



Authorization For Expenditure

under
N Shugart 05

Company/Entity: Cimarex Energy Co. Date Prepared: March 1, 2010

Table with columns: Region (Permian), Well Name (West Shugart 32 State), Well No. (1H), Prospect or Field Name (Shugart), Property Number, Drilling AFE No.

Table with columns: Location (W/2 W/2 of Sec 32, 185-31E), County (Eddy), State (NM), Type Well (Oil x, Gas, Expl, Prod x)

Table with columns: Estimate Type (Original Estimate selected), Est. Start Date, Est. Comp Date, Formation (2nd Bone Spring SS), Est. TD (13,300')

Project Description: Drill and complete a NM Bone Spring horizontal well. With no pilot hole. 8 stages 3200' VS

Table: Intangibles costs including Drilling Costs (\$1,256,375), Completion Costs (\$927,000), Total Intangible Costs (\$2,183,375)

Table: Tangibles costs including Well Equipment (\$188,000), Lease Equipment (\$97,500), Total Tangible Well Cost (\$934,936)

Table: Plug and Abandon Cost (\$150,000)

Table: Total Well Cost (\$1,594,375)

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... I elect to purchase my own well control insurance policy.

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.

Cimarex Energy Co. Approval

Approval table with columns: Prepared by (Mark Audas), Drilling and Completion Manager (Doug Park), Regional Manager (Roger Alexander)

