

PROPERTY MANAGEMENT & CONSULTING, INC.

P. O. BOX 2596  
FARMINGTON, NEW MEXICO 87499-2596  
(505) 325-5220

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94 JAN 13 PM 3:45

070 FARMINGTON, NM

January 13, 1994

Bureau of Land Management  
1235 La Plata Highway  
Farmington, New Mexico 87401

5,25N-11W

Attn: Mr. Ken Townsend

Re: PRO New Mexico Application for approval to Surface Commingle  
Gas Production from the Gracia Navajo 5k #2 and Gallegos Com #5.

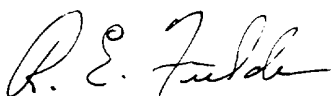
Dear Ken:

Here are copies of the original letters submitted by PRO New Mexico in September and December 1993. The package includes the proposed allocation formula's and plats showing the proposed facility layout. At this time PRO is planning on maintaining a dual reporting system. We will allocate production for reporting purposes by the method (MCF) prescribed in our December letter and we will allocate revenue for royalty and tax purposes based on the MMBTU method proposed in our September letter. This method has been approved by the State Land Office and is in the final stages of approval at the NMOCD.

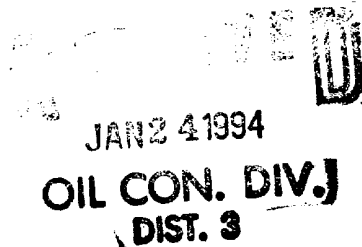
The Federal gas involved in this proposed project will be measured directly by a metering facility on the Gracia Navajo 5k #2 location. The gas quality will be determined and the meter facility calibrated on a quarterly schedule to coincide with the schedule on the CDP meter station at the Gallegos Com #5.

In our opinion the Federal gas will be protected by this proposal and we request your concurrence at your earliest convenience. Would you please notify Mary Lou Drywater at the Navajo Area Office of the BIA in Gallup (602-871-5151) of your approval since they are awaiting a technical review from your office.

Sincerely,



R.E. Fielder  
Agent for PRO New Mexico, Inc.



FILED FOR RECORD

JAN 20 1994

FARMINGTON DISTRICT OFFICE  
Sm

NMOCD

BY

# PRO NEW MEXICO INC.

OIL & GAS PRODUCTION AND PROPERTIES

(505) 988-4171 • FAX (505) 988-4548 • 141 E. Palace Ave. • Santa Fe, NM 87501

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94 JAN 13 PM 3:45

070 FARMINGTON, NM

CERTIFIED - RETURN RECEIPT REQUESTED

December 6, 1993

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

Re: Allocation of Production from the  
Gracia Navajo 5-K #2 Well (SW Sec. 5, T25N, R11W) and the  
Gallegos Com #5 Well (S/2 Sec. 32, T25N, R11W)  
San Juan County, New Mexico

Gentlemen:

In accordance with consultation with Mr. Frank Chavez, District Supervisor of the New Mexico Oil Conservation Commission, we have revised our September 30, 1993 proposal for allocation of production from the Gracia Navajo 5-K #2 well and the Gallegos Com #5 wells. The revised allocation method is based on volumes produced (Mcf's), rather than on the heat content of the individual gas streams (MMBtu's).

A copy of our revised application, with allocation calculations and a sample calculation is enclosed for your review. Pursuant to New Mexico Oil Conservation Division Rule 309-B.4., any objections to our proposal should be made within twenty (20) days.

If you have any questions concerning this matter please do not hesitate to contact us.

Very truly yours,

PRO NEW MEXICO, INC.

By

*Jolene Dicks*  
Jolene Dicks  
Contract Representative

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JAN 24 1994  
OIL CON. DIV.  
DIST. 3

Enclosures

cc: Mr. Frank Chavez, NM Oil Conservation Commission

## SAMPLE CALCULATION

### ASSUMPTIONS:

Total Monthly Sales at CDP: 10,000 MCF  
Monthly Gas Production from 5-K: 2,400 MCF  
Fuel Gas Usage for Month: 390 MCF

### STEP #1:

TOTAL MONTHLY GAS SALES at CDP = 10,000 MCF

### STEP #2:

TOTAL MONTHLY PRODUCTION = 10,000 MCF + 390 MCF  
= 10,390 MCF

### STEP #3:

MONTHLY GAS VOLUME for 5-K = 2,400 MCF

### STEP #4:

MONTHLY MCF PRODUCED by Com #5 = 10,390 - 2,400  
= 7,990

### STEP #5:

MONTHLY FUEL GAS FACTOR for 5-K =  $2,400 / 10,390 = .2310$   
MONTHLY FUEL GAS FACTOR for Com #5 =  $7,990 / 10,390 = .7690$

### STEP #6:

MONTHLY FUEL GAS USAGE by 5-K =  $390 * .2310 = 90.09$  MCF  
MONTHLY FUEL GAS USAGE by Com #5 =  $390 * .7690 = 299.91$  MCF

### STEP #7:

MONTHLY SALES VOLUME by 5-K =  $2,400 - 90.09 = 2,309.91$  MCF  
MONTHLY SALES VOLUME by Com #5 =  $7,990 - 299.91 = 7,690.09$  MCF

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DIST. 3

**PRO NEW MEXICO, INC.**  
**Allocation Calculations**

**STEP #1:**

Obtain TOTAL MONTHLY GAS SALES from CDP in MCF from transporter.

