



Authorization For Expenditure

Company Entity <b>Cimarex Energy Co.</b>	Date Prepared <b>November 16, 2011</b>
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Region	Well Name	Well No.	Prospect or Field Name	Property Number	Drilling AFE No.
Permian	Independence 8 Federal Com	2	Caprock	309742-023.01	251020

Location	County	State	Type Well
SML 1880 FNL & 2310 FEL Section 8-T155-R31E 1880 FNL & 330 FEL Section 9-T155-R31E	BHLL	NM	Oil <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Gas <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>

Estimate Type	Est. Start Date	Est. Comp. Date	Formation	TU Measured Depth
Original Estimate <input checked="" type="radio"/>			Abo	15,806'
Revised Estimate <input type="radio"/>				TU Vertical Depth
Supplemental Estimate <input type="radio"/>				8,850'

**Project Description:**  
Drill and complete a Lower ABO horizontal well (with pilot hole) using rotary Steerable dir tools. Complete with 15 stages 73 62' VS with Peak open hole packer system.

Intangibles	Dry Hole Cost	After Casing Point	Completed Well Cost
Drilling Costs	\$3,368,320		\$3,368,320
Completion Costs		\$3,674,000	\$3,674,000
<b>Total Intangible Costs</b>	<b>\$3,368,320</b>	<b>\$3,674,000</b>	<b>\$7,042,320</b>

Tangibles			
Well Equipment	\$37,000	\$1,048,889	\$1,085,889
Lease Equipment		\$280,000	\$280,000
<b>Total Tangible Well Cost</b>	<b>\$37,000</b>	<b>\$1,328,889</b>	<b>\$1,365,889</b>

Plug and Abandon Cost	\$150,000	-\$150,000	\$0
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<b>Total Well Cost</b>	<b>\$3,555,320</b>	<b>\$4,852,889</b>	<b>\$8,408,209</b>
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**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.

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 re-drilling 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 your 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	Drilling and Completion Manager	Regional Manager
Art Metcalfe	Doug Park	Roger Alexander

Joint Interest Approval

Company	By	Date

Oil Conservation Division  
Case No. 4  
Exhibit No. 4



Project Cost Estimate

Lease Name: Independence 8 Federal Cam

Well No.:

