## H. L. BROWN, JR.

## AUTHORITY FOR EXPENDITURE

PROSPECT NAME North Feather Prospe	Ct (#472) DATE PR	DATE PREPARED June 15, 1992	
LEASE NUMBER	DATE RE	VISED	
AFE NUMBER	To: Drill X RECOMPLET	E WORKO	VER
		N/O Continu 1	c
LEASEWELL N		N/2 Section I	6,
C		STATE	New Mexico
FIELD Morrow (Undesignated)			
Type of Well Gas			
PROJECTED DEPTH 12,500'			
MUST COMMENCE OPERATIONS DRILLING			
MOST COMMENCE OFERATIONS DRIELING			
In	TANGIBLE DRILLING COSTS		
		PRODUCING WELL COST	DRY HOLE COST
101 FOOTAGE 12,500 Ft. @ s 19.50	/ F*	243,750	243,750
		243,730	243,730
102 TURNKEY DRILLING		26,400	22,000
		20,400	22,000
104 DAYWORK DAYS WODP @\$			
106 CORING FEET AT \$/			
107 Core Analysis \$ Side Wall C			
108 Location Survey And Elevations		800	800
109 DRILLSTEM TESTS: No 3 @ \$_400			12,000
110 LOGGING: RADIOACTIVE \$ ELECTRIC		15,000	15,000
111 DIPMETER \$ VELOCITY SURVEY \$		137000	137000
112 MUDLOGGING 25 DAYS @ \$ 250 /		6,250	6,250
113 BOTTOMHOLE PRESSURE TESTS			
114 FLOW TESTING \$ TEMP. SURVEY A		2,000	
115 OTHER SURVEYS \$ FLUID AND GAS			
116 Tubular Goods Inspections		5,000	2,000
117 BOP AND WELLHEAD TESTS			
118 RENTALS AND ASSOCIATED SERVICES		5.000	2,000
119 LABOR · CONTRACT \$ COMPANY \$_		5,000	2,000
120 FUEL/POWER \$ WATER (PUMP, LINE		7,500	6,000
121 LOCATION \$ 7000 ROADS \$ 1500 PIT		11,000	11,000
122 ABANDONMENT/CLEANUP CHARGES		2,000	4,000
123 WATER DISPOSAL		2,000	2,000
124 TRANSPORTATION/TRUCKING/FORKLIFT	BEFORE EXAMINER CATANACE	3,000	2,000
125 CEMENTING SURFACE CASING		4,100	4,100
126 CEMENTING INTERMEDIATE CASING	OIL CONSERVATION DIVISION	8,000	8,000
127 CEMENTING PRODUCTION STRING/LINERIS) _		8,500	
128 Squeeze Cementing	EXHIBIT NO. 13		<del></del>
129 FLOAT EQUIPMENT, CENTRALIZERS, ETC.	CASENO	2,500	1,500
130 PICK UP AND LAYDOWN CHARGES	Office No.	2,000	
131 DRILLING MUD AND CHEMICALS/COMPLETION	FLUIDS	28,000	25,000
132 Acidizing Services And Materials			
133 FRACTURING SERVICES AND MATERIALS		15 000	
134 PERFORATING \$ WIRELINE TOOLS 8		15,000	
135 NITROGEN SERVICE/COIL TUBING			
136 COMPLETION UNIT 7 days @ \$1320/d	_	9,240	
137 WELDING		1,000	500
138 ENGINEERING SUPERVISION & EXPENSES: C		20,000	17,500
139 GEOLOGICAL SUPERVISION & EXPENSES: Co.		4,000	3,500
140 Bits, Lubricants, Expendables		3,000	3,000
141 LOSSES, DAMAGES, RIGHT-OF-WAY		3,000	3,000
143 REPAIRS - LABOR AND MATERIALS			
144 DRILLING OVERHEAD		12,500	10,000
145 MISCELLANEOUS IDC'S / CONTINGENCIES		25,000	15,000
TOTAL INTANGIBLE DRILLING COSTS		s 490,340	s 418,900

## H. L. BROWN, JR.

## AUTHORITY FOR EXPENDITURE

PAGE 2

WELL NAME & No. North Feather Prospect (#472)

