

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting Lease Management Contract Pumping

3001 Northridge Drive P.O. Drawer 419 Farmington, New Mexico 87401 (505) 327-4892

November 19, 1986

Mr. Ronald Fellows Area Manager Bureau of Land Management Caller Service 4104 Farmington, New Mexico 87499

OIL CON. DIV. DIST. 3

BUREAU OF LAND MANAGEMENT FARMINGTON RESOURCE AREA

RECEIVED

NOV 20 1986

REF: Lobo Production Magnum No. 1

1750'FSL, 800'FEL, Section 28-T24N-R7W

Rio Arriba County, New Mexico

Lease No: NM-33001

Dear Mr. Fellows:

This is a request on behalf of the above-referred-to Operator for approval to vent casinghead gas from the above-referred-to well.

Attached you will find the information prepared to make an economic cost analysis of constructing a gas gathering line to gather the casinghead gas. The analysis indicates that the cost to lay a gathering system cannot be justified by estimated gas sales.

The well is located approximately 2800 feet from a gas gathering system, El Paso Natural Gas Company. It is approximately 3 miles to gathering system operated by the Gas Company of New Mexico. Also El Paso Natural Gas Company will not enter into a gas purchase contract.

It is requested that approval to vent the gas be set forth.

Thank you for your consideration in this matter.

Very truly yours,

Ewell N.

President

ENW:rr

Enclosures

Walsh, P.E.

FARMINGTON APOSITION AREA



LOBO PRODUCTION
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CASINGHEAD GAS GATHERING LINE

BUREAU OF LAND MANAGEMENT FARMINGTON RESOURCE AREA

CONDITIONS FOR EVALUATION - GAS

Working Interest	100.00000%
Revenue Interest to Working Interest	77.50%
Gas Production Vented, as per Oil Production Decline	GOR-3750 cu.ft/bbl.
Initial Vented Gas Value, per MCF, Estimated (1)	\$1.72
Production Taxes, New Mexico, Gas Value	8.0%
Ad Valorem Taxes, New Mexico, Gas Value	0.3%
Operating Costs, Gas Line (2)	\$1000.00
Estimated Gas Line Construction Costs	\$17,050.00

- (1) Gas Sale value remain constant throughout life of well.
- (2) Escalated, per month, at 6.0% per year. (Including fuel and operating cost, for compressor and rental of compressor)

CONDITIONS FOR EVALUATION - OIL

Working Interest	100.00000%
Revenue Interest to Working Interest	77.50%
Initial Oil Production, Per month	220 bbls.
Decline in Oil Production, Per Year	(3)
Initial Oil Sale Value, per bbl. August 1985 (1)	\$12.25
Production Taxes, New Mexico, Oil Value	8.0%
Ad Valorem Taxes, New Mexico, Gas Value	0.3%
Operating Costs, per month (2)	\$600.00
Drilling Costs to Recover	\$225,000

- (1) Oil Sale value remain constant throughout life of well. Sale value after deduction for transportation costs.
- (2) Escalated, per month, at 6.0% per year.
- (3) 18 months 20%, next 36 months 15%, next 24 months 10%, thereafter 5%.



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CASINGHEAD GAS GATHERING LINE ESTIMATED COST

BUREAU OF LAND MANAGEMENT FARMINGTON RESOURCE AREA

		ESTIMATED COSTS	
ITEM		TANGIBLE	INTANGIBLE
2-3/8", O.D. Line Pipe - 2800' Ditch, wrap, lay & cover line - 2800' Metering Equipment Tie-In, Miscellaneous Roustabout - 3 days Miscellaneous fittings		\$1,800	\$4,500
		3,500	3,000
		2,000	
j	SUBTOTAL	\$7,300	\$7,500
Contengency - 15%		1,100	1,150
	TOTAL	\$8,400	\$8,650

Total Tangible and Intangible - \$17,050



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SUMMARY

BUREAU OF LAND MANAGEMENT **FARMINGTON RESOURCE AREA**

- 1. Combined Oil & Gas Operating Expenses vs. Net Oil Income
 - A. For year 1987

Total Operating Expenses, Gas & Oil - \$22,089 (Exhibit "A") Net Oil Income 12,519 (Exhibit "B")

 $\frac{$12,519}{322,020} = 0.5667 \times 12 \text{ months} = $6.80 \text{ per month or } 7 \text{ months}$

- Reserves Produced and Sold with Gas Conservation. √2.
 - A. 0il 1987 (7 months) Exhibit "A"

1987 (7 months)

-1.341 bbls.

B. Gas - 1987 (7 months) Exhibit "A"

1987 (7 months) - 5.028 MCF

- 3. Reserves Produced and Sold with Gas Conservation.
 - A. Oil 1987 through 1991 (Exhibit "B")

Total 7,946 Barrels

- Loss of B.T.U. Equivalent.
 - A. Oil Lost Due to Early Abandonment

Produced & Sold Oil Without Gas Conservation Produced & Sold Oil With Gas Conservation Total

- 7,946 bbls. -<u>1,341</u>bbls. 6,605 bbls

0il Lost

6,605 bbls. x 42 gg1/bbl x 6.769 lb/gal x 19,500 BTU/lb = $3,662 \times 10^{9}$ BTU.



Page 2 LOBO PRODUCTION Magnum No. 1 SUMMARY

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B. Gas - If Vented.

BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA

Vented - 16,563 MCF

16,563 MCF x 1,300,000 BTU/MCF = 2,153 x 10^9 BTU.

C. BTU Lost Comparison

0il - 3,662 x $10\frac{9}{9}$ (Lost due to early abandonment) Gas - 2,153 x 10 (Lost due to venting)

- 5. Pay Out of Construction of Gas Line Costs
 - A. Gas Sales

Income from gas sales will not pay off costs within 6 months.
(Exhibit "C")

B. Oil Sales Plus Gas Sales

1987 Net Income discounted 10.0% from total oil and gas sales will not pay off costs within 6 months. $$11,039 \times 0.9913 = $10,943$ (Exhibit "A").