

Florene,

Please set this for hearing on October 23, 1997.

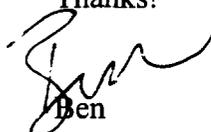
The application is for exception to Rules 303.B and 309.B.

Specifically, the applicant wishes to commingle production from multiple pools and multiple leases to a proposed gathering system and to allocate production by well tests where ownership is diverse.

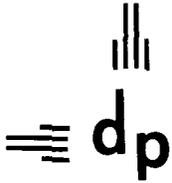
The applicant applied for administrative approval but for this to occur as proposed, the ownership must be common.

Let me know if you have any questions.

Thanks!



Ben



dugan production corp.

September 24, 1997

RECEIVED

SEP 26 1997

BLM REGION

11863

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

Re: Dugan Production's 8-19-97 Application  
Surface Commingling and Off-Lease Measurement  
Proposed Federal I Central Gathering System  
San Juan County, New Mexico

Dear Mr. Stone:

Attached for your review and file in considering the captioned application is a copy of the BLM's 9-22-97 approval of our application. In addition, I am attaching a copy of the return receipt card for 1 additional overriding royalty interest owner holding 0.32% in the O'Henry #1. Thus as an update to our 9-16-97 letter, we now have notice verification from all ownership for 5 of the wells (Camp David Com #1, Federal I #4, 5R, and 6, plus the Winifred #2), and for the O'Henry #1, we have receipts for 98.68% of the ownership. We still have not received, or have been unable to locate 5 overriding royalty interest owners with a combined interest of 1.32%. We will continue our efforts to locate these 5 parties.

I have attached the interest ownership detail (Attachment No. 7) included in our 8-19-97 application and have highlighted in blue the owners that we have been unable to locate.

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

Sincerely,

*John D. Roe*

John D. Roe  
Engineering Manager

JDR/tmf

attachs.



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Farmington District Office  
1235 La Plata Highway, Suite A  
Farmington, New Mexico 87401

# COPY

September 22, 1997

IN REPLY REFER TO:  
NMSF-078110(WF)  
3162.7-3

Mr. John Roe  
Dugan Production Corp.  
P.O. Box 420  
Farmington, NM 87499-0420

Dear Mr. Roe:

Dugan submitted an application for off-lease measurement and surface commingling of gas production from the following wells:

Well Name	QTR/QTR	Location	Lease Number	CA Number	Pool
1 Camp David Com	G	36-30N-14W	State	N/A	Fruitland Coal
4 Federal I	C	1-29N-14W	NMSF-078110	N/A	FR Sand -PC
5R Federal I	J	1-29N-14W	NMSF-078110	N/A	FR Sand -PC
6 Federal I	G	1-29N-14W	NMSF-078110	N/A	FR Sand -PC
1 O'Henry	N	36-30N-14W	State	N/A	Fruitland Coal
2 Winifred	G	35-30N-14W	Fee	SCR-141	FR Sand -PC

Based upon our review of your application and the supplemental data Dugan submitted September 19, 1997, your application for the Federal I Central Gathering System is approved, effective August 1, 1997. This approval for off-lease measurement and surface commingling is subject to the following conditions of approval:

1. Dugan is required to test the gas system integrity prior to initiating operations and submit the results for our files.
2. Dugan is required to comply with the applicable provisions of Onshore Orders No. 3, 4 and 5.

If you have any questions, please call Duane Spencer at (505) 599-6350.

Sincerely,

Duane W. Spencer  
Team Lead, Petroleum Management

cc:  
NMOCD, Aztec, NM  
State Land Office, O&G Division, Santa Fe, NM



Fed I CDD

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1.  Addressee's Address
- 2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Martin A. Moe, Jr.  
660 Palm Blvd.  
Weston, IA 33326

4a. Article Number

P 352 631 198

4b. Service Type

- Registered  Certified
- Express Mail  Insured
- Return Receipt for Merchandise  COD

7. Date of Delivery

9/13/97

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)



Thank you for using Return Receipt Service.

COPY

PS Form 3811, December 1994

Domestic Return Receipt

to 8-19-97 Application

COPY

ATTACHMENT NO. 7  
 INTEREST OWNERSHIP  
 PROPOSED FEDERAL I CENTRAL GATHERING SYSTEM  
 DUGAN PRODUCTION CORP.  
 SAN JUAN COUNTY, NEW MEXICO

	Camp David Com #1		Federal I Lease 1		O'Henry #1		Winifred #2	
	WI	NI	WI	NI	WI	NI	WI	NI
<b>Working Interest Owners</b>								
Dugan Production	1.0000	0.8326	1.0000	0.8750	1.0000	0.7024	1.0000	0.8650
<b>Royalty Interest Owners</b>								
USA-Federal				0.1250				0.0625
State of New Mexico		0.1250				0.1250		
Joseph O. & Cicily Muench								0.03125
Patricia Harbin								0.03125
<b>Overriding Royalty Owners</b>								
Conoco		0.0068				0.1504		
Anne B. Little		0.0051						
Sylvia Little		0.0051						
Texaco Exploration		0.0253						
Edward & Juanita Lopez						0.0036		
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Harper L. & Nellie A. Proctor						0.0036		
Gisle W. Romo						0.0012		
Clara Sault						0.0012		
Ernest J. & Valene M. Sill						0.0042		
Winifred & Forest Jacobs								0.0100

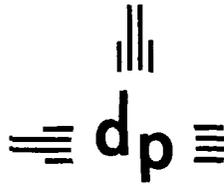
Total 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000

= interest ownership  
 not yet located

Total = 1.32%

1 Federal I Wells No. 4, 5R & 6.

PLC 9/9/87



# dugan production corp.



August 19, 1997

AUG 20 1997

Mr. Bill LeMay, Director  
New Mexico Oil Conservation Div.  
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, Branch Manager  
Bureau of Land Management  
1235 La Plata Highway  
Farmington, NM 87401

*Case 11863*

Re: Surface Commingling & Off-Lease Measurement  
Proposed Federal I Central Gathering System  
Dugan Production Corp.'s  
Camp David Com #1, Federal I wells No. 4, 5R & 6, O'Henry #1, & Winifred #2  
San Juan County, New Mexico

Dear Mr. LeMay, Mr. Powell and Mr. Spencer:

We are writing to request your administrative approvals for the proposed surface commingling of production (natural gas and water) from the subject 6 wells; all are operated by Dugan Production.

