DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-136
Originated 12/23/91

Submit original and 4 copies to the appropriate district office.

APPLICATION FOR APPROVAL TO USE AN ALTERNATE GAS MEASUREMENT METHOD
Rule 403.B(1) or (2)

Operator Name: Southern Union Exploration Company Operator No. _____

Operator Address: 324 Hwy US 64, NBU3001 Farmington, NM 87401

Lease Name: Mobil Federal #1 Type: State _____ Federal xx Fee _____

Location: J Sec36,T24N,R1W

Pool: Regina Gallup

Requested Effective Time Period: Beginning February 21, 1992 Ending February 2, 1997

APPROVAL PROCEDURE: RULE 403.B.(1)
Please attach a separate sheet with the following information.

1) A list of the wells (including well name, number, ULSTR location, and API No.) included in this application.
2) A one year production history of each well included in this application (showing the annual and daily volumes).
3) The established or agreed-upon daily producing rate for each well and the effective time period.
4) Designate wells to be equipped with a flow device (required for wells capable of producing 5 MCF per day or more).
5) The gas transporter(s) connected to each well.

RECEIVED
MAR 12 1992
OIL CON. DIV.
DIST. 3

APPROVAL PROCEDURE: RULE 403.B.(2)
Please attach a separate sheet with the following information.
A separate application is required for each Central Point Delivery (CPD).
Working interest, royalty and overriding royalty ownership must be common for all wells to be connected to the subject CPD.

1) An ownership plat showing a description of the lease and all of the wells to be produced through this CPD.
   a) List the wells which will be metered separately, including API No.
   b) List the wells which will not be metered separately, including API No.
2) Describe the proposed method of allocating production from non-metered wells.
3) A one year production history of the wells which will not be metered showing the annual and daily volumes.
4) The gas transporter(s) connected to this CPD.

Applicant will be responsible for filing OCD Form C-111 for the CPD.

OPERATOR
I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: _____
Printed Name & Title: Martin D. Boggs, Drilling & Production Supt.

OIL CONSERVATION DIVISION
This approval may be cancelled at anytime that operating conditions indicate that re-tests may be necessary to prevent waste and protect correlative rights.

