - P. O. Box 840, Artesia, NM 88210-0840

Myco Industries - 105 S. 4th Street, Artesia, NM 88210

Yates Drilling Co. - 105 S. 4th Street, Artesia, NM 88210

Yates Petroleum - 105 S. 4th Street, Artesia, NM 88210

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
811 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 87505-6429

Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Dugan Production Corp.
Operator

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

Zappa
Lease

3
Well No.

P-27-T22N-R8W
Unit Ltr. - Sec - Twp - Rge

San Juan
County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 006515 Property Code 013361 API NO. 30-045-29908 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	Basin Fruitland Coal 71629		Bisti Chacra 96166
2. Top and Bottom of Pay Section (Perforations)	752'-775' (proposed)		1130'-1252'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing -possibly artificial lift		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 190 PSIA @ 765' (estimated) b. (Original) 190 PSIA @ 765' (estimated)	a. b.	a. 300 PSIA @ 765' (estimated) b. 300 PSIA @ 765' (estimated)
6. Oil Gravity (°API) or Gas BTU Content	±1020 BTU/CF		±1120 BTU/CF
7. Producing or Shut-In?	To be completed		Shut-in
Production Marginal? (yes or no)	Anticipated to be		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 * If Producing, give date and oil/gas/ water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: 12-7-99 Rates: Max SIWHP = 254 PSIA
	Date: Rates:	Date: Rates:	Date: Rates:
8. Fixed Percentage Allocation Formula -% for each zone	Oil: % Gas: 50%	Oil: % Gas: %	Oil: % Gas: 50%

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 ☐ No

11. 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 ☐ No

13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)

14. If this well is on, or communitized 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. NMOCD 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.)-Attachment No. 3
- * For zones with no production history, estimated production rates and supporting data.- Attachment No. 3
- * Data to support allocation method or formula.-Attachment No. 3
- * Notification list of all offset operators.-Attachment No. 4
- * 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 B. Roe TITLE Engineering Manager DATE February 10, 2000

TYPE OR PRINT NAME John Roe TELEPHONE NO. (505) 325-1821