Forta 3160-5 (November 1983) (Formarly 9-331)	UNITED ST DEPARTMENT OF T BUREAU OF LAND	THE INTERIOR	SUBMIT IN TRIPLICATE* (Other instructions on re- verse side)	5. LEASE DESIGNATION A	31, 1985 MD SERIAL NO. - 37548
SUN (Do not use this	IDRY NOTICES AND form for proposals to drill or to use "APPLICATION FOR PER	REPORTS ON  deepen or plug back t	WELLS  of a father years reservoir.	N/A	VA ISISS NAZS
1. GAS	CR APPLICATION FOR TAX		VED	7. UNIT AGREEMENT NAM	18
WELL WELL	OTEER		<u> </u>	S. FARM OR LEASE NAME	<u> </u>
	TROLEUM COMPANY	BUREA	Une	FEDERAL 24-	-3
S. ADDRESS OF OPERATO		CON CALTEODAIT	NGTON RESOURCE AREA	#3	
A. LOCATION OF WELL (	ORD AVENUE, WILMING	cordance with any State	requirements.	10. FIBLD AND POOL, OR	WILDCAT
išee also space 17 be at surface	10w.)	•		RIO PUERCO	MANCOS-GALLUP
SECH / 55	ni FCL 1000! FUL\			SURVEY OR AREA	
SESW (DD	O' FSL 1980' FWL)			SECTION 3 -	
14. PERMIT NO.		S (Show whether DF, RT, GL. 6889 'KB	ca, etc.)	12. COUPTY OR PARISE SANDOVAL	NEW MEXICO
Approved 12			e of Notice, Report, or (		TIEW TIEM
16.	HOZICE OF INTENTION TO: Op.	_		UBNY REPORT OF:	
TEST WATER SHUT-	<del></del> 1		WATER SHUT-OFF	EMPAIRING W	BLL
PRACTURE TREAT	MULTIPLE COMPI	1 <del></del> 1 1	PRACTURE TREATMENT	ALTERING CA	<del>                                     </del>
SHOOT OR ACIDIES	ARANDON®		SECOTING OR ACIDIZING	ABANDONMEN	**
REPAIR WELL  (Other) To Vo	nt/Flare Gas (NTL-4)	A) $ x $	(Other)(Nors: Report result Completion or Recomi	s of multiple completion e pletion Report and Log for	m Well
	on COMPLETED OPERATIONS (Clearl If well is directionally drilled, gi		ally and also partitions dates	including estimated date	of starting any
subject lea Well Gas". Based on the	etroleum Company rec ase pursuant to NTL- ne latest production ng an average of 2 E e lease for fuel, re	4A, Section I n test on Octo BOPD and 16 MC	V.B "Venting and F ber 31, 1985, the FD. Approximately	Flaring Oil subject well	
economic d	s Attachments "A", " ata to demonstrate t ly use such as gas a e gas could result	that expenditu are uneconomic	res necessary to make all and that require	market or red conserva-	
Expires	5 1-6-87		OIL CONT	36 D <b>Y</b>	B. The Assessment of the Control of
18. I hereny certify the	at the foregoing is true and corr	ect	DIST.		PROPERTY OF STATE OF
SIGNED JON	1. M. Senner		roleum Engineer	DATE 12/30	)/85
PM'	Mckinney  deral or State office ase)			1	
APPROVED BY		_ TITLE		DATE	1986
CONDITIONS OF	APPROVAL, IF ANY:			Jet St	Elle !
	•	[-1	2	The area area	64\$P
	ont	*See Instructions on	Reverse Side	- PARMINUMENTE	EUSENZE AREA

## BACKGROUND

Production in the Rio Puerco Field, Sandoval County, New Mexico, occurs in the Gallup-Mancos member of the Mancos Shale. This formation is characterized as a fractured, silty, interbedded formation with predominant fracturing occuring along the flanks of the localized structures.

Volumetric reserve estimates are considered to be invalid due to the lack of matrix porosity and the degree of fracturing through the productive interval. Reserves, however, have been based upon well performance of each well during the last six month period and projecting this information to the economic limit.

Recent well tests and other pertinent well data are shown below:

	#2 Federal 22-1	#3 Federal 24-3	#1 Federal 24-11
Production Period Test Date Oil Rate Gas Rate GOR Drilling & Completion Cost Estimated Gas Reserves Champlin W.I. Champlin R.I.	24 hours 10/29/85 2.0 BOPD 13 MCFD 6,500 \$520,000 Minimal 35.75%	24 hours 10/31/85 2.0 BOPD 16 MCFD 8,000 \$560,000 Minimal 50.0% 41.25%	24 hours 10/30/85 2.0 BOPD 5.0 MCFD 2,500 \$490,000 Minimal 50.0% 41.25%
	#2 Federal 24-2	#1 Federal 44-2	
Production Period Test Date Oil Rate Gas Rate GOR Drilling & Completion Cost Estimated Gas Reserves Champlin W.I. Champlin R.I.	24 hours 10/28/85 32 BOPD 37 MCFD 1,160 \$555,000 10 MMCF 50.0% 41.25%	24 hours 10/27/85 32 BOPD 26 MCFD 800 \$600,000 8 MMCF 50.0% 41.25%	

## CHAMPLIN PETROLEUM COMPANY RIO PUERCO FIELD SANDOVAL COUNTY, NEW MEXICO

## EVALUATION FOR FEASIBILITY OF MARKETING GAS

It is determined that there is no economically feasible alternative to venting the gas at the Rio Puerco Field. Three of the existing wells are near the economic limit and to prevent premature abandonment, permission is requested to vent the gas. A brief discussion of the alternatives and economics of each is as follows:

1. Sales via Gas pipeline:

Sales via gas pipeline is unfeasible due to the 12-15 miles of line that would have to be installed. The wells produce 5-37 MCFD and have insufficient reserves at current prices, to cover the cost of installation of the line.

2. Installation of a small gas plant to strip liquids:

This type of plant would cost  $\pm$  \$300,000. Reserves are insufficient to cover initial costs and increased operating expenses would affect premature abandonment. In addition, there would still be measurable gas to vent.

In conclusion, there is no reasonable alternative to venting our produced gas at this time. Champlin will, however, continue to investigate alternatives as they may be presented to us.

E. F. Wood

Petroleum Engineer

		Page 1 of 1		
		File 3806-G-1414		
ompany CHAMPLIN PETROLEUM COMPANY		Formation Marcos-64/14p		
¥e:11	#1 FEDERAL 44-2	County SANDOVAL		
Field P	10 Avesco Fiers	State NEW MEXICO		

## HYDROCARBON ANALYSIS OF: SEPARATOR GAS

Component	Mol Percent	GPM
Carbon Dioxide Nitrogen Methane Ethane Propane iso-Butane n-Butane iso-Pentane n-Pentane Hexanes Plus	.07 8.70 57.46 10.49 13.75 1.75 3.71 .78 .65 2.64	2.789 3.762 .569 1.163 .284 .234 1.131 9.932

Calculated gas gravity (air = 1.000) = .954

Calculated gross heating value = 1479 BTU per cubic foot of dry gas at 14.65 psia and 60°F.

Collected at 36 psig and 76 °F.

Date Sampled: 8-16-84 Cylinder Number: 868