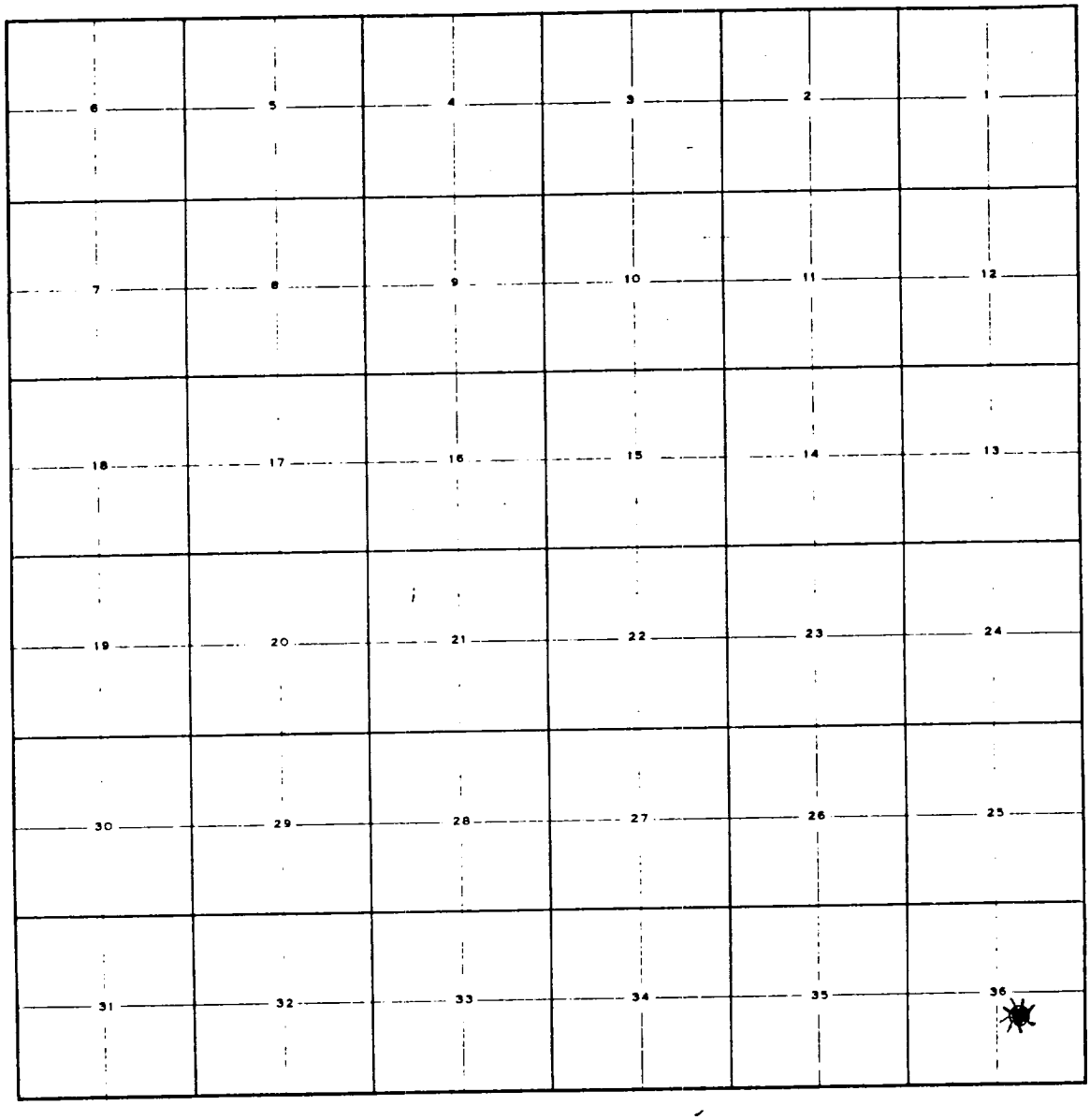
Approved Until: 2-2-97

By: Original Signed by FRANK T. CHAVEZ

Title: SUPERVISOR DISTRICT # 3

TOWNSHIP PLAT (SCALE 1 IN — 1 MI.)
Form 17-217 (8-77)

TOWNSHIP 24N RANGE 1W COUNTY Rio Arriba STATE New Mexico



Lease Numbers NMNM28669

API #3003908170000SI
J Sec36,T24N,R1W
Mobil Federal #1

Southern Union Exploration Company
324 Hwy US 64, NBU3001
Farmington, New Mexico 87401
505/327-4481

PD0026 SOUTHERN UNION EXPLORATION COMPANY SXPDFF02

PRODUCTION HISTORY DETAIL MAINTENANCE

WELL NUMBER....[5055201] WELL NAME....[MOBIL FEDERAL #1]

PRODUCTION YR..[91]

M O	P I	GAS PROD	GAS SALES	D P	LEASE USE	OIL PROD	OIL SALES	GAS TEST	GAS/OIL RATIO	GAS PSE
JA	P									
FB	P									
MR	P	16		31	16	112	246			
AP	P									
MY	P	44	22	22	22	160				
JN	P	145	126	19	19	68				
JL	P	297	268	29	29	31				
AU	P	79	70	9	9	2	227			
SP	P	267	236	31	31	164				
OC	P	1	1	29	29	94				
NV	P	105	77	28	28	50				
DC	P	139	108	31	31	61				

REFRESH SCREEN PRINT SCREEN 12 5 CN EXIT PROGRAM

11:39 CAPS

DRAFT

ALTERNATIVE MEASUREMENT
REQUEST FORM
FOR TIME CALCULATED VOLUME
(5-15 Dth Per Day)

I hereby request government approval for use of this Alternative Measurement method for marginal low flow wells. I have consented, upon receipt of all necessary regulatory approvals, to El Paso Natural Gas Company's installation and use of the Alternative Measurement method described below for my low flow natural gas well(s) producing into El Paso's pipeline system.

1. Reason for Proposal

Try to reduce likelihood of well shut-in and loss of production due to uneconomical operations. Low flow production wells incur most of the same fixed costs experienced for wells producing much greater amounts of natural gas, but do not enjoy the same economies of scale. Therefore, the per unit cost of measurement for low flow well(s) can be unacceptably high for a prudent operator.

