1a. TTPE OF WORK DRI b. TIPE OF WELL OIL 0.L WELL 2. NAME OF OPERATION COG OPERATING 3. ADDRESS AND TELEPHONENO. 550 WEST TEXA: 4. LOCATION OF WELL (ReAt surface)		LAND MANA	GEMEI DRIL	NT OCD HO	<u> </u>	Expires: February 28, 1995 5. LEASE DEBIGNATION AND BERIAL NO. NM- 85937 6. IF INDIAN, ALLOTIES OF TRIBE NAME
1a. TTPE OF WORK DRI b. TIPE OF WELL OIL 0.L WELL 2. NAME OF OPERATION COG OPERATING 3. ADDRESS AND TELEPHONENO. 550 WEST TEXA: 4. LOCATION OF WELL (ReAt surface)		ERMIT TO	DRIL	L OR DEEPEN	<u> </u>	NM- 85037
1a. TTPE OF WORK DRI b. TIPE OF WELL OIL 0.L WELL 2. NAME OF OPERATION COG OPERATING 3. ADDRESS AND TELEPHONENO. 550 WEST TEXA: 4. LOCATION OF WELL (ReAt surface)						0. IF INDIAN, ALLOTTER OR TRIBE NAME
DRI b. TIPE OF WELL OIL WELL KN W 2. NAME OF OPERATOR COG OPERATING 3. ADDRESS AND TELEPHONENO. 550 WEST TEXAS 4. LOCATION OF WELL (Re At surface	AS OTHER	DEEPEN				
WELL KX W 2. NAME OF OPERATOR COG OPERATING 3. ADDRESS AND TELEPHONENO. 550 WEST TEXA: 4. LOCATION OF WELL (Re At surface	ILL OTHIR			SECRETARY	S POTA	GTTE UNIT AGREEMENT NAME
COG OPERATING 3. ADDRESS AND TELEPHONENO. 550 WEST TEXA: 4. LOCATION OF WELL (Re At surface	, LLC. ()			INGLE XX MUL		S. FARM OR LEASE NAME WELL NO. 34806
550 WEST TEXA: 4. LOCATION OF WELL (Re At surface		ERICK NELSO	N) (4	432-683-7443	いっか	PROHIBITION "12" FED. # 10
At sufface	S AVENUE SUITE	1300 MIDLAN	 Φ, Τ	EXAS 79701	<u> </u>	30-025-37819 10. FIELD AND POOL OF WILDOL-
1980' FSI. & 19	port location clearly and	in accordance wi	th any 1	State requirements.*)		RED TANK-BONE SPRING
At proposed prod. zone	980' FWL SECTION SAME	12 T22S-I	R32E	LEA CO. NM		11. SEC., T., B., M., OE BLK. AND SURVEY OR AREA
14. DISTANCE IN MILES A			Un	it K		SECTION 12 T22S-R32E
		·				12. COUNTY OF PARISH 13. BTATE LEA CO. NM
Approximately 13. DISTANCE FROM PROPUS LOCATION TO NEAREST	40 miles South	west of Hob		NEW MEXICO	1 17. 80.	PER CO. NM NEW MEXICO
PROPERTY OR LEASE LI (Also to Dearest drig.	NE, FT. . ualt line, if any)	1980'	-,	640		HIS WILL 40
13. DISTANCE FROM FROM TO NEAREST WELL, DR	SED LOCATION"		19. гн	OPOSED DEPTH	20. ROTA	AU ALLA TOOLS
OR APPLIED FOR, ON THIS	B LEASE, FT.	1320'		8900'	•	ROTARY
21. ELEVATIONS (Show whet	ther DF, RT, GR, etc.)	3637' GR.				22. APPROX. DATE WORK WILL START* WHEN APPROVED
23.		PROPOSED CASE	NG ANE	CEMENTING PROGR	AM	ed Contrelled Water Besta
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FO	507	SETTING DEPTH		QUANTITY OF CENENT
26"	Conductor	NA		40'	Cement	to surface with Redi-mix
	<u>H-40 13 3/8"</u>	48#		950'		x. circulate cement
	<u>ICK/J-55 8 5/8''</u> N-80 5½''	<u> </u>		<u> 4700' </u>		Sx circulate cement
		<u>_</u>		6900	1 200 2	x. Estimate TOC 6000'±
<pre>Redi-mix. 2. Drill 17½" h with 700 Sx. Class "C" ce 3. Drill 11" ho Cement with 200 Sx. of C 4. Drill 7 7/8" with 500 Sx. 6000'± from WW</pre>	of 35/65 POZ (ment + 2% CaCl, le to 4700'. Ru 1000 Sx. of Cla lass "C" cement hole to 8900'. of Class "H" F surface. itmess Surface (PROPOSED PROGRAM: 10	In and set f Class "C" co + ½ # Floce In and set 4 In and set 4 In and set 4 In and set Run and set Run and set Temimum Plu Casing	950' ement ele/S 4700' nt We , cir et 89 15 ce	of 13 3/8" 48; + additives, 5x., circulate of 8 5/8" 32; ight Cement + culate cement 00' of 5}" 17; mappional it; GENERAL RE	H-40 S tail in cement J-55/H additiv to surf N-80 L N-80 L DUIREN	CK STREELED OF es, tail in with ace. T&C casing. Cement imate top of cement
SIGNER R.	o T. far	nca	_e A	gent		DATE 02/02/06
(This space for Federal	or State office use)		į			
PERMIT NO.	~		^	PPROVAL DATX	<u></u>	
		zant holds legal or equi	table title	to those rights in the subject	lense which wou	ild entitle the applicant to conduct operations thereon.
CONDITIONS OF APPROVAL IF	nda S. C. Runde		STAT	re directo		APR 1 0 2006 DVAL FOR 1 YEAR