Attachments No. 1 and No. 2 present these 6 wells along with their respective spacing units, completion and lease information. These 6 wells are all low volume natural gas wells, 3 of which have established production histories and are all currently shut in waiting on the installation of a water disposal system, and 3 of which have never been connected for gas sales. Four of the wells are completed in the Harper Hill Fruitland Sand Pictured Cliffs gas pool (160 acre spacing) and 2 in the Basin Fruitland Coal gas pool (320 acre spacing). It is anticipated that production will range from 15 to 30 MCFD per well and the only liquid production anticipated is water which is typical to both pools in this area.

We are proposing to install a central gathering system which will transport all production (gas and water) from each well to a central battery located at the Federal I #4. The gas and water will be separated and the gas compressed and sold to El Paso Field Services through a CPD sales meter currently serving as the Federal I #4 sales meter. The water will then be transferred by pipeline from a central storage tank also located at the Federal I #4 to Dugan Production's water disposal

well, the Stella Needs A Com #1 located in the NWNW of Section 36, T-30N, R-14W. Each well will be tested at regular intervals using Dugan's portable test unit and the tests used to establish factors for allocating CPD gas sales and water production from the battery at the Federal I #4 to the individual wells. For the 1st year of operation, we propose testing every 3 months and then at a frequency to be established by production performance at the central facility. Thus an unexplained change in either total gas or water at the central battery would dictate a re-test of all wells and new allocation factors. After the 1st 12 months, we plan to test each well annually unless a shorter frequency is indicated by production.

Dugan's portable test unit is a trailer mounted 3 phase separator capable of measuring bbl of oil, bbl of water and MCF of gas. Gas production is recorded on a conventional chart using a Barton Dry Flow Orifice Meter. The test unit will be connected to the flow line at each well site, the total production stream separated and individual streams measured, and then all fluids returned to the flowline and transferred to the central battery. We have been using this unit for approximately 2 years and have found it to produce accurate measurements especially in the lower volume wells such as those on our proposed Federal I central gathering system.

The Federal I wells #4 and #6 plus the Winifred #2 are connected and have produced gas into El Paso Field Services system, however water production typical to the Harper Hill Fruitland Sand PC gas pool has resulted in each well being shut in until the water disposal issues could be resolved and economic operations restored. Attachment No. 3 presents the production histories for all 3 wells. We have converted our Stella Needs A Com #1 to a water disposal well (NMOCD Administrative Order SWD-595 dated 6-7-95) and plan to install a pipeline system to transfer water from our central facilities to the disposal well. The central gathering system proposed is important to the handling of water production and overall economic operations of these low volume gas wells. We have recently tested each of these currently idle well and anticipate production rates of 15 to 30 MCFD.

In addition to returning these 3 wells to production , we plan to connect 2 Basin Fruitland Coal wells completed in 1991, (our Camp David Com #1 and O'Henry #1) and a recently completed Harper Hill Fruitland Sand-PC well (our Federal I #5R). All 3 of these new wells are small wells and do not warrant individual wellhead connections. Thus our proposed central gathering system is the only feasible option for placing these wells on production.

Dugan Production has negotiated an arrangement with El Paso Field Services that will allow us to convert the Federal I #4 sales meter to a CPD gas sales meter for these 6 wells. The CPD meter will be operated and maintained by EPFS. Gas sales volumes and revenues will be allocated from the CPD meter to each well based upon allocation factors and procedures set out on Attachment No. 4. The gas system integrity will be periodically monitored using DPC's gas detector and the entire gathering system will be pressure tested prior to being placed in service.

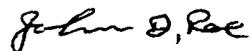
The gas from each completion is compatible and very similar in composition. Attachments No. 5 and 6 present representative analysis from each pool and individual gas samples will be taken in accordance with the BLM's On Shore Order No. 5 to insure the accurate allocation of BTU's.

The interest ownership is presented on Attachment No. 7 and all interest owners have received notice of this proposal by certified mail. Attachment No. 8 presents the letters providing notice to our royalty and overriding royalty interest owners and upon receiving the certified mail receipts, we will provide copies to the NMOCD. Dugan Production Corp. is the operator of all 6 wells and holds a 100% working interest.

In summary, Dugan Production proposes to install a central gathering system to collect natural gas and water from 6 low volume gas wells and use a central facility to separate the gas and water. The natural gas will be delivered to El Paso Field Services at their CPD sales meter and will be allocated to each well using allocation factors determined from periodic individual well tests. The water production will be transferred by pipeline and will be disposed of at Dugan's water disposal well. We do not anticipate any liquid hydrocarbon production. We view the proposed operation as our only viable option to place these 6 wells on production.

