

**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

WELL NAME: Falabella 31 Fee #1H  
Surf. 150' FSL, 380' FWL, Section 31  
BHL. 330' FNL, 380' FWL, Section 31  
T18S, R26E

PROSPECT NAME: Lakewood  
COUNTY & STATE: Eddy Co. NM  
OBJECTIVE: 7,400' MD, (2750' TVD) Paddock Test

<b>INTANGIBLE COSTS</b>		<b>BCP</b>	<b>ACP</b>	<b>TOTAL</b>
Title/Curative/Permit	201	10,000		10,000
Insurance	202	22,000	302	22,000
Damages/Right of Way	203	15,000	303	15,000
Survey/Stake Location	204	3,000	304	3,000
Location/Pits/Road Expense	205	40,000	305	55,000
Drilling / Completion Overhead	206	5,000	306	6,000
Turnkey Contract	207		307	0
Footage Contract	208		308	0
Daywork Contract 15:3 @ \$14000/day	209	210,000	309	252,000
Directional Drilling Services	210	250,000	310	200,000
Fuel & Power	211	44,625	311	53,550
Water	212	20,000	312	80,000
Bits	213	40,000	313	41,000
Mud & Chemicals	214	35,000	314	35,000
Drill Stem Test	215		315	0
Coring & Analysis	216			0
Cement Surface	217	50,000		50,000
Cement Intermediate	218			0
Cement Production 5-1/2"	218		319	25,000
Cement Squeeze & Other (Kickoff Plug)	220		320	0
Float Equipment & Centralizers	221	2,000	321	27,000
Casing Crews & Equipment	222	5,000	322	17,000
Fishing Tools & Service	223		323	0
Geologic/Engineering	224	10,000	324	11,000
Contract Labor	225	10,000	325	31,000
Company Supervision	226	2,000	326	4,000
Contract Supervision	227	24,000	327	28,800
Testing Casing/Tubing	228	4,000	328	16,000
Mud Logging Unit	229	15,000	329	15,000
Logging	230	0	330	0
Perforating/Wireline Services	231	3,500	331	43,500
Stimulation/Treating			332	1,400,000
Completion Unit			333	24,000
Swabbing Unit			334	0
Rentals-Surface	235	25,000	335	100,000
Rentals-Subsurface	236	35,000	336	45,000
Trucking/Forklift/Rig Mobilization	237	45,000	337	65,000
Welding Services	238	5,000	338	7,500
Water Disposal	239		339	15,000
Plug to Abandon	240		340	0
Seismic Analysis	241		341	
Closed Loop & Environmental	244	75,000	344	75,000
Miscellaneous	242	5,000	342	6,000
Contingency	243	102,875	343	285,650
<b>TOTAL INTANGIBLES</b>		<b>1,113,000</b>	<b>2,001,000</b>	<b>3,114,000</b>
<b>TANGIBLE COSTS</b>				
Surface Casing 8 5/8" 32#	401	23,850		23,850
Intermediate Casing	402		503	0
Production Casing/Liner 5 1/2" 17# x 7" 26#			503	151,100
Tubing 2600' 2 7/8"			504	19,000
Wellhead Equipment	405	8,000	505	20,000
Pumping Unit			506	40,000
Prime Mover			507	20,000
Rods			508	0
Pumps			509	10,000
Tanks			510	27,825
Flowlines			511	5,000
Heater Treater/Separator			512	48,500
Electrical System			513	2,500
Packers/Anchors/Hangers	414		514	310,000
Couplings/Fittings/Valves	415	2,500	515	47,750
Gas Compressors/Meters			516	4,000
Dehydrator			517	0
Injection Plant/CO2 Equipment			518	0
Miscellaneous	419	1,000	519	22,000
Contingency	420	4,650	520	77,475
<b>TOTAL TANGIBLES</b>		<b>40,000</b>	<b>789,000</b>	<b>829,000</b>
<b>TOTAL WELL COSTS</b>		<b>1,153,000</b>	<b>2,790,000</b>	<b>3,943,000</b>

COG Operating LLC

By: J. Coffman / C. Bird / C. Elliott

Date Prepared: 02/15/2012

We approve:  
\_\_\_\_\_% Working Interest

Company:  
By:

Printed Name:  
Title:  
Date:

BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico  
Exhibit No. 4A  
Submitted by:  
**COG OPERATING LLC**  
Hearing Date: March 15, 2012

This AFE is only an estimate. By signing you agree to pay your share of the actual costs incurred.