**STEP #2:**

Add TOTAL MONTHLY GAS SALES and TOTAL MONTHLY FUEL GAS USAGE to obtained a combined TOTAL MONTHLY PRODUCTION.

**STEP #3:**

Obtain MONTHLY GAS VOLUME in MCF for 5-K from independent chart integration company.

**STEP #4:**

Subtract the MONTHLY GAS VOLUME for the 5-K from the TOTAL MONTHLY PRODUCTION to obtain the MONTHLY MCF PRODUCED by the Com #5.

**STEP #5:**

Divide the MONTHLY MCF PRODUCED from each well by the TOTAL MONTHLY PRODUCTION to calculate the MONTHLY FUEL GAS FACTORS allocated to each well.

**STEP #6:**

Multiply the individual FUEL GAS FACTORS by the TOTAL MONTHLY FUEL GAS to obtain a MONTHLY FUEL GAS USAGE IN MCF for each well.

**STEP #7:**

Subtract the MONTHLY FUEL GAS USAGE IN MCF from the MONTHLY MCF PRODUCED for each well to obtain the allocated MONTHLY SALES VOLUMES in MCF for each well.

LINE 41894  
OIL CON. DIV.  
DIST. 3

# PRO New Mexico, Inc.

## Schematic of Facilities and Mineral Leases for Allocation of Production

T26N R11W NMPM

State

32

Gallegos Com #5  
(EPNG Sales Meter)

Tribal

5

Gracia Navajo  
5K #2

Federal

T25N R11W NMPM

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TOTAL F.O.

# PRO NEW MEXICO INC.

OIL & GAS PRODUCTION AND PROPERTIES

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JAN 2 1994

CERTIFIED - RETURN RECEIPT REQUESTED

September 30, 1993

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

APPROVED
DATE
1 & 2 SPEC
SCUDS
FLUIDS D&P 2
WGS. MGMT. 3
FLUIDS I & E
GPS
ALL TROPY
FILES

Gentlemen:

Pro New Mexico, Inc. is in the process of obtaining the necessary approvals to install a gas gathering line from the Gracia Navajo 5-K #2 (5K) located in the NE/SW Sec. 5, T25N, R11W and terminating at a field compressor site and Central Delivery Point (CDP) at the Gallegos Com #5 (Com #5) located in Sec. 32, T26N, R11W. The layout of the facilities and mineral ownership of the dedicated acreage is shown on the attached schematic. Due to the diversified mineral ownership and the fact that the 5K is producing from the Fruitland Coals while the Com #5 is producing from the Dakota, in accordance with New Mexico Oil Conservation Division Rule 309-B.3., we are requesting your concurrence for allocation of the production as outlined on the attached method.

In order to facilitate the most economic gas production levels from each well, as well as increasing the total reserve recovery, compression is required. Unfortunately neither well will withstand the cost of an individual compressor and as a result efforts are being made to utilize a single compressor for both wells. This effort produces a commingled gas stream delivered to the transmission company through a single sales meter.

Our intention is to allocate the gas sales and production volumes for each well based on the sales meter set at the outlet of the compressor located on the Com #5 location and a standard orifice meter located on the 5K location. The allocation will be based on the heat content of the individual gas streams (MMBTU) in order to facilitate proper credits being given the wells. A gas analysis will be obtained on a quarterly basis approximately the same time as the transmission company samples the CDP. The monthly calculations to be used for this allocation are shown on the attached sheet.

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OIL CON. DIV.  
DIST. 3

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APPROVED

JAN 10 1994  
DISTRICT

Bureau of Land Management  
Page 2  
September 30, 1993

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Please indicate your concurrence to this method by signing, dating and returning one copy of this letter to our office. Pursuant to New Mexico Oil Conservation Division Rule 309-B.4., any objections to our proposal should be made within twenty (20) days. We appreciate your prompt attention to this matter. A self-addressed stamped envelope is enclosed for your convenience in responding.

---

Very truly yours,

PRO NEW MEXICO, INC.

By

Jolene Dicks  
Contract Representative

Enclosures

\_\_\_\_\_ accepts the allocation method as described.

By: \_\_\_\_\_

Date: \_\_\_\_\_

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OIL CON. DIV.  
DIST. 3

**PRO NEW MEXICO, INC.**  
**ALLOCATION CALCULATIONS**

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OIL CO. DIV  
DIST. 3

**STEP #1:**

Obtain TOTAL MONTHLY GAS SALES From CDP in MMBTU from transporter.

**STEP #2:**

Multiply estimated TOTAL MONTHLY FUEL GAS USAGE by BTU/MCF used by transporter to obtain TOTAL MONTHLY FUEL GAS MMBTU.

