

CTB ~~PC~~ N/A
4/20/98

dugan production corp.

30

March 26, 1998

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

Mr. Ray Powell, Commissioner
New Mexico State Land Office
P. O. Box 1148
Santa Fe, NM 87504-1148

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

Re: Request for Surface Commingling, Off-lease Measurement and
Sale of Produced Natural Gas - Four Addition Wells
Dugan Production's Topaz Gas Gathering System
Federal Lease SF-078091 (Sections 27 & 28, T26N, R13W)
San Juan County, New Mexico

Dear Ms. Wrotenbery, Mr. Powell, and Mr. Spencer:

We are writing to request approval for the surface commingling, plus off-lease measurement and sale of gas produced from four additional wells to be connected to our Topaz Gas Gathering System, two of which are completed and ready for production, one is being drilled and one is a location approved for drilling.

Dugan Production's Topaz Gas Gathering Systems currently has 12 wells previously approved (or submitted for approval), 11 of which are producing and one of which is completed but not yet connected. During February 1998 production totalled 15,995 MCF (@ 15.025 psi) for an average of 571 MCFD. The operation of the gas gathering system which delivers gas to a CDP sales meter on El Paso Field Services' system in the NW/4 SE/4 of Section 25, T26N, R13W was initially authorized for six wells in 1994 and this application will be the fifth expansion. The approval dates for each expansion are included on Attachment No. 2. It should be noted that our application dated 11-24-97 to include the Bisti State No. 1 and Salge Federal A wells No. 94 and 95 has been approved by the State Land Office, however the NMOCD and BLM have not approved this application. Conversations with representatives from both agencies indicate that both approvals are forthcoming.

Attachment No. 1 presents the Topaz Gas Gathering System with the addition of Dugan Production's Patriot wells No. 90, 91, 92 and 93 which are the wells to be added with this application.

The pertinent lease and well information for these four wells along with the 12 other wells previously submitted for approval to deliver gas into the Topaz Gas Gathering System is presented on Attachments No. 1 and 2. The Patriot No. 90 & No. 91 wells were completed in the Basin Fruitland Coal pool on 2-20-98 and 2-26-98 with initial potentials of 150 MCFD and 175 MCFD, respectively. Both wells are currently shut in and work to connect them to the Topaz Gas Gathering System is in progress.

The Patriot No. 93 was spudded on March 23, 1998 and will be completed in the Basin Fruitland Coal pool in the very near future.

The Patriot No. 92 has been approved for drilling at a standard Fruitland Coal location in the NWNE (Unit B) of Section 28, T26N, R13W as indicated on the map of Attachment No. 1. This well will be drilled following the Patriot No. 93 and is scheduled to also be a Fruitland Coal completion.

The four subject wells either are or will all be completed in the Basin Fruitland Coal at intervals correlative to the producing interval in the twelve other wells currently submitted for approval to deliver gas into the Topaz Gas Gathering System and we anticipate the production performance from these four wells to be similar to other wells currently connected to the gathering system, i.e., primarily dry natural gas with possibly a small amount of water. We do not anticipate any liquid hydrocarbons to be produced from any of the wells. All gas production will be metered at the individual wells utilizing conventional metering equipment. As with the other twelve wells, the volumes measured at the wellsite meters will be utilized to determine factors for allocating sales volumes, BTUs and revenues from the CDP back to the individual wells. The allocation procedures currently approved for the existing wells on the Topaz Gas Gathering System are presented on Attachment No. 3 and will also be utilized for the Patriot wells No. 90, 91, 92 and 93.

Dugan Production Corp. is the operator of all wells connected to the Topaz Gas Gathering System, and only State and Federal mineral interest is involved in any of the 16 spacing units. There is no Indian or Fee mineral ownership.

Many of the wells presented on Attachment No. 1 are part of Dugan Production's West Bisti Unit which produces oil from the Gallup formation with very little casinghead gas. These wells are not connected to the Topaz Gas Gathering System. For clarification, the twelve wells connected to the Topaz Gas Gathering System have been highlighted in blue, and the four wells proposed to be connected are highlighted in orange.

The commingling of the natural gas production from each lease is the result of using a common system to gather and transport the produced gas to the CDP sales meter. All gas volumes will be continuously measured at each well using conventional metering equipment installed and maintained by Dugan Production. The gas charts recorded at each well will be integrated for volumes to be used in determining allocation factors.