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

Sincerely,

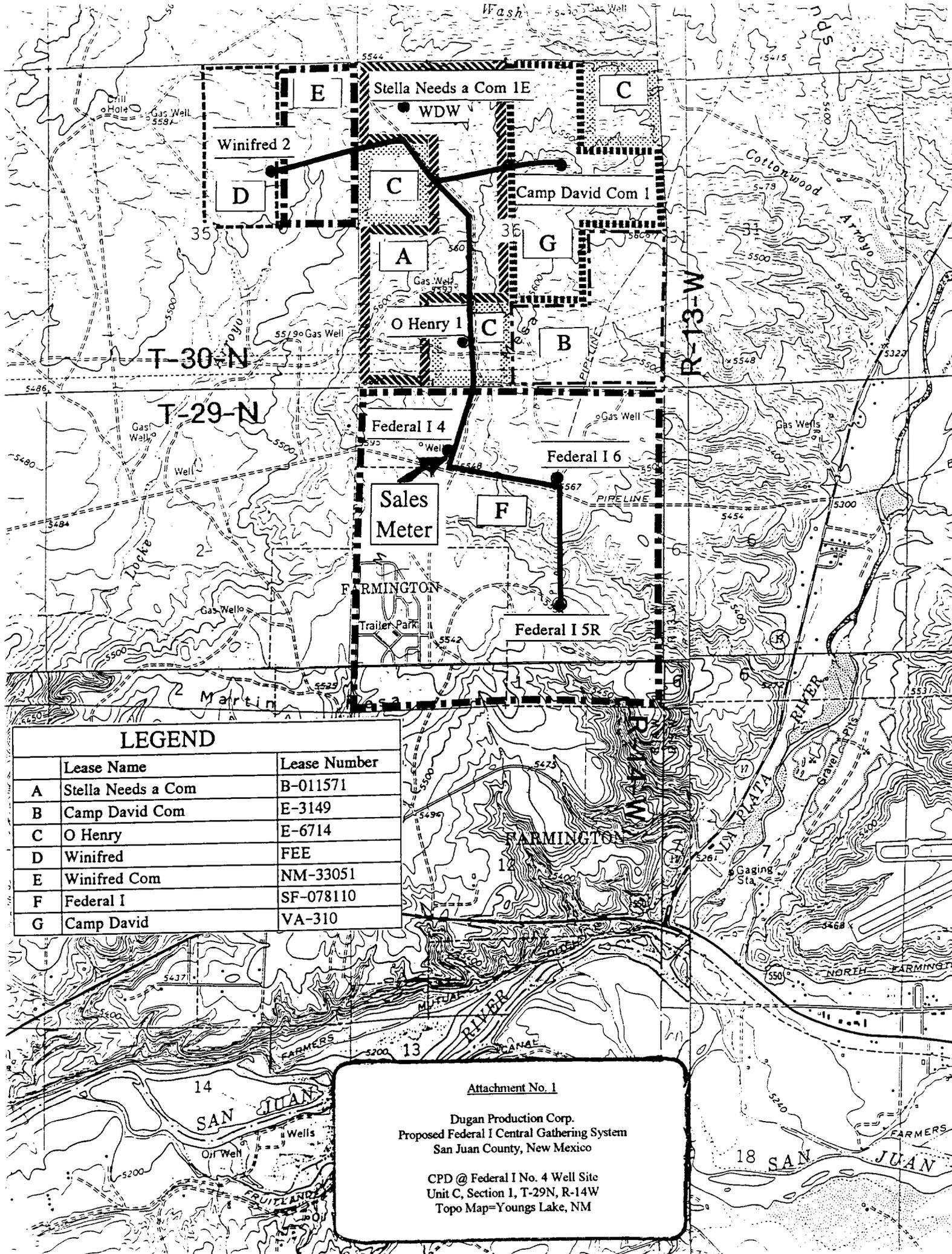


John D. Roe  
Engineering Manager

JDR/tmf

cc: Frank Chavez-NMOCD, Aztec  
Royalty Interest Owners

attachments



**LEGEND**

	Lease Name	Lease Number
A	Stella Needs a Com	B-011571
B	Camp David Com	E-3149
C	O Henry	E-6714
D	Winifred	FEE
E	Winifred Com	NM-33051
F	Federal I	SF-078110
G	Camp David	VA-310

Attachment No. 1

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

CPD @ Federal I No. 4 Well Site  
Unit C, Section 1, T-29N, R-14W  
Topo Map=Youngs Lake, NM

**ATTACHMENT NO. 2  
DUGAN PRODUCTION CORP.  
PROPOSED FEDERAL I Central Gathering System and C.P.D.  
SAN JUAN COUNTY, NEW MEXICO**

Well Name	API Number	Well Location		Well Location		Communitization Agreement Number	Pool	Completion Date	Average Production 1st 6 months 1997		Spacing Unit
		Unit	Sec-Twn-Ring	Lease Number	Type Lease				BOPD	MCFD	
Camp David Com #1	30-045-28428	G	36-30N-14W	VA-310	State	State	Basin Fruitland Coal	1/10/91	0	0	① E/2-323.59
Federal I #4	30-045-20397	C	1-29N-14W	SF078110	Fed.	N/A	Harper Hill FR Sand-PC	10/3/69	0	0	② NW/4-160
Federal I #5R	30-045-29351	J	1-29N-14W	SF078110	Fed.	N/A	Harper Hill FR Sand-PC	12/16/96	0	0	③ SE/4-160
Federal I #6	30-045-23207	G	1-29N-14W	SF078110	Fed.	N/A	Harper Hill FR Sand-PC	2/22/79	0	0	④ NE/4-160
O'Henry #1	30-045-08958	N	36-30N-14W	E6714	State	State	Basin Fruitland Coal	6/27/91	0	0	⑤ W/2-320
Winifred #2	30-045-23200	G	35-30N-14W	Fee	Fee	SCR-141	Harper Hill FR Sand-PC	3/15/79	0	0	⑥ NE/4-160

