

February 19, 2013

U.S. Certified Mail
Return Receipt Requested
91 7199 9991 7030 4041 6281

Leslie M Butts
605 South 14th Street
Artesia, NM 88210

Attn: Leslie M Butts

Re: **Well Proposal – Bradley 8 Fee #1H**
T19S, R26E, W/2W/2 of Section 8
SHL: 150' FSL & 330' FWL, or a legal location in Unit D
BHL: 330' FNL & 330' FWL, or a legal location in Unit M
Eddy County, New Mexico

Dear Miss. Leslie M Butts,

COG Operating LLC (COG), as Operator, proposes to drill the Bradley 8 Fee #1H well as a horizontal well at the above-captioned location to a TVD of approximately 3085' and a MD of 7700' to test the Yeso Formation ("Operation"). The total cost of the Operation is estimated to be \$3,292,000 and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE"). COG anticipates that it will spud the well on or before May 6, 2013.

COG is proposing to drill this well under the terms of the modified 1989 AAPL form of Operating Agreement which is enclosed for your review and approval. The Operating Agreement covers (description of lands insert). It has the following general provisions:

- 100/300 Non-consenting penalty
- \$5,450.00/\$540.00 Drilling and Producing rate
- COG named as Operator

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. 4
Submitted by:
COG OPERATING LLC
Hearing Date: April 4, 2013

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:

- 18 month primary term
- Delivering a 75% NRI, proportionately reduced
- \$1000.00 per net acre bonus consideration

This Term Assignment offer is subject to the approval of COG's management and verification of title.

If you have any questions, please do not hesitate to contact the undersigned at 432-221-0333.

Respectfully,

Katayoun "Katie" Mohebkhosravi

Landman

COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING

WELL NAME:	BRADLEY 8 FEE #1H	PROSPECT NAME:	LAKEWOOD/CEMETERY
SHL:	150' FSL & 330' FWL UL-D	STATE & COUNTY:	New Mexico, Eddy
BHL:	330' FNL & 330' FWL UL-M	OBJECTIVE:	SH9 Yeso Horizontal
FORMATION:	Glorieta Yeso	DEPTH:	7,700
LEGAL:	SEC8 T19S-R26E	TVD:	3,085

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	50,000	303 0	50,000
Survey/Stake Location	204	3,000	304 0	3,000
Location/Pits/Road Expense	205	60,000	305 25,000	85,000
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	165,000	309 45,000	210,000
Directional Drilling Services (0 dir days @ \$0)	210	190,000	310	190,000
Fuel & Power	211	42,000	311 12,000	54,000
Water	212	29,000	312 100,000	129,000
Bits	213	27,000	313 5,000	32,000
Mud & Chemicals	214	24,000	314 0	24,000
Drill Stem Test	215		315 0	0
Coring & Analysis	216			0
Cement Surface	217	48,000		48,000
Cement Intermediate	218	0		0
Cement 2nd Intermediate/Production	218	0	319 65,000	65,000
Cement Squeeze & Other (Kickoff Plug)	220		320 0	0
Float Equipment & Centralizers	221	2,000	321 30,000	32,000
Casing Crews & Equipment	222	5,000	322 12,000	17,000
Fishing Tools & Service	223		323	0
Geologic/Engineering	224	10,000	324	10,000
Contract Labor	225	20,000	325 21,000	41,000
Company Supervision	226	2,000	326 2,000	4,000
Contract Supervision	227	19,000	327 20,000	39,000
Testing Casing/Tubing	228	3,000	328 12,000	15,000
Mud Logging Unit (logging f/24 days)	229	10,000	329	10,000
Logging	230	10,000	330	10,000
Perforating/Wireline Services	231	3,500	331 50,000	53,500
Stimulation/Treating			332 750,000	750,000
Completion Unit			333 30,000	30,000
Swabbing Unit			334	0
Rentals-Surface	235	18,000	335 250,000	268,000
Rentals-Subsurface	236	32,000	336 75,000	107,000
Trucking/Forklift/Rig Mobilization	237	43,000	337 20,000	63,000
Welding Services	238	5,000	338 2,500	7,500
Water Disposal	239	0	339 40,000	40,000
Plug to Abandon	240	0	340 0	0
Seismic Analysis	241	0	341 0	0
Closed Loop & Environmental	244	83,000	344 0	83,000
Miscellaneous	242	0	342 0	0
Contingency 10%	243	94,000	343 157,500	251,500
TOTAL INTANGIBLES		1,032,000	1,726,000	2,758,000

TANGIBLE COSTS

Surface Casing (8 5/8" 32# J55 LTC)	401	28,000		28,000
Intermediate Casing(2150' 8 5/8" 32# J55 LTC)	402	0	503 0	0
Production Casing (5 1/2" 17# L80)			503 122,000	122,000
Tubing			504 22,000	22,000
Wellhead Equipment	405	6,000	505 20,000	26,000
Pumping Unit			506 60,000	60,000
Prime Mover			507 20,000	20,000
Rods			508 12,000	12,000
Pumps			509 70,000	70,000
Tanks			510 21,000	21,000
Flowlines			511 8,000	8,000
Heater Treater/Separator			512 30,000	30,000
Electrical System			513 20,000	20,000
Packers/Anchors/Hangers	414	0	514 2,500	2,500
Couplings/Fittings/Valves	415	500	515 60,000	60,500
Gas Compressors/Meters			516 5,000	5,000
Dehydrator			517	0
Injection Plant/CO2 Equipment			518	0
Miscellaneous	419	500	519 500	1,000
Contingency	420	2,000	520 24,000	26,000
TOTAL TANGIBLES		37,000	497,000	534,000
TOTAL WELL COSTS		1,069,000	2,223,000	3,292,000

COG Operating LLC

By: Carl Bird

Date Prepared: 2/18/13 JJ

We approve:
_____% Working Interest

COG Operating LLC

By: _____

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.