Currently, the Alamo Com No. 90 and Cisco Com No. 91 are the only wells that have equipment requiring lease fuel. We do have plans to install rod pump equipment on the Jeter No. 4 and 5 wells which will also require a small amount of lease fuel. In addition, we installed a gathering system compressor on March 4, 1998 which has reduced the gathering system pressure from ± 70 psig to ± 15 psig. This installation has increased gas deliveries at the CDP sales meter from ± 571 MCFD to ± 1100 MCFD and appears to have increased production from all wells connected to the gathering system. All volumes used for fuel will be accounted for and allocated to the wells benefiting from the operation of the equipment. The current and anticipated lease fuel requirements are presented on Attachment No. 4.

In summary, Dugan Production Corp. is requesting approval to add four wells (all on the same Federal lease), to the Topaz Gas Gathering System which will require surface commingling, plus off-lease measurement and sale of produced gas. These wells will be operated in the same manner that has been approved by the BLM, NMOCD and the State Land Office for the twelve wells currently approved to (or pending approval) for delivering gas into the system. Dugan Production Corp. has incurred a substantial investment in installing this gathering system, following extensive negotiations with EPNG upon their refusal to make wellhead connections for any of these wells. The only way EPNG (now El Paso Field Services) would consider accepting the gas produced from the subject wells was if we gathered and delivered the gas to a central point on their existing system, which has necessitated the installation and operation of the Topaz Gas Gathering System.

Should you need additional information or have questions regarding any of this information, please feel free to contact me or Barbara Williams at the letterhead address.

Sincerely,



John D. Roe
Engineering Manager

JDR/tmf

attachs.

cc: NMOCD - Aztec

Lease Key	
Letter	Lease Name
A	Salge Federal A
B	Cisco
C	Com'd
D	Alamo
E	Jeter
F	Bisti State
G	Bisti State Com'd
H	Patriot

