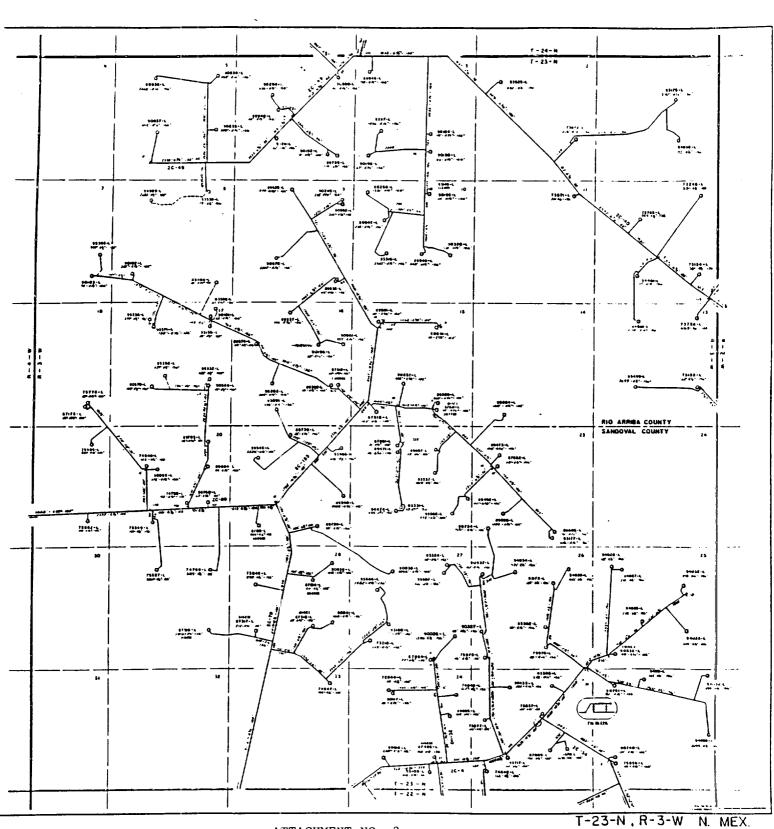
UNITED STATES SUBMIT IN TRIPLICATES Form from 400 DEPARTMENT OF THE INTERIOR verse side: SUREAU OF LAND MANAGEMENT	5. LEASE DESIGNATION AND SERIAL NO. CONTRACT 412			
SUMBRY NOTICES AND REPORTS ON WELLS 10 to the last corm for proposals to drill or to deepen or disc back to a different reservoir. Cue "APPLICATION FOR PERMIT—" for such proposals.	JICARILLA APACHE			
AT THE XX OTHER	7. UNIT AGREEMENT NAME			
DAVE M. THOMAS, JR.	6. FARM OR LEASE NAME CHACON JICARILLA			
P. O. BOX 2026, FARMINGTON, NM 87499-2026	9. WELL NO.			
t. LOUATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface	10. PIELD AND POOL, OR WILDCA'S BALLARD PICTURED CLIFFS			
1850' FNL; 1850' FEL	SEC. 16, T23N, R3W, N.M.			
14. PERMIT NO. 15. ELEVATIONS (Show whether of, ST. CX. etc.) 7363 GR.	RIO ARRIBA NM			
Check Appropriate Box To Indicate Nature of Notice, Report, or C	Other Data			
TEST WATER SHUT-OFF PULL OR ALIER CASING WATER SHUT-OFF FRACTULE TREATMENT SHOOT OF ACIDITY ABANDON* SHOOTING OR ACIDIZING SEPARATIVELY CHANGE PLANS OFFICE CONVERSION TO ALTERNATIVE (Note: Report results)	i dentur for all markers and zones betti-			
THE ORIFICE METERING EQUIPMENT ON THIS WELL TO USE THE TIME CALC GAS VOLUME DETERMINIATION. THE VOLUME PRODUCED BY THIS WELL NO JUSTIFIES MAINTENANCE OF THE NORMAL MEASUREMENT METHOD. CONVERS METHOD WILL ADEQUATELY DETERMINE THE VOLUME OF GAS PRODUCED BY T GAS VOLUME ALLOCATION TO THE WELL VERSUS DISCONTINUANCE OF SERVIWITH SUBSEQUENT LOSS OF REVENUE AND ROYALTY. THE HOURLY VOLUME ,26 MCF PER HOUR AS SHOWN ON ATTACHMENT NO. 1. A SECTION OF EL P PIPELINE MAP SHOWING THE PROPOSED FACILITY TO BE CONVERTED IS AT ATTACHMENT NO. 3 IS A DESCRIPTION OF THE EQUIPMENT AND PROCEDURE NO. 4 IS A TABULATION OF THE PRIOR FIVE YEARS PRODUCTION FROM THE	LONGER ECONOMICALLY ION TO THIS ALTERNATIVE HIS WELL, AND WILL ALLOW CE BY THE GAS PURCHASER MULTIPLIER TO BE USED IS ASO NATURAL GAS COMPANY'S TACHMENT NO. 2. S TO BE USED. ATTACHMENT			
APRI 4 1993 OIL CON. DIV				
8. I hereby certif- may the foregoing is true and correct SIGNET STEEL OFFICE MANAGER				
This sunce for Federal or State unice user Acting Stinkley IVICINDY	APR 12 1993			

