

**COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING**

WELL NAME: COACHMAN FEE COM #14H	PROSPECT NAME: BULLDOG 2535 (717109)
SHL: 190 FNL & 580 FWL	STATE & COUNTY: New Mexico, Lea
BHL: 330 FSL & 580 FWL	OBJECTIVE: DRILL & COMPLETE
FORMATION: BRUSHY CANYON	DEPTH: 13,575
LEGAL: 21-25S-35E	TVD: 9,060

INTANGIBLE COSTS		BCP	ACP	TOTAL
Title/Curative/Permit	201	9,000		9,000
Insurance	202	4,000	302	4,000
Damages/Right of Way	203	7,000	303	7,000
Survey/Stake Location	204	4,000	304	4,000
Location/Pits/Road Expense	205	80,000	305	170,000
Drilling / Completion Overhead	208	8,000	306	8,000
Turnkey Contract	207	0	307	0
Footage Contract	208	0	308	0
Daywork Contract	209	295,000	309	295,000
Directional Drilling Services	210	104,000	310	104,000
Fuel & Power	211	30,000	311	38,500
Water	212	42,000	312	372,000
Bills	213	80,000	313	63,000
Mud & Chemicals	214	30,000	314	38,500
Drill Stem Test	215	0	315	0
Coring & Analysis	216	0		0
Cement Surface	217	25,500		25,500
Cement Intermediate	218	36,000		36,000
Cement 2nd Intermediate/Production	218	0	319	95,000
Cement Squeeze & Other (Kickoff Plug)	220	0	320	0
Float Equipment & Centralizers	221	4,500	321	11,000
Casing Crews & Equipment	222	12,500	322	26,000
Fishing Tools & Service	223	0	323	0
Geologic/Engineering	224	0	324	0
Contract Labor	225	5,500	325	154,000
Company Supervision	226	0	326	0
Contract Supervision	227	43,000	327	113,000
Testing Casing/Tubing	228	10,000	328	20,000
Mud Logging Unit	229	15,000	329	15,000
Logging	230	0	330	0
Perforating/Wireline Services	231	4,000	331	134,000
Stimulation/Treating		0	332	984,000
Completion Unit		0	333	42,500
Swabbing Unit		0	334	0
Rentals-Surface	235	77,000	335	186,000
Rentals-Subsurface	236	73,000	336	73,000
Trucking/Forklift/Rig Mobilization	237	85,000	337	130,000
Welding Services	238	3,500	338	5,000
Water Disposal	239	0	339	420,000
Plug to Abandon	240	0	340	0
Seismic Analysis	241	0	341	0
Closed Loop & Environmental	244	140,000	344	145,000
Miscellaneous	242	0	342	0
Contingency	243	24,000	343	58,500
TOTAL INTANGIBLES		1,211,500	2,681,000	3,872,500

TANGIBLE COSTS				
Surface Casing	401	29,000		29,000
Intermediate Casing	402	113,000	503	113,000
Production Casing		0	503	185,000
Tubing		0	504	34,500
Wellhead Equipment	405	25,000	505	48,000
Pumping Unit		0	506	87,173
Prime Mover		0	507	0
Rods		0	508	35,000
Pumps		0	509	60,000
Tanks		0	510	48,776
Flowlines		0	511	27,000
Heater Treater/Separator		0	512	106,262
Electrical System		0	513	86,000
Packers/Anchors/Hangers	414	0	514	0
Couplings/Fittings/Valves	415	0	515	228,000
Gas Compressors/Meters		0	516	11,000
Dehydrator		0	517	0
Injection Plant/CO2 Equipment		0	518	0
Miscellaneous	419	0	519	38,000
Contingency	420	0	520	34,000
TOTAL TANGIBLES		167,000	983,711	1,150,711
TOTAL WELL COSTS		1,378,000	3,644,711	5,023,711

COG Operating LLC

Date Prepared: 2/15/2018

We approve:
_____% Working Interest

COG Operating LLC

By: TRAVIS NEWMAN/KEN LAFORTUNE KG

Company: Ohio State University
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. 15485

**COG OPERATING
Exhibit # 7**