**NOTES**

N/A - Not Applicable

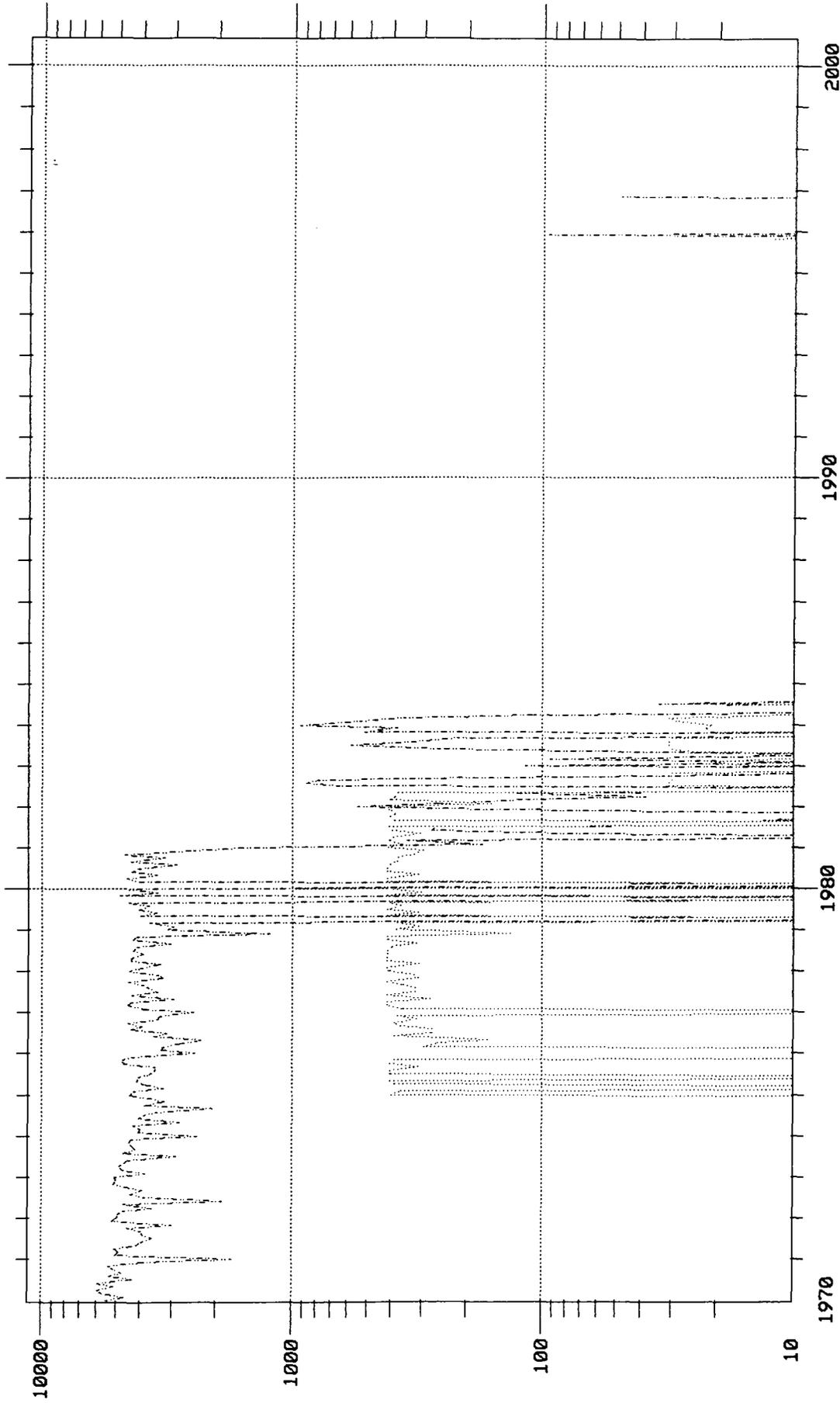
- ①- Well shut in waiting on pipeline connection. Cumulative production = 0 MCF. Test 4/97: SITP=350 psig, est. rate = 30 MCFD with light spray of water.
- ②- Well shut in pending water disposal system. Cumulative production=540,606 MCF. Test 4/97: SITP=230 psig, estimated rate=15 MCFD w/1-2 BWPD.
- ③- Well shut in waiting on pipeline connection. Cumulative production=0 MCF. Test 12/96: SITP=330 psig. Est. rate=30 MCFD.
- ④- Well shut in pending water disposal system. Cumulative production= 154,170 MCF. Test 4/97: SITP=270 psig, est. rate=30 MCFD + 1 BWPD.
- ⑤- Well shut in waiting on pipeline connection. Cumulative production= 0 MCF. Test 12/96: SITP=330 psig, est. rate=30 MCFD with light spray water
- ⑥- Well shut in waiting on water disposal system. Cumulative production=69,966 MCF. Test SITP=230 psig, est. rate=18 MCFD + 4.5 BWPD.

Calculated  
 Oil .....  
 Gas .....  
 Water .....

HARPER HILL FRUITLAND SAND-PICTURED CLIFFS  
 Production Rate vs Time  
 BBl/Mo or Mcf/Mo vs Months  
 FEDERAL I NO. 4  
 C-1-29N-14W

Production  
 Oil .....  
 Gas .....  
 Water .....

Attachment  
 No. 3  
 Pg 1 of 3



Reported Oil Production = 0 Bbls  
 Reported Gas Production = 540655 Mcf  
 Reported Water Production = 29405 Bbls