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Intangibles	Code	Dry Hole Cost	Code	After casing Point	Completed Well Cost			
Roads & Location Preparation / Restoration	DIOC.109	\$65,000	DICC.100	\$10,000	\$75,000			
Damages	DIOC.105	\$2,000	DICC.105		\$2,000			
Mud / Fluids Disposal Charges	DIOC.155	\$94,000	DICC.235	\$60,000	\$154,000			
Day Rate	40 DH Days	6 ACP Days @	Per Day	DIOC.115	\$690,120	DICC.120	\$104,000	\$794,120
Misc Preparation Cost (mouse hole, rat hole, pads, pile clusters, misc.)	DIOC.130	\$24,000			\$24,000			
BITS	DIOC.125	\$130,000	DICC.125	\$2,000	\$132,000			
Fuel	\$3.50 Per Gallon	Gallons Per Day	DIOC.135	\$223,000	DICC.120	\$1,000	\$224,000	
Water / Completion Fluids	DIOC.140	\$0	DICC.135	\$140,000	\$140,000			
Mud & Additives	DIOC.145	\$140,000			\$140,000			
Surface Rentals	DIOC.150	\$299,000	DICC.140	\$150,000	\$449,000			
Downhole Rentals	DIOC.155	\$96,000	DICC.145	\$22,000	\$118,000			
Formation Evaluation (DST, Coring including evaluation, G&G Services)	DIOC.160				\$0			
Mud Logging	\$1,200 Days @	32 Per Day	DIOC.170	\$42,000	\$42,000			
Open Hole Logging	DIOC.180	\$45,000			\$45,000			
Cementing & Float Equipment	DIOC.185	\$110,000	DICC.155	\$0	\$110,000			
Tubular Inspections	DIOC.190	\$12,000	DICC.160	\$3,000	\$15,000			
Casing Crews	DIOC.195	\$12,000	DICC.165	\$18,000	\$30,000			
Extra Labor, Welding, Etc.	DIOC.200	\$15,000	DICC.170	\$10,000	\$25,000			
Land Transportation (Trucking)	DIOC.205	\$18,000	DICC.175	\$22,000	\$40,000			
Supervision	Per Day	DIOC.210	\$67,200	DICC.180	\$30,000	\$97,200		
Trailer House / Camp / Catering	\$80 Per Day	DIOC.220	\$24,000	DICC.235	\$6,000	\$30,000		
Other Misc Expenses	DIOC.220	\$2,000	DICC.190	\$12,000	\$14,000			
Overhead	250 Per Day	DIOC.235	\$9,000	DICC.195	\$4,000	\$13,000		
Remedial Cementing	DIOC.251		DICC.215		\$0			
MOB/DEMOb	DIOC.240	\$165,000			\$165,000			
Directional Drilling Services	24 Days @	\$1,500 Per Day	DIOC.245	\$816,000	\$816,000			
Deck, Dispatcher, Crane	DIOC.190		DICC.230		\$0			
Marine & Air Transportation	DIOC.275		DICC.250		\$0			
Solids Control	1,550 Per Day	DIOC.260	\$62,000		\$62,000			
Well Control Equip (Snubbing Svcs.)	DIOC.265	\$25,000	DICC.240	\$16,000	\$41,000			
Fishing & Sidetrack Operations	DIOC.270	\$0	DICC.245		\$0			
Completion Rig	5 Days @	4,400 Per Day	DICC.115	\$34,000	\$34,000			
Coil Tubing	1 Days @	Per Day	DICC.260	\$55,000	\$55,000			
Completion Logging, Perforating, WL Units, WL Surveys	DICC.200	\$12,000		\$12,000				
Stimulation	DICC.210	\$2,555,000		\$2,555,000				
Legal / Regulatory / Curative	DIOC.300	\$15,000	DICC.280		\$15,000			
Well Control Insurance	\$0.35 Per Foot	DIOC.325	\$6,000		\$6,000			
Contingency	5% of Drilling Intangibles	DIOC.435	\$160,000	DICC.220	\$163,000	\$323,000		
Construction For Well Equipment	DWEA.110	\$32,000		\$32,000				
Construction For Lease Equipment	DLEQ.110	\$98,000		\$98,000				
Construction For Sales P/L	DICC.265	\$115,000		\$115,000				
<b>Total Intangible Cost</b>		<b>\$3,368,320</b>		<b>\$3,674,000</b>	<b>\$7,042,320</b>			

Tangible - Well Equipment	Size	Feet	\$ / Foot	Code	Cost	Code	Cost
Casing							
Drive Pipe	20"	40.00	\$173.00	DWER.150	\$7,000		\$7,000
Conductor Pipe				DWER.120	\$0		\$0
Water String				DWEB.125	\$0		\$0
Surface Casing	13-3/8"	340.00	\$42.72	DWER.140	\$15,000		\$15,000
Intermediate Casing	9 5/8"	0.00	\$33.26	DWER.145	\$0		\$0
Drilling Liner				DWEB.145	\$0		\$0
Drilling Liner				DWEB.145	\$0		\$0
Production Casing or Liner	7"	9050.00	\$31.50			DWEA.100	\$289,000
Production Tie-Back	4 1/2"	7450.00	\$15.22			DWEA.100	\$113,389
Tubing	2 7/8"	8400.00	\$8.25			DWEA.105	\$69,000
N/C Well Equipment						DWEA.115	\$63,500
Wellhead, Tree, Chokes				DWEB.115	\$15,000	DWEA.120	\$10,000
Liner Hanger, Isolation Packer				DWEB.100	\$0	DWEA.125	\$0
Packer, Nipples						DWEA.130	\$225,000
Pumping Unit, Engine						DLEQ.100	\$210,000
Lift Equipment (BHP, Rods, Anchors)						DLEQ.105	\$69,000
Tangible Lease Equipment							
N/C Lease Equipment						DLEQ.115	\$107,000
Tanks, Tanks Steps, Stairs						DLEQ.120	\$90,000
Battery (Heater Treater, Separator, Gas Treating Equipment)						DLEQ.125	\$76,000
Flow Lines (Line Pipe from wellhead to central facility)						DLEQ.130	\$7,000
Offshore Production Structure for Facilities						DWEA.135	\$0
Pipeline to Sales						DWEA.140	\$0
<b>Total Tangibles</b>					<b>\$37,000</b>		<b>\$1,328,889</b>

P&A Costs	DIOC.295	\$150,000	DICC.275	-\$150,000	\$0
<b>Total Cost</b>		<b>\$3,555,320</b>		<b>\$4,852,889</b>	<b>\$8,408,209</b>