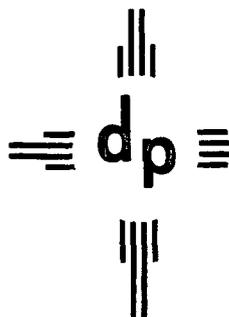
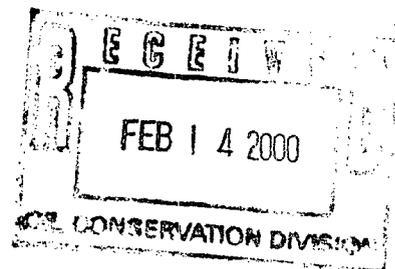


NSL 3/6/00



dugan production corp.

February 11, 2000



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.

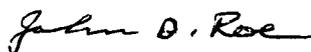
Dugan Production Corp. is currently evaluating our options to place each of these wells on production and is considering the installation of a gas gathering system which will deliver gas to existing systems ± 5 miles east, ± 11 miles northwest or into PNM's main line to Albuquerque. As with most things, 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
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

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

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

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

Zappa 3 P-27-T22N-R8W San Juan
Lease Well No. Unit Ltr. - Sec - Twp - Rge 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: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 190 PSIA @ 765' (estimated)	a.	a. 300 PSIA @ 765' (estimated)
	(Original) b. 190 PSIA @ 765' (estimated)	b.	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	Date: Rates:	Date: Rates:	Date: 12-7-99 Rates: Max SIWHP = 254 PSIA
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	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 D. Roe TITLE Engineering Manager DATE February 10, 2000

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

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

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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ APT Number 30 045 29908		² Pool Code 96166		³ 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

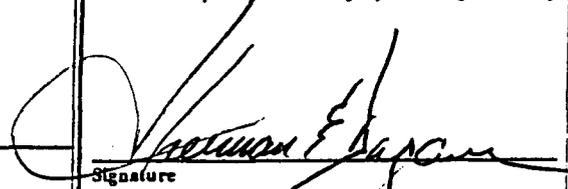
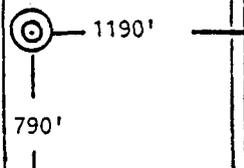
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	27	22N	8W	P	790	South	1190	East	San Juan

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

16				¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i>  Signature Sherman E. Dugan Printed Name Vice-President Title 4/19/99 Date
				¹⁸ SURVEYOR CERTIFICATION <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> April 6, 1999 Date of Survey Signature and Seal of Professional Surveyor:  Certificate Number: 5979
			Section 27 Dugan Prod. NM 57445 	

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

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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 AFI 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

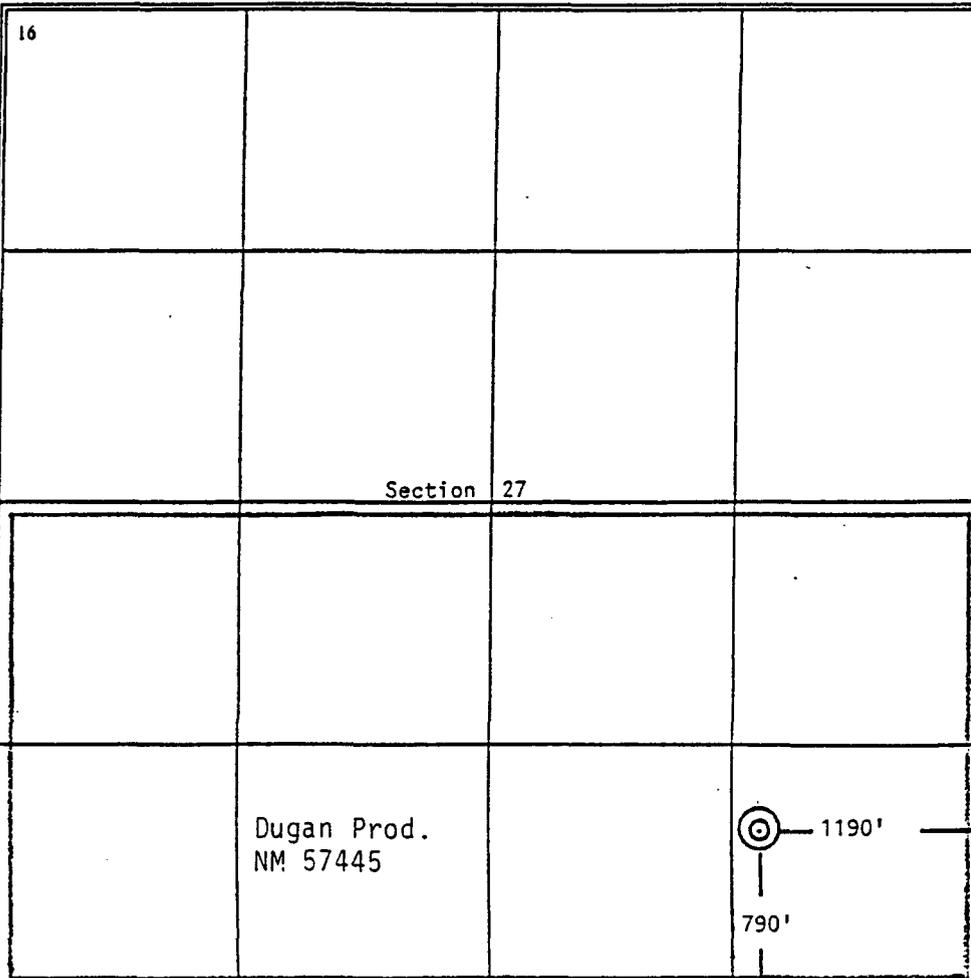
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
P	27	22N	8W		790	South	1190	East	San Juan