APPROVED BY
CONDITIONS OF APPROVAL IF ANT:

DATE : Ref Agreement dated 7-21-92						Page	1	of 1
ATTACHMENT ALTERNATIVE METHOD LOW FLOW WELL LISTING Operator Code 8903 Operator Name Thomas Dave M. Jr.								
METER NO.	WELL NAME	STATE	AREA LOCATION	TEST PERIOD MCF	TEST PERIOD FLOW HOURS	CALC.	AGREED VOLUME DAILY RATE MCF	Į.
90-196	Chacon Jicarilla # 11	NM-31	Chaco	1072	4006.6	0.26	6.24	TC

TC = Time Calculated Volume (Hourly)	AV = Agreed Upon Volume (Daily)
ACCEPTED BY :	



"TIME CALCULATED VOLUME" ALTERNATIVE MEASUREMENT METHOD

- Recommended Flow Rate Range 5 to 15 dth/D
- 2. Determine Daily/Hourly Average Flow Rate for Low Volume Well
 - a. Use the 1990 Annual (Latest) Measured Production Volume and Flow Hours to Establish an "Average Hourly" Volume of Low Rate.
 - b. Formula:

<u>Annual Measured Flow Volume</u> = "Average Hourly" Volume Flow Rate Annual Flow Hours

3. <u>Piceline and Well Operator Execute Letter Agreement to Use Alternative Methods</u> (Well(s) Listed by Appropriate Meter Number, Meter Name, and Average Hourly Flow Rate From Last Test Period).

4. Meter Station Equipment

- a. Leave Primary Measurement Elements on Location for Annual Production Test.
- b. Install Smallest Recognized Orifice Plate Beta Ratio to Ensure Reliable Pressure Drop Detection (i.e. 4.026 I.D. and 0.250 Orifice Plate Bore).
- c. Remove Orifice Recorder and Recording Thermometer and Thermowell.
- D. Install Differential Switch with Hour Meter
 - (1) Hour Meter must not have an external hour reset button.
 - (2) Differential Switch "ON" setpoint to be at or near 0.5 inches W.C. but not more than 0.9 inches W.C.
- , (3) Hour Meter must have external flow status indicator to indicate when hour meter is counting (i.e. flashing decimal point).
 - (4) Report equipment change to appropriate Volume Calculation Dept.