Date Prepared June 15, 1992

				PRODUCING WELL COST	DRY HOLE COS
CASING					
о <u>40</u> гт. Ог <u>20" Со</u>	nductor	@ \$		700	70
51500 FT. OF13-3/8	" 48# H-40 ST&C	@ \$		8,000	8,00
2 4260 Ft. OF 8-5/8"	24# & 32# K55 ST	&C@ \$	8.50 <sub>/FT</sub> .	36,200	36,20
3 <u>12750</u> Fт ОF <u>5-1/2"</u>	20# N80, LT&C	@ \$	6.60 <sub>/FT</sub>	84,200	
3 FT. OF		@ \$	/FT.		
TUBING					
4 12700 Ft. OF 2-3/8"	EUE 4.7# N80	@ <b>\$</b>	2.90 <sub>/FT</sub>	36,800	
4 FT. OF					
		3 -			
SUCKER RODS					
5 FT. OF					
5 FT. OF					
5 FT. OF		@ \$	/FT		-
6 PUMPS, SUBSURFACE EQUIPMENT, 1	Гвс. Anchor				
7 PACKERS, LINER HANGERS, SEAL A				5,000	3,9
8 CASINGHEADS AND SPOOLS				9,900	
9 TUBINGHEAD ASSEMBLY Rec	onditioned. Used			5,600	
O TREE AND UPPER RUN Rec	conditioned, Used	5000# WP Dual Ma	ster	9,500	
1 PUMPING UNIT					]
2 ENGINE/ELECTRIC MOTOR			· · · · · · · · · · · · · · · · · · ·		]
3 OIL/CONDENSATE TANKS, NO	2 SIZE 500-b	bl		9,500	1
4 WATER TANK				3,000	]
5 SEPARATORS			*		
6 HEATER TREATER					1
7 GAS PRODUCTION UNIT				10,000	1
8 DEHYDRATOR/SWEETNING UNIT		<u>.</u>			1
9 COMPRESSOR					1
O CIRCULATING PUMP/CHEMICAL PUM	IP			1,500	-
71 ELECTRICAL SYSTEM		······································		ļ	-
'2 FLOWLINE 1200	_			3,600	-
3 PIPELINE					4
4 CHECK METER, METER RUN, BLOCK				5,000	1
5 Installation Costs				7,000	-
6 MISCELLANEOUS TANGIBLE COSTS	CONTINGENCIES			7,000	
	Drilling	\$467 700		235 500	100
TOTAL TANGIBLE COSTS	Drilling Completion	219 540		s 235,500	s 48,8
				s 725,840	s 467,7
		37.000		\$ 723,840	3 40/,/
TOTAL WELL COSTS	Frod: Eqpt.				
TOTAL WELL COSTS	Frod. Eqpt.	\$725,840			
* IMPORTANT: Please initial appropriate box.  1. H. L. Brown, Jr. Will Will Not obtain agreed that H. L. Brown, Jr. is not a warrantor Jr. shall not be liable to any other party for los	in cost of well control and pollution of the financial responsibility of th	\$725,840	ance is carried and tha	it except for willful negli	igence H. L. Brow
1. H. L. Brown, Jr. Will Will Not obtain agreed that H. L. Brown, Jr. is not a warrantor Jr. shall not be liable to any other party for los of the policy will be furnished to you.	in cost of well control and pollution of the financial responsibility of th ss suffered on account of the insuff	\$725,840 I clean-up Insurance (a certificate insurer with whom such insurance carried	ance is carried and tha , or of insurer with who	it except for willful negli om carried. Upon written	igence H. L. Brov request a full co
* IMPORTANT: Please initial appropriate box.  1. H. L. Brown, Jr. Will Will Not obtai agreed that H. L. Brown, Jr. is not a warrantor Jr. shall not be liable to any other party for los of the policy will be furnished to you.  2. I/We: desire H. L. Brown, Jr. to secure for	in cost of well control and pollution of the financial responsibility of the ss suffered on account of the insuff or my/our proportionate interest cost	\$725,840  I clean-up Insurance (a certificate insurer with whom such insurance carried tof well control insurance for the	ance is carried and tha , or of insurer with who is well and I/we will pa	it except for willful negli m carried. Upon written ay our proportional share	igence H. L. Brov request a full co a of the premium
* IMPORTANT: Please initial appropriate box.  1. H. L. Brown, Jr. Will Will Not obtain agreed that H. L. Brown, Jr. is not a warrantor Jr. shall not be liable to any other party for loss of the policy will be furnished to you.	in cost of well control and pollution of the financial responsibility of th ss suffered on account of the insuff or my/our proportionate interest cost	\$725,840  I clean-up insurance (a certificate insurer with whom such insuriciency of the insurance carried to f well control insurance for the ortionate interest and will furnish	ance is carried and tha , or of insurer with who is well and I/we will pa ; him a certificate prior	at except for willful negli om carried. Upon written ay our proportional share to drilling evidencing the	igence H. L. Brow request a full co of the premium( e fact that I/we ha
* IMPORTANT: Please initial appropriate box.  1. H. L. Brown, Jr. Will Will Not obtal agreed that H. L. Brown, Jr. is not a warrantor Jr. shall not be liable to any other party for los of the policy will be furnished to you.  2. I/We: desire H. L. Brown, Jr. to secure for the policy will be furnished to you.  3. I/We: do not desire H. L. Brown, Jr. to secure for a similar nature and amount coverinsurance of a similar nature and amount covering.	in cost of well control and pollution of the financial responsibility of the ss suffered on account of the insuff or my/our proportionate interest cost ture such insurance for my/our proporting our interest. If a certificate satis	\$725,840  I clean-up Insurance (a certificate insurer with whom such insuriciency of the insurance carried to f well control insurance for the ortionate interest and will furnish factory to Brown is not received	ance is carried and that, or of insurer with who is well and I/we will part in him a certificate prior prior to spudding, I/We	at except for willful negli om carried. Upon written ay our proportional share to drilling evidencing the authorize H. L. Brown, Jr	igence H. L. Brov request a full co e of the premium e fact that I/we ha to obtain covera