Failure to approve use of this Alternative Measurement could result in premature abandonment of production from these low flow wells.

2. Explanation and Diagram

Please refer to the detailed explanation of the Alternative Measurement method to be used and the schematic flow diagram provided as Attachment A.

3. Map and Lease Numbers

A township plat map listing all lease, communitization, and Unit numbers and showing the location of these properties and the related wells is provided as Attachment B.

4. Schematic Diagram and Location of Equipment

Please refer to information provided with item numbers 2 and 3 above.

5. Central Point Delivery Production Allocation Method

Please refer to the outline for "Central Point Delivery (CPD) Measurement and Allocate Low Production Well Volumes" provided as Attachment C. A copy of the CPD Agreement between the operator and the pipeline is provided as Attachment D.

6. Estimated Lease Production

A table listing the estimated hourly or daily production rate for each well on the lease, communitization, or Unit property is provided as Attachment E.

7. Additions to Approved Commingling or Off-Lease Measurement

None are proposed.

DATE : 1-22-92

REV DATE: 2-20-92

ATTACHMENT
ALTERNATIVE METHOD

LOW FLOW WELL LISTING

Operator Code 8285
Operator Name Southern Union Exploration

METER NO.	WELL NAME	STATE	AREA LOCATION	TEST PERIOD MCF	TEST PERIOD FLOW HRS	TIME CALC. HOURLY RATE MCF	AGREED VOLUME DAILY RATE MCF	WELL VOLUME CLOSED CONDITIONS
73-989	Mobil Federal No. 1	NM-31	Chaco	248	696.7	0.35	8.4	TC

TC = Time Calculated Volume (Hourly)

AV = Agreed Upon Volume (Daily)

ACCEPTED BY : David Boyer

El Paso
Natural Gas Company

P.O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-5050

LARRY R. TARVER VICE PRESIDENT

February 21, 1992

Southern Union Exploration Co.
Attn: Office Supervisor
324 Highway US #64
NBU 3001
Farmington, NM 87401

File: Southern Union Exploration Co.

Re: Agreement to Use Alternative
Measurement Method for Low Flow Meters

Gentlemen:

ALTERNATE MEASUREMENT METHOD FOR LOW FLOW WELL METERS PRODUCING 15 DTH - 1 DTH PER DAY

This Letter Agreement, when accepted by you, authorizes El Paso Natural Gas Company ("El Paso") to use the Alternative Measurement Methods described below for those low flow meter locations listed on the attachment hereto, as revised from time to time.

In return, El Paso agrees to use the applicable Alternative Measurement Method as soon as practicable for the listed low flow meters on wells producing 15 dekatherm ("dth") to 1 dth per day during the past year.

ALTERNATE MEASUREMENT METHODS TO BE USED

The Alternative Measurement Method applicable shall be in accordance with the attached procedures and determined by the anticipated production range, as outlined below.

15 Dth to 5 Dth Per Day
"Timed Calculated Volume" Method

The 1990 Annual Production Volume, or the most recent annual test, shall be used to establish an "Average hourly" flow rate, and each year thereafter the Annual Production Measurement Test results shall be used to establish an updated Average hourly flow rate for the meter. A differential pressure switch and an hour meter also shall be used to calculate the time when the well flows. Each well is deemed to produce a "Timed Calculated Volume," to be calculated by the flow hours metered times the Average hourly flow rate. Primary measurement elements will be kept on site for Annual Production Tests; however, the Timed Calculated Volume is deemed to represent a reasonable approximation of actual production and permanent measurement recorders on site shall not be required or used.

5 Dth to 1 Dth Per Day
"Agreed Volume" Method

The 1990 Annual Production Volume, or the most recent annual test, shall be used to establish an "Agreed Volume" average hourly flow rate for the meter during the first year this Letter Agreement is effective. Each year

thereafter, the Annual Production Measurement Test results shall be used to establish an updated Agreed Volume for the next year of 5 dth to 1 dth per day. Operator agrees to cause the production valves to be open at all times during the period of this agreement. This well is deemed to produce at all times at the Agreed Volume hourly flow rate, subject to adjustments for well shutins due to well workovers, no market for production, or other production valve closed conditions. Primary measurement elements will be left on site for Annual Production Tests; however, the Agreed Volume is deemed to represent a reasonable approximation of actual production and permanent measurement recorders on site shall not be required or used.

