



## Authorization For Expenditure

Company/Entity  
Cimarex Energy Co

Date Prepared  
June 10, 2014

Region	Well Name	Prospect or Field Name	Property Number	Drilling AFE No.
Permian Basin	Riverbend 14 Fed 2H	White City		

Location	County	State	Type Well
75 FNL, 1980 FWL, section 14, 25s-28e 660 FSL, 1980 FWL, Section 14, 25s-28e	Lea	NM	Oil <input checked="" type="checkbox"/> Expl <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Prod <input type="checkbox"/>

Estimate type	Est. Start Date	Est. Complete Date	Formation	Total Measured Depth
Original Estimate	x		Avalon	15,149'
Revised Estimate				At Vertical Depth
Supplemental Estimate				10,722'

**Project Description:**  
Drill and complete a horizontal test. Drill to 475', set surface casing. Drill to 2537', set intermediate casing. Drill to 10244' (KOP). Drill curve at 12 DLS build rate to +/- 10720' TVD and a +/- 4070' long lateral in the Wolfcamp formation. Run and cement production casing. Stage frac in 20 stages. Drill out plugs. Run production packer, tubing and GLVs. Flow to sales through not shared facility.

Intangibles	Dry Hole Cost	After Casing Point	Completed Well Cost
Drilling Costs	\$3,301,000		\$3,301,000
Completion Costs		\$4,446,718	\$4,446,718
<b>Total Intangible Costs</b>	<b>\$3,301,000</b>	<b>\$4,446,718</b>	<b>\$7,747,718</b>

ables			
Equipment	\$512,000	\$371,000	\$883,000
Lease Equipment		\$845,223	\$845,223
<b>Total Tangible Well Cost</b>	<b>\$512,000</b>	<b>\$1,216,223</b>	<b>\$1,728,223</b>

Plug and Abandon Cost			
	\$0	\$0	\$0

Total Well Cost			
	\$3,813,000	\$5,662,941	\$9,475,941

**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 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 gas 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. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

☐ I elect to take my gas in kind.

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



W Riverbend 14 Feb 2H

Intangibles		BCP-Drilling (day/hole cost)	ACP-Drilling	Completion/ Stimulation	Production Equipment/ Construction	Post- Completion	Total Well Cost
Code		Code	Code	Code	Code	Code	
Roads & Location Preparation / Restoration		DIOC-100	\$100,000	STIM-100	\$10,000	PCDM-100	\$0
Diamones		DIOC-105	\$0	STIM-105	\$0	PCDM-105	\$0
Mud / Fluids Disposal Charges		DIOC-235	\$165,000	STIM-235	\$45,000	PCDM-235	\$90,000
Day Rate	25.50 / OH Days	DIOC-113	\$583,000	DIOC-120	\$88,000		\$671,000
Misc Preparation Cost (mouse hole, rat hole, pods, pile clusters, misc.)		DIOC-120	\$45,000				\$45,000
Bits		DIOC-125	\$100,000	DIOC-125	\$0	PCDM-125	\$0
Fuel	\$3.50 / Per Gallon	DIOC-185	\$171,000	DIOC-130	\$15,000	PCDM-130	\$0
Water for Drilling Rig / Completion Fluids (Not Frac Water)		DIOC-140	\$5,000	DIOC-135	\$5,000	PCDM-135	\$0
Mud & Additives		DIOC-145	\$325,000				\$325,000
Surface Rentals		DIOC-150	\$80,000	DIOC-140	\$0	STIM-140	\$160,000
Downhole Rentals		DIOC-155	\$150,000	STIM-145	\$0	PCDM-145	\$0
Formation Evaluation (DST, Coring including evaluation, G&G Services)		DIOC-160	\$0	STIM-150	\$0		\$0
Mud Logging		DIOC-170	\$30,000				\$30,000
Open Hole Logging		DIOC-180	\$0				\$0
Cementing & Plug Equipment		DIOC-185	\$170,000	DIOC-155	\$75,000		\$245,000
Tubular Inspections		DIOC-190	\$30,000	DIOC-160	\$8,000	STIM-160	\$6,500
Casing Crews		DIOC-195	\$40,000	DIOC-165	\$25,000	STIM-165	\$0
Extra Labor, Welding, Etc.		DIOC-200	\$10,000	DIOC-170	\$8,000	STIM-170	\$8,000
Land Transportation (Trucking for tangibles)		DIOC-205	\$15,000	DIOC-175	\$20,000	STIM-175	\$30,000
Supervision		DIOC-210	\$133,000	DIOC-180	\$20,000	STIM-180	\$75,000
Trailer House / Camp / Catering		DIOC-220	\$35,000	DIOC-255	\$15,000	STIM-280	\$20,000
Other Misc Expenses		DIOC-220	\$1,000	DIOC-190	\$30,000	STIM-190	\$0
Overhead		DIOC-225	\$6,000	DIOC-195	\$2,000	STIM-215	\$0
Remedial Cementing		DIOC-231	\$0	STIM-215	\$0	PCDM-215	\$0
MOB/DEM/DB		DIOC-240	\$250,000				\$250,000
Directional Drilling Services		DIOC-245	\$550,000				\$550,000
Crane for Construction						CON-230	\$3,340
Solids Control		DIOC-260	\$35,000				\$35,000
Well Control Equip (Snubbing Svcs.)		DIOC-265	\$100,000	DIOC-240	\$60,000	STIM-240	\$80,000
Fishing & Side-track Operations		DIOC-270	\$0	DIOC-245	\$0	STIM-245	\$0
Completion Rig		DIOC-280	\$33,000	STIM-215	\$33,000	PCDM-115	\$0
Coil Tubing		DIOC-280	\$300,000	STIM-280	\$300,000	PCDM-280	\$0
Completion Logging, Perforating, WL Units, WL Surveys		DIOC-290	\$180,000	STIM-200	\$180,000	PCDM-200	\$0
Composite Plugs		DIOC-290	\$60,000	STIM-330	\$60,000	PCDM-330	\$0
Stimulation Pumping Charges, Chemicals, Additives, Sand		DIOC-290	\$1,842,000	STIM-210	\$1,842,000	PCDM-210	\$0
Stimulation Water / Water Transfer / Water Storage		DIOC-295	\$598,000	STIM-295	\$598,000	PCDM-295	\$0
Gimarex Owned Frac / Rental Equipment		DIOC-300	\$10,000	STIM-300	\$30,000	PCDM-300	\$0
Leasehold / Curative		DIOC-300	\$10,000	CON-300	\$0		\$10,000
Insurance		DIOC-305	\$5,000				\$5,000
Costs for Flow Lines		DIOC-435	\$157,000	DIOC-220	\$19,000	STIM-220	\$174,000
Construction For Sales P/L						CON-310	\$0
Total Intangible Cost			\$3,301,000		\$290,000		\$3,657,500
						CON-235	\$102,000
							\$384,218
							\$95,000
							\$7,747,718