]

DISTRICT I					State of Ne	w Mexico			
SZS N. PRENCE DR.,	HOBBS, NM 60	3240		Energy.	Minerals and Natural	Resources Department		7	'orm C-
)ISTRICT II 301 W. GRAND AVENU	B, ARTESIA, NA	68210	OIL			ON DIVIS FRANCIS DR.	ION Subm	Revised J Revised J Nit to Appropriate D State Lease	UNE 10.
DISTRICT III 000 Rio Brazos I	Rd., Aztec, N	M 87410				exico 87505		Fee Lease	e - 3 Co
DISTRICT IV 220 S. ST. FRANCES	DR., SANTA PE, Number	NM 87505	WELL LO		AND ACREA	GE DEDICATI		amendi	ED REPO
30-07		8.9	5168	Pool Code		RED TANK-BONE	Pool Name		
Property					Property Nan	he lite	STRING	Well Num	aber
34806				PROHH	BITION "12	" FEDERAL		10	
OGRID N	0.			CO(Operator Nam			Elevatio	
229137		<u>i.</u>			G OPERATIN			3637	7′
		r			Surface Loc				
UL or lot No. K	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
n.	12	22-S	32-E		1980	SOUTH	1980	WEST	
		· · · · · ·	Bottom	Hole Loo	cation If Diffe	erent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acre	s Joint o	or Infill Co	nsolidation	Code Or	der No.				
10				•					
40					·····				
	WABLE V	VILL BE AS	SSIGNED	TO THIS	COMPLETION U	INTIL ALL INTER	RESTS HAVE BI	EEN CONSOLIDA	ATED
	WABLE V	VILL BE AS OR A N	SSIGNED ION-STAN	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	INTIL ALL INTER APPROVED BY	RESTS HAVE BI THE DIVISION	EEN CONSOLIDA	ATED
	WABLE V	VILL BE AS OR A N	SSIGNED ION-STAN	TO THIS NDARD UN	COMPLETION U	INTIL ALL INTER APPROVED BY	THE DIVISION		
)WABLE V	VILL BE AS OR A N	SSIGNED ION-STAN	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	JNTIL ALL INTER APPROVED BY	THE DIVISION	DR CERTIFICAT	TION
	DWABLE V	VILL BE AS OR A N	SSIGNED ION-STAN	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	JNTIL ALL INTEH APPROVED BY	THE DIVISION)R CERTIFICAT y certify the the inj n is true and comple	CION formation
)WABLE V	VILL BE AS OR A N	SSIGNED	 TO THIS NDARD UN 	COMPLETION UNIT HAS BEEN	JNTIL ALL INTEH	THE DIVISION	OR CERTIFICAT	CION formation
)WABLE V	VILL BE AS OR A N	SSIGNED	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	JNTIL ALL INTEH	THE DIVISION)R CERTIFICAT y certify the the inj n is true and comple	CION formation
)WABLE V	VILL BE AS OR A N	SSIGNED	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	JNTIL ALL INTEH APPROVED BY	THE DIVISION OPERATO I hereb contained herei best of my know)R CERTIFICAT y certify the the inj n is true and comple	CION formation
)WABLE V	VILL BE AS OR A N	SSIGNED	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	JNTIL ALL INTEH	THE DIVISION)R CERTIFICAT y certify the the inj n is true and comple	CION formation
)WABLE V	VILL BE AS OR A N	SSIGNED	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	JNTIL ALL INTEH	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T.	DR CERTIFICAT y certify the the in, n is true and comple whedge and belief. The formation of the second true of the second	CION formation
)WABLE V	VILL BE AS OR A N	SSIGNED	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	JNTIL ALL INTER	THE DIVISION OPERATO I hereb contained herei best of my know Signature	DR CERTIFICAT y certify the the in, n is true and comple whedge and belief. The formation of the second true of the second	CION formation
