

Version 1.4 DRILLING - WELL APPROPRIATION - DETAIL OF COST ESTIMATE				Date: 10/05/2012	
Field / Area	Culebra Bluff S	Well Name	Heritage 2.15-24	By:	
Cost Element	Description	Vendor	Intangible	Tangible	DRILLING
74400001	Rig - Daywork days: 27.956250 rate: 28300 \$/day		791,162		791,162
74400002	Drilling Rig-Footage/Turnkey feet		0		0
74400003	Rig Up/ Rig Down		0		0
71050200	Fuel-Purchased Natural Gas & Propane		0		0
71290100	Fuel - Diesel / Motor Fuels		134,803		134,803
71290300	Utilities - Other (potable water)		0		0
74500023	Mobilization / De-Mobilization Rig Days: 5 Rig Trucking: 150000		291,500		291,500
	Rig Costs Total - Intangible		1,217,465	0	1,217,465
66010100	Campsite Supervision days: 32.956250 rate: 4500 \$/day		148,303		148,303
70000300	Contract Project Supervision days: 32.956250 rate: 100,900 \$/day		29,661		29,661
	Supervision Total - Intangible		177,964	0	177,964
68200100	Onshore Catering		0		0
68250100	Offshore Catering		0		0
68730100	Employee Personal and Business Expense		0		0
70000100	Contract Labor Surface		0		0
70000200	Contract Labor Casual		0		0
76150500	Communications - Radio		0		0
76150600	Communications - Telephone -CITC		0		0
76200100	Communications- Cellular		0		0
76200300	Communications-Other		2,940		2,940
	Other People Costs Total - Intangible		2,940	0	2,940
74400004	Drilling Fluids		84,244		84,244
71901900	Drill and Completion Fluids (not Service)		0		0
71900500	Materials, Supply, Repair Parts		10,000		10,000
	Mud, Materials Total - Intangible		94,244	0	94,244
72300100	Surface Equipment Rentals		369,960		369,960
72300200	Well Service Equipment Rentals		104,847		104,847
72300300	Motor Vehicle Rentals		0		0
72300200	Marine Transportation-Allocated		0		0
73400300	Other Transportation Services		75,000		75,000
73400400	Air Transportation allocated Adj		0		0
73400700	Hauling Services (Not Freight)		0		0
74400006	Directional Survey and Service Costs		245,470		245,470
74400007	Drill String Rentals and Mills		13,228		13,228
71901800	Drill Bits		58,000		58,000
74400009	Coil Tubing		0		0
74400010	Simulation / Gravel Pack Materials & Service		0		0
74400011	Pumping Services		0		0
74400014	Parotizing & Electric Line Services		0		0
74400015	Slickline Services		0		0
74500100	Contract Equipment & Services		0		0
	Contract Rentals & Services Total - Intangible		866,504	0	866,504
74500105	Services- Non Taxable Materials		0		0
74500200	Technical Services		0		0
75100500	HES Permit Costs & Fees		0		0
75100501	Surface Regulatory & HES Inspection		0		0
75500200	Other Professional Services & Fees		0		0
75900800	Misc. Services and Fees		0		0
	Other Service Total - Intangible		0	0	0
74200300	Solid Waste Disposal		125,000		125,000
74200600	Waste Water Disposal		10,000		10,000
	Waste Disposal Total - Intangible		135,000	0	135,000
74400017	Coring		0		0
74400018	Testing		0		0
74400019	Logging Wireline		40,000		40,000
74400020	LWD (Logging While Drilling)		0		0
74400021	Logging - Mud days: 27.554 rate: 1500 \$ per day		41,331		41,331
	Formation Evaluation Total - Intangible		81,331	0	81,331
71900022	Well Pipe Casing Size Feet \$/foot				588,300
	Conductor 13-3/8" 500 35.8				17,900
	Intermediate 1 9-5/8" 5000 40.98				204,900
	Intermediate 2				0
	Drilling Liner				0
	Production 5-1/2" 12500 26				312,500
	Production Liner				0
	Centrifuge & Float Equipment				0
	Conductor				0
	Surface				3000
	Intermediate 1				5000
	Intermediate 2				0
	Drilling Liner				0
	Production				45000
	Production Liner				0
71900020	Well Pipe - Tubing Under 2" OD Size Feet \$/foot				0
					0
					0
71900021	Well Pipe - Tubing 2" OD and over Size Feet \$/foot				0
					0
					0
71900100	Well Equipment / Materials				0
71900110	Wellhead / Xmas Tree Size Cost				85,000
	"A"				85,000
	"B"				0
	"C"				0
	Tubing Head				0
	Xmas Tree				0
71900120	Submersible Pumps & Equipment				0
71500100	Surface Lifting Equipment / Materials				0
	Rod String Size Feet \$/foot				0
					0
					0
	Production Pwr.				0
	Well Pump				0
	Other:				0
	Equipment Total - Tangible		0	673,300	673,300
74400024	Cement & Cementing				190,000
	Conductor Size Sacks Cost				0
	Surface Size: 13-3/8" Sacks Cost: 30000				30000
	Intermediate 1 Size: 9-5/8" Sacks Cost: 35000				35000
	Intermediate 2 Size Sacks Cost				0
	Drilling Liner Size Sacks Cost				0
	Production Size: 5-1/2" Sacks Cost: 125000				125000
	Production Liner Size Sacks Cost				0
	Squeeze Job Size Sacks Cost				0
	Squeeze Job Size Sacks Cost				0
	Squeeze Job Size Sacks Cost				0
	Cement Total - Intangible		190,000	0	190,000
74400013	Equipment Lost in Hole		0		0
74400025	Fishing Costs		0		0
74500021	Site Work / Roads / Locations		30,000		30,000
	Unanticipated & Location Total - Intangible		30,000	0	30,000
	Sub Total Cost Estimate		2,785,448	673,300	3,458,748
94100700	Contingency 0.0%		0	0	0
	Sub Total Cost Estimate w/ G&A		2,785,448	673,300	3,458,748
94100700	Capitalized G&A		0	0	0
	TOTAL COST ESTIMATE w/ Contingencies		2,785,448	673,300	3,458,748

