RICHARDSON OPERATING COMPANY AUTHORITY FOR EXPEDITURES

Well Name: ROPCO #9-1 SECTION 9 PC NE/4, FC E/2

Location: T29N R14W

Proposed Depth: 900' Fruitland Coal

1200' Pictured Cliffs

Date: 09/28/2000

Objective Formation: Commingled Pictured Cliffs

and Fruitland Coal

l.	Drilling Costs (Included Run Casing)	Tangible	Intangible	Total	Fruitland Coal	Pictured Cliffs
	Survey and Permits - · · · · · · · · · · · · · · · · · ·		3,000		1,500	1,500
	Title Opinion	j	3,000		1,500	1,500
	* Drilling (incl. water and mud) 1200' @ 15.00/ft.		18,000		6.750	11,250
	BOP Rental·····		750		375	375
	Dirt Work		4.000		2,000	2,000
	Pit Lining · · · · · · · · · · · · · · · · · · ·		2,800		1,400	1,400
	Surface Casing 200' @ 7.18/ft.	1,436	, -		718	718
	Casing Head·····	1,500			750	750
	Cement Surface	-,	2,300		1,150	1.150
	Power Tongs · · · · · · · · · · · · · · · · · · ·		1,000		500	500
	Casing 1200' @ 5.50/ft	6.600	1,000		2,475	4,125
	Trucking 1200 @ 0.00/m.	0,000	3,000		1,500	•
	3		3,750		. 1	1,500
	Logs·····		'		1,875	1,875
	Engineering		5,000		2,500	2,500
	Cement Longstring		4,000		1,500	2,500
	Total Cost to Run Casing	9,536	50,600	60,136	26,493	33,643
	5.9375% Farmington, NM Tax			3,571	1,573	1,998
	10% Contingency · · · · · · · · · · · · · · · · · · ·			6.371	2,807	3,564
	Grand Total to Run Casing		<u> </u>	70,077	30,873	39,205
II.	Completion Costs				i	
	Rig Anchors		750		375	375
	Logs	•	3.000	İ	1,500	1,500
	Perf		3,500		1.750	1,750
	Wellhead & Fittings	4.000			2.000	2,000
	Tubing 1200' @ 2.50/ft	3,000			1,125	1.875
	Stimulation	-,	42,000		21.000	21.000
	Tool Rental		2,300	İ	1,150	1,150
	Trucking		3,000		1,500	1,500
	Battery Installation		6,000	ľ	3,000	3,000
	Restore Location		3,500		1,750	1,750
	Engineering		5,800		2,900	2,900
	Treator, Separator · · · · · · · · · · · · · · · · · · ·	5,300	3,800		2,650	2,650
	Flowline	4,000				2,000
					2,000	•
	Tank & Fittings	4,500	2.000		2,250	2,250
	Gravel		3,000		1,500	1,500
	Workover Rig		10,000		5,000	5,000
	Completion Fluids		2,000		1,000	1,000
	Pipeline Hookup	•	13,000		6,500	6,500
	Division Order Opinion	•	1,500		750	750
	Frac Tank Rental		2,500	1	1,250	1,250
	Flowback		2,000		1,000	1,000
	Fence Location	3,300			1,650	1,650
	Total Completion Costs	24,100	103,850	127,950	63,600	64,350
	5.9375% Farmington, NM Tax			7,597	3,776	3,821
	10% Contingency			13,555	6,738	6,817
	Drilling Costs			70.077	30,873	39,205
	Grand Total Well Costs			219,179	104,986	114,192

RICHARDSON OPERATING COMPANY AUTHORITY FOR EXPEDITURES

Well Name: ROPCO 9-2 SECTION 9-SE/4 Location: T29N R14W, San Juan County, NM

Proposed Depth: 1200'

Date: 09/29/2000 Objective Formation: Pictured Cliffs

1.	Drilling Costs (Included Run Casing)	Tangible	Intangible	Total	Actual
	Survey and Permits · · · · · · · · · · · · · · · · · · ·		3,000		
	Title Opinion		1,500		
	Drilling (incl. water and mud) 1200' @ 15.00/ft.		18,000		
	BOP Rental·····		750		
	Dirt Work.		4,000		
	Pit Lining · · · · · · · · · · · · · · · · · · ·	[2,800		
	Surface Casing 200' @ 7.18/ft	1,436		ĺ	
	Casing Head	1,500	J		
	Cement Surface		2,300		
	Power Tongs		1,000	1	
	Casing 1200' @ 5.50/ft	6,600	· I		
	Trucking	·	3,000		
	Logs		3,500		
	Engineering		3.000		
	Cement Longstring		4,000		
	Total Cost to Run Casing.	9,536	46.850	56,386	
	5.9375% Farmington, NM Tax	5,550	40,830	3,348	ĺ
	10% Contingency			5,973	
	Grand Total to Run Casing		ľ	65,707	
II.	Completion Costs		750		
	Rig Anchors		750		İ
	Logs		2,500		
	Perf		2.000		į
	Wellhead & Fittings	4,000			
	Tubing 1200' @ 2.50/ft	3,000			
	Stimulation		22,000		
	Tool Rental		2,300		
	Trucking		3,000		
	Battery Installation		6,000		
	Restore Location		3,500		
	Engineering		3.250		
	Treator, Separator	5,300			
	Flowline	4,000	1	ľ	
	Tank & Fittings	4,500			
	Gravel	3,000			
	Workover Rig		5,000		
	Completion Fluids		1,000		
	Division Order Opinion		1,000	J	j
	Pipeline Hookup		13,000		
	Frac Tank Rental		1.250		
	Flowback		1,000		ĺ
	Fence Location	3,300	-,		
	Total Completion Costs	27,100	67,550	94,650	
	5.9375% Farmington, NM Tax	27,100	07.550	5,620	
	10% Contingency · · · · · · · · · · · · · · · · · · ·			10,027	
	Drilling Costs			65,707	
	Grand Total Well Costs			176,004	
	Granu Total Well Costs			170,004	