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	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



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

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
 EDGAR L. RISENHOOVER
 NEW MEXICO
 5979
 PROFESSIONAL SURVEYOR
 Certificate Number

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 \pm 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 \pm 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 \pm 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 \pm 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 \pm 3 mcf/d and \pm 1/2 to 1 bwpd when rod pump equipment was installed increasing production to \pm 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 \pm 68 mmcf per well.

With reference to Attachment No. 7, it can be seen that the Zappa No. 3 is within \pm 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 \pm 12 miles to the north and a test of the Fruitland Coal \pm 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*

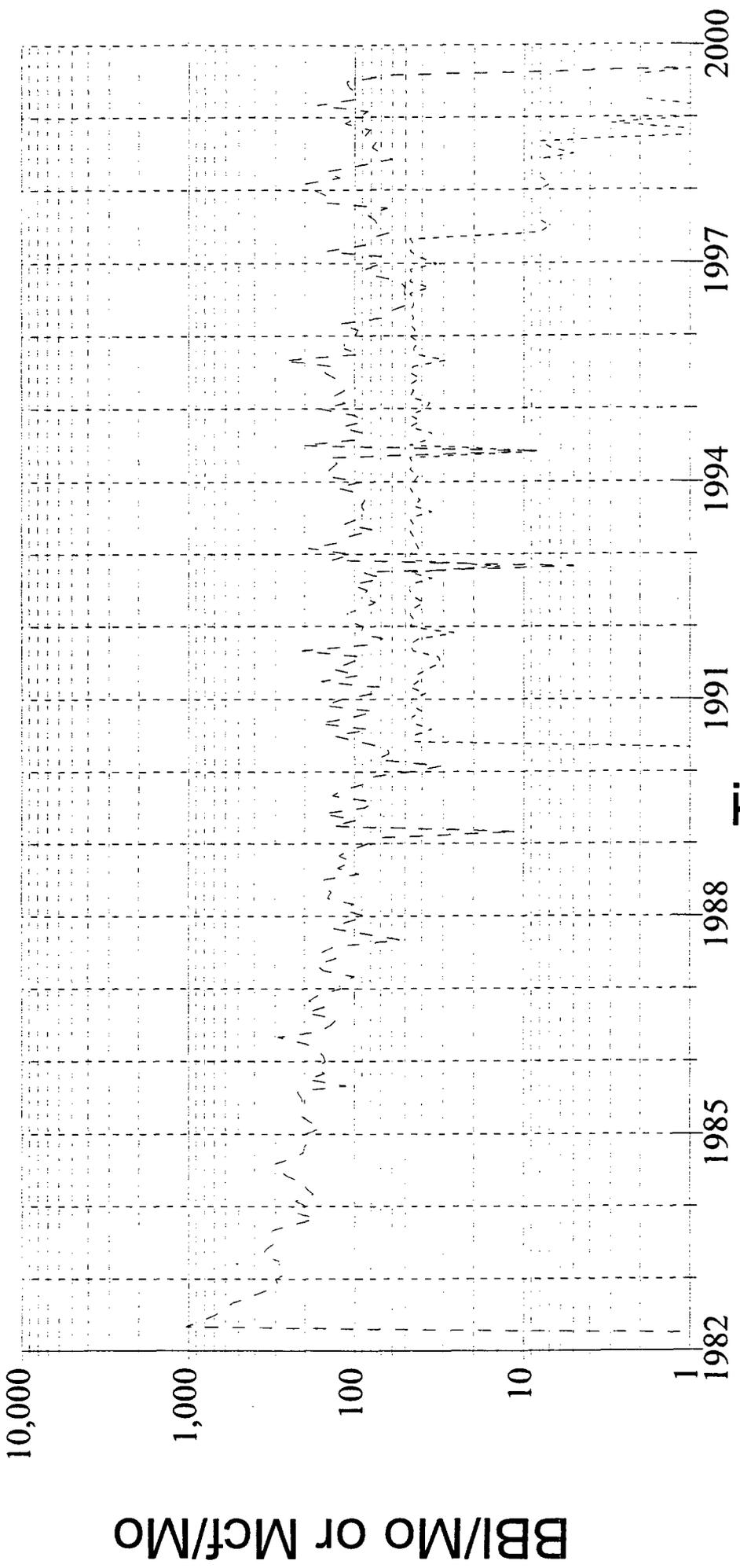
	<u>Gas</u>	<u>Water</u>
Basin Fruitland Coal	50%	80%
Bisti Chacra	50%	20%