5. Periodic Hour Meter Reports (Quarterly)

- a. Establish Hour Meter "READ" Schedule
- b. Report Start and Stop Hourly Meter Readings and Flow Hours Difference on Appropriate Form to the Volume Calculation Division at Least Every Three (3) Months.
- c. Monitor Switch/Hour Meter Serviceability

6. Volume Calculation Department

- a. Code Volume Calculation Method as "Time Calculated Volume".
- b. Verify and Enter Reported Flow Hours Into the Volume Calculation Routine.
- c. Use 60°F As the Flowing Temperature Base Value (Factor 1.0) For Volume Calculation.
- d. Use the Most Recent Gas Analysis For Specific Gravity and BTU Calculation Factors.
- e. Enter the Most Recent "Average Hourly" Flow Rate Volume Into the Volume Calculation Routine.
- f. Calculate Settlement Volume and MMBTU (dth) Formula.
 Flow Meter Hours X Average MCF Hourly Flow Rate = Volume (MCF)
 Volume (MCF) X 8TU Factor = MMBTU (dth) for the Period Indicated.
 Example: 1971 (Hours) X .31 (MCF) = 611 MCF
 611 MCF X 1097 BTU = 670 MMBTU (dth) for the Period.
- g. Identify and report "Time Calculated Volume" MMBTU(dth) on the Appropriate Volume Statement(s).

"TIME CALCULATED VOLUME" ALTERNATIVE MEASUREMENT METHOD

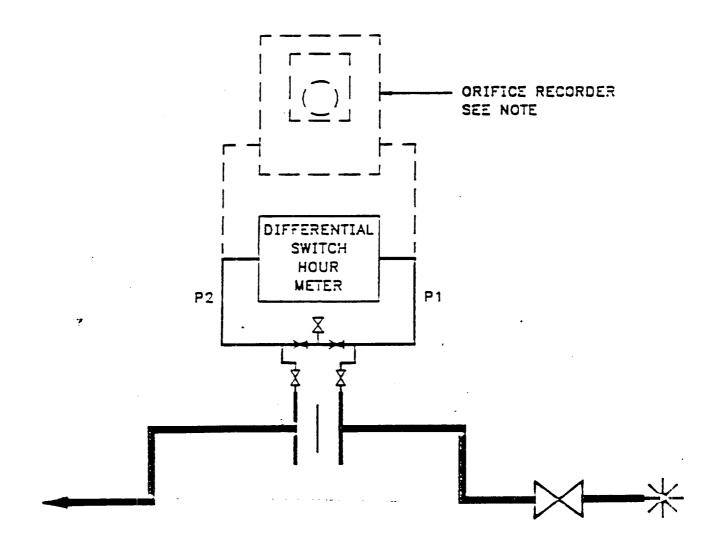
-2-

- 7. Perform Annual Production Measurement Test to Update Hourly Flow Rates
 - a. Schedule Annual Production Measurement Test
 - b. Conduct 16 Day Test Period
 - (1) Install and calibrate test orifice recorder
 - (2) Note Test Hour Meter start reading
 - (3) Inspect orifice plate and meter tube for serviceability
 - (4) Procure and process representative gas sample
 - (5) Complete test and remove test orifice recorder
 - (6) Compare test Hour Meter Start and Stop reading difference with orifice chart recording
 - (7) Check Differential Switch/Hour Meter for serviceability
 - (8) Forward test charts and equipment inspection reports to the Volume Calculation Department
 - c. Volume Calculation Department makes Re-Determination of New Average Hourly Flow Rate for Use During the Subsequent Year and Notifies Weil Operator of New MCF or dth Values.

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

DAVE M. THOMAS, JR. PROPOSED ALTERNATIVE MEASUREMENT METHOD WELL

	1991 1990		0 1989		1988	19	87	FIVE YEAR	
	PROD.	PROD.	PROD.		PROD.	PR	OD.	AVG. PROD.	
WELL	MCFD	MCFD	MC	FD	MCFD	MC	FD	MCFE	<u> </u>
CHACON JIC. NO. 11		9	6	11		10	18		9