Casing	Size	Feet	\$ / Foot.
Drive Pipe	0	0	\$0.00
Conductor Pipe	0	0	\$0.00
Water String	0	0	\$0.00
Surface Casing	13 3/8"	475'	\$38.00
Intermediate Casing	9 5/8"	2537'	\$32.00
Drilling Liner 1	7"	9824'	\$38.00
Drilling Liner 2	0	0	\$0.00
Production Casing or Liner	4 1/2"	5020'	\$20.00
Production Tie-Back	0	0	\$0.00
Tubing	2 3/8"	12500'	\$6.00
Wellhead, Tree, Chokes	DWEL-150	\$0	\$100,000
Liner Hanger, Isolation Packer	DWEA-165	\$0	\$85,000
Packer, Nipples	DWER-115	\$40,000	DWEA-120 \$26,000
Pumping Unit, Engine	DWER-100	\$0	DWEA-125 \$85,000
Downhole Lift Equipment (BHP, Rods, Anchors, ESP, GVLs, PC Pump)	DWER-100	\$0	DWEA-125 \$85,000
N/C Lease Equipment	CONT-400	\$175,440	\$175,440
Tanks, Tanks Steps, Stairs	CONT-405	\$106,632	\$106,632
Battery (Heater Treater, Separator, Gas Treating Equipment)	CONT-410	\$250,365	\$250,365
Secondary Containments	CONT-415	\$70,000	\$70,000
Overhead Power Distribution (electric line to facility)	CONT-420	\$0	\$0
Facility Electrical & Automation	CONT-425	\$70,000	\$70,000
SWD Connection	CONT-430	\$0	\$0
Flow Lines (Line Pipe from wellhead to central facility)	CONT-435	\$0	\$0
Pipeline to Sales	CONT-440	\$102,000	\$102,000
Meters and Metering Equipment	CONT-445	\$70,786	\$70,786
Total Tangibles		\$512,000	\$211,000
		\$160,000	\$845,223
		\$0	\$1,728,223

P&A Costs	DICC.295	\$0	DICC.275	\$0		\$0
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<b>Total Cost</b>	<b>\$3,813,000</b>	<b>\$601,000</b>	<b>\$3,817,500</b>	<b>\$1,149,441</b>	<b>\$95,000</b>	<b>\$9,475,941</b>
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