

YATES ENERGY CORPORATION
AUTHORIZATION FOR EXPENDITURE

LEASE NAME & WELL NUMBER: THORNBUSH FEDERAL #2

LEGAL LOCATION: SW/4SW/4 of SECTION 1, T-18S, R-31E

COUNTY: EDDY STATE: NEW MEXICO DEPTH: 5,600' FORMATION: SAN ANDRES/DELAWARE

Item		TO CASING POINT	COMPLETION	TOTAL WELL
<u>INTANGIBLE COSTS:</u>				
Location:	Survey, etc.	\$ 800	\$ 0	\$ 800
	Permit & Archaeological Services	1,500	0	1,500
	Surface tenant costs	1,000	500	1,500
	Road, pad & clean-up	7,500	2,500	10,000
Drilling:	Footage -5,600' @ \$12.50/ft.	70,000	0	70,000
	Daywork - 1.0/1.0 days @ \$4,300/day	4,300	4,300	8,600
Drilling Fluids:	Mud, oil & chemicals (mud sweeps only)	7,500	0	7,500
	Brine & Water	12,500	1,000	13,500
Cement:	8-5/8" x 11" x 350', circulate	6,000	0	6,000
	4-1/2" x 7-7/8" x 5600', circulate	0	23,000	23,000
Services:	OH Logs: GR-CN-LDT & DLL w/MSFL	10,000	0	10,000
	Pulling unit	0	10,800	10,800
	GR-CNL-CBL Log & Perforate	0	5,000	5,000
	Acid: 1 @ 250 gal. & 1 @ 3000 gal.	0	6,500	6,500
	Frac treatment (25 foot interval)	0	35,000	35,000
	Csg. crews	0	2,500	2,500
Hauling:	Oil, water, etc.	500	500	1,000
	Equipment	500	1,000	1,500
Rental:	H2S, BOP, pipe racks, etc.	1,000	2,500	3,500
	Water storage & test tanks	500	1,000	1,500
Supplies:	Sample sx., pipe dope, etc.	560	560	1,120
Insurance:	Normal, pro-rated	1,200	700	1,900
Supervision:	Geological & Mud Logger (2/8)	3,500	0	3,500
	Engineering (5/9)	2,750	4,500	7,250
	Overhead (12/9)	1,800	1,350	3,150
Contingencies:	Welding, packers, taxes (6%), misc. tools, etc.	8,902	7,190	16,092
TOTAL INTANGIBLES		\$142,312	\$110,400	\$252,712
<u>TANGIBLE COSTS:</u>				
Casing:	Surface: 350' of 8-5/8" @ \$10./ft.	3,500	0	3,500
	Production: 5,600' of 4-1/2" @ \$4.5/ft.	0	25,200	25,200
Tubing:	5,600' of 2-3/8" @ \$2.25/ft.	0	12,600	12,600
Wellheads:	Drilling and completion assembly	1,000	5,100	6,100
Tank Btty:	2 -300 Bbl (0) 1 -300 Bbl. FG-CT(W)	0	10,000	10,000
	4' x 20' Heater-treater	0	6,500	6,500
Lift Equipment:	Pumping unit with power & elec. system	0	22,500	22,500
	Rods, pump, anchor, misc.	0	10,600	10,600
Flowline:	500 @ \$3.50/ft. incl. valves, etc.	0	1,800	1,800
	Labor & dirt work:	0	2,500	2,500
Miscellaneous:	Packer, tools, tax (6%), etc.	1,270	8,290	9,560
TOTAL TANGIBLES		\$ 5,770	\$105,090	\$110,860
TOTAL WELL		\$148,082	\$215,490	\$363,572
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Prepared by: Jim O'Briant April 3, 1991.

IT IS RECOGNIZED THAT THE AMOUNTS PROVIDED FOR HEREIN ARE ESTIMATED ONLY, AND APPROVAL OF THIS AUTHORIZATION SHALL EXTEND TO THE ACTUAL COSTS INCURRED IN CONDUCTING THE OPERATIONS SPECIFIED, WHETHER MORE OR LESS THAN HEREIN SET OUT.

APPROVED BY: _____

COMPANY: _____

DATE: _____

BEFORE EXPIRATION DATE	
OIL DEPARTMENT	5
YEC	10295
CASE NO.	