

April 19, 2012

Murchison Oil & Gas, Inc.
1100 Mira Vista Blvd.
Plano, Texas 75093

Attn: Brett Austin

Re: **Well Proposal – Hogan State Com #4H Well**
T17S, R29E, Section 2: S/2S/2
SHL: 330' FSL & 330' FEL, or a legal location in Unit P
BHL: 330' FSL & 330' FWL, or a legal location in Unit M
Eddy County, New Mexico

Dear Mr. Austin:

COG Operating LLC (COG), as Operator, proposes to drill the Hogan State Com #4H well as a horizontal well at the above-captioned location to a TVD of approximately 5,250' and a MD of 9,666' to test the Yeso Formation ("Operation"). The total cost of the Operation is estimated to be \$4,229,000 and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

Also enclosed is COG's proposed form of Operating Agreement ("OA"). The Operating Agreement covers the entire S/2 of Section 2, T17S, R29E.

If you do not wish to participate in the Operation, COG would like to acquire a Term Assignment of your leasehold for the following general terms:

- 1 year primary term
- Delivering a 7.5% NRI, proportionately reduced
- \$1,000 per net acre bonus consideration

If you have any questions, please do not hesitate to contact the undersigned at 432-221-0308.

Respectfully,

Brandon K. Gaynor
Landman

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. 2
Submitted by:
COG OPERATING LLC
Hearing Date: June 25, 2012

COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING

WELL NAME:	HOGAN STATE COM #4H	PROSPECT NAME:	EMPIRE
SHL:	330' FSL & 330' FEL Sec 2 UL-P	STATE & COUNTY:	New Mexico, Eddy
BHL:	330' FSL & 330' FWL Sec 2 UL-M	OBJECTIVE:	SH39 9,666" MD (5,250' TVD) NO PH
FORMATION:	Lower Blinebry; Glorieta Yeso Formation		
LEGAL:	SEC2 T17S-R29E UL-P - M		

INTANGIBLE COSTS

		BCP		ACP		TOTAL
Title/Curative/Permit	201	10,000				10,000
Insurance	202	22,000	302	0		22,000
Damages/Right of Way	203	15,000	303	0		15,000
Survey/Stake Location	204	3,000	304	0		3,000
Location/Pits/Road Expense	205	50,000	305	15,000		65,000
Drilling / Completion Overhead	206	5,000	306	1,000		6,000
Turnkey Contract	207	0	307	0		0
Footage Contract	208	0	308	0		0
Daywork Contract (0 days f/spud-rls @ \$0)	209	280,000	309	56,000		336,000
Directional Drilling Services (0 dir days @ \$0)	210	175,000	310	0		175,000
Fuel & Power	211	60,000	311	12,000		72,000
Water	212	30,000	312	60,000		90,000
Bits	213	50,000	313	5,000		55,000
Mud & Chemicals	214	50,000	314	0		50,000
Drill Stem Test	215	0	315	0		0
Coring & Analysis	216	0				0
Cement Surface	217	40,000				40,000
Cement Intermediate	218	24,000				24,000
Cement 2nd Intermediate 7"	218	0	319	33,135		33,135
Cement Squeeze & Other (Kickoff Plug)	220	0	320	0		0
Float Equipment & Centralizers	221	4,000	321	25,000		29,000
Casing Crews & Equipment	222	12,000	322	15,000		27,000
Fishing Tools & Service	223	0	323	0		0
Geologic/Engineering	224	10,000	324	1,000		11,000
Contract Labor	225	20,000	325	21,000		41,000
Company Supervision	226	2,000	326	2,000		4,000
Contract Supervision	227	32,000	327	6,400		38,400
Testing Casing/Tubing	228	5,000	328	12,000		17,000
Mud Logging Unit (logging f/24 days)	229	25,000	329	0		25,000
Logging	230	25,000	330	0		25,000
Perforating/Wireline Services	231	3,500	331	0		3,500
Stimulation/Treating			332	1,300,000		1,300,000
Completion Unit			333	24,000		24,000
Swabbing Unit			334	0		0
Rentals-Surface	235	34,000	335	75,000		109,000
Rentals-Subsurface	236	52,000	336	10,000		62,000
Trucking/Forklift/Rig Mobilization	237	45,000	337	20,000		65,000
Welding Services	238	5,000	338	2,500		7,500
Water Disposal	239	0	339	15,000		15,000
Plug to Abandon	240	0	340	0		0
Seismic Analysis	241	0	341	0		0
Closed Loop & Environmental	244	96,000	344	0		96,000
Miscellaneous	242	5,000	342	1,000		6,000
Contingency	243	119,500	343	172,965		292,465
TOTAL INTANGIBLES		1,309,000		1,885,000		3,194,000

TANGIBLE COSTS

Surface Casing (655' 13 3/8" 54.5# J55 STC)	401	29,000				29,000
Intermediate Casing(4050' 9 5/8" 36#/40# J55 BUTT)	402	36,000	503	0		36,000
Production Casing (13,450' 5 1/2" 17# N80/P110)			503	234,000		234,000
Tubing			504	35,000		35,000
Wellhead Equipment	405	8,000	505	15,000		23,000
Pumping Unit			506	40,000		40,000
Prime Mover			507	20,000		20,000
Rods			508	24,000		24,000
Pumps			509	10,000		10,000
Tanks			510	21,000		21,000
Flowlines			511	8,000		8,000
Heater Treater/Separator			512	30,000		30,000
Electrical System			513	11,250		11,250
Packers/Anchors/Hangers	414	0	514	335,000		335,000
Couplings/Fittings/Valves	415	2,500	515	45,000		47,500
Gas Compressors/Meters			516	14,500		14,500
Dehydrator			517	0		0
Injection Plant/CO2 Equipment			518	0		0
Miscellaneous	419	1,000	519	20,000		21,000
Contingency	420	8,500	520	87,250		95,750
TOTAL TANGIBLES		85,000		950,000		1,035,000
TOTAL WELL COSTS		1,394,000		2,835,000		4,229,000

COG Operating LLC

Date Prepared: 4/17/12 JJ

COG Operating LLC

We approve:
_____% Working Interest

By: Chad Elliott

Company:

By:

Printed Name:

Title:

Date:

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