***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 7 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
For the Period 01/1982 to 12/1999 | API: 30043203190000



BBI/Mo or Mcf/Mo

Time

Reported Oil Production = 0 Bbls
Reported Gas Production = 31,116 Mcf
Reported Water Production = 3,697 Bbls

Plot Displays Monthly Totals
Copyright (C) 1900 by Petroleum Information/Dwights LLC

*Attachment
No. 3
Pg 5 of 7*

Field Name	Reservoir Name	Operator Name	Lease Name	Well Number	Well	Number	County	Zone	API Number	Lower Perfs	Cumulative Production Liquid	Gas	Annual Production Liquid	Gas	L O C A T I O N	U/L
RUSTY	CHACRA	DUGAN	PRODUCT CHACRA	10-22-7	1	SANDOVAL	604CHCR	3004320308	1902	0	43139	0	7093	22N 7W	10	D
RUSTY	CHACRA	DUGAN	PRODUCT DOME FEDERAL	10-22-7	1	SANDOVAL	604CHCR	3004320484	1910	0	88872	0	2696	22N 7W	10	H
RUSTY	CHACRA	DUGAN	PRODUCT NAVAJO	10-22-7	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	1088	22N 7W	11	G
RUSTY	CHACRA	M & M	PRODUCT RUSTY FEDERAL		1	SANDOVAL	604CHCR	3004320150	1991	0	46370	0	0	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		3	SANDOVAL	604CHCR	3004320159	2041	0	24688	0	0	22N 7W	13	C
RUSTY	CHACRA	HICKS	OIL & G GULF FEDERAL		4	SANDOVAL	604CHCR	3004320215	1980	0	37071	0	0	22N 7W	13	G
RUSTY	CHACRA	M & M	PRODUCT RUSTY FEDERAL		2	SANDOVAL	604CHCR	3004320190	1884	0	90224	0	4159	22N 7W	13	M
RUSTY	CHACRA	M & M	PRODUCT RUSTY FEDERAL		3	SANDOVAL	604CHCR	3004320157	1884	0	71129	0	3805	22N 7W	14	H
RUSTY	CHACRA	M & M	PRODUCT RUSTY FEDERAL		3	SANDOVAL	604CHCR	3004320171	1884	0	10742	0	8739	22N 7W	14	P
RUSTY	CHACRA	DUGAN	PRODUCT DOME FEDERAL	15-22-7	1	SANDOVAL	604CHCR	3004320281	1784	0	104650	0	447	22N 7W	15	P
RUSTY	CHACRA	DUGAN	PRODUCT DOME NAVAJO	17-22-07	2	SANDOVAL	604CHCR	3004320480	1572	0	18698	0	4172	22N 7W	17	K
RUSTY	CHACRA	DUGAN	PRODUCT DOME NAVAJO	20-22-7	1	SANDOVAL	604CHCR	3004320408	1520	0	27833	0	1203	22N 7W	20	H
RUSTY	CHACRA	DUGAN	PRODUCT DOME RUSTY	20-22-7	1	SANDOVAL	604CHCR	3004320319	1600	0	31116	0	828	22N 7W	20	P
RUSTY	CHACRA	DUGAN	PRODUCT NAVAJO	21-22-7	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	3004320309	1562	0	31069	0	0	22N 7W	22	A
RUSTY	CHACRA	CHACE	OIL COM RUSTY NAVAJO		7	SANDOVAL	604CHCR	3004320252	1918	0	14468	0	0	22N 7W	22	M
RUSTY	CHACRA	CHACE	OIL COM RUSTY NAVAJO		1Y	SANDOVAL	604CHCR	3004320264	1812	0	56933	0	0	22N 7W	23	A
RUSTY	CHACRA	CHACE	OIL COM RUSTY NAVAJO		3	SANDOVAL	604CHCR	3004320203	1776	0	57120	0	0	22N 7W	23	A
RUSTY	CHACRA	CHACE	OIL COM RUSTY NAVAJO		2	SANDOVAL	604CHCR	3004320203	1776	0	9393	Low	0	22N 7W	23	K
RUSTY	CHACRA	DUGAN	PRODUCT DOME RUSTY	24-22-7	3	SANDOVAL	604CHCR	3004320219	1743	0	106735	0	3720	22N 7W	24	J
RUSTY	CHACRA	DUGAN	PRODUCT DOME RUSTY	24-22-7	1	SANDOVAL	604CHCR	3004320320	1699	0	30619	0	660	22N 7W	25	B
RUSTY	CHACRA	DUGAN	PRODUCT FEDERAL	25-22-7	1	SANDOVAL	604CHCR	3004320398	1688	0	91503	0	3347	22N 7W	26	A
RUSTY	CHACRA	DUGAN	PRODUCT FEDERAL	26-22-7	4	SANDOVAL	604CHCR	3004320363	1730	0	28506	0	0	22N 7W	26	F
RUSTY	CHACRA	CHACE	OIL COM RUSTY NAVAJO		4	SANDOVAL	604CHCR	3004320241	1731	0	16966	0	0	22N 7W	27	A
RUSTY	CHACRA	CHACE	OIL COM RUSTY NAVAJO		6	SANDOVAL	604CHCR	3004320266	1572	0	0	0	0	22N 7W	27	A

