ORIGINAL AUTHORITY FOR EXPENDITURE

Date: 05/28/86 Well Nam Location: NE/4 SE/4 Sec.	e HAWKEYE	#1 T.D. 807	5' (Dakota) , New Mexico	
Operator: MESA GRANDE RESO	URCES, INC.	Prepared by:	David Blandford	
INTANGIBLE COSTS		Drill/Test	Complete/Equip.	Note:
LOCATION: Survey Location Build Roads & Pad Surface Damages Restoration DRILLING: \$ 100,000 Footage 8075 ft @ \$ 11.2 Daywork 2 days WDP @ Daywork - days WODP @	\$ 4400 / day	\$ 300 3,500 5,000 5,000 91,200 8,800	\$ 400 3,000 -	
WIRELINE SERVICES: Electric Logs Cement Bond Logs Perforating PROFESSIONAL SERVICES:		9,000	3,500 6,500	
Title Opinion Mud Logger Geological Engineering Other		6,500 6,500 6,000 6,000 500	5,000 600 5,500 1,000	(1)
SUPPORT SERVICES: Water Purchase Mud & Chemicals Trucking & Hauling Cement Casing - SURFACE Cement Casing - PRODUCTION Equipment - Rental/Serv.		5,000 28,000 4,000 3,500	2,000 3,000 8,000 23,000 8,000	(2)
Welding Completion Workover Rig Acid Treatment Frac Treatment Labor - Casing Crews Labor - Miscellaneous		1,500	2,000 27,000 15,000 50,000	(4)
Initial Well Testing Administrative, General Expe SUBTOTAL: Contingencies0% Plug and Abandonment	nses	3,350 195,450 19,545 2,500	2,000 4,500 173,000 17,300	
TOTAL INTANGIBLE:		\$ 217,495	\$ 190,300	
TANGIBLE COSTS				
TUBULAR EQUIPMENT Surface Casin; Production Casing Tubing Casing Equipment SURFACE EQUIPMENT Storage Tanks Tank Connections Line Pipe/Labor Gas Processing Unit	OIL CONSER Santa	\$ 4,500 EFORE THE EVATION COMMISSION Fe, New Americo	\$ 41,200 19,800 8,000 14,200 10,500 9,500 10,000	(5) (6) (7)
Separator/Heau-Treat. Water Tank Pumping Unit and Engine Sucker Rod String P.U. Connections MISC. EQUIPMENT Christmas Tree	Submitted by	Mesa Grande Re August 6, 1989		(9) (10) (11)
Packer, Tubing Anchor Valves and Fittings Gates/Culverts/Cattle Gua	ards	500	1,250 2,000 3,500	(12)
TOTAL TANGIBLE:		\$ 7,000	\$ 197,350	
DRY HOLE TOTAL: COMPLETED TOTAL:		\$ 224,495	\$ 387,650	
TOTAL ESTIMATED VELL COST:	\$ 612,145			
Approvals				
Company: Mesa Grande, Ltd.	By:		W.I. 47.500000 % Dat	e:
Company: Dugan Production Corp.	Ву:			e:
Company: Mesa Grande Resources	Inc By: Me	gough Phillips	W.I. 6.666666 % Dat	
Company: Mntn. Sts. Nat. Gas.	By:		W.I. 6.250000 % Dat	
Company: Wiepking-Fullerton En	erqy By:			e:
Hooper, Kimball & Williams, Inc.				e:
The state of the s			n.r # Dat	-

AUTHORITY FOR EXPENDITURE

HAWKEYE #1

05/28/86

NE/4 SE/4 Sec.

8075'

, Rio Arriba County, New Mexico

T.D.