MISCELLANEOUS

If any well previously subject to the "Agreed Volume" Method that later increases production to the 15 dth to 5 dth per day range, on an annual basis, that well prospectively shall become subject to the "Time Calculated" Method. If any well previously subject to either Alternative Measurement Method herein later increases production to 25 dth per day or more, on an annual basis, that well prospectively shall become subject to another conventional measurement method for larger volumes, the specific provisions of which are to be agreed upon by El Paso and the well operator at that time. In no event shall this Letter Agreement obligate El Paso to accept natural gas from wells with an anticipated production range of less than one (1) Dth per day.

This Letter Agreement is effective as of the date first set forth above and shall remain in effect for a Primary Term of five (5) years, and from month to month thereafter subject to termination at the end of any month by either party giving written notice to the other party at least one month in advance. This Letter Agreement is subject to all valid laws, regulations and rules. Neither party hereto is obligated to accept measurement results from an Alternative Measurement Method that has not received all necessary regulatory approvals, when applicable, such as approvals from the Bureau of Land Management, or State conservation agencies. The Attachments to this Letter Agreement, as revised from time to time, are incorporated herein.

If the foregoing accurately sets forth our agreement on Alternate Measurement Methods, please cause an authorized individual to sign both original counterparts of this Letter Agreement on behalf of the well operator in the space provided below and return one signed original to the address below:

Director, Measurement Technical Operations Department
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

Very truly yours,

WELL OPERATOR NAME

By _____

_____
Name (Type or Print)

_____
Title (Type or Print)

3/3/92
Date

EL PASO NATURAL ~~GAS COMPANY~~

By _____

Larry R. Tarver
Name

Vice President, Field Services Division
Title

2-24-92
Date

Attachments

WPPPSA:LA

BASIC HOURLY FLOW RATE CALCULATION METHODS

1. Average Hourly Flow Rate (MCF)

   a. Annual or Test Period Measured Volume (MCF) = Average Hourly Flow
      Annual or Test Period Flow Hours Rate (MCF)

   b. Example: 3365 MCF = 0.57 MCF/Hour Average Flow Rate
      5877.8 Hours

2. Average Daily Hourly Flow Rate (MCF)

   a. Average Hourly Flow Rate (MCF) X 24 = Average Daily Flow Rate (MCF/D)

   b. Example: 0.57 (Average Hourly MCF) x 24 = 13.68 MCF (Average Daily Flow Rate)

3. "Time Calculated Volume" Formula

   a. Flow Meter Hours X Average MCF Hourly Flow Rate = Volume (MCF)
      Volume (MCF) X BTU Factor = MMBTU (dth) for Period Indicated

   b. Example: 1971 (Hours) X .31 (MCF) = 611 MCF
      611 MCF X 1097 BTU = 670 MMBTU (dth) for the Period Indicated

4. "Agreed Volume" Formula

   a. Annual or Test Period Measured Flow Volume = "Average Hourly" MCF
      Annual or Test Period Flow Hours.