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

12 operated by Dugan Production Corp.

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

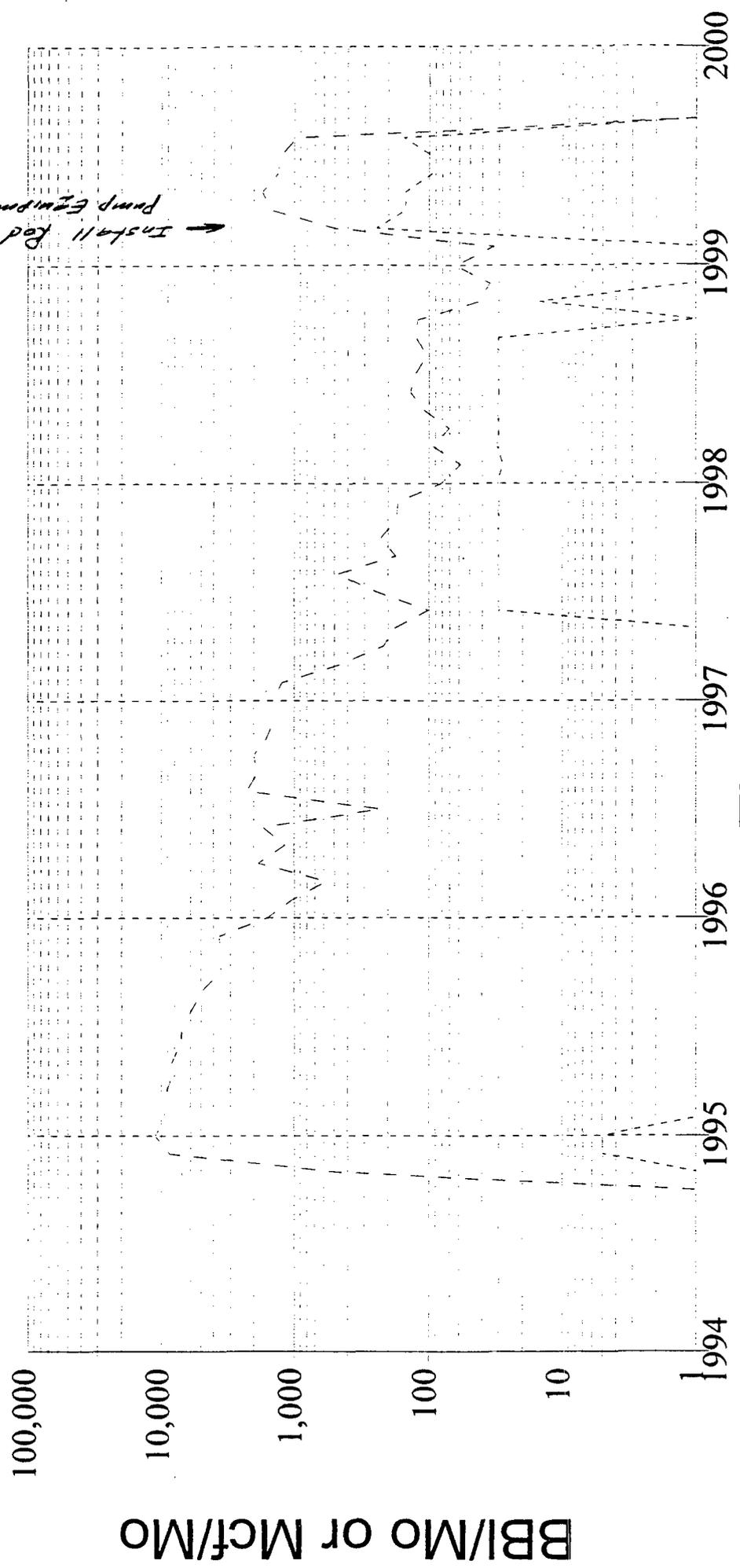
0 1342386 0 48896

27 well average = 49,718 mcf well

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 9-1-99
Reported Water Production = 1,402 Bbls "

