

# Magnum Hunter Production, Inc. / Gruy Petroleum Management Co. wholly owned subsidiaries of Cimarex Energy Co. AUTHORIZATION FOR EXPENDITURE

COMPANY ENTITY Cimarex Energy Co.			DATE P					DATE PRE	TE PREPARED 08-Feb-06			
REGION	WELL NAME Caudill West 8 Fee	WELL NO	PROSPECT OR FIELD NAME PROPERTY Star / Denton 309499			TY NUMBER	DRILLING AFE NO.					
LOCATION: 1,250' FNL, 660' FEL, 8-T15S-R36E (same)			BHL SHL	COL Le	JNTY a	_	TATE NM	OIL GAS	TYPE WELL EXPL X X PROD			
ORIGINAL ESTIMATE X		X	EST. START DATE 15-Apr-06		EST. COMP. DATE <b>15-Jun-06</b>		FORMATION Atoka		EST. TD (TVD) <b>12,750'</b>			

## PROJECT DESCRIPTION: Drill and complete Atoka well.

-Estimating 2 Fracture treatments in the Morrow zones.

-No hole problems are anticipated.

-Closed loop mud system.

INTANGIBLES	DRY HOLE COST	AFTER CASING POINT	COMPLETED WELL COST
Intangible Drilling Costs	\$1,878,563		\$1,878,563
Intangible Completion Costs		564,250	564,250
TOTAL INTANGIBLE COSTS	1,878,563	564,250	2,442,813
TANGIBLES			
Well Equipment	178,500	336,500	515,000
Lease Equipment		41,000	41,000
TOTAL TANGIBLE WELL COST	178,500	377,500	556,000
PLUG AND ABANDON COST	75,000	(75,000)	
TOTAL WELL COST:	\$2,132,063	\$866,750	\$2,998,813

### Comments on Well Costs:

1. All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.

### WELL CONTROL INSURANCE:

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

CASE NUMBER EXHIBIT NUMBER 4

I elect to purchase my own well control insurance policy.

Well control insurance procured by Operator, provides, among other terms, for \$1,000,000 (100% W.I.) of Combined Single Limit coverage for well control and related redrilling and clean-up/pollution expense covering drilling (through completion) with a \$1,000,000 (100% W.I.) deductible.

#### **Comments on AFE**

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

PREPARED BY	DRILLING DEPT.	REGIONAL MANAGER						
Howard L. Miller, Sr. Drilling/Completion Engineer - Permian Basin	Doug Park, Mgr Drilling/Completion Operations Offshore and Permian Regions	Roger Alexander, Regional Manager Permian Basin						
JOINT INTEREST APPROVAL								
COMPANY	3Y	DATE						