(Dakota)

Well Name HAWAL-Operator: MESA GRANDE RESOURCES, INC. Prepared by: David Blandford Complete/Equip. Note: INTANGIBLE COSTS Drill/Test LOCATION: Survey Location Build Roads & Pad <u>30</u>0 400 3,000 3,500 5,000 5,000 Surface Damages Restoration DRILLING: \$ 100,000

Footage 8075 ft @ \$ 11.29 /ft

Daywork 2 days WDP @ \$ 4400 /day

Daywork - days WODP @ \$ 4300 /day 91,200 8,800 WIRELINE SERVICES: 9,000 Electric Logs Cement Bond Logs Perforating PROFESSIONAL SERVICES: 6.500 Title Opinion 6,500 5,000 Mud Logger 6,500 (1)Geological 6,000 600 5,500 1,000 6,000 Engineering Other 500 SUPPORT SERVICES: Water Purchase Mud & Chemicals <u>5,</u>000 000 28,000 3,000 Trucking & Hauling
Cement Casing - SURFACE
Cement Casing - PRODUCTION
Equipment - Rental/Serv. 4,000 8,000 (2) 3,500 23,000 (3) 1,500 8,000 300 2,000 Welding Completion Worksver Rig 27,000 (4)Acid Treatment 15,000 Frac Treatment 50,000 Labor - Casing Crews Labor - Miscellaneous Initial Well Testing 1,500 3,000 2,000 Administrative, General Expenses 3,350 4,500 <u>,0</u>00 SUBTOTAL: 450 19,545 Contingencies - 10% 17,300 Plug and Abandonment TOTAL INTANGIBLE: 217,495 \$ 190,300 TANGIBLE COSTS TUBULAR EQUIPMENT Surface Casing 4,500 (5) Production Casing (6) Tubing 19,800 8,000 (7) Casing Equipment SURFACE ÉQUIPMENT Storage Tanks
Tank Connect:.ons 14,200 (8) 10,500 9,500 Line Pipe/Labor Gas Processing Unit 10,000 Separator/Heat-Treat. Water Tank Pumping Unit and Engine Sucker Rod String 56,000 14,000 (9) P.U. Connections (10)MISC. EQUIPMENT Christmas Tree 2,000 3,900 (11)Packer, Tubing Anchor Valves and Fittings Gates/Culverts/Cattle Guards (12)500 2,000 3,500 TOTAL TANGIBLE: 7,000 \$ 197,350 DRY HOLE TOTAL: \$ 224,495 COMPLETED TOTAL: \$ 387,650 TOTAL ESTIMATED WELL COST: \$ 612,145 Approvals Company: Ralph Gilliland W.I. 3.125000 % Date: __ By:__ Company: <u>Duer Wagner</u>, Jr. W.I. 2.906250 % Date: _ By:_ Company: P.C. Ltd. _By:__ W.I. 1.951093 % Date: Company: <u>IBEX Partnership</u> _ By:_ 1.951093 % Date: W.I. Company: Clark and Oatman et al By: W.I. __ By:_ Company: Arriba Company, Ltd. 0.250000 % Date:__ W.I. √Company: <u>Duer Wagner</u>, III 0.218750 % Date: _ By:__ W.I.

Attachment to the Hawkeye #1
Authority for Expenditure
Operated by MESA GRANDE RESOURCES, INC.

NOTES

- 1. Mudlegger: Two Man unit for 15 days.
- Cemert Casing SURFACE: cost listed includes tools.
- 3. Cemert Casing PRODUCTION: cost listed does not include tools.
- 4. Completion Workover Rig: 15 days @ \$1800.00 day
- 5. <u>Surface Casing:</u> 500' 8 5/8" 20# K-55; \$9.00 per foot.
- 6. Production Casing: 8075' 5½" 17# J-55; \$5.10 per foot.
- 7. Tubing: 7600' 2 7/8" J-55, 8-Rnd; \$2.60 per foot.
- 8. Storage Tanks: Three 400 BBL Tanks
- 9. Sucker Rod String: 3000' 7/8" Dia. w/ Ryton Scrapers
 4000' 3/4" Dia.; all costs \$2.00 per foot.
- 10. P.U. Connections: Includes 11 x 21 x 18 Top Hold Down Pump with a Harbison-Fischer No-Lock Plunger.
- 11. Christmas Tree: McEvoy 3000#, Low Boy Head with valve fittings.
- 12. Packer: 5½ X 2 7/8 Tubing Anchor