*Attachment
No. 3
pg 7 of 7*

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

*← Northwest Basin
Fruitland (B&I)
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 MCF/well

**Attachment No. 4
Offset Lease Ownership
Dugan Production Corp.'s Zappa No. 3
Unit P, Section 27, T-22N, R-8W
San Juan County, New Mexico**

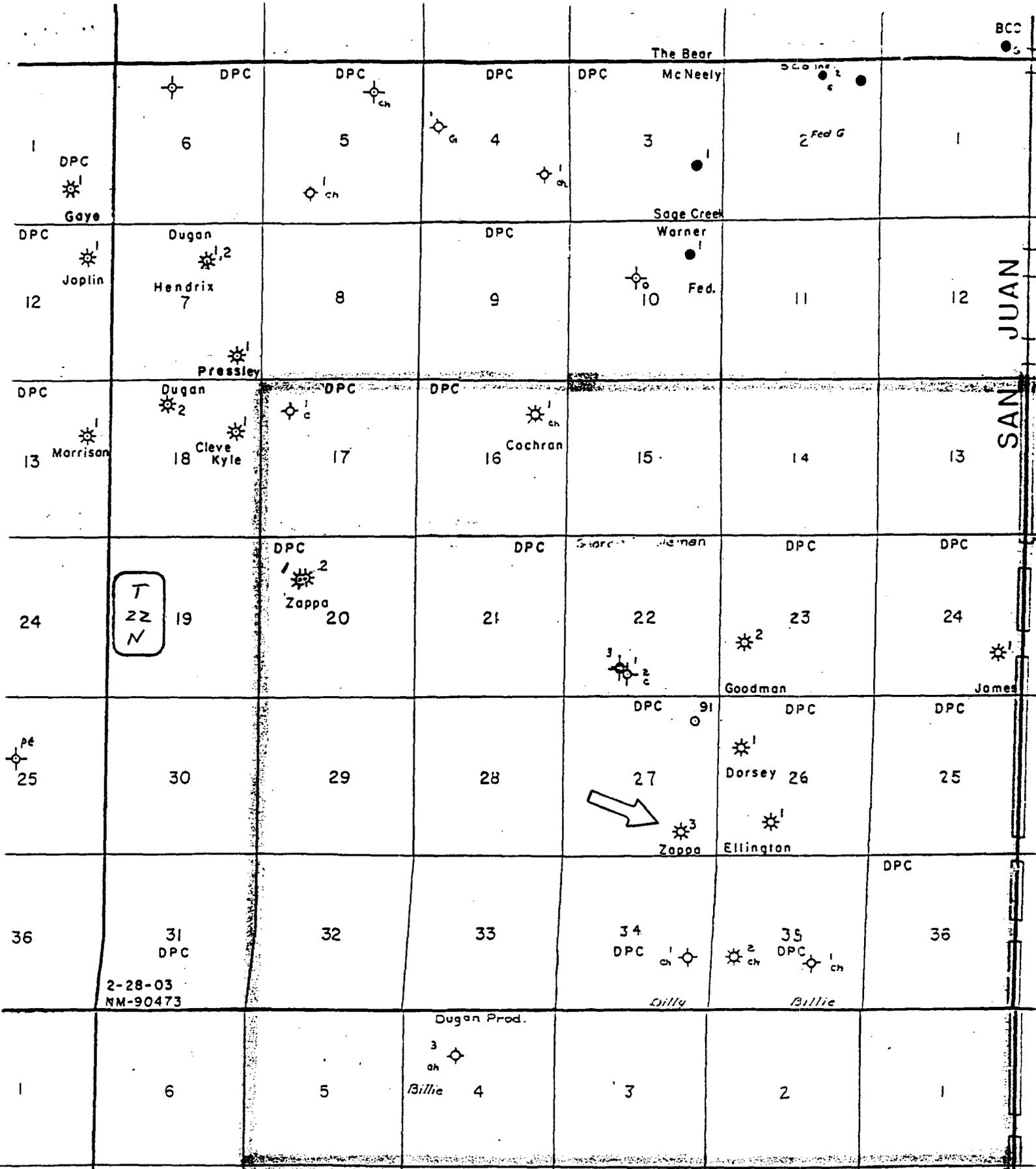
21				22				23	
A	A	A	A	A	A	A	A	A	A
A	A	A	A	A	A	A	A	A	A
C	C	A	A	A	A	A	A	A	A
28	C	C	A	A	A	A	A	A	26
	C	C	A	A	A	A	A	A	
	C	C	A	A	A	A	A	A	
	B	B	A	A	A	A	A	A	
	B	B	A	A	A	D	A	A	
33				34				35	

