dugan production corp.

September 19, 1997

October 23, 1997
NMOCD Case No. 11863
Dugan Production Corp.
Exhibit No. 4

Mr. Ben Stone
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, NM 87505

Mr. Pete Martinez
New Mexico State Land Office
P O Box 1148
Santa Fe, NM 87504-1148

Mr. Frank Chavez
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Re: Supplemental information
Dugan's 8-19-97 letter application
Surface commingling and off-lease measurement
Proposed Federal I Central Gathering System
San Juan County, NM

Dear Ben, Pete and Frank:

Attached for your files and information regarding Dugan's captioned application is a copy of supplemental information sent to the BLM at their request. The supplemental data does not change anything in our initial application, however either clarifies (revised Attachment No. 4), or adds descriptive data (Attachments No. 9 and 10).

Please let me know should you have questions or need additional information.

Sincerely,

John D Roe

John D. Roe
Engineering Manager

JDR/tmf

attachs.

709 E. MURRAY DR. • P. O. BOX 420 • FARMINGTON, N.M. 87499-0420 • PHONE: (505) 325-1821 • FAX# (505) 327-4613

dugan production corp.

Hand Delivered

September 19, 1997

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

Re: Supplemental Information
Dugan's 8-19-97 letter application
Surface commingling and off-lease measurement
proposed Federal I Central Gathering System
San Juan County, New Mexico

Dear Mr. Spencer:

Attached for your consideration of the subject application, is the following supplemental information:

1. Revised Attachment No. 4 from our initial application. Hopefully the revisions will better state Dugan's intention to account for the number of days any one well produces during any allocation period. We intend to use the most recent test data for each allocation period and until a subsequent test is taken on all wells. During any allocation period the factor for each well will be determined considering the actual days produced multiplied by the most recent test to arrive at that wells theoretical production during the period. The individual well factor will be computed by dividing the individual well's theoretical production by the sum of all well's individual theoretical production. This allocation procedure is to be used for all production (gas and water). Thus should any well be shut in during the entire allocation period, its factor will be zero for that period.

2. A diagrammatic sketch of our proposed gathering system and CPD. In addition, I have included the facilities related to water disposal (i.e. the Stella Needs A Com #1E , water storage tanks, lines and transfer pumps) since they will be located at our CPD site on the Federal I #4 location. The water disposal facilities are an important part of making this gathering system economical and are currently located at the Stella Needs A Com #1E, however will be relocated as indicated on the attached sketch in order to also receive water associated with the 6 wells on the Federal I gathering system. This facilities sketch will be Attachment No. 9 to our application.

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3. A table presenting the current fuel requirements for lease and gathering system equipment. This will be Attachment No. 10 to our application.

I hope this information will satisfy the BLM's concerns. Should you have questions or need additional information please let me know.

Sincerely,

John D Roe

John D. Roe
Engineering Manager

JDR/tmf

attachs.

cc: NMOCD - Santa Fe & Aztec
NMSLO - Pete Martinez

Attachment No. 4 (Revised 9-17-97)
Allocation Procedures
Dugan Production Corp.'s
Proposed Surface Commingling & Off Lease Measurement
Federal I Central Gathering System
CPD: C-1-29N-14W
San Juan County, New Mexico

Base Data:
U=Water volume (BWPD) from Periodic Well Test x days operated during allocation period
V=Water volume (bbl) at Central Battery during allocation period
W=Gas volume (MCFD) from Periodic Well Test x days operated during allocation period
X=Gas volume (MCF) from CPD Sales Meter during allocation period
Y=BTU's from CPD Sales Meter during allocation period
Z=Gas Revenue ($) from CPD Sales Meter during allocation period

Allocation Period is typically a calendar month and will be the same for all wells.

1. Individual Well Gas Production = A+B+C+D+E
   A = Allocated Sales Volume, MCF.
   = (W/SUM W) x 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.

