



Authorization For Expenditure

Company/Entity: **Cimarex Energy Co.** Date Prepared: **January 13, 2012**

Region: **Permian** Well Name: **Chapparral 33 Federal** Well No.: **3**

Location: **Sec 33 19S-34E e/2e/2 with SHL in ne/ne** County: **Lea** State: **NM** Type Well: **Oil** **Gas** **Expl** **Prod**

Estimate Type: **Original Estimate**  **Revised Estimate**  **Supplemental Estimate**   
 Est. Start Date: \_\_\_\_\_ Est. Comp. Date: \_\_\_\_\_ Formation: **3rd Bone Spring** **TD Measured Depth:** **15,400'** **TD Vertical Depth:** **11,000'**

Project Description: **Drill and complete a 3rd Bone spring horizontal well . With Pilot hole.**

Intangibles	Dry Hole Cost	After Casing Point	Completed Well Cost
Drilling Costs	\$2,706,000		\$2,706,000
Completion Costs		\$3,299,000	\$3,299,000
<b>Total Intangible Costs</b>	<b>\$2,706,000</b>	<b>\$3,299,000</b>	<b>\$6,005,000</b>
<b>Tangibles</b>			
Well Equipment	\$270,000	\$643,000	\$913,000
Lease Equipment		\$122,000	\$122,000
<b>Total Tangible Well Cost</b>	<b>\$270,000</b>	<b>\$765,000</b>	<b>\$1,035,000</b>
Plug and Abandon Cost	\$150,000	-\$150,000	\$0
<b>Total Well Cost</b>	<b>\$3,126,000</b>	<b>\$3,914,000</b>	<b>\$7,040,000</b>

Comments on Well Costs: **I. 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.

I elect to purchase my own well control insurance policy.

Well control insurance procured by Operator, provides, among other terms, for \$20,000,000 (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.

Marketing Election: Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market you share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold.

I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contracts.

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.

Cimarex Energy Co. Approval

Prepared by: <b>Art Metcalfe</b>	Drilling and Completion Manager: <b>Doug Park</b>	Regional Manager: <b>Roger Alexander</b>
----------------------------------	---	--

Joint Interest Approval

Company: \_\_\_\_\_ By: \_\_\_\_\_ Date: \_\_\_\_\_

Oil Conservation Division  
 Case No. 5  
 Exhibit No. \_\_\_\_\_



Project Cost Estimate

Lease Name: Chapparral 33 Federal

Well No.: 3

Intangibles	Code	Qty	Unit	Rate	Dry Hole Cost	Code	Qty	Unit	Rate	After Casing Point	Completed Well Cost
Roads & Location Preparation / Restoration					\$75,000					\$7,000	\$82,000
Damages					\$1,000						\$1,000
Mud / Fluids Disposal Charges					\$100,000					\$65,000	\$165,000
Day Rate	40, DH Days	3, ACP Days @	20,767	Per Day	\$891,000					\$62,000	\$893,000
Misc Preparation Cost (mouse hole, rat hole, pads, pile clusters, misc)					\$60,000						\$60,000
Bits					\$110,000					\$1,000	\$111,000
Fuel	\$3.50, Per Gallon	1500, Gallons Per Day			\$218,000					\$1,000	\$219,000
Water / Completion Fluids					\$10,000					\$225,000	\$235,000
Mud & Additives					\$130,000						\$130,000
Surface Rentals					\$59,000					\$230,000	\$289,000
Downhole Rentals					\$145,000					\$20,000	\$165,000
Formation Evaluation (DST, Coring including evaluation, G&G Services)											\$0
Mud Logging	\$1,250, Days @	22, Per Day			\$34,000						\$34,000
Open Hole Logging					\$40,000						\$40,000
Cementing & Float Equipment					\$92,000					\$140,000	\$232,000
Tubular Inspections					\$10,000					\$7,000	\$17,000
Casing Crews					\$24,000					\$18,000	\$42,000
Extra Labor, Welding, Etc.					\$13,000					\$11,000	\$24,000
Land Transportation (Trucking)					\$14,000					\$20,000	\$34,000
Supervision					\$71,000					\$22,000	\$93,000
Trailer House / Camp / Catering	650, Per Day				\$33,000					\$4,000	\$38,000
Other Misc Expenses					\$2,000					\$7,000	\$9,000
Overhead	200, Per Day				\$9,000					\$3,000	\$12,000
Remedial Cementing											\$0
MOB/DEMOB					\$125,000						\$125,000
Directional Drilling Services	14, Days @	12,500, Per Day			\$286,000						\$286,000
Dock, Dispatcher, Crane											\$0
Marine & Air Transportation											\$0
Solids Control	1,050, Per Day				\$46,000						\$46,000
Well Control Equip (Snubbing Svcs.)					\$33,000					\$20,000	\$53,000
Fishing & Sidetrack Operations					\$0						\$0
Completion Rig	7, Days @	3,800, Per Day								\$39,000	\$39,000
Coil Tubing	2, Days @									\$72,000	\$72,000
Completion Logging, Perforating, WL Units, WL Surveys										\$70,000	\$70,000
Stimulation										\$2,000,000	\$2,000,000
Legal / Regulatory / Curative					\$10,000						\$10,000
Well Control Insurance	\$0.35, Per Foot				\$5,000						\$5,000
Contingency	5%, of Drilling Intangibles				\$129,000					\$50,000	\$179,000
Construction For Well Equipment										\$90,000	\$90,000
Construction For Lease Equipment										\$90,000	\$90,000
Construction For Sales P/L										\$25,000	\$25,000
<b>Total Intangible Cost</b>					<b>\$2,706,000</b>					<b>\$3,299,000</b>	<b>\$6,005,000</b>

Tangible - Well Equipment	Size	Feet	\$ / Foot	Code	Qty	Unit	Rate	After Casing Point	Completed Well Cost
Casing									
Drive Pipe	20	40.00	\$0.00				\$0		\$0
Conductor Pipe							\$0		\$0
Water String							\$0		\$0
Surface Casing	13-3/8"	550.00	\$44.68				\$24,000		\$24,000
Intermediate Casing	9 5/8"	5500.00	\$42.13				\$232,000		\$232,000
Drilling Liner							\$0		\$0
Drilling Liner							\$0		\$0
Production Casing or Liner	5 1/2"	15400.00	\$20.54				\$319,000		\$319,000
Production Tie-Back							\$0		\$0
Tubing	2 7/8"	10000.00	\$7.58				\$76,000		\$76,000
N/C Well Equipment									
Wellhead, Tree, Chokes							\$13,000		\$13,000
Liner Hanger, Isolation Packer							\$0		\$0
Packer, Nipples							\$0		\$0
Pumping Unit, Engine							\$140,000		\$140,000
Lift Equipment (BHP, Rods, Anchors)							\$5,000		\$5,000
Tangible - Lease Equipment									
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs							\$22,500		\$22,500
Battery (Heater Treater, Separator, Gas Treating Equipment)							\$65,000		\$65,000
Flow Lines (Line Pipe from wellhead to central facility)							\$28,500		\$28,500
Offshore Production Structure for Facilities							\$6,000		\$6,000
Pipeline to Sales							\$0		\$0
<b>Total Tangibles</b>							<b>\$270,000</b>		<b>\$765,000</b>

P&A Costs							\$150,000		-\$150,000	\$0
-----------	--	--	--	--	--	--	-----------	--	------------	-----

<b>Total Cost</b>							<b>\$3,126,000</b>		<b>\$3,914,000</b>	<b>\$7,040,000</b>
-------------------	--	--	--	--	--	--	--------------------	--	--------------------	--------------------