Joint Interest Approval

Table with columns: Company, By, Date

Oil Conservation Division Case No. 4 Exhibit No. 4



Project Cost Estimate

Lease Name: West Shugart 32 State

Well No.: 1H

Intangibles	Codes	Dry Hole Cost	Codes	After Casing Point	Completed Well Cost
Roads & Location Preparation / Restoration	DHRC 100	\$35,000	DHRC 100	\$3,000	\$38,000
Damages	DHRC 105	\$10,000	DHRC 105		\$10,000
Mud / Fluids Disposal Charges	DHRC 106	\$45,000	DHRC 106	\$40,500	\$85,500
Day Rate 28 DH Days 5 ACP Days @	DHRC 111	\$336,000	DHRC 111	\$60,000	\$396,000
Misc Preparation Cost (mouse hole, rat hole, pads, pile clusters, misc.)	DHRC 110	\$8,000			\$8,000
Bits	DHRC 125	\$50,750	DHRC 125	\$1,000	\$51,750
Fuel \$2.65 Per Gallon	DHRC 135	\$67,000	DHRC 135	\$12,000	\$79,000
Water / Completion Fluids	DHRC 140	\$45,000	DHRC 140	\$67,500	\$112,500
Mud & Additives	DHRC 145	\$53,625			\$53,625
Surface Rentals	DHRC 148	\$46,000	DHRC 148	\$66,000	\$112,000
Downhole Rentals	DHRC 155	\$100,000	DHRC 145	\$9,000	\$109,000
Formation Evaluation (DST, Coring including evaluation, G&G Services)	DHRC 160				\$0
Mud Logging \$850 Days @	DHRC 170	\$21,000			\$21,000
Open Hole Logging	DHRC 180	\$0			\$0
Cementing & Float Equipment	DHRC 185	\$35,000	DHRC 135	\$20,000	\$55,000
Tubular Inspections	DHRC 190	\$5,000	DHRC 145	\$3,000	\$8,000
Casing Crews	DHRC 205	\$13,000	DHRC 145	\$16,000	\$29,000
Extra Labor, Welding, Etc.	DHRC 210	\$8,000	DHRC 130	\$5,000	\$13,000
Land Transportation (Trucking)	DHRC 215	\$17,000	DHRC 175	\$4,000	\$21,000
Supervision	DHRC 220	\$41,000	DHRC 190	\$14,000	\$55,000
Trailer House / Camp / Catering 400 Per Day	DHRC 230	\$17,000	DHRC 215	\$4,000	\$21,000
Other Misc Expenses	DHRC 235	\$8,000	DHRC 180	\$7,000	\$15,000
Overhead 300 Per Day	DHRC 235	\$10,000	DHRC 195	\$3,000	\$13,000
Remedial Cementing	DHRC 240		DHRC 145		\$0
MOB/DEMOB	DHRC 245	\$37,000			\$37,000
Directional Drilling Services 13 Days @ 7,200 Per Day	DHRC 245	\$121,000			\$121,000
Dock, Dispatcher, Crane	DHRC 250		DHRC 230		\$0
Marine & Air Transportation	DHRC 255		DHRC 230		\$0
Solids Control	DHRC 260	\$33,000			\$33,000
Well Control Equip (Snubbing Svcs.)	DHRC 265	\$22,000	DHRC 240	\$11,000	\$33,000
Fishing & Sidetrack Operations	DHRC 270	\$0	DHRC 245		\$0
Completion Rig 7 Days @ 3,400 Per Day			DHRC 115	\$36,000	\$36,000
Coil Tubing 1 Days @ 25,000 Per Day			DHRC 180	\$25,000	\$25,000
Completion Logging, Perforating, WL Units, WL Surveys			DHRC 200	\$8,000	\$8,000
Stimulation			DHRC 210	\$425,000	\$425,000
Legal / Regulatory / Curative	DHRC 300	\$7,000	DHRC 180		\$7,000
Well Control Insurance \$0.35 Per Foot	DHRC 305	\$5,000			\$5,000
Contingency 5% of Drilling Intangibles	DHRC 435	\$60,000	DHRC 225	\$42,000	\$102,000
Construction For Well Equipment			DHRC 110	\$25,000	\$25,000
Construction For Lease Equipment			DHRC 110	\$20,000	\$20,000
Construction For Sales P/L			DHRC 115		\$0
Total Intangible Cost		\$1,256,375		\$927,000	\$2,183,375
Tangible - Well Equipment					
Casing	Size	Feet	\$ / Foot		
Drive Pipe	20"	40.00	\$0.00	DHRC 150	\$0
Conductor Pipe				DHRC 150	\$0
Water String				DHRC 135	\$0
Surface Casing	13-3/8"	755.00	\$60.46	DHRC 140	\$46,000
Intermediate Casing	9 5/8"	3200.00	\$41.34	DHRC 145	\$132,000
Drilling Liner				DHRC 145	\$0
Drilling Liner				DHRC 145	\$0
Production Casing or Liner	7"	8500.00	\$35.64	DHRC 150	\$303,000
Production Tie-Back	4 1/2"	3600.00	\$15.26	DHRC 150	\$54,936
Tubing	2 7/8"	8300.00	\$7.30	DHRC 155	\$61,000
N/C Well Equipment				DHRC 155	\$61,000
Wellhead, Tree, Chokes				DHRC 115	\$10,000
Liner Hanger, Isolation Packer				DHRC 120	\$10,000
Packer, Nipples				DHRC 135	\$0
Pumping Unit, Engine				DHRC 150	\$140,000
Lift Equipment (BHP, Rods, Anchors)				DHRC 130	\$140,000
Tangible - Lease Equipment				DHRC 135	\$63,500
N/C Lease Equipment				DHRC 135	\$63,500
Tanks, Tanks Steps, Stairs				DHRC 115	\$7,500
Battery (Heater Treater, Separator, Gas Treating Equipment)				DHRC 120	\$62,000
Flow Lines (Line Pipe from wellhead to central facility)				DHRC 115	\$22,500
Offshore Production Structure for Facilities				DHRC 110	\$5,500
Pipeline to Sales				DHRC 115	\$0
Total Tangibles				DHRC 110	\$188,000
P&A Costs				DHRC 27	-\$10,000
Total Cost					\$1,594,375
					\$1,711,936
					\$3,306,311