

**FEDERAL EXPRESS**

July 16, 2015

Katherine Ross Madera Sharbutt  
408 Bosque  
Tularosa, NM 88352

Re: **Well Proposal – Viking Helmet State Com 1H**  
Sec 29: E/2 E/2 - T24S-R35E  
Sec 32: E/2 NE/4 - T24S-R35E  
SHL: 190' FNL/380' FEL, or a legal location in Sec 29 (Unit A)  
BHL: 2310' FNL/380' FEL, or a legal location in Sec 32 (Unit H)  
Lea County, New Mexico

Dear Sir/Madam:

COG Operating LLC (COG), as Operator, hereby proposes to drill the Viking Helmet State Com No. 1H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 12,432' and a MD of 19,500' to test the Bone Spring Formation ("Operation"). The total cost of the Operation is estimated to be \$11,686,790.00 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 which is enclosed for your review and approval. The Operating Agreement covers Sec 29: E/2 E/2 - T24S-R35E and Sec 32: E/2 NE/4 - T24S-R35E. It has the following general provisions:

- 100/300 Non-Consenting Penalty
- \$7,000/\$700 Drilling and Producing Rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided below, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience.

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

- \$750/Net Mineral Acre
- 3 Yr. Primary Term
- Delivery of an 80% NRI, proportionately reduced (1/5 Royalty)

If you have any questions, please do not hesitate to contact the undersigned at 432-221-0465.

Respectfully,

Mike Wallace  
Senior Landman

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One Concho Center | 600 West Illinois Avenue | Midland, Texas 79701 | P 432.683.7443 | F 432.683.7441

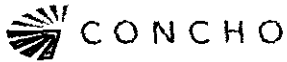
BEFORE THE OIL CONSERVATION DIVISION :

Santa Fe, New Mexico

Case Nos. 15373 & 15374 Exhibit 3

Submitted by: COG OPERATING LLC

Hearing Date: September 17, 2015



\_\_\_\_\_ I/We hereby elect to participate in the Viking Helmet State Com No. 1H.

\_\_\_\_\_ I/We hereby elect not to participate in the Viking Helmet State Com No. 1H.

Company or  
Individual Name: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

WELL NAME: Viking Helmet State Corn 1H	PROSPECT NAME: Bulldog 717008
SHL: 190' FNL/380' FEL	STATE & COUNTY: New Mexico, Lea
BHL: 2310' FNL/380' FEL	OBJECTIVE: Drill and Complete
FORMATION: Bone Spring	DEPTH: 19,500
LEGAL: 29: E/2 E/2 & 32: E/2 NE/4 - T24S-R35E	TVD: 12,432

INTANGIBLE COSTS		BCP	ACP	TOTAL
Time/Curative/Permit	201	11,000		11,000
Insurance	202	4,000	302	4,000
Damages/Right of Way	203	5,000	303	5,000
Survey/State Location	204	7,000	304	7,000
Location/Pits/Road Expense	205	80,000	305 25,000	105,000
Drilling / Completion Overhead	206	8,000	306	8,000
Turnkey Contract	207	0	307	0
Footage Contract	208	0	308	0
Daywork Contract	209	1,035,000	309	1,035,000
Directional Drilling Services	210	221,000	310	221,000
Fuel & Power	211	118,000	311 10,000	128,000
Water	212	54,000	312 728,000	782,000
Blts	213	73,000	313 8,000	81,000
Mud & Chemicals	214	150,000	314 25,000	175,000
Drill Stem Test	215	0	315	0
Coring & Analysis	216	0		0
Cement Surface	217	20,000		20,000
Cement Intermediate	218	40,000		40,000
Cement 2nd Intermediate/Production	219	80,000	319 135,000	215,000
Cement Squeeze & Other (Pickoff Plug)	220	0	320 0	0
Float Equipment & Centralizers	221	10,000	321 25,000	35,000
Casing Crews & Equipment	222	30,000	322 24,000	54,000
Fishing Tools & Service	223	0	323	0
Geologic/Engineering	224	0	324	0
Contract Labor	225	8,000	325 200,000	208,000
Company Supervision	226	0	326	0
Contract Supervision	227	138,000	327 70,000	208,000
Testing Casing/Tubing	228	10,000	328 10,000	20,000
Mud Logging Unit	229	45,000	329	45,000
Logging	230	0	330	0
Perforating/Wireline Services	231	6,000	331 350,000	356,000
Stimulation/Treating		0	332 4,800,000	4,800,000
Completion Unit		0	333 125,000	125,000
Swabbing Unit		0	334	0
Rentals-Surface	235	160,000	335 275,000	435,000
Rentals-Subsurface	236	192,000	336 55,000	247,000
Trucking/Forklift/Rig Mobilization	237	125,000	337 25,000	150,000
Welding Services	238	4,000	338 5,000	9,000
Water Disposal	239	0	339 473,000	473,000
Plug to Abandon	240	0	340	0
Seismic Analysis	241	0	341	0
Closed Loop & Environmental	244	160,000	344 5,000	165,000
Miscellaneous	242	0	342	0
Contingency	243	56,000	343 50,000	106,000
<b>TOTAL INTANGIBLES</b>		<b>2,850,000</b>	<b>7,422,000</b>	<b>10,272,000</b>