)WABLE V	VILL BE AS OR A N	SSIGNED	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	JNTIL ALL INTEH	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T Printed Nam	DR CERTIFICAT y certify the the in, n is true and comple whedge and belief. The formation of the second true of the second	CION formation
)WABLE V	VILL BE AS OR A N	SSIGNED	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	JNTIL ALL INTEH	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T. Printed Nam Agent Title 02/0	OR CERTIFICAT ny certify the the in, n is true and comple- weedge and betief. The formation of the second lanica	CION formation
)WABLE V	VILL BE AS OR A N	SSIGNED	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	JNTIL ALL INTEH	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T. Printed Nam Agent Title	OR CERTIFICAT ny certify the the in, n is true and comple- weedge and betief. The formation of the second lanica	CION formation
)WABLE V	VILL BE AS OR A N	SSIGNED	TO THIS NDARD UN	COMPLETION UNIT HAS BEEN	JNTIL ALL INTEH	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T. Printed Nam Agent Title 02/0 Date	OR CERTIFICAT ny certify the the in, n is true and comple- weedge and betief. The formation of the second lanica	TION formation ste to the
)WABLE V	VILL BE AS OR A N		TO THIS NDARD UN	IIT HAS BEEN	APPROVED BY .	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T Printed Nam Agent Title 02/0 Date SURVEYO	DR CERTIFICAT y certify the the in, n is true and comple- wedge and belief. Janica 2/06 DR CERTIFICAT	TION formation ste to the
)WABLE V	OR A N 	37 3636.0'	TO THIS NDARD UN	COMPLETION ON THAS BEEN	APPROVED BY	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T Printed Nam Agent Title 02/0 Date SURVEYO I hereby certify on this plat w	DR CERTIFICAT ny certify the the in, n is true and comple- wledge and belief. Ianica 2/06 DR CERTIFICAT y that the well location as plotted from field	TION formation sete to the construction TION for shown t notes of
)WABLE V	OR A N	37 	TO THIS NDARD UN	IT HAS BEEN	APPROVED BY	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T Printed Nam Agent Title 02/0 Date SURVEYO I hereby certify on this plat w actual surveys	DR CERTIFICAT ny certify the the iny n is true and comple- whedge and betief. Ianica 2/06 DR CERTIFICAT y that the well location	TION formation sete to the construction TION for shown under m
)WABLE V	OR A N 	37 3636.0'	TO THIS NDARD UN	IT HAS BEEN	APPROVED BY '	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T Printed Nam Agent Title 02/0 Date SURVEYO I hereby certiff on this plat uw actual surveys Supervison an	DR CERTIFICAT ny certify the the iny n is true and comple- whedge and betief. Ianica e 2/06 DR CERTIFICAT y that the well location as plotted from field made by me or	TION formation sete to the definition TION ion shown i notes of under m true on
		OR A N NM-859 3641.5' 600	37 37 3636.0'	TO THIS NDARD UN	IT HAS BEEN	APPROVED BY RDINATES VME .5 N .2 E	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T. Printed Nam Agent Title 02/0 Date SURVEYO I hereby certify on this plat w actual surveys supervison ar correct to th	OR CERTIFICAT y certify the the in, n is true and comple- whedge and belief.	TION formation sete to the definition TION ion shown i notes of under m true on
