

**COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING**

WELL NAME: COOKIE TOSSER STATE COM #1H	PROSPECT NAME: ZEUS 1830 (717100)
SHL: SEC 16: 330' FNL & 990' FEL	STATE & COUNTY: New Mexico, Eddy
LHL: SEC 16: 330' FNL & 330' FEL	OBJECTIVE: DRILL & COMPLETE
FORMATION: LBSS/2ND BSS	DEPTH: 13,200
LEGAL: 9-18S-30E	TVD: 8,170

<u>INTANGIBLE COSTS</u>		<u>BCP</u>	<u>ACP</u>	<u>TOTAL</u>
Title/Curative/Permit	201	11,000		11,000
Insurance	202	5,000	302	5,000
Damages/Right of Way	203	15,000	303	15,000
Survey/Stake Location	204	7,000	304	7,000
Location/Pits/Road Expense	205	75,000	305	100,000
Drilling / Completion Overhead	206	6,000	306	6,000
Turnkey Contract	207	0	307	0
Footage Contract	208	0	308	0
Daywork Contract	209	369,000	309	369,000
Directional Drilling Services	210	130,000	310	130,000
Fuel & Power	211	70,000	311	80,000
Water	212	75,000	312	206,000
Bits	213	90,000	313	94,500
Mud & Chemicals	214	50,000	314	50,000
Drill Stem Test	215	0	315	0
Coring & Analysis	216	0		0
Cement Surface	217	30,000		30,000
Cement Intermediate	218	65,000		65,000
Cement 2nd Intermediate/Production	218	0	319	85,000
Cement Squeeze & Other (Kickoff Plug)	220	0	320	0
Float Equipment & Centralizers	221	30,000	321	40,000
Casing Crews & Equipment	222	15,000	322	15,000
Fishing Tools & Service	223	0	323	0
Geologic/Engineering	224	0	324	0
Contract Labor	225	10,000	325	135,000
Company Supervision	226	0	326	0
Contract Supervision	227	32,000	327	82,000
Testing Casing/Tubing	228	7,000	328	7,000
Mud Logging Unit	229	21,000	329	21,000
Logging	230	0	330	10,000
Perforating/Wireline Services	231	15,000	331	134,000
Stimulation/Treating		0	332	2,300,000
Completion Unit		0	333	50,000
Swabbing Unit		0	334	0
Rentals-Surface	235	60,000	335	260,000
Rentals-Subsurface	236	75,000	336	100,000
Trucking/Forklift/Rig Mobilization	237	100,000	337	125,000
Welding Services	238	5,000	338	12,500
Water Disposal	239	0	339	240,000
Plug to Abandon	240	0	340	0
Seismic Analysis	241	0	341	0
Closed Loop & Environmental	244	150,000	344	160,000
Miscellaneous	242	0	342	0
Contingency	243	16,000	343	205,000
TOTAL INTANGIBLES		1,534,000	3,706,000	5,240,000

<u>TANGIBLE COSTS</u>				
Surface Casing	401	32,000		32,000
Intermediate Casing	402	110,000	503	110,000
Production Casing		0	503	225,000
Tubing		0	504	57,000
Wellhead Equipment	405	15,000	505	50,000
Pumping Unit		0	506	115,000
Prime Mover		0	507	20,000
Rods		0	508	45,000
Pumps		0	509	125,000
Tanks		0	510	75,000
Flowlines		0	511	50,000
Heater Treater/Separator		0	512	55,000
Electrical System		0	513	0
Packers/Anchors/Hangers	414	0	514	1,200
Couplings/Fittings/Valves	415	0	515	125,000
Gas Compressors/Meters		0	516	8,100
Dehydrator		0	517	0
Injection Plant/CO2 Equipment		0	518	0
Miscellaneous	419	0	519	0
Contingency	420	8,000	520	47,700
TOTAL TANGIBLES		165,000	984,000	1,149,000
TOTAL WELL COSTS		1,699,000	4,690,000	6,389,000

COG Operating LLC

We approve:
_____% Working Interest

Company: _____
By: _____

Printed Name: _____
Title: _____
Date: _____

Date Prepared: 10/7/2014

COG Operating LLC

By: TIM SMITH

BEFORE THE OIL CONVERSION
DIVISION
Santa Fe, New Mexico
Exhibit No. 4
Submitted by: COG Operating LLC
Hearing Date: March 19, 2015

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