TANGIBLE COSTS				
Surface Casing	401	16,000		16,000
Intermediate Casing	402	478,000	503	478,000
Production Casing		0	503 207,000	207,000
Tubing		0	504 65,000	65,000
Wellhead Equipment	405	30,000	505 15,000	45,000
Pumping Unit		0	506 100,500	100,500
Prime Mover		0	507	0
Rods		0	508 55,000	55,000
Pumps		0	509 36,000	36,000
Tanks		0	510 60,000	60,000
Flowlines		0	511 27,800	27,800
Heater Treater/Separator		0	512 54,000	54,000
Electrical System		0	513 36,000	36,000
Packers/Anchors/Hangers	414	0	514 9,000	9,000
Couplings/Fittings/Wires	415	0	515 135,000	135,000
Gas Compressors/Meters		0	516 7,290	7,290
Dehydrator		0	517	0
Injection Plant/CO2 Equipment		0	518	0
Miscellaneous	419	0	519	0
Contingency	420	0	520 50,000	50,000
<b>TOTAL TANGIBLES</b>		<b>625,000</b>	<b>889,790</b>	<b>1,414,790</b>
<b>TOTAL WELL COSTS</b>		<b>3,375,000</b>	<b>8,311,790</b>	<b>11,686,790</b>

COG Operating LLC

Date Prepared: 5/20/15

We approve:  
\_\_\_\_\_% Working Interest

COG Operating LLC

By: Travis Newman

Company: Katherine Ross Madera Sharbut  
By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

This AFE is only an estimate. By signing you agree to pay your share of the actual costs incurred.



**FEDERAL EXPRESS**

July 16, 2015

Working Interest Owners  
Listed on Exhibit "A"

Re: **Well Proposal – Viking Helmet State Com 2H**  
Sec 29: W/2 E/2 - T24S-R35E  
Sec 32: W/2 NE/4 - T24S-R35E  
SHL: 190' FNL/1980' FEL, or a legal location in Sec 29 (Unit B)  
BHL: 2310' FNL/1980' FEL, or a legal location in Sec 32 (Unit G)  
Lea County, New Mexico

Dear Sir/Madam:

COG Operating LLC (COG), as Operator, hereby proposes to drill the Viking Helmet State Com No. 2H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 12,478', a MD of 19,600' and a Pilot Hole TVD of 12,750' to test the Bone Spring Formation ("Operation"). The total cost of the Operation is estimated to be \$12,347,790.00 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 which is enclosed for your review and approval. The Operating Agreement covers Sec 29: W/2 E/2 - T24S-R35E and Sec 32: W/2 NE/4 - T24S-R35E. It has the following general provisions:

- 100/300 Non-Consenting Penalty
- \$7,000/\$700 Drilling and Producing Rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided below, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment.

If you have any questions, please do not hesitate to contact the undersigned at 432-221-0465.

Respectfully,

A handwritten signature in black ink, appearing to read "Mike Wallace".

Mike Wallace  
Senior Landman



\_\_\_\_\_ I/We hereby elect to participate in the Viking Helmet State Com No. 2H.

\_\_\_\_\_ I/We hereby elect not to participate in the Viking Helmet State Com No. 2H.