# LEASE NAME: Caudill West 8 Fee WELL NO.: 2

						r	AFTER CASING	<u> </u>	
				Cartes	DRY HOLE COST	Codes	POINT		ELL COST
INTANGIBLES ROADS & LOCATION PREPARATION / RESTORATION				Codes DIDC.100	\$40,000	DICC.100	\$2,500		\$42,500
DAMAGES			·	DIDC.105	10,000	DICC.105			\$10,000
MUD/FLUIDS DISPOSAL CHARGES						DICC.235	5,500		\$8,000
DAY RATE 40 DH DAYS 5 ACP DAYS @ 21000 PER DAY					840,000	DICC.120	105,000		\$945,000
MISC PREPARATION COST (mouse hole, rat hole, pads, pile clusters, misc.)					8,000				\$8,000
BITS						DICC.125			\$65,000
FUEL \$2.25 PER GALLON						DICC.130	17,000	-	\$157,000
WATER / COMPLETION FLUIDS				DIDC.140		DICC.135	17,500	┣	\$37,500
MUD & ADDITIVES				DIDC.145	60,000	DICC.140	40,000	1	\$60,000
SURFACE RENTALS				DIDC.150 DIDC.155		DICC.140	5,000		\$65,000
FORMATION EVALUATION (DST, Coring including evaluati	on G&G S	ERVICES)		DIDC.160	00,000	111111			
MUD LOGGING 22 DAYS @ \$850				DIDC.170	18,700				\$18,70
OPEN HOLE LOGGING				DIDC.180	80,000				\$80,000
CEMENTING & FLOAT EQUIPMENT			·····	DIDC.185	35,000	DICC.155	50,000		\$85,000
TUBULAR INSPECTIONS				DIDC.190	5,000	DICC.160	2,500		\$7,50
CASING CREWS				DIDC.195	7,500	DICC.165	6,500		\$14,000
EXTRA LABOR, WELDING, ETC.				DIDC.200	10,000	DICC.170	3,500		\$13,50
LAND TRANSPORTATION (Trucking)				DIDC.205		DICC.175	7,500		\$12,50
SUPERVISION				DIDC.210		DICC.180	18,250	<u> </u>	\$62,250
TRAILER HOUSE/CAMP/CATERING				DIDC.280		DICC.255	1,000		\$11,000
OTHER MISC EXPENSES				DIDC.220	2,500		1,000	├	\$3,50
OVERHEAD REMEDIAL CEMENTING				DIDC.225 DIDC.231	12,000	DICC.195 DICC.215	3,000	$\vdash$	\$15,000
MOB/DEMOB				DIDC.231	120,000				\$120,000
DIRECTIONAL DRILLING SERVICES	DAYS @		PER DAY	DIDC.240	120,000	V///////			÷ 120,000
DOCK, DISPATCHER, CRANE				DIDC.250		DICC.230		1	
MARINE & AIR TRANSPORTATION				DIDC.275		DICC.250			:
SOLIDS CONTROL				DIDC.260	140,000				\$140,000
WELL CONTROL EQUIP (Snubbing services)				DIDC.265		DICC.240			
FISHING & SIDETRACK OPERATIONS				DIDC.270		DICC.245			
	3500	PER DAY				DICC.115	52,500		\$52,500
COIL TUBING DAYS @		PER DAY				DICC.260		<b> </b>	
COMPLETION LOGGING, PERFORATING, WL UNITS, WL	. SURVEYS	<u>S</u>				DICC.200	35,000		\$35,000
		10.00				DICC.210	150,000		\$150,000
LEGAL/REGULATORY/CURATIVE WELL CONTROL INSURANCE \$0.34 PER F	007			DIDC.300 DIDC.285	5,000	DICC.280			\$5,000
CONTINGENCY 5% OF DRILLING IN		S		DIDC.285		DICC.220	26,000		\$115,000
CONSTRUCTION FOR WELL EQUIPMENT						DWEA.110			
CONSTRUCTION FOR LEASE EQUIPMENT		· · · · · ·				DLEQ.110	15,000	<b> </b>	\$15,000
CONSTRUCTION FOR SALES P/L						DICC.265			
TOTAL INTANGIBLE COST					\$1,878,563		\$564,250		\$2,442,813
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TANGIBLE - WELL EQUIPMENT									
CASING	SIZE	FEET	\$/FOOT	DWED 450					
	20"	40	100.00	DWEB.150 DWEB.130	4,000			-	£4.000
WATER STRING			100.00	DWEB.130	4,000				\$4,000
SURFACE CASING	13-3/8"	600	45.00	DWEB.140	27,000			-	\$27,000
INTERMEDIATE CASING	9-5/8"	4,750	31.00	DWEB.145	·				\$147,000
DRILLING LINER				DWEB.145				-	
DRILLING LINER				DWEB.145					
PRODUCTION CASING OR LINER	5-1/2"	12,650	19.40			DWEA.100	245,000		\$245,000
PRODUCTION TIE-BACK						DWEA.100			
	2-3/8"	12,000	5.15	<i>\///////</i>		DWEA.105	62,000		\$62,000
				<i>\////////////////////////////////////</i>		DWEA.115		L	
WELLHEAD, TREE, CHOKES	DWEB.115 DWEB.100		DWEA.120	24,500	ļ	\$25,000			
					mmmm	DWEA.125			
PACKER, NIPPLES PUMPING UNIT, ENGINE						DWEA.130	5,000	<u> </u>	\$5,000
LIFT EQUIPMENT (BHP, Rods, Anchors)						DLEQ.100			
TANGIBLE - LEASE EQUIPMENT		·				DLEQ.105			
N/C LEASE EQUIPMENT						DLEQ.115	5.000		\$5,000
TANKS, TANKS STEPS, STAIRS						DLEQ.120	10,000		\$10,000
BATTERY (Heater Treater, Separator, Gas Treating Equipment)						DLEQ.125	21,000		\$21,000
FLOW LINES (Line Pipe from wellhead to central facility)						DLEQ.130	5,000		\$5,000
OFFSHORE PRODUCTION STRUCTURE FOR FACILITIES						DWEA.135			
PIPELINES TO SALES						DWEA.140			
TOTALTANGIBLES			1991 HARABARA	HAMPAGE		mannene	uning the state of the state of the	हत्त्वन	- 
	HUNRAPPIN	MAMPAGE CONTRACTOR	antener Balling		\$178,500		\$377,500	953	\$556,000
P&A COSTS		· ··· ···		820.60	75,000	830.60	(75.000)		:
				020.00	/5,000	630.60	(75,000)		· 
TOTAL COST					\$2,132,063	<b>INPOSTO</b>	\$866,750	SER	\$2,998;813
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