      "Average Hourly" MCF X 24 = Daily MCF Flow Volume

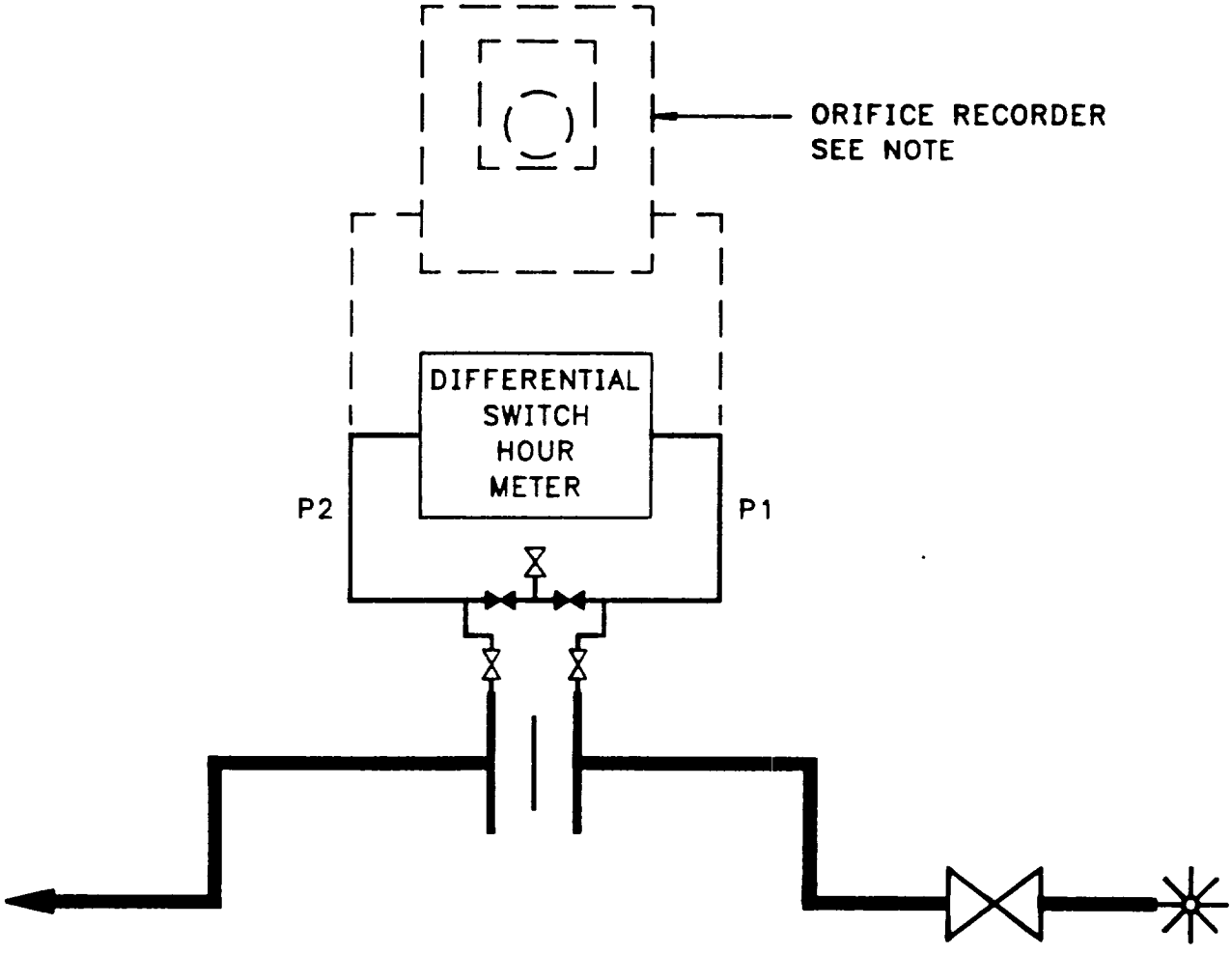
      Daily MCF Flow Volume X Percent Stipulated Flow Time (i.e. Cycle Flow)=
      Average Daily MCF Flow Volume

   b. Example: 31 (days) X 4 (MCF) = 124 MCF
      124 MCF X 1097 BTU = 136 MMBTU (dth) for the month

TIME CALCULATED VOLUME

ALTERNATIVE METHOD SCHEMATIC

PRIMARY ELEMENT AND DIFFERENTIAL SWITCH/HOUR METER
USED FOR FLOW TIME DETECTION AND ANNUAL TEST



NOTE:
ORIFICE RECORDER TEMPORARILY INSTALLED
ONLY TO CONDUCT 16 DAY ANNUAL TEST

TRANSPORTATION GENERAL TERMS AND CONDITIONS
(Continued)

4. SCHEDULING AND CAPACITY ALLOCATION (Continued)

4.1 Scheduling of Receipts and Deliveries (Continued)

(c) El Paso shall not be obligated to accept, for the account of Shipper, from any receipt point, a quantity of gas that is less than fifteen (15) dth per day, so as to avoid measurement problems relative to small volumes and disproportionate administrative burdens.