



March 28, 2014

Sent Via Certified Mail
91 7199 9991 7033 5225 6353

Yates Petroleum Corporation
Abo Petroleum Corporation
MYCO Industries, Inc.
Attn: Janet Richardson
105 South Fourth Street
Artesia, NM 88210

RE: **Well Proposal – Sherman 4 Fee #2H**
T19S, R26E, Sections 8: W2E2 Unit Area
SHL: 150' FSL & 1645' FWL (or a legal location in Unit N – SESW)
BHL: 330' FNL & 1650' FWL (or a legal location in Unit C – Lot 3)
Eddy County, New Mexico

To Janet Richardson:

COG Operating LLC (COG), as Operator, proposes to drill the Sherman 4 Fee # 2H well as a horizontal well at the above-captioned location to a TVD of approximately 3,000' and a MD of 7,415' to test the Yeso Formation ("Operation"). The total cost of the Operation is estimated to be \$3,548,000 and a detailed description of the 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. Enclosed is a 1989 AAPL form Operating Agreement. The Operating Agreement covers (T19S R26E Section 4 E/2W/2). It has the following general provisions:

- 200/500 Non-consenting penalty
- \$5,450/\$545 Drilling and Producing rate
- COG named as Operator

If you have any questions, please do not hesitate to contact me at 432-688-6601 or by email at jscott@concho.com

Respectfully,

Joseph Scott
Landman

Enclosure(s)

CORPORATE ADDRESS: One Concho Center 600 W Illinois Avenue Midland, Texas 79701 Phone 432.683.7443 Fax 432.683.7441

BEFORE THE OIL CONVERSATION
DIVISION
Santa Fe, New Mexico
Exhibit No. 5
Submitted by: COG OPERATING LLC
Hearing Date: May 29, 2014

**COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING**

WELL NAME: SHERMAN 4 FEE #2H	PROSPECT NAME: LAKEWOOD/CEMETARY
SHL: 150' FSL & 1645' FWL UL: N	STATE & COUNTY: New Mexico, Eddy
BHL: 330' FNL & 1650' FWL UL: C/3	OBJECTIVE: SH9 Yeso Horizontal
FORMATION: Yeso	DEPTH: 7,636
LEGAL: SEC. 4 T19S-R26E API#: 30-015-42204	TVD: 3,000

INTANGIBLE COSTS	BCP	ACP	TOTAL
Title/Curative/Permit	201	10,000	10,000
Insurance	202	22,000	22,000
Damages/Right of Way	203	50,000	50,000
Survey/Stake Location	204	3,000	3,000
Location/Pits/Road Expense	205	55,000	80,000
Drilling / Completion Overhead	206	2,500	4,500
Turnkey Contract	207		0
Footage Contract	208		0
Daywork Contract (0 days f/spud-rts @ \$0)	209	160,000	189,000
Directional Drilling Services (0 dir days @ \$0)	210	125,000	125,000
Fuel & Power	211	33,000	39,000
Water	212	27,000	157,000
Bits	213	25,000	30,000
Mud & Chemicals	214	21,000	21,000
Drill Stem Test	215		0
Coring & Analysis	216		0
Cement Surface	217	42,000	42,000
Cement Intermediate	218	0	0
Cement 2nd Intermediate/Production	218	0	61,000
Cement Squeeze & Other (Kickoff Plug)	220		0
Float Equipment & Centralizers	221	2,000	22,000
Casing Crews & Equipment	222	5,000	17,000
Fishing Tools & Service	223		0
Geologic/Engineering	224	8,000	8,000
Contract Labor	225	16,000	37,000
Company Supervision	226	2,000	4,000
Contract Supervision	227	19,000	39,000
Testing Casing/Tubing	228	3,000	8,000
Mud Logging Unit (logging f/24 days)	229	10,000	10,000
Logging	230	0	0
Perforating/Wireline Services	231	1,500	96,500
Stimulation/Treating			1,100,000
Completion Unit			30,000
Swabbing Unit			0
Rentals-Surface	235	16,000	216,000
Rentals-Subsurface	236	26,000	86,000
Trucking/Forklift/Rig Mobilization	237	43,000	63,000
Welding Services	238	5,000	7,500
Water Disposal	239	0	130,000
Plug to Abandon	240	0	0
Seismic Analysis	241	0	0
Closed Loop & Environmental	244	55,000	55,000
Miscellaneous	242	0	0
Contingency 10%	243	79,000	277,500
TOTAL INTANGIBLES		866,000	3,040,000
TANGIBLE COSTS			
Surface Casing (8 5/8" 32# J55 LTC)	401	25,000	25,000
Intermediate Casing(2150' 8 5/8" 32# J55 LTC)	402	0	0
Production Casing (5 1/2" 17# L80)			107,000
Tubing			15,000
Wellhead Equipment	405	6,000	26,000
Pumping Unit			60,000
Prime Mover			20,000
Rods			12,000
Pumps			70,000
Tanks			21,000
Flowlines			8,000
Heater Treater/Separator			30,000
Electrical System			20,000
Packers/Anchors/Hangers	414	0	2,500
Couplings/Fittings/Valves	415	500	60,500
Gas Compressors/Meters			5,000
Dehydrator			0
Injection Plant/CO2 Equipment			0
Miscellaneous	419	500	1,000
Contingency	420	2,000	25,000
TOTAL TANGIBLES		34,000	508,000
TOTAL WELL COSTS		900,000	3,548,000

COG Operating LLC

By: Carl Bird

Date Prepared: 2/12/2014

GB

We approve:
_____% Working Interest

COG Operating LLC

By: *Maureen Burleson*

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.