		OR A N 	37 		IT HAS BEEN	APPROVED BY '	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T. Printed Nam Agent Title 02/0 Date SURVEYO I hereby certify on this plat w actual surveys supervison ar correct to th	DR CERTIFICAT ny certify the the in, n is true and comple- wledge and belief. Ianica 2/06 DR CERTIFICAT y that the well location as plotted from field made by me or withat the same is a best of my belief UARY 5, 2006	TION formation sete to the definition 'ION ion shown i notes of under my true on
		OR A N NM-859 3641.5' 600	37 37 3636.0'		TIT HAS BEEN	APPROVED BY '	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T Printed Nam Agent Title 02/0 Date SURVEYO I hereby certiff on this plat we actual surveys supervison ar correct to th JANI Date Surveys	OR CERTIFICAT y certify the the in; n is true and comple- whedge and belief.	TION formation sete to the construction TION ion shown inners of under my frue and
		OR A N NM-859 3641.5' 600 3643.8'	37 		TIT HAS BEEN	APPROVED BY '	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T Printed Nam Agent Title 02/0 Date SURVEYO I hereby certiff on this plat un actual surveys supervison an correct to th JANI Date Surveyse	OR CERTIFICAT y certify the the in; n is true and comple- whedge and belief.	TION formation sete to the construction tion shown index of under m frue an
		OR A N NM-859 3641.5' 600	37 		TIT HAS BEEN	APPROVED BY '	THE DIVISION OPERATO I hereb contained herei best of my know Signature Joe T Printed Nam Agent Title 02/0 Date SURVEYO I hereby certiff on this plat we actual surveys supervison ar correct to th JANI Date Surveys	OR CERTIFICAT y certify the the in, n is true and comple- whedge and belief.	TION formation ete to the definition of the TION ion shown t notes of under my true and r. RZB
		OR A N NM-859 3641.5' 600 3643.8'	37 		TIT HAS BEEN	APPROVED BY '	THE DIVISION OPERATO I hereb contained herei best of my known Signature Joe T Printed Nam Agent Title 02/0 Date SURVEYO I hereby certiff on this plat we act wal surveys supervison ar correct to th JANI Date Surveys Signature & Professional	DR CERTIFICAT y certify the the in; n is true and comple- whedge and belief.	TION formation sete to the construction TION ion shown index of under my frue on c
		OR A N NM-859 3641.5' 600 3643.8'	37 		TIT HAS BEEN	APPROVED BY '	THE DIVISION OPERATO I hereb contained herei best of my known Signature Joe T Printed Nam Agent Title 02/0 Date SURVEYO I hereby certified on this plat we actual surveyse supervision ar correct to the JANN Date Surveyse Signature & Professional Bawy	DR CERTIFICAT y certify the the in, n is true and comple- whedge and belief.	TION formation ete to the decent TION ion shown t notes of under my true an r. RZB
		OR A N NM-859 3641.5' 600 3643.8'	37 		TIT HAS BEEN	APPROVED BY '	THE DIVISION OPERATO I hereb contained herei best of my known Signature Joe T Printed Nam Agent Title 02/0 Date SURVEYO I hereby certified on this plat we actual surveyse supervision ar correct to the JANN Date Surveyse Signature & Professional Bawy	DR CERTIFICAT y certify the the iny n is true and completion wedge and belief.	TION formation ete to the decent TION ion shown t notes of under my true an r. RZB

