

**COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING**

WELL NAME: Coachman Fee Corn 4H	PROSPECT NAME: Bulldog 717109
SHL: 190' FNL & 380' FWL	STATE & COUNTY: New Mexico; Lea
BHL: 330' FSL & 380' FWL	OBJECTIVE: Drill and Complete + PH
FORMATION: Bone Spring	DEPTH: 17,120
LEGAL: Sec 21-T25S-R35E	TVD: 12,382'

INTANGIBLE COSTS		BCP	ACP	TOTAL
Title/Curative/Permit	201	11,000		11,000
Insurance	202	5,000		5,000
Damages/Right of Way	203	5,000		5,000
Survey/State Location	204	7,000		7,000
Location/Pits/Road Expense	205	90,000	25,000	115,000
Drilling / Completion Overhead	208	9,000		9,000
Turnkey Contract	207	0		0
Footage Contract	208	0		0
Daywork Contract	209	1,215,000		1,215,000
Directional Drilling Services	210	278,000		278,000
Fuel & Power	211	171,000	10,000	181,000
Water	212	45,000	500,000	545,000
Bits	213	95,000	4,500	99,500
Mud & Chemicals	214	279,000	25,000	304,000
Drill Stem Test	215	0		0
Coring & Analysis	218	0		0
Cement Surface	217	31,500		31,500
Cement Intermediate	218	58,500		58,500
Cement 2nd Intermediate/Production	218	135,000	97,000	232,000
Cement Squeeze & Other (Kickoff Plug)	220	45,000	0	45,000
Float Equipment & Centralizers	221	14,000	23,000	37,000
Casing Crows & Equipment	222	30,000	30,000	60,000
Fishing Tools & Service	223	0		0
Geologic/Engineering	224	0		0
Contract Labor	225	10,000	176,500	186,500
Company Supervision	226	0		0
Contract Supervision	227	182,000	70,000	232,000
Testing Casing/Tubing	228	10,000		10,000
Mud Logging Unit	229	61,000		61,000
Logging	230	500,000		500,000
Perforating/Wireline Services	231	7,000	255,000	262,000
Stimulation/Treating		0	4,928,000	4,928,000
Completion Unit		0	200,000	200,000
Swabbing Unit		0		0
Rentals-Surface	235	178,000	220,000	398,000
Rentals-Subsurface	236	225,000	45,000	270,000
Trucking/Forklift/Rig Mobilization	237	200,000	22,500	222,500
Welding Services	238	5,000	5,000	10,000
Water Disposal	239	0	440,000	440,000
Plug to Abandon	240	0		0
Seismic Analysis	241	0		0
Closed Loop & Environmental	244	149,000	5,000	154,000
Miscellaneous	242	0		0
Contingency	243	74,000	50,000	124,000
TOTAL INTANGIBLES		4,105,000	7,131,500	11,236,500

TANGIBLE COSTS				
Surface Casing	401	17,000		17,000
Intermediate Casing	402	508,000		508,000
Production Casing		0	97,000	97,000
Tubing		0	65,000	65,000
Wellhead Equipment	405	24,000	34,000	58,000
Pumping Unit		0	115,000	115,000
Prime Mover		0		0
Rods		0	85,000	85,000
Pumps		0	31,500	31,500
Tanks		0	90,000	90,000
Flowlines		0	45,000	45,000
Heater Treater/Separator		0	76,500	76,500
Electrical System		0		0
Packers/Anchors/Hangers	414	60,000	90,000	150,000
Couplings/Fittings/Valves	415	0	135,000	135,000
Gas Compressors/Meters		0	7,250	7,250
Dehydrator		0		0
Injection Plant/CO2 Equipment		0		0
Miscellaneous	419	0		0
Contingency	420	13,000	50,000	63,000
TOTAL TANGIBLES		622,000	901,250	1,523,250
TOTAL WELL COSTS		4,727,000	8,032,750	12,759,750

COG Operating LLC

Date Prepared: 03/18/15

COG Operating LLC

By: Seth Wild

We approve:

% Working Interest

Company: Richard Lyons Moore

By:

Printed Name:

Title:

Date:

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

OCD Case No. 15296

**COG OPERATING
Exhibit # 4**