Company or  
Individual Name: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

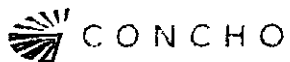


Exhibit "A"

**COG Operating LLC**  
600 West Illinois Ave  
Midland, TX 79701

**Chevron U.S.A., Inc.**  
Mid-Continent Business Unit  
Chevron North America Exploration  
and Production  
1400 Smith St.  
Houston, TX 77002  
Attention: Jason Levine

**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

WELL NAME: Viking Helmet State Com 2H	PROSPECT NAME: Bulldog 717008
SHL: 190' FNL/1980' FEL	STATE & COUNTY: New Mexico, Lea
BHL: 2310' FNL/1980' FEL	OBJECTIVE: Drill and Complete
FORMATION: Bone Spring	DEPTH: 19,600 +PH 12,750
LEGAL: 28: W/2 E/2 & 32: E/2 NE/4 - T24S-R35E	TVD: 12,478

INTANGIBLE COSTS		BCP	ACP	TOTAL
Title/Curative/Permit	201	11,000		11,000
Insurance	202	4,000	302	4,000
Damages/Right of Way	203	5,000	303	5,000
Survey/Stake Location	204	7,000	304	7,000
Location/Pk/Road Expense	205	80,000	305 25,000	105,000
Drilling / Completion Overhead	206	8,000	306	8,000
Turnkey Contract	207	0	307	0
Footage Contract	208	0	308	0
Daywork Contract	209	1,193,000	309	1,193,000
Directional Drilling Services	210	239,000	310	239,000
Fuel & Power	211	138,000	311 10,000	148,000
Water	212	54,000	312 725,000	780,000
Bits	213	82,000	313 9,000	91,000
Mud & Chemicals	214	175,000	314 25,000	200,000
Drift Stem Test	215	0	315	0
Coring & Analysis	216	30,000		30,000
Cement Surface	217	20,000		20,000
Cement Intermediate	218	40,000		40,000
Cement 2nd Intermediate/Production	219	80,000	319 135,000	215,000
Cement Squeeze & Other (Kickoff Plug)	220	45,000	320 0	45,000
Float Equipment & Centralizers	221	10,000	321 25,000	35,000
Casing Crews & Equipment	222	30,000	322 24,000	54,000
Fishing Tools & Service	223	0	323	0
Geologic/Engineering	224	0	324	0
Contract Labor	225	8,000	325 200,000	208,000
Company Supervision	226	0	326	0
Contract Supervision	227	159,000	327 70,000	229,000
Testing Casing/Tubing	228	10,000	328 10,000	20,000
Mud Logging Unit	229	54,000	329	54,000
Logging	230	250,000	330	250,000
Perforating/Wireline Services	231	8,000	331 350,000	358,000
Stimulation/Treating		0	332 4,800,000	4,800,000
Completion Unit		0	333 125,000	125,000
Swabbing Unit		0	334	0
Rentals-Surface	235	180,000	335 275,000	455,000
Rentals-Subsurface	236	235,000	336 55,000	290,000
Trucking/Forklift/Rig Mobilization	237	125,000	337 25,000	150,000
Welding Services	238	4,000	338 5,000	9,000
Water Disposal	239	0	339 473,000	473,000
Plug to Abandon	240	0	340	0
Selamite Analysis	241	0	341	0
Closed Loop & Environmental	244	160,000	344 5,000	165,000
Miscellaneous	242	0	342	0
Contingency	243	89,000	343 50,000	139,000
<b>TOTAL INTANGIBLES</b>		<b>3,511,000</b>	<b>7,422,000</b>	<b>10,933,000</b>

TANGIBLE COSTS				
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Intermediate Casing	402	479,000	503	479,000
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Pumping Unit		0	506 103,500	103,500
Prime Mover		0	507	0
Rods		0	508 85,000	85,000
Pumps		0	509 36,000	36,000
Tanks		0	510 90,000	90,000
Flowlines		0	511 27,000	27,000
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Couplings/Fittings/Valves	415	0	515 135,000	135,000
Gas Compressors/Motors		0	516 7,290	7,290
Dehydrator		0	517	0
Injection Plant/CO2 Equipment		0	518	0
Miscellaneous	419	0	519	0
Contingency	420	0	620 50,000	50,000
<b>TOTAL TANGIBLES</b>		<b>525,000</b>	<b>889,790</b>	<b>1,414,790</b>
<b>TOTAL WELL COSTS</b>		<b>4,036,000</b>	<b>8,311,790</b>	<b>12,347,790</b>

COG Operating LLC

Date Prepared: 5/20/15

We approve:  
\_\_\_\_\_% Working Interest

COG Operating LLC

By: Travis Newman

Company: Chevron U.S.A., Inc.

By:

Printed Name:

Title:

Date:

This AFE is only an estimate. By signing you agree to pay your share of the actual costs incurred.