CDP
Sales
Meter

25

R-13-W

T-26-N

T-25-N

Compressor

Jeter 5

Jeter #3

T-25-N

Bisti State #1

Bisti State #1

Jeter #1

Bisti State Com #1

Patriot 91

Patriot 90

Patriot 92

Patriot 93

Salge Federal A #94

Salge Federal A #95

Cisco Com #91

Salge Federal A Com #91

Salge Federal A Com #90

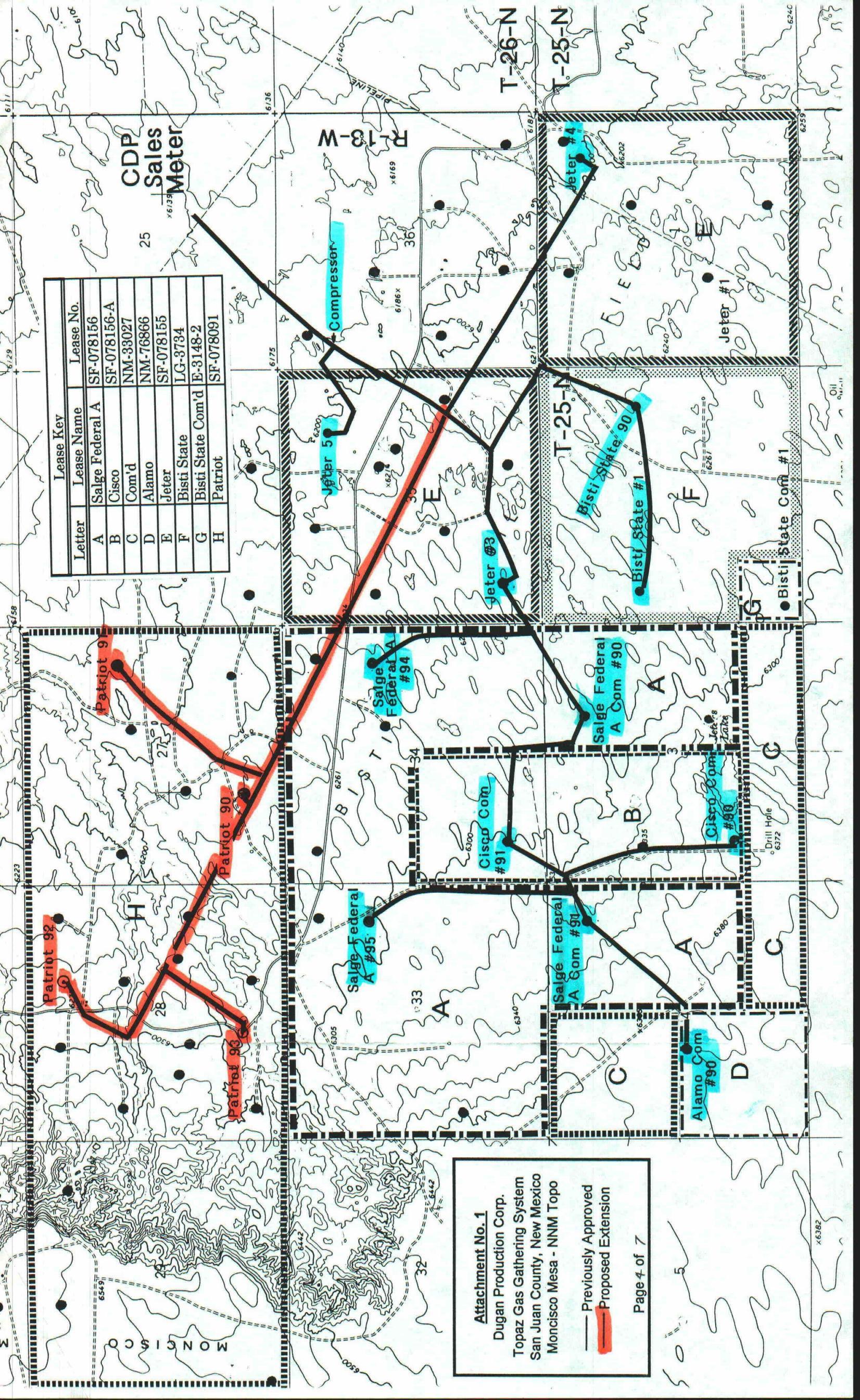
Cisco Com #90

Alamo Com #90

Attachment No. 1
 Dugan Production Corp.
 Topaz Gas Gathering System
 San Juan County, New Mexico
 Moncisco Mesa - NNIM Topo

