

**COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
DRILLING**

WELL NAME: Tarpan 33 Fee #3H	PROSPECT NAME: Lakewood
Surf. 150' FSL, 1700' FWL, Section 33	STATE & COUNTY: New Mexico, Eddy
BHL. 380' FNL, 1700" FWL, Section 33	OBJECTIVE: 8415' MD, (4000' TVD) Yeso Test
T18S, R26E	

INTANGIBLE COSTS	BCP	ACP	TOTAL
Title/Curative/Permit	201 10,000	0	10,000
Insurance	202 22,000	302 0	22,000
Damages/Right of Way	203 15,000	303 0	15,000
Survey/Stake Location	204 3,000	304 0	3,000
Location/Pits/Road Expense	205 50,000	305 15,000	65,000
Drilling / Completion Overhead	206 5,000	306 1,000	6,000
Turnkey Contract	207 0	307 0	0
Footage Contract	208 0	308 0	0
Daywork Contract: 16 DAYS BCP / 3 DAYS ACP	209 224,000	309 42,000	266,000
Directional Drilling Services	210 175,000	310 0	175,000
Fuel & Power	211 48,000	311 9,000	57,000
Water	212 24,000	312 60,000	84,000
Bits	213 50,000	313 5,000	55,000
Mud & Chemicals	214 50,000	314 0	50,000
Drill Stem Test	215 0	315 0	0
Coring & Analysis	216 0	0 0	0
Cement Surface	217 20,000	0 0	20,000
Cement Intermediate	218 24,300	0 0	24,300
Cement Production 5-1/2"	218 0	319 21,135	21,135
Cement Squeeze & Other (Kickoff Plug)	220 0	320 0	0
Float Equipment & Centralizers	221 4,000	321 25,000	29,000
Casing Crews & Equipment	222 12,000	322 15,000	27,000
Fishing Tools & Service	223 0	323 0	0
Geologic/Engineering	224 10,000	324 1,000	11,000
Contract Labor	225 20,000	325 21,000	41,000
Company Supervision	226 2,000	326 2,000	4,000
Contract Supervision	227 25,600	327 4,800	30,400
Testing Casing/Tubing	228 5,000	328 12,000	17,000
Mud Logging Unit	229 20,000	329 0	20,000
Logging	230 25,000	330 0	25,000
Perforating/Wireline Services	231 3,500	331 0	3,500
Stimulation/Treating	0 0	332 1,300,000	1,300,000
Completion Unit	0 0	333 24,000	24,000
Swabbing Unit	0 0	334 0	0
Rentals-Surface	235 27,200	335 75,000	102,200
Rentals-Subsurface	236 41,600	336 10,000	51,600
Trucking/Forklift/Rig Mobilization	237 45,000	337 20,000	65,000
Welding Services	238 5,000	338 2,500	7,500
Water Disposal	239 0	339 15,000	15,000
Plug to Abandon	240 0	340 0	0
Selsmic Analysis	241 0	341 0	0
Closed Loop & Environmental	244 76,000	344 0	76,000
Miscellaneous	242 5,000	342 1,000	6,000
Contingency	243 105,800	343 169,565	275,365
TOTAL INTANGIBLES	1,153,000	1,851,000	3,004,000

TANGIBLE COSTS	BCP	ACP	TOTAL
Surface Casing	401 15,000	0	15,000
Intermediate Casing	402 25,000	503 0	25,000
Production Casing/Liner	0	503 178,000	178,000
Tubing	0	504 23,000	23,000
Wellhead Equipment	405 8,000	505 15,000	23,000
Pumping Unit	0	506 40,000	40,000
Prime Mover	0	507 20,000	20,000
Rods	0	508 16,000	16,000
Pumps	0	509 10,000	10,000
Tanks	0	510 21,000	21,000
Flowlines	0	511 8,000	8,000
Heater Treater/Separator	0	512 30,000	30,000
Electrical System	0	513 11,250	11,250
Packers/Anchors/Hangers	414 0	514 335,000	335,000
Couplings/Fittings/Valves	415 2,500	515 45,000	47,500
Gas Compressors/Meters	0	516 14,500	14,500
Dehydrator	0	517 0	0
Injection Plant/CO2 Equipment	0	518 0	0
Miscellaneous	419 1,000	519 20,000	21,000
Contingency	420 6,500	520 79,250	85,750
TOTAL TANGIBLES	58,000	866,000	924,000
TOTAL WELL COSTS	1,211,000	2,717,000	3,928,000

COG Operating LLC

By: Jennifer Johns

Date Prepared: 4/10/2012

We approve:
_____% Working Interest

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.

April 10, 2012

Oxy Y-1
P.O. Box 4294
Houston, TX 77210-4294
Attn: Katie Almeida

***U.S. Certified Mail
Return Receipt Requested***

RE: **New Well Proposal**
Tarpan "33" Fee #3H
SL: 150' FSL & 1700' FWL (Unit N) of Section 33, T18S, R26E
BHL: 380' FNL & 1700' FWL (Unit C) of Section 33, T18S, R26E
Eddy County, New Mexico

Dear Mr. Moran:

COG Operating LLC ("COG") proposes to drill the Tarpan "33" Fee #3H at the captioned location, or at an approved surface location within Unit Location N, with a landing point of the lateral at approximately 4,000' TVD, 8,415' MD, to test the Yeso Formation ("Operation"). The total cost of the Operation is estimated to be \$3,928,000 and a detailed description of such cost is set out in the enclosed Authority for Expenditure ("AFE"). These costs include the drilling of a pilot hole which may be determined at a later date to be unnecessary. The approximate spud date for the Tarpan 33 Fee #3H is August 22nd, 2012.

Also enclosed is COG's proposed form of Operating Agreement ("OA"). A completed version of the Exhibit "A" to be incorporated into the OA will follow under separate cover, accompanied by a fully executed set of signature pages.

If you elect to participate in the subject well, please sign and return a copy of the AFE to the below letterhead address.

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 Chad Elliott at 432-818-2338 and land questions to the undersigned at 432-221-0465.

Yours truly,

COG Operating, LLC

Mike Wallace
Senior Landman

Enclosure (s)