

**COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING**

WELL NAME: LEE 3 FEE #7H	PROSPECT NAME: LAKEWOOD/CEMETARY
SHL: 150' FSL, 1650' FEL	STATE & COUNTY: New Mexico, Eddy
BHL: 330' FNL, 1652' FEL	OBJECTIVE: SH9 Yeso Horizontal
FORMATION: YESO	DEPTH: 7,615
LEGAL: SWSE of Sec. 3, T19S, R26E APl 30-015-41663	TVD: 3,200

INTANGIBLE COSTS

		BCP	ACP	TOTAL
Title/Cursive/Permit	201	11,000		11,000
Insurance	202	22,000	0	22,000
Damages/Right of Way	203	50,000	0	50,000
Survey/Stake Location	204	7,000	0	7,000
Location/Pits/Road Expense	205	85,000	25,000	110,000
Drilling / Completion Overhead	206	6,000	2,000	8,000
Turnkey Contract	207			0
Footage Contract	208			0
Daywork Contract (0 days @ \$50)	209	145,000	29,000	174,000
Directional Drilling Services (0 dir days @ \$0)	210	125,000		125,000
Fuel & Power	211	30,000	6,000	36,000
Water	212	24,000	120,000	144,000
Bits	213	25,000	5,000	30,000
Mud & Chemicals	214	19,000	0	19,000
Drill Stem Test	215		0	0
Coring & Analysis	216			0
Cement Surface	217	54,000		54,000
Cement Intermediate	218	0		0
Cement 2nd Intermediate/Production	219	0	55,000	55,000
Cement Squeeze & Other (Kickoff Plug)	220		0	0
Float Equipment & Centralizers	221	2,000	20,000	22,000
Casing Crews & Equipment	222	5,000	12,000	17,000
Fishing Tools & Service	223			0
Geologic/Engineering	224	2,000		2,000
Contract Labor	225	35,000	21,000	56,000
Company Supervision	226	2,000	2,000	4,000
Contract Supervision	227	17,000	40,000	57,000
Testing Casing/Tubing	228	3,000	5,000	8,000
Mud Logging Unit (logging 1/24 days)	229	17,000		17,000
Logging	230	20,000		20,000
Perforating/Wireline Services	231	1,500	95,000	96,500
Stimulation/Treating			925,000	925,000
Completion Unit			30,000	30,000
Swabbing Unit				0
Rentals-Surface	235	14,000	200,000	214,000
Rentals-Subsurface	236	23,000	15,000	38,000
Trucking/Forklift/Rig Mobilization	237	42,000	30,000	72,000
Welding Services	238	5,000	2,500	7,500
Water Disposal	239	0	30,000	30,000
Plug to Abandon	240	0	0	0
Seismic Analysis	241	0	0	0
Closed Loop & Environmental	244	50,000	0	50,000
Miscellaneous	242	0	0	0
Contingency 10%	243	85,500	167,500	253,000
TOTAL INTANGIBLES		927,000	1,837,000	2,764,000

TANGIBLE COSTS

Surface Casing (8 5/8" 32# J55 LTC)	401	26,000		26,000
Intermediate Casing (2150' 8 5/8" 32# J55 LTC)	402	0	0	0
Production Casing (5 1/2" 17# L80)			109,000	109,000
Tubing			16,000	16,000
Wellhead Equipment	405	6,000	20,000	26,000
Pumping Unit			60,000	60,000
Prime Mover			20,000	20,000
Rods			12,000	12,000
Pumps			70,000	70,000
Tanks			21,000	21,000
Flowlines			12,000	12,000
Heater Treater/Separator			33,000	33,000
Electrical System			20,000	20,000
Packers/Anchors/Hangers	414	0	2,500	2,500
Couplings/Fittings/Valves	415	500	40,000	40,500
Gas Compressors/Meters			5,000	5,000
Dehydrator				0
Injection Plant/CO2 Equipment				0
Miscellaneous	419	500	4,000	4,500
Contingency	420	2,000	23,500	25,500
TOTAL TANGIBLES		35,000	468,000	503,000
TOTAL WELL COSTS		962,000	2,305,000	3,267,000

COG Operating LLC

By: Carl Bird

We approve:
_____% Working Interest

Company:

By:

Printed Name:

Title:

Date:

Date Prepared: 3/18/14

COG Operating LLC

By:

**BEFORE THE OIL CONVERSION
DIVISION**

Santa Fe, New Mexico

Exhibit No. 4

Submitted by: COG Operating LLC

Hearing Date: January 8, 2015

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