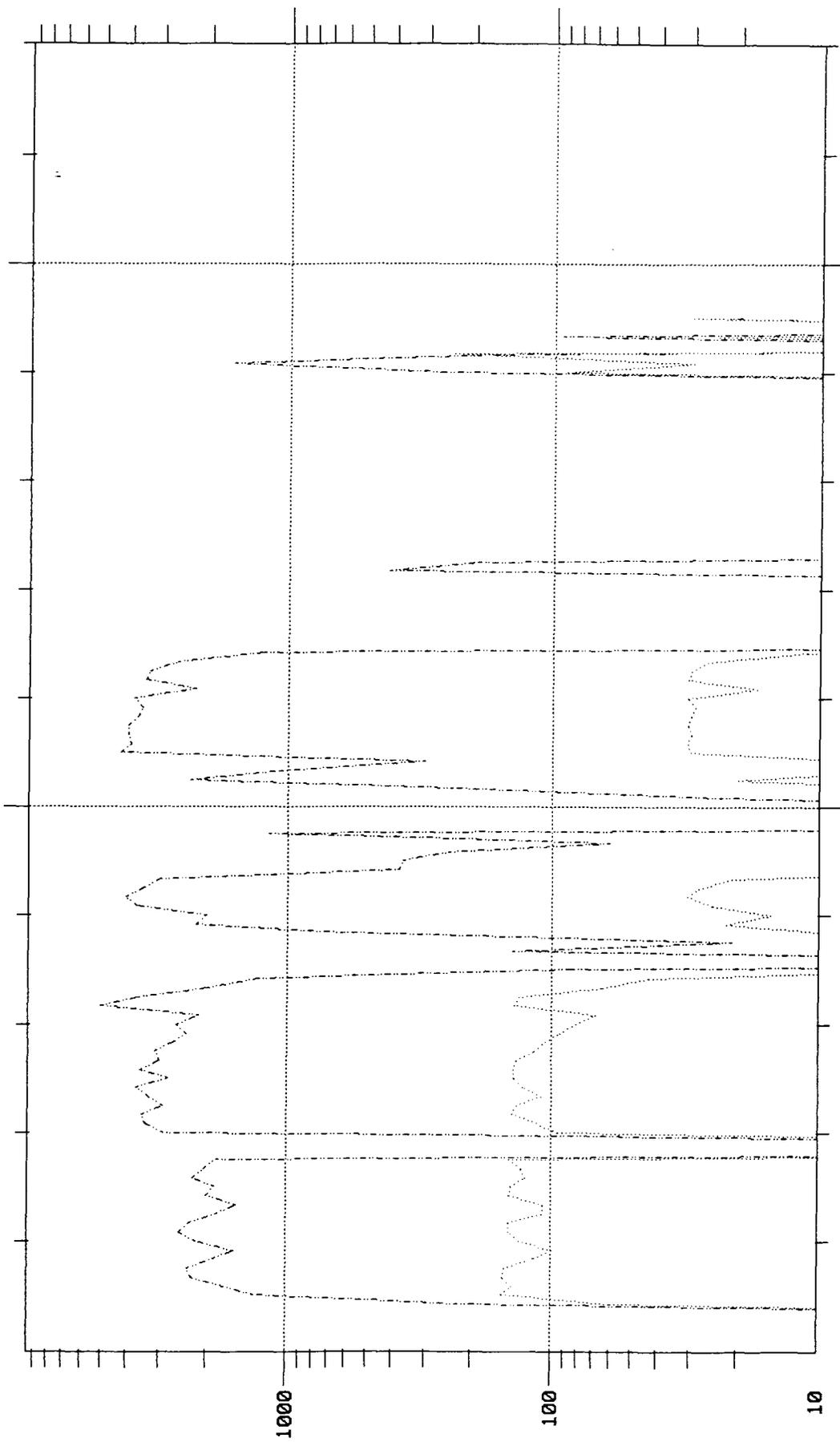
As of 7-1-97  
 " "  
 " "

**Calculated**  
 Oil .....  
 Gas .....  
 Water .....

**HARPER HILL FRUITLAND SAND-PICTURED CLIFFS**  
 Production Rate vs Time  
 BBl/Mo or Mcf/Mo vs Months  
 FEDERAL I NO. 6  
 G-1-29N-14W

**Production**  
 Oil .....  
 Gas .....  
 Water .....

Attachment  
 No. 3  
 - PG 2 of 3



1979 1984 1989

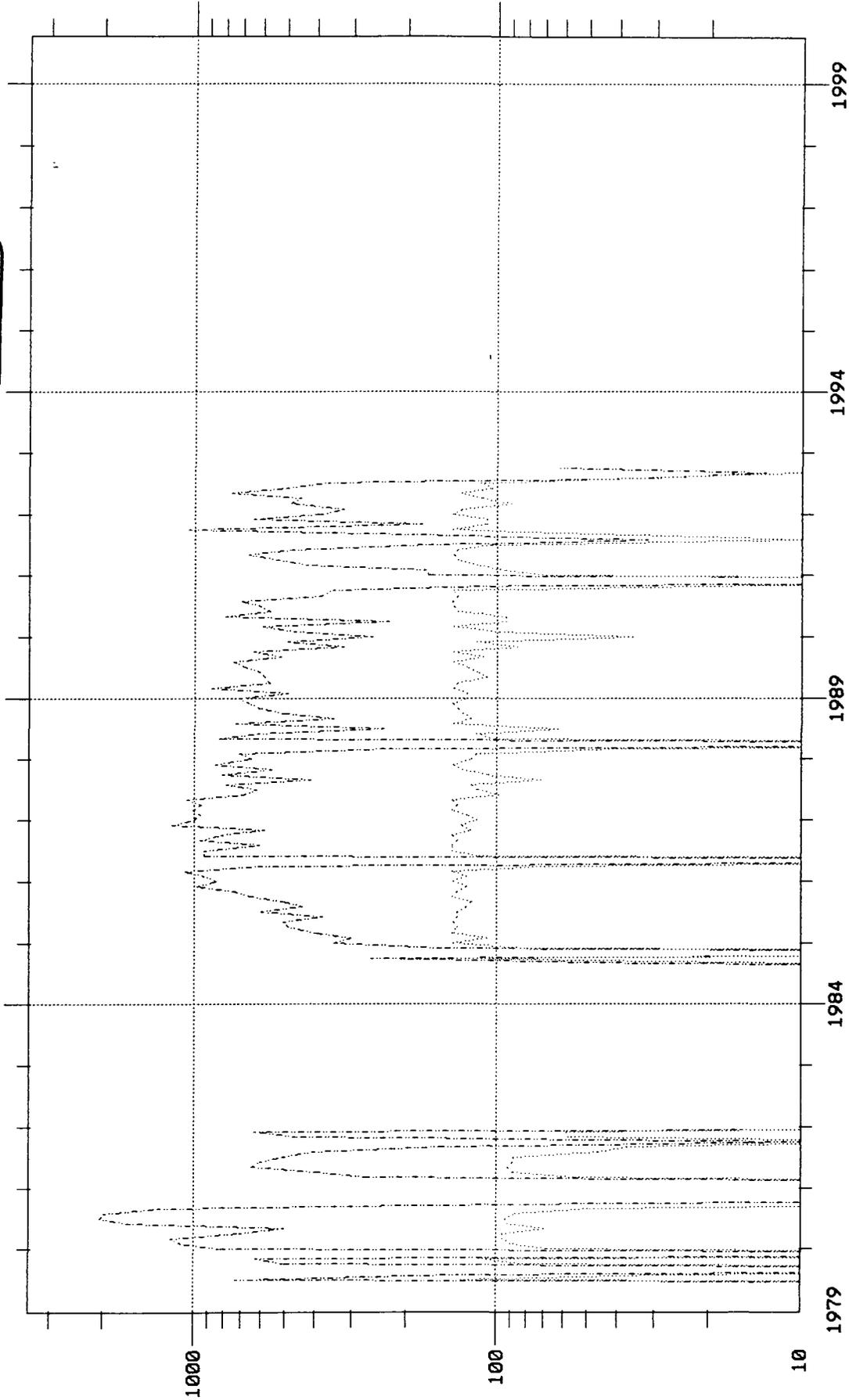
Reported Oil Production = 0 Bbls AS of 7-1-97  
 Reported Gas Production = 154170 Mcf "  
 Reported Water Production = 5127 Bbls "

Calculated  
 Oil .....  
 Gas .....  
 Water .....

