

COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING

WELL NAME:	SHERMAN 4 FEE #1	PROSPECT NAME:	ZEUS 1926 717088
SHL:	612' FSL & 380' FWL UL-M	STATE & COUNTY:	New Mexico, Eddy
BHL:	612' FSL & 380' FWL UL-M	OBJECTIVE:	4800' Blinbry Paddock 4 Fracs AFE
FORMATION:	GLORIETA YESO		
LEGAL:	SEC4 T19S-R26E API#: 30-015-39589	TVD:	4,800

INTANGIBLE COSTS

		BCP	ACP	TOTAL
Title/Curative/Permit	201	10,000		10,000
Insurance	202	3,800	302 0	3,800
Damages/Right of Way	203		303 0	0
Survey/Stake Location	204	2,500	304 0	2,500
Location/Pits/Road Expense	205	34,000	305 5,000	39,000
Drilling / Completion Overhead	206	2,500	306 2,000	4,500
Turnkey Contract	207		307	0
Footage Contract	208		308	0
Daywork Contract (0 days f/spud-ris @ \$0)	209	189,000	309	189,000
Directional Drilling Services (0 dir days @ \$0)	210	0	310	0
Fuel & Power	211	53,000	311 1,000	54,000
Water	212	37,000	312 50,000	87,000
Bits	213	30,000	313 3,000	30,500
Mud & Chemicals	214	35,000	314	35,000
Drill Stem Test	215		315	0
Coring & Analysis	216	285,000		285,000
Cement Surface	217	39,000		39,000
Cement Intermediate	218	0		0
Cement 2nd Intermediate 7"	218		319 24,000	24,000
Cement Squeeze & Other (Kickoff Plug)	220		320	0
Float Equipment & Centralizers	221	2,500	321 2,000	4,500
Casing Crews & Equipment	222	7,000	322 8,000	15,000
Fishing Tools & Service	223		323	0
Geologic/Engineering	224	1,000	324	1,000
Contract Labor	225	3,000	325 45,000	48,000
Company Supervision	226		326	0
Contract Supervision	227	23,000	327 25,000	48,000
Testing Casing/Tubing	228	3,000	328 3,000	6,000
Mud Logging Unit (logging f/24 days)	229	20,000	329	20,000
Logging	230	110,000	330	110,000
Perforating/Wireline Services	231	3,500	331 60,000	53,500
Stimulation/Treating			332 750,000	750,000
Completion Unit			333 85,000	85,000
Swabbing Unit			334	0
Rentals-Surface	235	19,000	335 80,000	99,000
Rentals-Subsurface	236	37,000	336 75,000	112,000
Trucking/Forklift/Rig Mobilization	237	46,000	337 10,000	56,000
Welding Services	238	3,000	338 1,000	4,000
Water Disposal	239		339 25,000	15,000
Plug to Abandon	240		340	0
Seismic Analysis	241		341	0
Closed Loop & Environmental	244	105,000	344	105,000
Miscellaneous	242		342	0
Contingency	243	48,200	343 70,500	118,700
TOTAL INTANGIBLES		1,152,000	1,324,500	2,454,000

TANGIBLE COSTS

Surface Casing (655' 13 3/8" 54.5# J55 STC)	401	35,000		35,000
Intermediate Casing(4050' 9 5/8" 36#/40# J55 BUTT)	402	0	503 0	0
Production Casing (13,450' 5 1/2" 17# N80/P110)			503 110,000	110,000
Tubing			504 32,000	32,000
Wellhead Equipment	405	6,000	505 3,000	9,000
Pumping Unit			506 60,000	60,000
Prime Mover			507 10,000	10,000
Rods			508 41,000	41,000
Pumps			509 4,500	4,500
Tanks			510 20,000	20,000
Flowlines			511 15,000	15,000
Heater Treater/Separator			512 12,000	12,000
Electrical System			513 20,000	20,000
Packers/Anchors/Hangers	414	0	514 5,000	5,000
Couplings/Fittings/Valves	415	500	515 20,000	20,500
Gas Compressors/Meters			516 0	0
Dehydrator			517 0	0
Injection Plant/CO2 Equipment			518 0	0
Miscellaneous	419	500	519 500	1,000
Contingency	420	3,000	520 19,600	22,600
TOTAL TANGIBLES		45,000	372,600	417,600
TOTAL WELL COSTS		1,197,000	1,697,100	2,894,100

COG Operating LLC

We approve:
_____% Working Interest

Company:

By:

Printed Name:

Title:

Date:

Date Prepared: 8/3/12 NBA

COG Operating LLC

By: Carl Bird

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. 4

Submitted by:

COG OPERATING LLC

Hearing Date: November 28, 2012

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