T
22
N

R8W

Lease Ownership

- A = Dugan Production Corp. - P. O. Box 420, Farmington, NM 87499-0420
- B = Daniel Gonzales - P. O. Box 2475, Santa Fe, NM 87504-2475
- C = 40% Yates Petroleum - 105 S. 4th Street, Artesia, NM 88210
 20% Myco Industries - P. O. Box 840, Artesia, NM 88210-0840
 20% Abo Petroleum Corp. - 105 S. 4th Street, Artesia, NM 88210
 20% Yates Drilling Co. - 105 S. 4th Street, Artesia, NM 88210
- 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



T
22
N



R&W

Attachment No. 5

Dugan Production Corp

- 25 Section Study Area
IN VICINITY OF DUGAN'S
ZAPPA No. 3

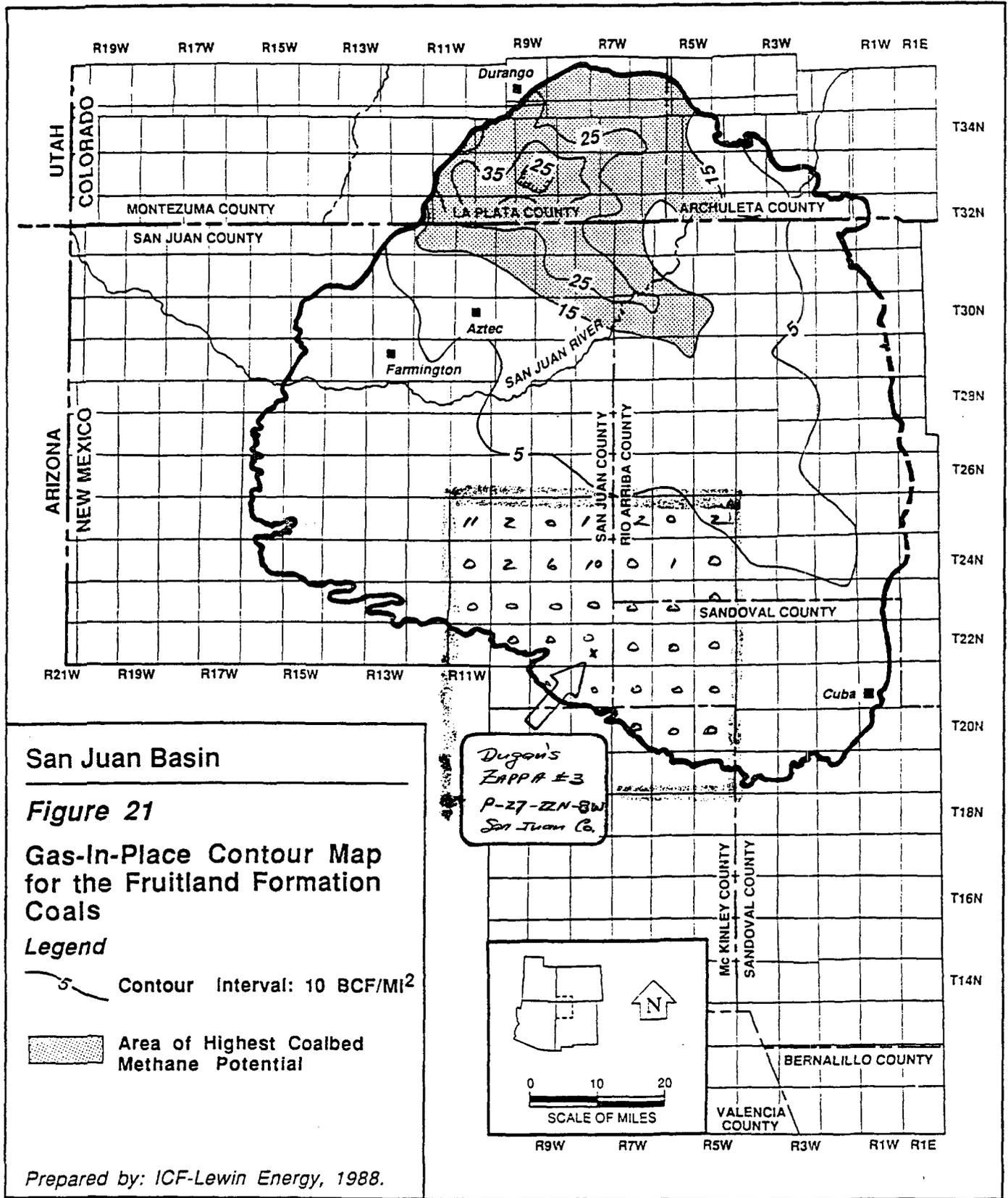
SAN JUAN

**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		
<i>Wells Within 25 Section Study Area</i>								
A-16-22N-8W	Dugan Production	Cochran #1	6-24-98	Bisti Chacra	75	23	312	Texaco compl. 10/80 & plugged 9/86
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
<i>Additional Dugan Production Wells in Vicinity of Study Area</i>								
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



San Juan Basin

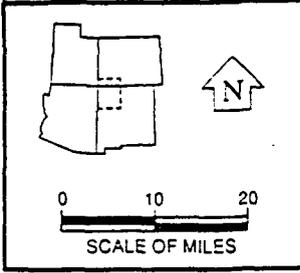
Figure 21
Gas-In-Place Contour Map
for the Fruitland Formation
Coals

Legend

- 5 Contour Interval: 10 BCF/MI²
- Area of Highest Coalbed Methane Potential

Prepared by: ICF-Lewin Energy, 1988.

Dugan's
ZAPPA #3
P-27-ZN-8W
San Juan Co.



Number = the Fruitland Coal wells producing within the Township as of 9-1-99. See page #2 for well specific data.