— Previously Approved
 — Proposed Extension

Page 4 of 7



ATTACHMENT NO. 2
 DUGAN PRODUCTION CORP.
 TOPAZ GAS GATHERING SYSTEM 3-25-98
 SAN JUAN COUNTY, NEW MEXICO

Well Name	API No. 30-045-	Well Location		Lease Number	Type Lease	Communitization Agreement Number	Producing Interval	Completion Date	Current Average Production		Spacing Unit	Dates for Surface Commingling, Off-Lease Measurement & Sales APPROVAL		
		¼	¼						Sec-Twn-Rng	MCFD		BWPD	Application	BLM
WELLS TO BE ADDED TO SYSTEM														
Patriot #90	29511	SESW	27-26N-13W	SF 078091	Fed.	N/A	Basin Fruitland Coal	02-20-98	150*	0*	W/2-320A	03-25-98		
Patriot #91	29510	SENE	27-26N-13W	SF 078091	Fed.	N/A	Basin Fruitland Coal	02-26-98	175*	0*	E/2-320A	03-25-98		
Patriot #92	29512	NWNE	28-26N-13W	SF 078091	Fed.	N/A	Basin Fruitland Coal	Note (4)	---	---	N/2-320A	03-25-98		
Patriot #93	29513	SESW	28-26N-13W	SF 078091	Fed.	N/A	Basin Fruitland Coal	Note (3)	---	---	S/2-320A	03-25-98		
WELLS PREVIOUSLY APPROVED FOR SYSTEM														
Alamo Com #90	28806	NESW	04-25N-13W	NM 76866	Fed.	NM NM 91217	Basin Fruitland Coal	08-15-93	16	0	W/2-320A	08-26-94	(2) 10-11-94	10-09-96
Bisti State #1	25834	SWNW	02-25N-13W	LG-3734	State	State Com.	Basin Fruitland Coal	09-11-97	55	0.3	W/2-319.57A	11-24-97	pending	12-09-97
Bisti State #90	29216	SENE	02-25N-13W	LG-3734	State	N/A	Basin Fruitland Coal	09-18-96	49	0.3	E/2-319.67A	09-26-96	12-12-96	10-09-96
Cisco Com #90	28662	NWSW	03-25N-13W	SF 078156-A	Fed.	NM NM 89398	Basin Fruitland Coal	02-22-93	6	0.7	W/2-320A	08-26-94	(2) 10-11-94	10-09-96
Cisco Com #91	28805	SWSW	34-26N-13W	SF 078156-A	Fed.	NM NM 89374	Basin Fruitland Coal	04-15-93	31	0.8	W/2-320A	08-26-94	(2) 10-11-94	10-09-96
Jeter #3	28860	SWSW	35-26N-13W	SF 078155	Fed.	N/A	Basin Fruitland Coal	04-12-93	161	0.8	S/2-320A	08-26-94	(2) 10-11-94	10-09-96
Jeter #4	28804	NENE	01-25N-13W	SF 078155	Fed.	N/A	Basin Fruitland Coal	12-21-92	37	0.5	N/2-320A	12-29-94	01-09-95	10-09-96
Jeter #5	29390	NENE	35-26N-13W	SF 078155	Fed.	N/A	Basin Fruitland Coal	09-17-96	35	0.1	N/2-320A	09-26-96	12-12-96	10-09-96
Salge Federal A Com #90	28587	NWNE	03-25N-13W	SF 078156	Fed.	NM NM 88297	Basin Fruitland Coal	02-12-92	91	1.0	E/2-320A	08-26-94	(2) 10-11-94	10-09-96
Salge Federal A Com #91	28663	NENE	04-25N-13W	SF 078156	Fed.	NM NM 89362	Basin Fruitland Coal	02-14-93	10	1.5	E/2-320A	08-26-94	(2) 10-11-94	10-09-96
Salge Federal A #94	29501	SENE	34-26N-13W	SF 078156	Fed.	N/A	Basin Fruitland Coal	12-01-97	56	1.0	E/2-320A	11-24-97	pending	12-09-97
Salge Federal A #95	NR	SENE	33-26N-13W	SF 078156	Fed.	N/A	Basin Fruitland Coal	02-25-98	200*	0*	E/2-320A	11-24-97	pending	12-09-97

N/A - Not Applicable

NR - None Reported

1 - Average production 1/98 & 2/98. * = well not producing 1/98 & 2/98. Rates are estimated from subsequent testing.

2 - Application Supplemented 9/19/94, 9/30/94 and 10/19/94

3 - Well not completed. Spudded 3/23/98 & currently being drilled.

4 - Well location, APD submitted 6/02/97 and approved 1/8/98.

5 - NMOCD Commingling order CTB-407: a = 02/09/95; b = 05/16/95; c = 12/04/96.

Attachment No. 3
Allocation Procedures
Dugan Production Corp.'s
Topaz Gas Gathering System
CPD - NWSE 25, T-26N, R-13W
San Juan County, New Mexico

Base Data:

W=Volume (MCF) from Well Allocation Meter

X=Volume (MCF) from CPD Sales Meter

Y=BTU's from CPD Sales Meter

Z=Gas Revenue (\$) from CPD Sales Meter

1. Individual Well Production = A+B+C+D+E

A = Allocated Sales Volume, MCF.

$$= (W/\text{SUM } W) \times X$$

B = On lease fuel usage, MCF. Determined from equipment specifications and operating conditions.

C = Purged and/or vented gas from well and/or lease equipment, MCF. Calculated using equipment specifications and pressures.

D = Allocated fuel from gathering system equipment, MCF. The total fuel required to operate gathering system equipment will be allocated to the individual wells benefiting from the equipment using allocation factors determined by $(W / \text{Sum } W)$ for the wells involved.

E = Allocated volume of gas lost and/or vented from the gathering system and/or gathering system equipment, MCF. The total volume will be determined using industry accepted procedures for the conditions existing at the time of the loss. All volumes corresponding to liquid condensation within the gathering system will also be determined. The total volume lost and/or vented will be allocated to the individual wells affected using factors determined by $(W / \text{Sum } W)$.

2. Allocated Individual Well BTU's = $(W \times \text{Individual well BTU}) / \text{Sum } (W \times \text{individual well BTU}) \times Y$.