Version 1.4:		COMPLETION - WELL APPROPRIATION - DETAIL OF COST ESTIMATE					Date: 04/04/2012		
Field / Area: Culebra Bluff S		Well Name: Heritage 215-2H					By:		
Cost Element	Description					VENDOR	Intangible	Tangible	Total
74400001	Rig - Daywork	days	5.000000	rate	4000 \$/day		20,000		20,000
74400002	Drilling Rig-Footage/Turnkey	feet		rate	\$/day		0		0
74400003	Rig Up/ Rig Down						5,000		5,000
71050200	Fuel-Purchased Natural Gas & Propane						0		0
71290100	Fuel - Diesel / Motor Fuels						0		0
71290300	Utilities - Other (potable water)						10,000		10,000
74500023	Mobilization / De-Mobilization	Rig Days		Rig Trucking			0		0
		Rig Costs Total -- Intangible					35,000	0	35,000
66010100	Company Supervision	days	45.000000	rate	1500 \$/day		67,500		0
70000300	Contract Project Supervision	days	45.000000	rate	800 \$/day		36,000		0
		Supervision Total -- Intangible					103,500	0	0
74400004	Drilling Fluids						0		0
71901900	Drill and Completion Fluids (not Service)						150,000		0
71900500	Materials, Supply, Repair Parts						0		0
		Mud, Materials Total -- Intangible					150,000	0	0
72300100	Surface Equipment Rentals	Frac Stack	1500	day			180,000		0
72300200	Well Service Equipment Rentals	Flow back Eq	2500	day			0		0
72300300	Motor Vehicle Rentals	Camp	1000	day			0		0
73200200	Marine Transportation-Allocated						0		0
73400300	Other Transportation Services						0		0
73400400	Air Transportation allocated Adj						0		0
73400700	Hauling Services (Not Freight)						0		0
74400006	Directional Survey and Service Costs						0		0
74400007	Drill String Rentals and Mills						30,000		0
71901800	Drill Bits						0		0
74400009	Coil Tubing	20,000 Standby		40,000 24/hr ops			160,000		0
74400010	Stimulation / Gravel Pack Materials & Service						1,500,000		0
74400011	Pumping Services						0		0
74400014	Perforating & Electric Line Services	10	Plugs	5000			120,000		0
74400015	Slickline Services						0		0
74500100	Contract Equipment & Services						0		0
		Contract Rentals & Services Total -- Intangible					1,990,000	0	0
74500105	Services- Non Taxable Materials						0		0
74500200	Technical Services						0		0
75100500	HES Permit Costs & Fees						0		0
75100501	Surface Regulatory & HES Inspection						0		0
75590200	Other Professional Services & Fees						0		0
75900800	Misc. Services and Fees						0		0
		Other Services Total -- Intangible					0	0	0
74200300	Solid Waste Disposal						0		0
74200600	Waste Water Disposal						100,000		0
		Waste Disposal Total -- Intangible					100,000	0	0
74400017	Coring						0		0
74400018	Testing						0		0
74400019	Logging Wireline						0		0
74400020	LWD (Logging While Drilling)						0		0
74400021	Logging - Mud	days @		\$ per day			0		0
		Formation Evaluation Total -- Intangible					0	0	0
71900020	Well Pipe - Tubing Under 2" OD								0
		Size	Feet	\$/foot					
		1 1/2	8000	8				0	
								0	
71900021	Well Pipe - Tubing 2" OD and over								0
		Size	Feet	\$/foot					
		1 1/2	2,875	8000	8			64,000	
								0	
71900100	Well Equipment / Materials							0	0
71900110	Wellhead / Xmas Tree	Size		Cost					0
		"A"						0	
		"B"						0	
		"C"						0	
		Tubing Head	7/1/2016	10,000				10,000	
		Riser		8,000				8,000	
71900120	Submersible Pumps & Equipment							295,000	0
71500100	Surface Lifting Equipment / Materials							113,000	0
	Rod String	Size	Feet	\$/foot					
		1.25	8000	3				24,000	
								0	
	Production Pkr:								
	Well Pump:							10,000	
	Other:								
		Equipment Total -- Tangible					0	524,000	0
74400013	Equipment Lost in Hole						0		0
74400025	Fishing Costs						0		0
74500021	Site Work / Roads / Locations						0		0
		Unanticipated & Location Total -- Intangible					0	0	0
		Sub Total Cost Estimate					2,378,500	524,000	2,902,500
									0
	Contingency	5.0%					118,925	26,200	145,125
									0
		Sub Total Cost Estimate w/ G&A					2,497,425	550,200	3,047,625
									0
94100700	Capitalized G&A								0
									0
		TOTAL COST ESTIMATE w/ Contingencies					2,497,425	550,200	3,047,625

Site Work

Well Pad	\$	71,000
Damages	\$	20,000
Misc	\$	40,000
Electrical	\$	44,090
	\$	175,090

Battery

Materials	\$	250,000
Labor	\$	300,000
	\$	550,000

Total:	\$	725,090
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