Field Name	Reservoir Name	Operator Name	Lease Name	Well	Number	County	Zone	API 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	BURLINGTON RE	CANYON LARGO UNIT	263	RIO ARBA	604FRLDC	3003920981			0	15883	0 24N 6W 35
BASIN	FRUITLAND COAL	DUGAN PRODUCT	OKIE	2	SAN JUAN	604FRLDC	3004522304			0	59683	14009 24N 8W 8
BASIN	FRUITLAND COAL	DUGAN PRODUCT	OKIE	1	SAN JUAN	604FRLDC	3004522307			0	9223	935 24N 8W 8
BASIN	FRUITLAND COAL	DUGAN PRODUCT	MESA	90	SAN JUAN	604FRLDC	3004523159			0	63860	12738 24N 8W 16
BASIN	FRUITLAND COAL	DUGAN PRODUCT	LEE'S FERRY	90	SAN JUAN	604FRLDC	3004528939			0	631	0 24N 8W 19
BASIN	FRUITLAND COAL	DUGAN PRODUCT	SUABAI POINT	1	SAN JUAN	604FRLDC	3004528996			0	158101	43110 24N 8W 20
BASIN	FRUITLAND COAL	DUGAN PRODUCT	KAIKAB TRAIL	90	SAN JUAN	604FRLDC	3004529393			0	29854	8846 24N 8W 20
BASIN	FRUITLAND COAL	DUGAN PRODUCT	ANGELS GATE	90	SAN JUAN	604FRLDC	3004529394			0	8683	3746 24N 8W 21
BASIN	FRUITLAND COAL	DUGAN PRODUCT	SAPP	90	SAN JUAN	604FRLDC	3004529192			0	122391	7311 24N 8W 29
BASIN	FRUITLAND COAL	DUGAN PRODUCT	SAPP	91	SAN JUAN	604FRLDC	3004529238			0	1417	806 24N 8W 29
BASIN	FRUITLAND COAL	DUGAN PRODUCT	BUDDHA TEMPLE	90	SAN JUAN	604FRLDC	3004529239			0	225909	29408 24N 8W 30
BASIN	FRUITLAND COAL	DUGAN PRODUCT	BLANCO WASH	2	SAN JUAN	604FRLDC	3004522482			0	6673	0 24N 9W 2
BASIN	FRUITLAND COAL	DUGAN PRODUCT	BLANCO WASH	3	SAN JUAN	604FRLDC	3004522939			0	1280	0 24N 9W 2
BASIN	FRUITLAND COAL	DUGAN PRODUCT	MO VALLEY	90	SAN JUAN	604FRLDC	3004529549			0	61	0 24N 9W 5
BASIN	FRUITLAND COAL	DUGAN PRODUCT	MERRY CHASE	90	SAN JUAN	604FRLDC	3004529650			0	5492	8992 24N 9W 10
BASIN	FRUITLAND COAL	DUGAN PRODUCT	ELWOOD P. DOWD	1	SAN JUAN	604FRLDC	3004523502			0	15450	0 24N 9W 10
BASIN	FRUITLAND COAL	DUGAN PRODUCT	APRIL SURPRISE	90	SAN JUAN	604FRLDC	3004529188			0	3438	0 24N 9W 19
BASIN	FRUITLAND COAL	DUGAN PRODUCT	MARY LOU	90	SAN JUAN	604FRLDC	3004528026			0	5103	1114 24N 10W 32
BASIN	FRUITLAND COAL	DUGAN PRODUCT	AUGUST	90	SAN JUAN	604FRLDC	3004529174			0	1033	0 24N 10W 35
BASIN	FRUITLAND COAL	AMOCO PRODUCT	JICARILLA CONTRACT 1	40	RIO ARBA	604FRLDC	3003923159			0	5437	0 25N 5W 3
BASIN	FRUITLAND COAL	AMOCO PRODUCT	JICARILLA CONTRACT 1	12	RIO ARBA	604FRLDC	3003906153			0	28910	0 25N 5W 4
