MANZANO OIL CORPORATION
P.O. BOX 2107
ROSWELL, NEW MEXICO 88202-2107

AUTHORIZATION FOR EXPENDITURE

Date: August 10, 1998

Lease/Well Odyssey #1 Location 1149'FSl & 1370'FEl Sec 2, T16S, R36E
County Lea State NM Prospect Turtle Proposed TD 11,800'
Objective Zones Strawn Type Well Oil/Explor Est Start Date 11/1/98

Intangible Costs:	Dry Hole	Completion	Total
Surveying	$ 800	$	$ 800
Lease Restoration	3,000		3,000
Location, Roads & Pit Liner	14,000		14,000
Drlg-Footage:Depth 11,800'@ $18.50/ft	218,300		218,300
Drilling-Daywork: 5 days @ $5000 /day	25,000		25,000
Completion Rig: 10 days @ $1500 /day		15,000	15,000
Mud Logging	7,000		7,000
Drill Stem Tests: No____	7,000		7,000
Roustabouts & Trucking	3,500	5,000	8,500
Mud Chemicals	19,000		19,000
Cement & Services - Surface	3,500		3,500
Intermediate	13,300		13,300
Cement retainer -		15,000	15,000
Open Hole Logging & Sidewall Cores	18,000		18,000
Tie In Logging & Perforation		6,000	6,000
Acidizing & Fracturing		10,000	10,000
Tk Batty Install & Electriciation		12,000	12,000
Engineering & Geological Services	3,000	1,000	4,000
Well Supervision	3,000	4,500	7,500
Administrative Overhead	4,800	2,200	7,000
Rental Tools & Equipment	4,000	5,000	9,000
Permits, Title & Damages	7,000		7,000
Water	2,000	2,000	4,000
Miscellaneous Contingencies	15,000	10,000	25,000
Gross Receipts Tax	19,800	4,500	24,300
Total Intangible Costs:	$391,000	$ 92,200	$483,200
Tangible Costs:			
Casing:			
Surf - 400'of 13-3/8" @ $16.50/ft	$ 6,600	$	$ 6,600
Inter - 4,400'of 8-5/8" @ $11.50/ft	50,600		50,600
Prod - 11,800'of 5-1/2" @ $ 6.00/ft		70,800	70,800
Tubing - 11,600'of 2-7/8" @ $ 3.00/ft		34,800	34,800
Wellhead Equipment	7,000	4,000	11,000
Sucker Rods			
Packer & Sleeves		4,000	4,000
Down Hole Pump			
Pumping Unit & Prime Mover			
Float & Other Equipment	2,000	2,000	4,000
Tanks, Flow Lines & Fittings		25,000	25,000
Separator/Heater-Treater		7,000	7,000
Gas Lines & Meters			
Miscellaneous	3,000	5,000	8,000
Gross Receipts Tax	3,900	8,500	12,400
Total Tangible Costs:	$ 73,100	$161,100	$234,200
Total Well Costs:	$464,100	$253,300	$717,400

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

MANZANO OIL CORPORATION
APPROVED
BY: D.E. Brown
TITLE: Vice President, Engineering

DATE: August 10, 1998

COMPANY
APPROVED
BY:
TITLE:

BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

Case No. 12049 Exhibit No. 4

Submitted by: Manzano Oil Corporation

Hearing Date: October 8, 1998