CONCHO

October 13, 2016

To: **Tonkin Mineral Interests, LLC**
1524 Park Ave SW
Albuquerque, NM 87104

Re: **Well Proposal – Columbus Fee #23H**
Section 34: W/2E/2 - T25S-R33E
SHL: 210' FNL / 1340' FEL (or a legal location in Unit B)
Section 3: W/2E/2 - T26S-R33E
BHL: 50' FSL / 1650' FEL (or a legal location in Unit O)
Lea County, New Mexico

Dear Tonkin Mineral Interests, LLC:

COG Operating LLC (COG), as Operator, proposes to drill the Columbus Fee #23H horizontal well at the above-captioned location as approved by the governing regulatory agency to a TVD of approximately 12,451' and a MD of 23,270' to test the **Wolfcamp Formation** ("Operation"). The total cost of the Operation is estimated to be $12,489,051.00 and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

Please indicate your participation election in the space provided below, sign and return a copy of 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 at the terms previously delivered.

If you have any questions, please do not hesitate to contact the undersigned at 432-818-2214 or bcason@concho.com.

Respectfully,

Bryce Cason
Landman

____________ I/We hereby elect to participate in the Columbus Fee #23H.

____________ I/We hereby elect ***not*** to participate in the Columbus Fee #23H.

Company or
Individual Name: Tonkin Mineral Interests, LLC

By: ____________________

Name: ____________________

Title: ____________________

Date: ____________________

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. 4 – Case Nos. 15609
Submitted by: **COG Operating LLC**
Hearing Date: January 5, 2017

COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING

WELL NAME:	**COLUMBUS FEE #23H**	PROSPECT NAME:	BULLDOG 2533 (717043)
SHL:	SEC 34: 210' FNL & 1340' FEL	STATE & COUNTY:	New Mexico, Lea
BHL:	SEC 3: 50' FSL & 1650' FEL	OBJECTIVE:	DRILL & COMPLETE
FORMATION:	WOLFCAMP	DEPTH:	23,270 PH: 12750
LEGAL:	34-25S-33E 3-26S-33E	TVD:	12,451

INTANGIBLE COSTS		Drlg - Rig Release(D)		Completion(C)		Tank Btty Constrctn(TB)		Pmpg Equipment(PEQ)	TOTAL
Title/Curative/Permit	201	11,000							11,000
Insurance	202	4,000	302						4,000
Damages/Right of Way	203	5,000	303		351				5,000
Survey/Stake Location	204	6,000			352				6,000
Location/Pits/Road Expense	205	130,000	305	203,648	353	85,000	366		418,648
Drilling / Completion Overhead	206	11,100	306						11,100
Turnkey Contract	207	0	307						0
Footage Contract	208	0	308						0
Daywork Contract	209	626,000	309						626,000
Directional Drilling Services	210	229,000	310						229,000
Fuel & Power	211	86,000	311	5,000	354		367		91,000
Water	212	66,833	312	867,000			368		933,833
Bits	213	128,400	313	4,500			369		132,900
Mud & Chemicals	214	160,000	314	25,000			370		185,000
Drill Stem Test	215	0	315						0
Coring & Analysis	216	30,000							30,000
Cement Surface	217	28,000							28,000
Cement Intermediate	218	40,000							40,000
Cement 2nd Intermediate/Production	219	80,000							80,000
Cement Squeeze & Other (Kickoff Plug)	220	55,000					371		55,000
Float Equipment & Centralizers	221	17,800							17,800
Casing Crews & Equipment	222	50,000							50,000
Fishing Tools & Service	223	0	323				372		0
Geologic/Engineering	224	0	324		355		373		0
Contract Labor	225	5,500	325	8,200	356	90,000	374		103,700
Company Supervision	226	66,600	326	30,000	357		375		96,600
Contract Supervision	227	108,000	327	85,000	358		376	5,000	198,000
Testing Casing/Tubing	228	20,000	328	10,000			377		30,000
Mud Logging Unit	229	41,000	329						41,000
Logging	230	235,000					378		235,000
Perforating/Wireline Services	231	4,000	331	393,000			379		397,000
Stimulation/Treating			332	3,364,000			380		3,364,000
Completion Unit			333	138,000			381	7,000	145,000
Swabbing Unit			334				382		0
Rentals-Surface	235	208,000	335	315,000	359		383	6,000	529,000
Rentals-Subsurface	236	150,000	336	75,000			384		225,000
Trucking/Forklift/Rig Mobilization	237	140,000	337	20,000	360		385	5,000	165,000
Welding Services	238	4,000	338	5,000	361		386		9,000
Water Disposal	239	0	339	150,000	362	469,000	387		619,000
Plug to Abandon	240	0	340						0
Seismic Analysis	241	0	341						0
Miscellaneous	242	0	342				389		0
Contingency	243	56,000	343	125,000	363		390		181,000
Closed Loop & Environmental	244	203,000	344	5,000	364		388		208,000
Coil Tubing			346	750,000					750,000
Flowback Crews & Equip			347	96,000					96,000
Offset Directional/Frac	248	0	348						0
TOTAL INTANGIBLES		3,005,233		6,676,348		644,000		23,000	10,348,581

TANGIBLE COSTS		Drlg - Rig Release(D)		Completion(C)		Tank Btty Constrctn(TB)		Pmpg Equipment(PEQ)	TOTAL
Surface Casing	401	45,000							45,000
Intermediate Casing	402	418,000							418,000
Production Casing/Liner	403	388,000							388,000
Tubing			504	43,000			530		43,000
Wellhead Equipment	405	65,000	505	20,000			531	3,000	88,000
Pumping Unit				0			506	100,470	100,470
Prime Mover				0			507		0
Rods				0			508	45,000	45,000
Pumps-Sub Surface (BH)			509				532	8,000	8,000
Tanks					510	90,000			90,000
Flowlines					511	80,000			80,000
Heater Treater/Separator					512	180,000			180,000
Electrical System					513	80,000	533		80,000
Packers/Anchors/Hangers	414	0	514	6,000			534		6,000
Couplings/Fittings/Valves	415	0			515	260,000			260,000
Dehydration					517				0
Injection Plant/CO2 Equipment					518				0
Pumps-Surface					521	60,000			60,000
Instrumentation/SCADA/POC					522		529	4,000	4,000
Miscellaneous	419	0	519		523		535		0
Contingency	420	0	520		524		536		0
Meters/LACT					525	75,000			75,000
Flares/Combusters/Emission					526	110,000			110,000
Gas Lift/Compression			527	15,000	516	45,000	528		60,000
TOTAL TANGIBLES		916,000		84,000		960,000		160,470	2,140,470
TOTAL WELL COSTS		3,921,233		6,760,348		1,624,000		183,470	12,489,051
% of Total Well Cost		31%		54%		13%		1%	

COG Operating LLC

____

Date Prepared: 10/11/2016

COG Operating LLC

We approve:
_____% Working Interest

By: TIM SMITH ______________________ KG

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.