



Sent Certified Mail
Receipt No. 91-7199-9991-7035-3158-2068

April 21, 2016

Yates Brothers, a Partnership
PO Box 1394
Artesia, NM 88211

RE: Well Proposal – Clydesdale 1 Fee #5H
SHL: 2135' FSL & 150' FEL (Unit I)
BHL: 2310' FSL & 330' FWL (Unit L)
Section 1, T19S, R25E, Eddy County, New Mexico

To Whom It May Concern,

COG Operating LLC ("COG"), as Operator, proposes to drill the Clydesdale 1 Fee #5H well at the captioned location, or at an approved surface location within Unit Location I, to a depth of approximately 3,200' TVD, 7,750' MD, to test the Yeso Formation ("Operation"). The total cost of the Operation is estimated to be \$2,559,500 and a detailed description of such cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill this well under the terms of the modified 1989 AAPL form of Operating Agreement. Enclosed is a 1989 AAPL form Operating Agreement. The Operating Agreement covers (T19S-R25E, Section 1: N2S2). It has the following general provisions:

- 200/500 Non-consenting penalty
- \$5,450.00/\$545.00 Drilling and Producing rate
- COG named as Operator

If you do not wish to participate in the Operation, COG would like to lease your interest for the following general terms:

- 3 year primary term
- 3/16 Royalty, proportionately reduced
- \$150.00 per net acre bonus consideration

COG will apply to the New Mexico Oil Conservation Division for compulsory pooling for the Operation. If we do not reach an agreement within 30 days of this letter, your interest will be named in the application.

If you desire to receive well information regarding the subject operations please return a Well Information Requirements list to COG. Technical questions should be directed to Carl Bird at 432-686-3057 and land questions to Stuart Dirks at 432-685-4354.

Yours Truly,
COG Operating LLC

Jessica K. Froman
Land Tech, NM Shelf

Enclosure(s)
SD/JKF

BEFORE THE OIL CONSERVATION
DIVISION
Santa Fe, New Mexico
Exhibit No. 5
Submitted by: COG OPERATING LLC
Hearing Date: May 25, 2016

**COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING**

WELL NAME: CLYDESDALE 1 FEE #5H	PROSPECT NAME: LAKEWOOD	SWF
SHL: 2135' FSL & 150' FEL (I)	STATE & COUNTY: New Mexico, Eddy	
BHL: 2310' FSL & 330' FWL (L)	OBJECTIVE: Yeso Horizontal	
FORMATION: YESO	DEPTH: 7,750	
LEGAL: T19S-R25E, SEC. 1 NESE	TVD: 3,200	

		BCP	ACP	TOTAL
INTANGIBLE COSTS				
Title/Curative/Permit	201	11,000		11,000
Insurance	202	3,000	302 0	3,000
Damages/Right of Way	203	40,000	303 0	40,000
Survey/Stake Location	204	7,000	304 0	7,000
Location/Pits/Road Expense	205	65,000	305 7,000	72,000
Drilling / Completion Overhead	206	3,000	306 4,000	7,000
Turnkey Contract	207		307	0
Footage Contract	208		308	0
Daywork Contract (0 days f/apud-its @ \$0)	209	110,000	309 0	110,000
Directional Drilling Services (0 dir days @ \$0)	210	70,000	310	70,000
Fuel & Power	211	12,000	311 1,000	13,000
Water	212	21,000	312 121,000	142,000
Bits	213	20,000	313 3,000	23,000
Mud & Chemicals	214	24,000	314 0	24,000
Drill Stem Test	215		315 0	0
Coring & Analysis	216			0
Cement Surface	217	30,000		30,000
Cement Intermediate	218	0		0
Cement 2nd Intermediate/Production	218	0	319 36,000	36,000
Cement Squeeze & Other (Kickoff Plug)	220		320 0	0
Float Equipment & Centralizers	221	1,000	321 6,000	7,000
Casing Crews & Equipment	222	3,078	322 7,000	10,078
Fishing Tools & Service	223		323	0
Geologic/Engineering	224		324	0
Contract Labor	225	4,250	325 81,500	85,750
Company Supervision	226	2,000	326 7,000	9,000
Contract Supervision	227	14,000	327 56,000	70,000
Testing Casing/Tubing	228	2,490	328 5,000	7,490
Mud Logging Unit	229	13,000	329	13,000
Logging	230	16,560	330	16,560
Perforating/Wireline Services	231	1,600	331 111,000	112,600
Stimulation/Treating			332 777,000	777,000
Completion Unit			333 30,000	30,000
Swabbing Unit			334	0
Rentals-Surface	235	11,000	335 145,000	156,000
Rentals-Subsurface	236	19,000	336 12,000	31,000
Trucking/Forklift/Rig Mobilization	237	39,000	337 70,000	109,000
Welding Services	238	4,500	338 1,000	5,500
Water Disposal	239	0	339 9,000	9,000
Plug to Abandon	240	0	340 0	0
Seismic Analysis	241	0	341 0	0
Closed Loop & Environmental	244	32,000	344 0	32,000
Miscellaneous	242	0	342 0	0
Contingency 2%	243	12,622	343 62,000	74,622
TOTAL INTANGIBLES		592,000	1,661,500	2,143,500

TANGIBLE COSTS				
Surface Casing (8 5/8" 32# J55 LTC)	401	21,000		21,000
Intermediate Casing (8 5/8" 32# J55 LTC)	402	0	503 0	0
Production Casing (5 1/2" 17# L80)			503 84,000	84,000
Tubing			504 11,000	11,000
Wellhead Equipment	405	4,300	506 18,000	20,300
Pumping Unit			506 64,000	64,000
Prime Mover			507 0	0
Rods			508 13,000	13,000
Pumps			509 10,000	10,000
Tanks			510 25,000	25,000
Flowlines			511 37,500	37,500
Heater Treater/Separator			512 30,000	30,000
Electrical System			513 28,000	28,000
Packers/Anchors/Hangers	414	0	514 2,000	2,000
Couplings/Fittings/Valves	415	500	515 50,000	50,500
Gas Compressors/Meters			516 8,000	8,000
Dehydrator			517	0
Injection Plant/CO2 Equipment			518	0
Miscellaneous	419	500	519 10,000	10,500
Contingency	420	700	520 500	1,200
TOTAL TANGIBLES		27,000	389,000	416,000
TOTAL WELL COSTS		619,000	1,940,500	2,559,500

COG Operating LLC

By: Carl Bird/Paul Figal

Date Prepared: 2-3-16 JF

COG Operating LLC

By: _____

We approve:

_____% Working Interest

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.