Individual well gas heating values to be determined in accordance with BLM's On Shore Order No. 5.

3. Allocated Individual Well Gas Revenues = $(\text{Allocated Individual well BTU's} / \text{Sum Allocated individual well BTU's}) \times Z$

GAS USE ①
DUGAN PRODUCTION CORP.
TOPAZ GAS GATHERING SYSTEM
SAN JUAN COUNTY, NEW MEXICO

Well Location	Separator Burner		Equipment		Lease Fuel MCFD ②		Gas Purged to Unload Accumulated Liquids		
	BTU/hr	HP of Pump Unit Engine	HP of Compressor Engine	Summer Months	Winter Months	Normal Tubing Size -Inch	Average Wellhead Press - psia	MCF per Cycle	
WELLS TO BE ADDED TO SYSTEM									
Patriot #90	---	---	---	---	---	---	---	---	---
Patriot #91	---	---	---	---	---	---	---	---	---
Patriot #92	---	---	---	Note ③	Note ③	---	---	---	---
Patriot #93	---	---	---	Note ③	Note ③	---	---	---	---
WELLS PREVIOUSLY APPROVED FOR SYSTEM									
Alamo Com #90	---	7 ④	---	1.76 ④	1.76 ④	---	---	---	---
Bisti State #1	---	---	---	0	0	1-1/4"	71	0.06	0.06
Bisti State #90	---	---	---	0	0	1-1/4"	61	0.05	0.05
Cisco Com #90	---	---	---	0	0	1-1/2"	60	0.08	0.08
Cisco Com #91	90M	---	---	0	0.49	1-1/2"	54	0.07	0.07
Jeter #3	---	---	---	0	0	1-1/2"	69	0.08	0.08
Jeter #4	---	7 ⑥	---	1.76 ⑥	1.76 ⑥	1-1/2"	54	0.06	0.06
Jeter #5	---	7 ⑥	---	1.76 ⑥	1.76 ⑥	1-1/4"	61	0.05	0.05
Salge Fed A Com #90	---	---	---	0	0	2-3/8"	68	0.13	0.13
Salge Fed A Com #91	---	---	---	0	0	1-1/2"	59	0.07	0.07
Salge Federal A #94	---	---	---	0	0	1-1/4"	72	0.06	0.06
Salge Federal A #95	---	---	---	0	0	---	---	---	---
System Equipment	---	---	194 ⑤	33.76	33.76	---	---	---	---

Notes:

- 1 Data reflects information as of 3-25-98. As descriptions &/or equipment change, fuel uses will also change.
- 2 Summer Months = May thru October. Winter Months = November thru April. Lease fuel is calculated from stated burner requirements and horsepower.
- 3 Well not completed - No lease fuel anticipated.
- 4 Rod pump equipment installed 11-12-97. No fuel use prior to rod pump installation.
- 5 Sullair PDX-20 screw compressor installed 3-4-98
- 6 Rod pump equipment to be installed ±4-1-98. No fuel used to date.



APR 8 1998

**RAY POWELL, M.S., D.V.M.
COMMISSIONER**

**State of New Mexico
Commissioner of Public Lands**

310 OLD SANTA FE TRAIL P.O. BOX 1148

SANTA FE, NEW MEXICO 87504-1148

**(505) 827-5760
FAX (505) 827-5766**

April 6, 1998

Dugan Production Corporation
P. O. Box 420
Farmington, New Mexico 87499-0420

Attn: Mr. John D. Roe

Re: Application for Surface Commingling
Off-Lease Measurement & Sale of Production
Addition of Four Additional Federal Wells to Topaz Gas Gathering System
San Juan County, New Mexico

Dear Mr. Roe:

We have received your letter of March 26, 1998, requesting approval for surface commingling, off-lease measurement and sale of gas production from four federal wells at the Topaz Gas Gathering System.

Since the four wells in your application are federal wells, approval is not required from this office.

If you have any questions or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY POWELL, M.S., D.V.M.
COMMISSIONER OF PUBLIC LANDS

BY:
JAMI BAILEY, Director
Oil, Gas and Minerals Division
(505) 827-5744

RP/JB/cpm
pc: Reader File BLM OCD: David Catanach, Ben Stone