HARPER HILL FRUITLAND SAND-PICTURED CLIFFS  
 Production Rate vs Time  
 BBl/Mo or Mcf/Mo vs Months  
 WINIFRED NO. 2  
 G-35-30N-14W

Production  
 Oil .....  
 Gas .....  
 Water .....

Attachment  
 No. 3  
 Pg 3 of 3



Reported Oil Production = 0 Bbls  
 Reported Gas Production = 69966 Mcf  
 Reported Water Production = 12303 Bbls

As of 7-1-97  
 " "  
 " "

**Attachment No. 4**  
**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

V=Water volume (bbl) at Central Battery

W=Gas volume (MCFD) from Periodic Well Test

X=Gas volume (MCF) from CPD Sales Meter

Y=BTU's from CPD Sales Meter

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

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

4. **Individual Well Water Production** = Allocated production volume, bbl =  $(U / \text{Sum } U) \times V$

EL PASO NATURAL GAS COMPANY  
 VOLUME ACCOUNTING DEPARTMENT  
 MEASUREMENT DIVISION  
 POST OFFICE BOX 1492  
 EL PASO, TEXAS 79978  
 PHONE: (915) 541-5267  
 CHROMATOGRAPHIC GAS ANALYSIS REPORT

DATE 8/23/89

MAILEE  
 26730

DUGAN PRODUCTION CORPORATION  
 P. O. BOX 208  
 FARMINGTON, NEW MEXICO 87401

Attachment  
 No. 5  
 Pg 1 of 1

METER NUMBER 90544 - FEDERAL I #6 - Harper Hill Fruitland Sand - PC  
 OPERATOR 1862 - DUGAN PRODUCTION CORP

ANALYSIS DATE 0/00/00 TYPE CODE 2 - ACTUAL  
 SAMPLE DATE 12/30/87 H2S GRAINS 0  
 EFFECTIVE DATE 7/01/89 LOCATION M - MAIN OFFICE  
 EFFECTIVE FOR 6 MONTHS

COMPONENTS	NORMALIZED MOL %	GPM
CO2	.85	.000
H2S	.00	.000
N2	.20	.000
METHANE	98.70	.000
ETHANE	.06	.016
PROPANE	.08	.022
ISO-BUTANE	.02	.007
NORM-BUTANE	.02	.006
ISO-PENTANE	.01	.004
NORM-PENTANE	.00	.000
HEXANE PLUS	<u>.06</u>	<u>.026</u>
	100.00	0.081

SPECIFIC GRAVITY .567  
 MIXTURE HEATING VALUE  
 (BTU @ 14.73 DRY) 1009  
 RATIO OF SPECIFIC HEATS 1.306  
 NO TEST SECURED FOR H2S CONTENT



115 Farmington Ave. - Farmington, NM 87401

(505) 325-6622

ANALYSIS NO. DUG10002

WELL/LEASE INFORMATION

Attachment  
No. 6  
Pg 1 of 1

COMPANY: DUGAN PRODUCTION CORP.

WELL NAME: CAMP DAVID #1

LINE PRESSURE: 350 PSIG

LOCATION: SEC. 36, 30N, 14W

SAMPLE TEMP.: DEG.F

LEASE:

WELL FLOWING: NO

FORMATION: FRUITLAND <sup>BASIN</sup> Coal

DATE SAMPLED: 2/14/91

METER NO.:

SAMPLED BY: MARK BROWN

REMARKS:

ANALYSIS

COMPONENT	MOLE%	GPM
NITROGEN	0.562	0.000
CO2	0.638	0.000
METHANE	97.715	0.000
ETHANE	0.644	0.172
PROPANE	0.254	0.070
I-BUTANE	0.044	0.014
N-BUTANE	0.065	0.020
I-PENTANE	0.023	0.008
N-PENTANE	0.017	0.006
HEXANE+	0.038	0.017
TOTAL	100.000	0.308
COMPRESSIBILITY FACTOR	(1/Z)	1.00210
BTU/CU.FT. (DRY) CORRECTED FOR	(1/Z)	1015.95
BTU/CU.FT. (WET) CORRECTED FOR	(1/Z)	998.38
REAL SPECIFIC GRAVITY		0.57224

ANALYSIS RUN AT 14.73 PSIA & 60 DEGREES F

CYLINDER PRESSURE 365 PSIG

DATE RUN: 2/15/91

ANALYSIS RUN BY: CHELLE DURBIN

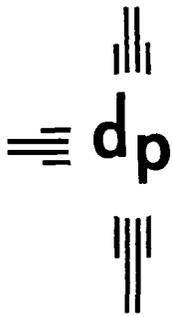
FEB 1991  
RECEIVED

ATTACHMENT NO. 7  
 INTEREST OWNERSHIP  
 PROPOSED FEDERAL I CENTRAL GATHERING SYSTEM  
 DUGAN PRODUCTION CORP.  
 SAN JUAN COUNTY, NEW MEXICO

	Camp David Com #1		Federal I Lease ①		O'Henry #1		Winifred #2	
	WI	NI	WI	NI	WI	NI	WI	NI
<b>Working Interest Owners</b>								
Dugan Production	1.0000	0.8326	1.0000	0.8750	1.0000	0.7024	1.0000	0.8650
<b>Royalty Interest Owners</b>								
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State of New Mexico		0.1250				0.1250		
Joseph O. & Cicily Muench								0.03125
Patricia Harbin								0.03125
<b>Overriding Royalty Owners</b>								
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Anne B. Little		0.0051						
Sylvia Little		0.0051						
Texaco Exploration		0.0253						
Edward & Juanita Lopez						0.0036		
Ruby Maculsay						0.0012		
Martin A. Moe, Jr.						0.0036		
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Harper L. & Nellie A. Proctor						0.0036		
Gisle W. Romo						0.0012		
Clara Sault						0.0012		
Ernest J. & Valene M. Sill						0.0042		
Winifred & Forest Jacobs								0.0100

Total 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000

① Federal I Wells No. 4, 5R & 6.