* IMPORTANT: Please initial appropriate box.  1. H. L. Brown, Jr. Will Will Not obtain agreed that H. L. Brown, Jr. is not a warrantor Jr. shall not be liable to any other party for loss of the policy will be furnished to you.  2. If We: desire H. L. Brown, Jr. to secure for Jr. shall not desire H. L. Brown, Jr. to secure for our interest as set out above.	in cost of well control and pollution of the financial responsibility of the ss suffered on account of the insuff or my/our proportionate interest cost ture such insurance for my/our proporting our interest. If a certificate satis	\$725,840  I clean-up Insurance (a certificate insurer with whom such insuriciency of the insurance carried to f well control insurance for the ortionate interest and will furnish factory to Brown is not received	ance is carried and that, or of insurer with who is well and I/we will part in him a certificate prior prior to spudding, I/We	at except for willful negli om carried. Upon written ay our proportional share to drilling evidencing the authorize H. L. Brown, Jr	igence H. L. Brov request a full co e of the premium e fact that I/we ha to obtain covera
* IMPORTANT: Please initial appropriate box.  1. H. L. Brown, Jr. Will Will Not obtai agreed that H. L. Brown, Jr. is not a warrantor Jr. shall not be liable to any other party for los of the policy will be furnished to you.  2. I/We: desire H. L. Brown, Jr. to secure fo insurance of a similar nature and amount cover for our interest as set out above.  IMPORTANT: If no election is indicated between N	in cost of well control and pollution of the financial responsibility of the ss suffered on account of the insuffer my/our proportionate interest costure such insurance for my/our proporting our interest. If a certificate satistic, 2 or 3, and H. L. Brown, Jr. is obtained the satistic of the satistic	\$725,840  I clean-up Insurance (a certificate insurer with whom such insuriciency of the insurance carried to f well control insurance for the ortionate interest and will furnish factory to Brown is not received aining coverage as evidenced by	ance is carried and that, or of insurer with who is well and I/we will path him a certificate prior prior to spudding, I/We his initials in No. 1, it was a series of the control of the c	at except for willful neglism carried. Upon written ay our proportional share to drilling evidencing the authorize H. L. Brown, Jrwill be deemed that No. 2	igence H. L. Brow request a full co e of the premium( e fact that I/we ha to obtain covera 2 has been initiale
* IMPORTANT: Please initial appropriate box.  1. H. L. Brown, Jr.  Will  Will Not obtal agreed that H. L. Brown, Jr. is not a warrantor Jr. shall not be liable to any other party for los of the policy will be furnished to you.  2. I/We:  desire H. L. Brown, Jr. to secure for 3. I/We:  do not desire H. L. Brown, Jr. to secure for our interest as set out above.  IMPORTANT: If no election is indicated between Note that the property of the party o	in cost of well control and pollution of the financial responsibility of the self-grade on account of the insuffer my/our proportionate interest costure such insurance for my/our proporting our interest. If a certificate satistic, 2 or 3, and H. L. Brown, Jr. is obtained.	\$725,840  I clean-up insurance (a certificate insurer with whom such insuricitiency of the insurance carried to f well control insurance for the pritionate interest and will furnish factory to Brown is not received aining coverage as evidenced by  APPROVED BY	ance is carried and that, or of insurer with who is well and I/we will path him a certificate prior prior to spudding, I/We his initials in No. 1, it was a series of the control of the c	at except for willful neglism carried. Upon written ay our proportional share to drilling evidencing the authorize H. L. Brown, Jrwill be deemed that No. 2	igence H. L. Brow request a full co e of the premium( e fact that I/we ha to obtain covera 2 has been initiale
* IMPORTANT: Please initial appropriate box.  1. H. L. Brown, Jr. Will Will Not obtai agreed that H. L. Brown, Jr. is not a warrantor Jr. shall not be liable to any other party for los of the policy will be furnished to you.  2. I/We: desire H. L. Brown, Jr. to secure fo 3. I/We: do not desire H. L. Brown, Jr. to sec insurance of a similar nature and amount cover for our interest as set out above.  IMPORTANT: If no election is indicated between N	in cost of well control and pollution of the financial responsibility of the self-grade on account of the insuffer my/our proportionate interest costure such insurance for my/our proporting our interest. If a certificate satistic, 2 or 3, and H. L. Brown, Jr. is obtained.	\$725,840  I clean-up insurance (a certificate insurer with whom such insuricitiency of the insurance carried to f well control insurance for the pritionate interest and will furnish factory to Brown is not received aining coverage as evidenced by  APPROVED BY	ance is carried and that, or of insurer with who is well and I/we will path him a certificate prior prior to spudding, I/We his initials in No. 1, it was a series of the control of the c	at except for willful neglism carried. Upon written ay our proportional share to drilling evidencing the authorize H. L. Brown, Jrwill be deemed that No. 2	igence H. L. Brow request a full co e of the premium( e fact that I/we ha to obtain covera 2 has been initiale