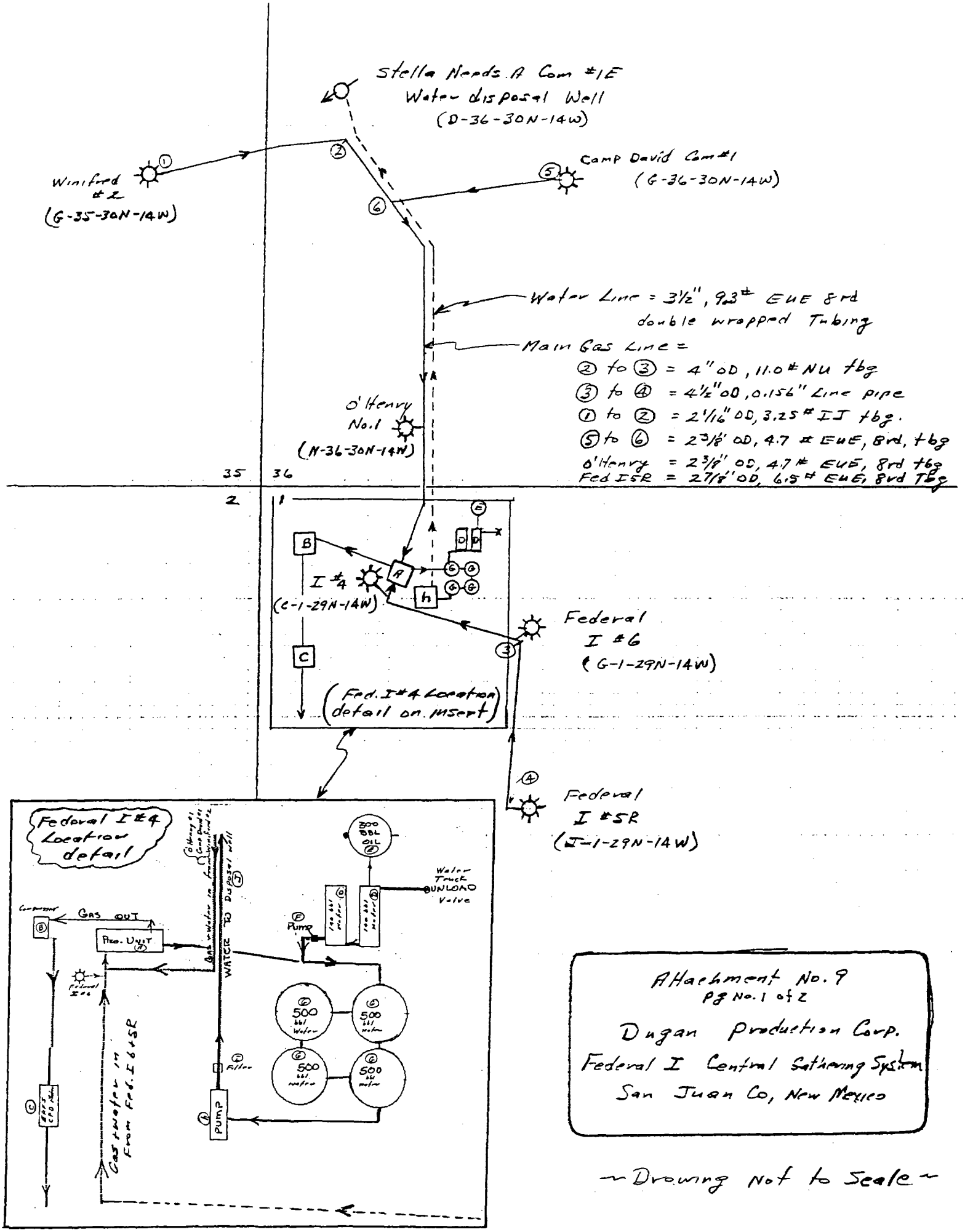
   D = Allocated fuel from gathering system equipment, MCF. The total fuel required to operate gathering system equipment will be allocated to the individual wells benefiting from the equipment using allocation factors determined by W / Sum W for the wells involved.

   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 / Sum W.

2. Allocated Individual Well BTU's =((W x Individual well BTU) / Sum (W x individual well BTU)) x 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 = (Allocated Individual well BTU's / Sum Allocated individual well BTU's) x Z

4. Individual Well Water Production=Allocated production volume, bbl=(U / Sum U) x V



Attachment No. 9
Pg No. 1 of 2

Dugan Production Corp.
Federal I Central Gathering System
San Juan Co, New Mexico

~ Drawing Not to Scale ~

Attachment No. 9
Page No. 2 of 2
Equipment Description
Federal I Central Battery
Unit C, Section 1, T-29N, R-14W
San Juan County, NM

Gathering System

A. Production Unit - P&A Inc. 2 phase, 125 psi separator (Model CP 23-125-2P) with 250,000 BTU burner. Only heated during winter months. Fuel requirements = 1.4 MCFD.

B. Compressor - Chicago Pneumatic 7" x 11" single stage powered by 156 hp Minneapolis Moline gas fired engine. Fuel requirements = 39.3 MCFD.

C. El Paso Field Services CPD Gas Sales Meter (previously served as gas sales meter for Dugan's Federal I well #4).

Water Disposal Facilities

D. 140 bbl steel tanks (6' W x 22' L x 6' D) for receiving water hauled to water disposal facilities.

E. 300 bbl steel tank to store minor amounts of oil plus BS&W recovered from water hauled to disposal facilities.

F. Transfer pump powered by electric motor.

G. 500 bbl steel tanks to store water received from Federal I gathering system and water hauled to disposal facilities (only water from Dugan operated wells will be received).

H. Gardner Denver Triplex Water Transfer Pump powered by 25 hp electric motor. Pump to be controlled by water level in storage tanks. Water pumped to Stella Needs A Com #1E water disposal well.

I. Nowata Cartridge Water Filter - model 3AH1ZC

J. Stella Needs A Com #1E water disposal well (D-36-30N-14W) - NMOCD Administrative Order SWD-595 dated 6-7-95.

ATTACHMENT NO. 10
GAS USE ①
DUGAN PRODUCTION CORP.
PROPOSED FEDERAL I GATHERING SYSTEM
SAN JUAN COUNTY, NEW MEXICO

Well Location	Equipment					Gas Purged to Unload Accumulated Liquids		
	Separator Burner BTU/hr	HP of Pump Unit Engine	HP of Compressor Engine	Lease Fuel MCFD ②		Normal Tubing Size -Inch	Average Wellhead Press - psia	MCF per Cycle
				Summer Months	Winter Months			
Camp David Com #1	---	---	---	---	---	---	---	---
Federal I #4	---	---	Note③	Note③	Note③	---	---	---
Federal I #5R	---	---	---	---	---	---	---	---
Federal I #6	---	---	Note③	Note③	Note③	---	---	---
O'Henry #1	---	---	---	---	---	---	---	---
Winifred #2	---	---	Note③	Note③	Note③	---	---	---
Central Battery	250M	---	156	39.3	40.7	---	---	---

Notes:

① Data reflects information as of 9-1-97. 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 Wellhead compressors used prior to installation of Central Gathering System will be removed from service & replaced with a Central Battery Compressor