



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 Yezo 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](mailto: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	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	55,000	305	25,000		80,000
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-rls @ \$0)	209	160,000	309	29,000		189,000
Directional Drilling Services (0 dir days @ \$0)	210	125,000	310			125,000
Fuel & Power	211	33,000	311	6,000		39,000
Water	212	27,000	312	130,000		157,000
Bits	213	25,000	313	5,000		30,000
Mud & Chemicals	214	21,000	314	0		21,000
Drill Stem Test	215		315	0		0
Coring & Analysis	216					0
Cement Surface	217	42,000				42,000
Cement Intermediate	218	0				0
Cement 2nd Intermediate/Production	218	0	319	61,000		61,000
Cement Squeeze & Other (Kickoff Plug)	220		320	0		0
Float Equipment & Centralizers	221	2,000	321	20,000		22,000
Casing Crews & Equipment	222	5,000	322	12,000		17,000
Fishing Tools & Service	223		323			0
Geologic/Engineering	224	8,000	324			8,000
Contract Labor	225	16,000	325	21,000		37,000
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	5,000		8,000
Mud Logging Unit (logging f/24 days)	229	10,000	329			10,000
Logging	230	0	330			0
Perforating/Wireline Services	231	1,500	331	95,000		96,500
Stimulation/Treating			332	1,100,000		1,100,000
Completion Unit			333	30,000		30,000
Swabbing Unit			334			0
Rentals-Surface	235	16,000	335	200,000		216,000
Rentals-Subsurface	236	26,000	336	60,000		86,000
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	130,000		130,000
Plug to Abandon	240	0	340	0		0
Selsmic Analysis	241	0	341	0		0
Closed Loop & Environmental	244	55,000	344	0		55,000
Miscellaneous	242	0	342	0		0
Contingency 10%	243	79,000	343	198,500		277,500
<b>TOTAL INTANGIBLES</b>		<b>866,000</b>		<b>2,174,000</b>		<b>3,040,000</b>

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	503	0		0
Production Casing (5 1/2" 17# L80)			503	107,000		107,000
Tubing			504	15,000		15,000
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	23,000		25,000
<b>TOTAL TANGIBLES</b>		<b>34,000</b>		<b>474,000</b>		<b>508,000</b>
<b>TOTAL WELL COSTS</b>		<b>900,000</b>		<b>2,648,000</b>		<b>3,548,000</b>

COG Operating LLC

By: Carl Bird

Date Prepared: 2/12/2014

GB

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.