



Sent Certified Mail
Receipt No. 91-7199-9991-7033-2264-5965

February 19, 2015

Yates Industries LLC
Sharbro Energy LLC
P.O. Box 840
Artesia, NM 88211
Attn: Ms. Hannah Palomin

Re: **Well Proposal – Pilum 15 Fee #1H**
T18S, R26E, Sections 15: N2S2 Unit Area
SHL: 2485' FSL & 425' FEL Section 16, or at a legal location
BHL: 2322' FSL & 330' FEL Section 15, or at a legal location
Eddy County, New Mexico

Dear Ms. Palomin:

COG Operating LLC (COG), as Operator, proposes to drill the Pilum 15 Fee #1H well as a horizontal well at the above-captioned location to a TVD of approximately 2,765' and a MD of 7,750' to test the Yeso Formation ("Operation"). The total cost of the Operation is estimated to be \$3,099,000.00 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 Agreement modified for horizontal development. Enclosed is a 1989 AAPL for Operating Agreement. It has the following general provisions:

- 100/300 Non-consenting penalty
- \$6,000.00/\$600.00 Drilling and Producing rate
- COG named as Operator

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 1.0% ORRI, proportionately reduced
- \$150.00 per net acre bonus consideration

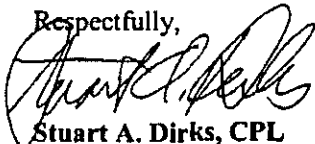
If we do not reach an agreement within 30 days of the date of this letter COG will request that the New Mexico Oil Conservation Division issue an order for compulsory pooling of your interest into a spacing unit for the proposed well.

BEFORE THE OIL CONSERVATION
DIVISION
Santa Fe, New Mexico
Exhibit No. 5
Submitted by: COG Operating LLC
Hearing Date: April 2, 2015

Please indicate your election to participate in the well by signing and returning the enclosed AFE and the second page of this letter. 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 the undersigned at 432-685-4354.

If you have any questions, please do not hesitate to contact the undersigned at 432-685-4354.

Respectfully,



Stuart A. Dirks, CPL

Senior Landman

Enclosure(s) SD/JKF

Yates Industries LLC

Pilum 15 Fee #1H, Well Proposal

February 19, 2015

_____ Elect to limit participation to original working interest in the Pilum 15 Fee #1H.

_____ Elect to assume proportionate share of the non-consenting parties' working interest in the Pilum 15 Fee #1H.

_____ Elect to assume all available non-consenting parties' working interest in the Pilum 15 Fee #1H.

By: _____

Date: _____

Printed Name: _____

Title: _____

Sharbro Energy LLC

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By: _____

Date: _____

Printed Name: _____

Title: _____

**COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING**

WELL NAME: PILUM 15 FEE #1H	PROSPECT NAME: LAKEWOOD/CEMETARY
SHL: 2485' FSL & 425' FEL (UL: I; SEC. 16)	STATE & COUNTY: New Mexico, Eddy
BHL: 2322' FSL & 330' FEL (UL: I; SEC. 15)	OBJECTIVE: SH9 Yeso Horizontal
FORMATION: YESO	DEPTH: 7,750
LEGAL: T18S-R26E, SEC. 15	TVD: 2,765

INTANGIBLE COSTS		BCP	ACP	TOTAL
Title/Curative/Permit	201	11,000		11,000
Insurance	202	3,000	0	3,000
Damages/Right of Way	203	40,000	0	40,000
Survey/Stake Location	204	7,000	0	7,000
Location/Pits/Road Expense	205	85,000	25,000	110,000
Drilling / Completion Overhead	206	3,000	2,000	5,000
Turnkey Contract	207			0
Footage Contract	208			0
Daywork Contract (0 days t/spud-ris @ \$0)	209	130,000	0	130,000
Directional Drilling Services (0 dir days @ \$0)	210	95,000		95,000
Fuel & Power	211	25,000	5,000	30,000
Water	212	24,000	105,000	129,000
Bits	213	20,000	5,000	25,000
Mud & Chemicals	214	28,000	0	28,000
Drill Stem Test	215		0	0
Coring & Analysis	216			0
Cement Surface	217	35,000		35,000
Cement Intermediate	218	0		0
Cement 2nd Intermediate/Production	218	0	42,000	42,000
Cement Squeeze & Other (Kickoff Plug)	220		0	0
Float Equipment & Centralizers	221	2,000	18,000	20,000
Casing Crews & Equipment	222	4,250	10,200	14,450
Fishing Tools & Service	223			0
Geologic/Engineering	224	2,000		2,000
Contract Labor	225	29,750	42,000	71,750
Company Supervision	226	2,000	2,000	4,000
Contract Supervision	227	17,000	46,000	63,000
Testing Casing/Tubing	228	2,490	4,500	6,990
Mud Logging Unit	229	15,000		15,000
Logging	230	18,000		18,000
Perforating/Wireline Services	231	1,500	130,000	131,500
Stimulation/Treating			970,000	970,000
Completion Unit			35,000	35,000
Swabbing Unit				0
Rentals-Surface	235	13,000	240,000	253,000
Rentals-Subsurface	236	23,000	15,000	38,000
Trucking/Forklift/Rig Mobilization	237	42,000	60,000	102,000
Welding Services	238	5,000	3,000	8,000
Water Disposal	239	0	20,000	20,000
Plug to Abandon	240	0	0	0
Seismic Analysis	241	0	0	0
Closed Loop & Environmental	244	56,000	0	56,000
Miscellaneous	242	0	0	0
Contingency 5%	243	37,010	89,300	126,310
TOTAL INTANGIBLES		776,000	1,869,000	2,645,000
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	0	0
Production Casing (5 1/2" 17# L80)			113,000	113,000
Tubing			15,000	15,000
Wellhead Equipment	405	5,790	18,000	23,790
Pumping Unit			54,000	54,000
Prime Mover			0	0
Rods			11,000	11,000
Pumps			63,000	63,000
Tanks			19,000	19,000
Flowlines			11,000	11,000
Heater/Treater/Separator			29,000	29,000
Electrical System			18,000	18,000
Packers/Anchors/Hangers	414	0	2,000	2,000
Couplings/Fittings/Valves	415	500	36,000	36,500
Gas Compressors/Meters			4,000	4,000
Dehydrator			0	0
Injection Plant/CO2 Equipment			0	0
Miscellaneous	419	500	4,000	4,500
Contingency	420	2,210	20,000	22,210
TOTAL TANGIBLES		37,000	417,000	454,000
TOTAL WELL COSTS		813,000	2,286,000	3,099,000

COG Operating LLC

By: Carl Bird

Date Prepared: 2/19/2015

JKF

COG Operating LLC

We approve:

% Working Interest

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.