# dugan production corp.

---

Attachment  
NO. 8  
pg 1 of 3

August 19, 1997

To: Royalty Interest Owners (address list attached)  
Dugan's Platero Winifred No. 2  
Unit G of Section 35, Section 35, T-30N, R-14W  
San Juan County, New Mexico

Gentlemen:

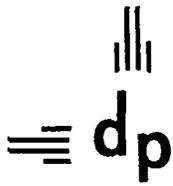
Attached for your information, review and file is a copy of our application to the New Mexico Oil Conservation Division (NMOCD), the New Mexico State Land Office, and the Bureau of Land Management to surface commingle and off lease measure natural gas produced from the captioned wells in which you have a royalty interest ownership. The proposed work will not diminish your interest and should allow Dugan to return this well to a producing status.

Should you have any questions, need additional information or have any concern as to our proposal, please let me know.

Sincerely,

John D. Roe  
Engineering Manager

JDR/tmf



dugan production corp.

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August 19, 1997

Attachment  
No. 8  
Pg 2 of 3

To: Overriding Royalty Interest Owners (address list attached)  
Dugan Production Corp.'s  
Camp David Com No. 1 (G-36-30N-14W)  
O'Henry No. 1 (N-36-30N-14W)  
Winifred No. 2 (G-35-30N-14W)  
San Juan County, New Mexico

Gentlemen:

Dugan Production Corp. has filed an application with the New Mexico Oil Conservation Division (NMOCD), the New Mexico State Land Office and the Bureau of Land Management (BLM) requesting their approvals to surface commingle and off lease measure natural gas produced from each of the 3 captioned wells. This will allow us to place all 3 wells on production. Each of these wells produces only small volumes of gas and cannot be connected for gas sales individually.

This proposal should not reduce your interest and should allow a revenue to be produced.

We would be happy to provide a complete copy of our application should you desire to have it. Should you have questions, need additional information or have concerns, please let me know.

Sincerely,

John D. Roe  
Engineering Manager

JDR/tmf

**Interest Owners-Proposed Federal I Central Gathering System  
Camp David #1, Federal I #4, Federal I #5R, Federal I #6,  
O'Henry #1, Stella Needs A Com #1E, and the Winifred #2 wells**

Bureau of Land Management  
1235 La Plata Highway  
Farmington, NM 87401

Harper L. & Nellie A. Proctor  
402 Masonic Temple Building  
Jacksonville, FL 32206

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

Gisle W. Romo  
5012 Venice Blvd.  
Los Angeles, CA

Patricia Harbin  
c/o Marilyn Adragna  
1708 Luthy Place, NE  
Albuquerque, NM 87112

Clara Sault  
Palmer W. Larson, Pers. Rep.  
Milwaukee, OR 97222

Joseph O. & Cicily M. Muench  
Family Trust of 10/12/84  
P. O. Box 779  
Placitas, NM 87043-0779

Ernest J. & Valerie M. Sill  
2048 Monticell Dr.  
Glendale, CA

Conoco, Inc.  
Gas Revenue  
P. O. Box 951063  
Dallas, TX 75395-1063

Winifred & Forrest Jacobs  
1000 SW Santa Fe Road  
Towanda, KS 67144-9213

Anne B. Little  
P. O. Box 82277  
Albuquerque, NM 87198-2277

Sylvia F. Little  
TTEE UTAD 5/25/90  
P. O. Box 1258  
Farmington, NM 87499-1258

Texaco Exploration & Prod., Inc.  
P. O. Box 20078  
Houston, TX 77216-0778

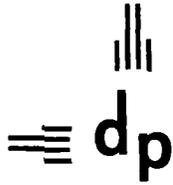
*Attachment  
No. 8  
Pg 3 of 3*

Edward A. & Juanita Lopez  
782 North Broad Street  
San Luis Obispo, CA 93401

Ruby Maculsay  
873 Erie Street  
Oakland, CA

Martin A. Moe, Jr.  
10305 N.W. 6th St.  
Plantation, FL 33324

James W. & Ella E. Post  
1447 West 101st Street  
Los Angeles, CA 90047



dugan production corp.



September 19, 1997

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SEP 22 1997

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).

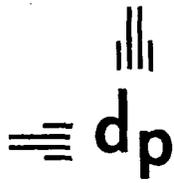
Please let me know should you have questions or need additional information.

Sincerely,

John D. Roe  
Engineering Manager

JDR/tmf

attachs.



dugan production corp.

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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:

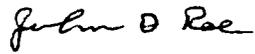
Attached for your consideration of the subject application, is the following supplemental information:

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 well's 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.

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  
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.

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

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.