RICHARDSON OPERATING COMPANY AUTHORITY FOR EXPEDITURES

REVISED 10/3/00

Well Name: ROPCO #9-3 SECTION 9 PC SW/4, FC W/2

Location: T29N R14W

Proposed Depth: 900' Fruitland Coal

1200' Pictured Cliffs

Date: 10/03/2000

Objective Formation: Commingled Pictured Cliffs

and Fruitland Coal

Ι,	Drilling Costs (Included Run Casing)	Tangible	Intangible	Total	Fruitland Coal	Pictured Cliffs
	Survey and Permits · · · · · · · · · · · · · · · · · · ·		3,000		1,500	1,500
	Title Opinion		3,000		1,500	1,500
	* Drilling (incl. water and mud) 1200' @ 15.00/ft		18,000		6,750	11,250
	BOP Rental		750		375	375
	Dirt Work		4,000		2,000	2,000
	Pit Lining		2,800		1,400	1,400
	Surface Casing 200' @ 7.18/ft.	1,436			718	718
	Casing Head	1,500			750	750
	Cement Surface	· ·	2,300	i	1,150	1,150
	Power Tongs		1,000		500	500
	Casing 1200' @ 5.50/ft	6,600	_,		2,475	4.125
	Trucking	.,.	3,000	Į	1,500	1,500
	Logs·····		3,750		1,875	1,875
	Engineering		5,000	i	2,500	2,500
	Cement Longstring · · · · · · · · · · · · · · · · · · ·		4,000	i	1,500	2,500
	Total Cost to Run Casing · · · · · · · · · · · · · · · · · · ·	9,536	50,600	60,136	26,493	33,643
	9	9,550	30,600	′ 1		
	5.9375% Farmington, NM Tax			3,571	1,573	1,998
	10% Contingency · · · · · · · · · · · · · · · · · · ·		<u> </u>	6.371	2,807	3,564
	Grand Total to Run Casing			70,077	30,873	39,205
H.	Completion Costs		İ		1	
	Rig Anchors	•	750		375	375
	Logs·····		3,000		1,500	1,500
	Perf. · · · · · · · · · · · · · · · · · · ·		3,500	1	1,750	1,750
	Wellhead & Fittings	4,000			2,000	2,000
	Tubing 1200' @ 2.50/ft	3,000	ĺ		1,125	1,875
	Stimulation		42,000	ļ	21.000	21,000
	Tool Rental		2,300		1,150	1,150
	Trucking		3,000		1,500	1,500
	Battery Installation		6,000		3,000	3,000
	Restore Location		3,500		1,750	1,750
	Engineering	ļ	5,800	j	2,900	2,900
	Treator, Separator	5,300	ì		2,650	2,650
	Flowline	4,000			2,000	2,000
	Tank & Fittings	4,500			2,250	2,250
	Gravel		3,000	ĺ	1,500	1,500
	Workover Rig- · · · · · · · · · · · · · · · · · · ·		10,000		5.000	5,000
	Completion Fluids		2,000		1,000	1,000
	Pipeline Hookup		13,000		6,500	6,500
	Division Order Opinion · · · · · · · · · · · · · · · · · · ·		1,500		750	750
	Frac Tank Rental		2,500	i	1,250	1,250
	Flowback		2,000		1,000	1,000
	Fence Location- · · · · · · · · · · · · · · · · · · ·	3,300	_,,,,,		1,650	1,650
	Total Completion Costs	24,100	103,850	127,950	63,600	64,350
	5.9375% Farmington, NM Tax	24,100	105,550	7,597	3,776	3,821
	10% Contingency · · · · · · · · · · · · · · · · · · ·	1	į	13,555	6,738	6,817
	the state of the s		į	70,077	30.873	39.205
	Drilling Costs Grand Total Well Costs		 	219,179	104,986	114,192
	Grand Total Well Costs		<u></u>	213,173	104,200[117,132