**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

WELL NAME: Falabella 31 Fee #4H  
Surf. 150' FSL, 1040' FEL, Section 31  
BHL. 330' FNL, 1040' FEL, Section 31  
T18S, R26E (Pilot Hole TD 4500')

PROSPECT NAME: Lakewood  
COUNTY & STATE: Eddy Co. NM  
OBJECTIVE: 7,400' MD, (2750' TVD) Paddock Test

INTANGIBLE COSTS		BCP		ACP	TOTAL
Title/Curative/Permit	201	10,000			10,000
Insurance	202	22,000	302		22,000
Damages/Right of Way	203	15,000	303		15,000
Survey/Stake Location	204	3,000	304		3,000
Location/Pits/Road Expense	205	40,000	305	15,000	55,000
Drilling / Completion Overhead	206	5,000	306	1,000	6,000
Turnkey Contract	207		307		0
Footage Contract	208		308		0
Daywork Contract 15:3 @ \$14000/day	209	210,000	309	42,000	252,000
Directional Drilling Services	210	250,000	310		200,000
Fuel & Power	211	44,625	311	8,925	53,550
Water	212	20,000	312	60,000	80,000
Bits	213	40,000	313	1,000	41,000
Mud & Chemicals	214	35,000	314		35,000
Drill Stem Test	215		315		0
Coring & Analysis	216				0
Cement Surface	217	50,000			50,000
Cement Intermediate	218				0
Cement Production 5-1/2"	218		319	25,000	25,000
Cement Squeeze & Other (Kickoff Plug)	220		320		0
Float Equipment & Centralizers	221	2,000	321	25,000	27,000
Casing Crews & Equipment	222	5,000	322	12,000	17,000
Fishing Tools & Service	223		323		0
Geologic/Engineering	224	10,000	324	1,000	11,000
Contract Labor	225	10,000	325	21,000	31,000
Company Supervision	226	2,000	326	2,000	4,000
Contract Supervision	227	24,000	327	4,800	28,800
Testing Casing/Tubing	228	4,000	328	12,000	16,000
Mud Logging Unit	229	15,000	329		15,000
Logging	230	0	330		0
Perforating/Wireline Services	231	3,500	331	40,000	43,500
Stimulation/Treating			332	1,400,000	1,400,000
Completion Unit			333	24,000	24,000
Swabbing Unit			334		0
Rentals-Surface	235	25,000	335	75,000	100,000
Rentals-Subsurface	236	35,000	336	10,000	45,000
Trucking/Forklift/Rig Mobilization	237	45,000	337	20,000	65,000
Welding Services	238	5,000	338	2,500	7,500
Water Disposal	239		339	15,000	15,000
Plug to Abandon	240		340		0
Seismic Analysis	241		341		
Closed Loop & Environmental	244	75,000	344		75,000
Miscellaneous	242	5,000	342	1,000	6,000
Contingency	243	102,875	343	182,775	285,650
<b>TOTAL INTANGIBLES</b>		<b>1,113,000</b>		<b>2,001,000</b>	<b>3,114,000</b>
<b>TANGIBLE COSTS</b>					
Surface Casing 8 5/8" 32#	401	23,850			23,850
Intermediate Casing	402		503		0
Production Casing/Liner 5 1/2" 17# x 7" 26#			503	151,100	151,100
Tubing 2600' 2 7/8"			504	19,000	19,000
Wellhead Equipment	405	8,000	505	12,000	20,000
Pumping Unit			506	40,000	40,000
Prime Mover			507	20,000	20,000
Rods			508		0
Pumps			509	10,000	10,000
Tanks			510	27,825	27,825
Flowlines			511	5,000	5,000
Heater Treater/Separator			512	48,500	48,500
Electrical System			513	2,500	2,500
Packers/Anchors/Hangers	414		514	310,000	310,000
Couplings/Fittings/Valves	415	2,500	515	45,250	47,750
Gas Compressors/Meters			516	4,000	4,000
Dehydrator			517		0
Injection Plant/CO2 Equipment			518		0
Miscellaneous	419	1,000	519	21,000	22,000
Contingency	420	4,650	520	72,825	77,475
<b>TOTAL TANGIBLES</b>		<b>40,000</b>		<b>789,000</b>	<b>829,000</b>
<b>TOTAL WELL COSTS</b>		<b>1,153,000</b>		<b>2,790,000</b>	<b>3,943,000</b>

COG Operating LLC

By: J. Coffman / C. Bird / C. Elliott

Date Prepared: 02/15/2012

We approve:  
\_\_\_\_\_% Working Interest

Company:

By:

Printed Name:

Title:

Date:

BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico  
**Exhibit No. 4B**  
Submitted by:  
**COG OPERATING LLC**  
Hearing Date: March 15, 2012

This AFE is only an estimate. By signing you agree to pay your share of the actual costs incurred.