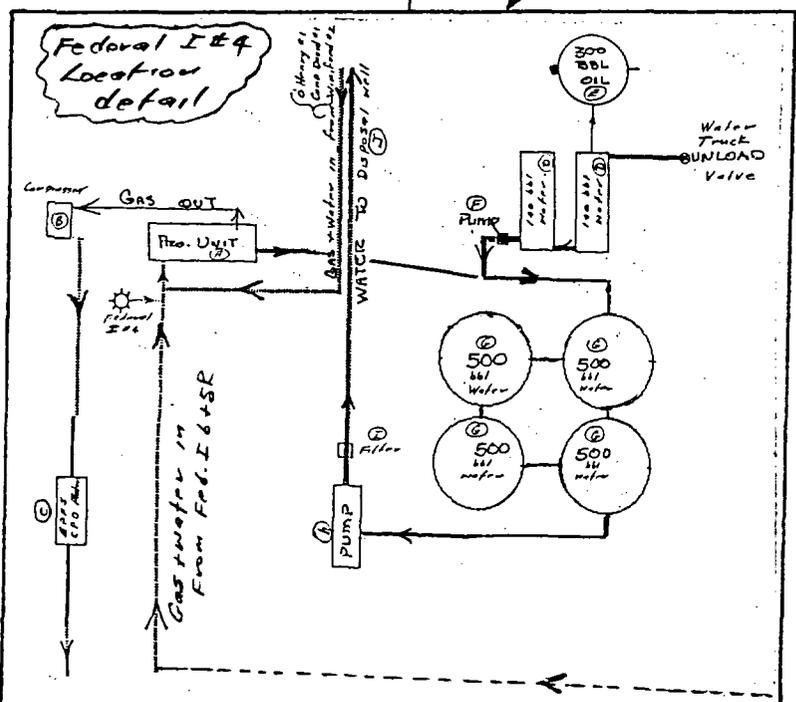
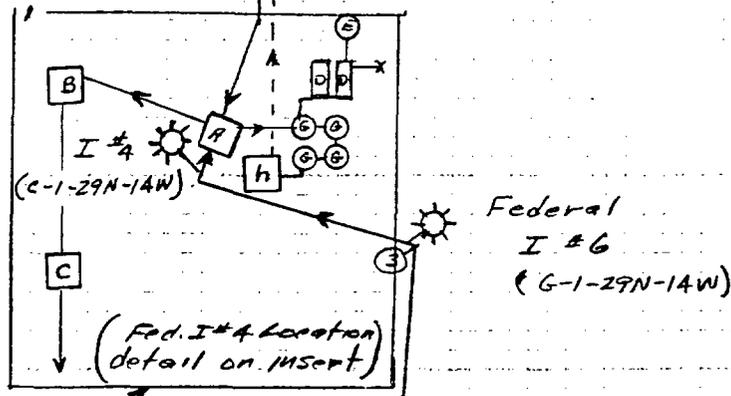
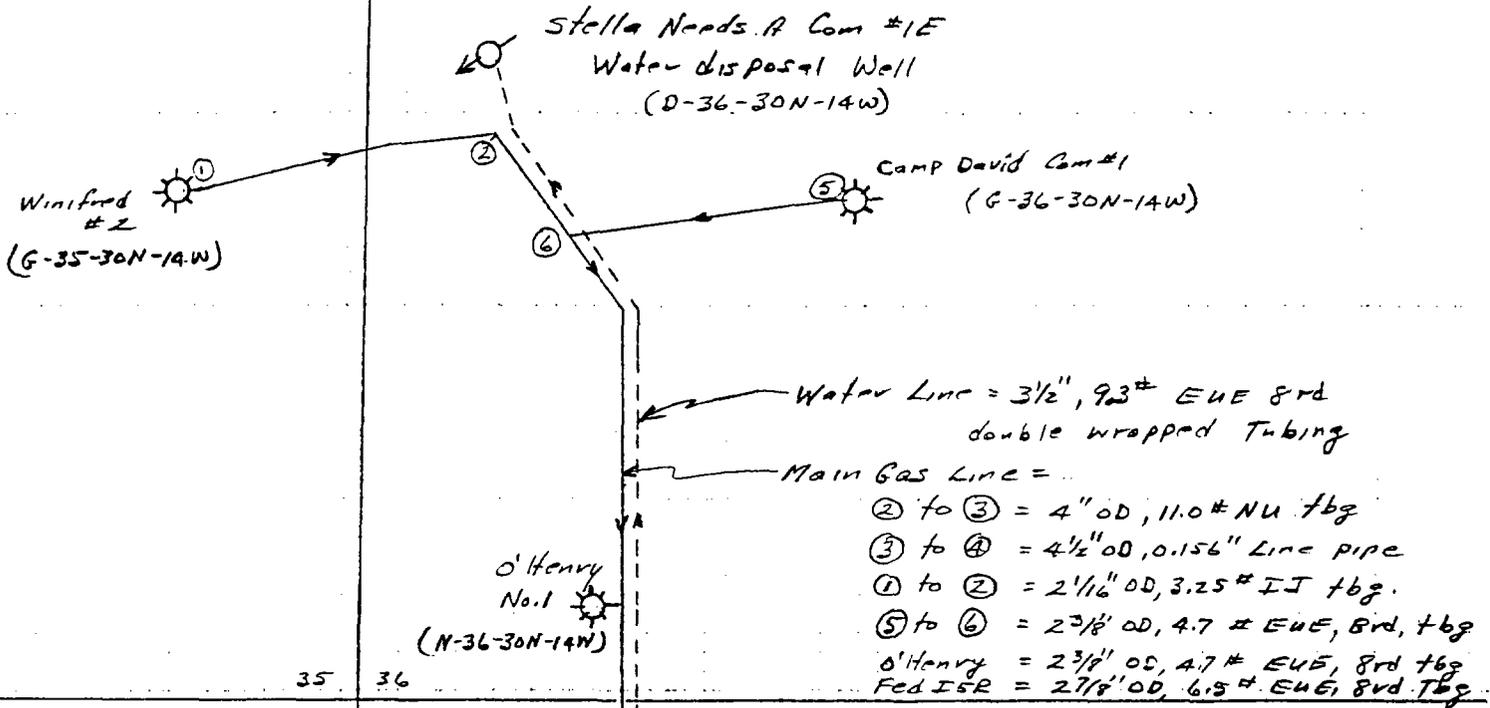
E = Allocated volume of gas lost and/or vented from the gathering system and/or gathering system equipment, MCF. The total volume will be determined using industry accepted procedures for the conditions existing at the time of the loss. All volumes corresponding to liquid condensation within the gathering 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 =  $(\text{Allocated Individual well BTU's} / \text{Sum Allocated individual well BTU's}) \times Z$

4. Individual Well Water Production = Allocated production volume, bbl =  $(U / \text{Sum } U) \times V$



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
Camp David Com #1	----	----	----	---	---	---	---
Federal I #4	----	----	Note③	Note③	---	---	---
Federal I #5R	----	----	----	---	---	---	---
Federal I #6	----	----	Note③	Note③	---	---	---
O'Henry #1	----	----	----	---	---	---	---
Winifred #2	----	----	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