BASIN	FRUITLAND COAL	TAURUS EXPLOR	DONOHUE	3	RIO ARBA	604FRLDC	3003924223			0	90602	142 25N 7W 7
BASIN	FRUITLAND COAL	BURLINGTON RE	CANYON LARGO UNIT	172	RIO ARBA	604FRLDC	3003920403			0	9253	0 25N 7W 27
BASIN	FRUITLAND COAL	BURLINGTON RE	CUSTER FEDERAL	1	SAN JUAN	604FRLDC	3004525974			0	4184	0 25N 8W 5
BASIN	FRUITLAND COAL	DUGAN PRODUCT	LATEX	1	SAN JUAN	604FRLDC	3004529244			0	37269	6355 25N 10W 9
BASIN	FRUITLAND COAL	DUGAN PRODUCT	LATEX	2	SAN JUAN	604FRLDC	3004529448			0	848	125 25N 10W 9
BASIN	FRUITLAND COAL	CENTRAL RESOU	SUERTE 3 L COM	1	SAN JUAN	604FRLDC	3004528646			0	38552	5691 25N 11W 3
BASIN	FRUITLAND COAL	CENTRAL RESOU	SUERTE 3 L COM	1	SAN JUAN	604FRLDC	3004528193			0	168580	14023 25N 11W 3
BASIN	FRUITLAND COAL	CENTRAL RESOU	SUERTE 4 G COM	1	SAN JUAN	604FRLDC	3004528506			0	187801	17663 25N 11W 4
BASIN	FRUITLAND COAL	CENTRAL RESOU	SUERTE 4 L COM	1	SAN JUAN	604FRLDC	3004528077			0	585245	51479 25N 11W 4
BASIN	FRUITLAND COAL	CENTRAL RESOU	SUERTE 5 B COM	1	SAN JUAN	604FRLDC	3004528507			0	509789	66233 25N 11W 5
BASIN	FRUITLAND COAL	PRO NEW MEXIC	GRACIA NAVAJO 5K	2	SAN JUAN	604FRLDC	3004528913			0	143781	11012 25N 11W 6
BASIN	FRUITLAND COAL	CENTRAL RESOU	EAST BISTI COAL 6	1	SAN JUAN	604FRLDC	3004527871			0	556857	34932 25N 11W 6
BASIN	FRUITLAND COAL	REDWOLF PRODU	C. E.	1	SAN JUAN	604FRLDC	3004529471			0	75524	35991 25N 11W 6
BASIN	FRUITLAND COAL	CENTRAL RESOU	EAST BISTI COAL 8	1	SAN JUAN	604FRLDC	3004527679			0	23319	0 25N 11W 8
BASIN	FRUITLAND COAL	GIANT EXPLORA	SUERTE 13 A CO	1	SAN JUAN	604FRLDC	3004527690			0	1208	0 25N 11W 13
BASIN	FRUITLAND COAL	MARALEX RESOU	GRACIA FEDERAL 26	1	SAN JUAN	604FRLDC	3004529489			0	834	484 25N 11W 26

Handwritten: #7
PP 2 of 2

Handwritten: 1 well in 24N-6W
10 wells in 24N-8W
class to Dugan's
Z appra of 3
± 12 miles

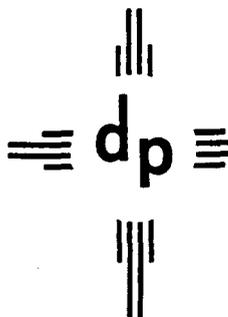
Handwritten: 6 wells in 24N-9W
2 wells in 24N-10W
2 wells in 25N-5W
2 wells in 25N-1W
1 well in 25N-1W
2 wells in 25N-10W

Handwritten: 11 wells in 25N-11W

Handwritten: 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

Handwritten: 20 of 37 operated
by Dugan production Corp.

***** 8 ***** 3205658 ***** 0 ***** 385255



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

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