**STEP #3:**

Add TOTAL MONTHLY GAS SALES and TOTAL MONTHLY FUEL GAS USAGE to obtain a combined TOTAL MONTHLY MMBTU PRODUCTION.

**STEP #4:**

Obtain MONTHLY GAS VOLUME in MCF for 5K from independent chart integration company.

**STEP #5:**

Multiply MONTHLY GAS VOLUME from 5K by the BTU/MCF from quarterly gas analysis to obtain the MONTHLY MMBTU produced by the 5K.

**STEP #6:**

Subtract the MONTHLY MMBTU for the 5K from the TOTAL MONTHLY MMBTU PRODUCED to obtain the MONTHLY MMBTU PRODUCED by the COM #5.

**STEP #7:**

Divide the TOTAL MONTHLY MMBTU PRODUCED by the MONTHLY MMBTU PRODUCED from each well to calculate the MONTHLY FUEL GAS FACTORS allocated to each well.

**STEP #8:**

Multiply the individual FUEL GAS FACTORS by the TOTAL MONTHLY FUEL GAS MMBTU to obtain a MONTHLY FUEL GAS USAGE in MMBTU for each well.

**STEP #9:**

Subtract the MONTHLY FUEL GAS USAGE in MMBTU from the MONTHLY MMBTU PRODUCED for each well to obtain the allocated MONTHLY MMBTU SALES from each well.

**STEP #10:**

Divide the MONTHLY MMBTU SALES by the heat content values obtained from the individual gas analysis to obtain MONTHLY SALES VOLUMMES in MCF for each well.

**STEP #11:**

Divide the MONTHLY MMBTU FUEL GAS by the heat content values obtained from the individual gas analysis to obtain MONTHLY FUEL GAS VOLUMMES in MCF for each well.

**STEP #12:**

Add the MONTHLY SALES VOLUME to the MONTHLY FUEL GAS VOLUME to obtain a MONTHLY PRODUCED VOLUME in MCF.

## SAMPLE CALCULATION

### ASSUMPTIONS:

Total Monthly Sales MMBTU at CDP: 10,080  
Monthly Gas Production from 5K: 3200 MCF  
Gas Analysis at CDP: 1160 BTU/SCF  
Gas Analysis for 5K: 1050 BTU/SCF  
Gas Analysis for COM 5: 1300 BTU/SCF  
Fuel Gas Usage for Month: 390 MCF

### CALCULATIONS

#### STEP #1:

TOTAL MONTHLY GAS SALES at CDP = 10,080 MMBTU

#### STEP #2:

TOTAL MONTHLY FUEL GAS MMBTU =  $390,000 * 1160 = 452,400,000 \text{ BTU}$   
= 452.4 MMBTU

#### STEP #3:

TOTAL MONTHLY MMBTU PRODUCTION =  $10,080 + 452.4 = 10,532.4 \text{ MMBTU}$

#### STEP #4:

MONTHLY GAS VOLUME for 5K = 3,200 MCF

#### STEP #5:

MONTHLY GAS PRODUCED from 5K in MMBTU =  $3,200 * 1050 \text{ BTU/SCF}$   
= 3,360,000,000 BTU  
= 3,360 MMBTU

#### STEP #6:

TOTAL MONTHLY MMBTU PRODUCED by the COM #5 =  $10,532.4 - 3,360$   
= 7,172.4 MMBTU

#### STEP #7:

MONTHLY PORTION of the FUEL GAS by 5K =  $3,360 / 10,532.4 = .3190$   
MONTHLY PORTION of the FUEL GAS by COM5 =  $7,172.4 / 10,532.4 = .6810$

#### STEP #8:

MONTHLY FUEL GAS USAGE by 5K =  $452.4 * .3190 = 144.32 \text{ MMBTU}$   
MONTHLY FUEL GAS USAGE by COM5 =  $452.4 * .6810 = 308.08 \text{ MMBTU}$

#### STEP #9:

MONTHLY MMBTU SALES by 5K =  $3,360 - 144.32 = 3,215.68 \text{ MMBTU}$   
MONTHLY MMBTU SALES by COM5 =  $7,172.4 - 308.08 = 6,864.32 \text{ MMBTU}$

#### STEP #10:

SALES VOLUME for 5K =  $3,215,680,000 / 1050 = 3,062,552 \text{ SCF}$   
= 3,062.55 MCF  
SALES VOLUME for COM5 =  $6,864,320,000 / 1300 = 5,280,246 \text{ SCF}$   
= 5,280.25 MCF

#### STEP #11:

FUEL GAS VOLUME for 5K =  $144,320,000 / 1050 = 137,448 \text{ SCF}$   
= 137.45 MCF  
FUEL GAS VOLUME for COM5 =  $308,080,000 / 1300 = 236,984 \text{ SCF}$   
= 236.98 MCF

#### STEP #12:

MONTHLY PRODUCED VOLUME by 5K =  $3,062.55 + 137.45 = 3,200 \text{ MCF}$   
MONTHLY PRODUCED VOLUME by COM5 =  $5,280.25 + 308.08 = 5,588.33 \text{ MCF}$

