

Authority For Expenditure

Well Name: 12 1H (3800' lateral)

Location:

Date: 23-Apr-12

County/State: TX

Prospect: Area 51

Project/Depth: 10,000' MD (5850' TVD) Black Shale Horizontal Test (13 stage frac)

AFE No.: 2012-042

Intangible Costs	0400-03-	Dry Hole	Completion	Total
Location, Road, Damages	09	\$75,000	\$40,000	\$115,000
Rig Mobilization	14	\$150,000		\$150,000
Daywork (23 days @ \$16,000)	15	\$320,000	\$48,000	\$368,000
Footage/Turnkey	21			\$0
Bits, Downhole Tools	05	\$50,000	\$2,000	\$52,000
Mud & Chemicals	12	\$65,000		\$65,000
Cement & Float Equip.	23	\$30,000	\$45,000	\$75,000
Fuel/Electricity	07	\$100,000	\$12,000	\$112,000
DST/Coring	--			\$0
Trucking & Hauling	24	\$18,000	\$10,000	\$28,000
Mud & Water Disposal	13	\$15,000	\$75,000	\$90,000
Casing Crews, Welder, Labor	10	\$25,000	\$35,000	\$60,000
Directional Services	26	\$220,000		\$220,000
Rental Equipment	16	\$55,000	\$95,000	\$150,000
Engineering/Geological Services	39	\$40,000	\$15,000	\$55,000
Wellsite Supervision	20	\$30,000	\$20,000	\$50,000
Mud Logging	38	\$12,000		\$12,000
Logging/Perforating	17		\$150,000	\$150,000
Permits/Legal/Land/etc	40	\$2,000		\$2,000
Overhead & Insurance	27	\$10,000	\$5,000	\$15,000
Completion/Coiled Tubing Unit	36		\$100,000	\$100,000
Stimulation	08		\$1,800,000	\$1,800,000
Water (frac pit)	37	\$5,000	\$150,000	\$155,000
Plugging/Abandonment	25			\$0
Miscellaneous/Contingencies (5%)	06	\$61,000	\$130,000	\$191,000
Total Intangible Costs		\$1,283,000	\$2,732,000	\$4,015,000

Tangible Costs	0400-02-	Dry Hole	Completion	Total
Conductor	50			\$0
Surface Casing (9-5/8")	51	\$10,000		\$10,000
Intermediate Casing (7")	49	\$170,000		\$170,000
Production Liner (4-1/2")	52		\$52,000	\$52,000
Wellhead Equipment	53	\$3,500	\$10,000	\$13,500
Tubing (2-3/8")	54		\$25,000	\$25,000
Rods	55		\$15,000	\$15,000
Packer/Tbg Anchor/Downhole Pump, etc	56		\$15,000	\$15,000
Pumping Unit w/ Prime Mover	57		\$55,000	\$55,000
Storage Tanks	58		\$35,000	\$35,000
Separator, Treaters	59		\$20,000	\$20,000
Misc., Conn. & Fittings	61		\$10,000	\$10,000
Flowline	62		\$5,000	\$5,000
Installation Labor	63		\$15,000	\$15,000
Miscellaneous/Contingencies (5%)	65	\$9,000	\$13,000	\$22,000
Total Tangible Costs		\$192,500	\$270,000	\$462,500
Total Costs		\$1,475,500	\$3,002,000	\$4,477,500

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. In executing this AFE, the participant agrees to pay its proportionate share of actual costs incurred.

Approved By _____

Date _____

Company _____