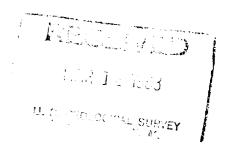


ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting Lease Management Contract Pumping

3001 Northridge Drive P.O. Drawer 419 Fermington, New Mexico 87401 [505] 327-4892

March 14, 1983



Mr. Jim Sims, District Supervisor Bureau of Land Management P.O. Drawer 600 Farmington, New Mexico 87499

> Jack A. Cole RE:

Mobil Federal No. 1 Sec. 35-T24N-R3W

Rio Arriba County, New Mexico

MAR 2 1 1350

DIST. 9

OIL CON

Lease No. 29078915

Dear Mr. Sims:

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

The reason for the request is due to the fact that the cost of compressor installation and construction of a gas gathering line and associated facilities cannot be economically justified.

Attached is the information prepared to support this request.

Very truly yours,

well Weale Ewell N. Walsh, P.E.

President

ENW: blk

Attachments

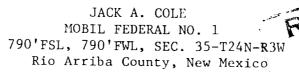
Mr. Jack A. Cole w/attachments

w/attachments

DISTRICT ENGINEER

NMOCD





SUMMARY



- 1. Combined Oil & Gas Operating Expenses Vs. Net Oil Income
 - A. For Year 1986

Total Operating Expenses, Gas & Oil - \$22,984 Net Oil Income - \$21,527

 $\frac{\$21,527}{\$22,984} = 0.9366 \text{ X } 12 \text{ months} = 11.24 \text{ month or } 11 \text{ months}$

- 2. Reserves Produced & Sold with Gas Conservation.
 - A. 0i1 1983 (10 months) through 1986 (11 months)

1983 (10 months) - 4827 Barrels 1984 & 1985 - 4951 Barrels 1986 (11 months) - 1588 Barrels 11,366 Barrels

B. Gas - 1983 (10 months) through 1986 (11 months)

1983 (10 months) - 8099 MCF 1984 & 1985 - 8308 MCF 1986 (11 months) - 2666 MCF 19,073 MCF

- 3. Reserves Produced & Sold Without Gas Conservation
 - A. 0i1 1983 (10 months) through 1991 (8 months)

Total - 17,391 Barrels

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

Produced & Sold Oil Without Gas Conservation - 17,391 Barrels Produced & Sold Oil with Gas Conservation (Less- 11,366 Barrels

0il Lost

TOTAL

6,025 Barrels



Page 2 JACK A. COLE Mobil Federal No. 1 SUMMARY Revised 3/18/83

4. A. Cont.

6,025 Bbls. X 42 gal/bbl x 6.769 lb/gal x 19,500 BTU/lb = 33.401×10^9 BTU.

B. Gas - If Vented.

Vented - 19,073 MCF

19,073 MCF x 1,300,000 BTU/MCF - 24.794×10^9 BTU.

C. BTU Lost Comparison.

0il - 33.401 x 10^9_{9} (Lost due to early abandonment). Gas - 24.794 x 10^9 (Lost due to venting)

- 5. Pay out of Compressor and Construction of Line Costs.
 - A. Gas Sales

Income from gas sales will never pay out costs.

B. Oil Sales Plus Gas Sales

Income discounted 12.0% from total oil and gas sales will not pay off costs within 6 months.



JACK A. COLE MOBIL FEDERAL NO. 1 790'FSL, 790'FWL, SEC. 35-T24N-R3W Rio Arriba County, New Mexico Lease No: 29078915

CASINGHEAD GAS GATHERING LINE

CONDITIONS FOR EVALUATION - GAS

Working Interest Revenue Interest to Working Interest	100.00000% 0.763125%
Gas Production, Vented. As per oil Production	GOR-1678 ft. 3/Bbl.
Gas Production, vented. As per oil Production	GOR 1070 10. 37 2210
Decline in Gas Production, Vented. As Per Oil Production	4.4 9.5
Initial Vented Gas Value, per MCF, Estimated (1)	\$4.15
Production Taxes, New Mexico, Gas Value	8.0%
Ad Valorem Taxes, New Mexico Gas Value	0.003%
Severance Taxes, Jicarilla Apache Tribe, per MCF	\$0.0 5
Operating Costs, Per Month, Compressor & Gas Line (2)	\$50 0. 00
Estimated Compressor and Gas Line Construction Costs	\$81,650.00

- (1) Gas sale value escalated, at 8.0% per year, to maximum of \$5.00 per MCF or until January 1, 1985, whichever, occurs first, then remain at \$5.00 per MCF or calculated value for December, 1984.
- (2) Escalated, per month, at 10.0% per year. (Including fuel costs for compressor).

CONDITIONS FOR EVALUATION - OIL

Working Interest 100.00000%	0
Revenue Interest to Working Interest 0.763125	
Initial Oil Production, Per Month (January 1983) 684 Bb	ls.
Decline in Oil Production, Per Year (3)	
Initial Oil Sale Value, Per Bbl., March 1983 (1) 29.00	
Production Taxes, New Mexico, Oil Value 8.0%	
Ad Valorem Taxes, New Mexico, Gas Value 0.003%	
Severance Taxes, Jicarilla Apache Tribe, Per Barrel \$0.29	
Operating Costs, Per Month (2) \$750.00	
Tangible Costs, To Recover \$528,752.00	

- (1) Oil Sale value remain constant throughout life of well.
- (2) Escalated, per month, at 10.0% per year.
- (3) 15 months 59%, next 30 months 20%, thereafter 8%.



JACK A. COLE MOBIL FEDERAL NO. 1 790'FSL, 790'FWL, SEC. 35-T24N-R3W Rio Arriba County, New Mexico Lease No: 29-78915

CASINGHEAD GAS GATHERINE LINE ESTIMATED COST

		ESTIMATED COSTS	
ITEM		TANGIBLE	INTANGIBLE
2-3/8", O.D. Line Pipe - 2800' Ditch, wrap, lay & cover line - Metering Equipment Compressor	2800'	\$6,300 3,500 40,000	\$14,000
Tie-In, Miscellaneous Roustabou Miscellaneous Fittings Right-of-way - 1800' not on lea Tap		3,000	1,500 1,700 1,000
	SUBTOTAL	\$52,800	\$18,200
Contengency - 15%		7,920	2,730
	TOTAL	\$60,720	\$20,930