EXHIBIT "A"



LOCATION VERIFICATION MAP

V



VICINITY MAP



SCALE: 1'' = 2 MILES

SEC. <u>12</u> TWP.<u>22–S</u> RGE. <u>32–E</u> SURVEY______N.M.P.M. COUNTY______LEA DESCRIPTION <u>1980' FSL & 1980' FWL</u> ELEVATION <u>3637'</u> OPERATOR <u>COG OPERATING, LLC</u> LEASE <u>PROHIBITION "12" FEDERAL</u>

7

, . 1



APPLICATION TO DRILL

COG OPERATING, LLC. PROHIBITION "12" FEDERAL # 10 UNIT "K" SECTION 12 T22S-R32E LEA CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

- 1. Location of well: 1980' FSL & 1980' FWL SECTION 12 T22S-R32E LEA CO. NM
- 2. Ground Elevation above Sea Level: 3736' GR.
- 3. Geological age of surface formation: Quaternary Deposits:
- 4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.
- 5. Proposed drilling depth: 8900'
- 6. Estimated tops of geological markers:

Rustler Anhydrite	930'	Delaware	4850'
Salt	1220'	Bone Spring	8700'

7. Possible mineral bearing formations:

Bone Spring 0il

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
26''	0-40'	20''	NA	NA	NA	Conductor
17½"	0-950'	13 3/8"	48#	8-R	ST&C	H-40
11"	0-4700'	8 5/8".	32#	8-R	ST&C	J-55/НСК
7 7/8"	0-8900'	512"	17#	8-R.	LT&C	N-80

APPLICATION TO DRILL

COG OPERATING, LLC. PROHIBITION "12" FEDERAL # 10 UNIT "K" SECTION 12 T22S-R32E LEA CO. NM

9. CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface Redi-mix.
13 3/8"	Surface	Set 950' of 13 3/8" 48# H-40 ST&C casing. Cement with 700 Sx. of 35/65 Class "C" POZ + additives, tail in with 200 Sx. of Class "C cement + 2% CaCl, circulate cement to surface.
8 5/8"	Intermediate	Set 4700' of 8 5/8" 32# HCK/J-55 ST&C casing. Cement 1000 Sx. of Class "C" Light Cement + additives, tail in with 200 Sx. of Class "C" cement + 1% CaCl, circulate cement to surface.
5 <u>1</u> "	Produxtion	Set 8900' of $5\frac{1}{2}$ " 17# N-80 LT&C casing. Cement with 500 Sx. of Class "H" Premium Plus cement + additives estimate top of cement 6000' from surface.

10. <u>PRESSURE CONTROL EQUIPMENT:</u> Exhibit "E" shows a 900 Series 3000 PSI working pressure B.O.P., consisting of an annular bag type preventor, middle blind rams and bottom pipe rams. The B.O.P. will be nippled up on the 8 5/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 2" 3000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SISTEM
40-950'	8.4-9.0	28-35	NC	Fresh water Spud mud add paper to control seepage.
950-4700'	10.0-10.2	28-35	NC	Brine water mud system add paper for seepage add lime for PH control use high viscosity sweeps to clean hole.
4700-8400 '	8.5-8.7	29-38	NC	Fresh water use paper to control seepage and high viscosity sweeps to clean hole.
8400-8900'	8.5-8.7	32-34	25 cc or less	Same as above add starch to reduce water loss,use high viscosity sweeps to clean hole.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's , open hole logs, and casing viscosity and/or water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

COG OPERATING, LLC. PROHIBITION "12" FEDERAL # 10 UNIT "K" SECTION 12 T22S-R32E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Induction, SNP, LDT, MSFL, Gamma Ray, and Caliper from TD back to 4700'.(8 5/8" casing shoe), run Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.
- B. No DST's or cores are planned at this time.
- C. Mud logger may be rigged up on hole at 4700' and remain on hole to TD.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H^2S in this area. If H^2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP <u>4250</u> PSI, and

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take <u>28</u> days. If production casing is run then an additional <u>30</u> days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The <u>Bone Spring</u> formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

....

- 1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of HoS
 - B. Physical effects and hazzards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H2S detectors, warning system and briefing areas.

 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
- 2. H_2S Detection and Alarm Systems
 - A. H2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- 3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
- 4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.
- 5. Well control equipment
 - A. See exhibit "E"
- 6. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
- 7. Drillstem Testing
 - A. Exhausts will be watered.
 - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - C. If location is near any dwelling a closed D.S.T. will be performed.

13-A ,

·····

- 8. Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.
- 9. If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H₂S scavengers if necessary.

13-A'

•.•

SURFACE USE PLAN

COG OPERATING LLC. PROHIBITION "12" FEDERAL # 10 UNIT "K" SECTION 12 T22S-R32E LEA CO. NM

- EXISTING ROADS & PROPOSED ROADS: Area maps; Exhibit "B" is a reproduction of a County General Hi-way Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the proposed well site as staked.
 - B. From Hobbs New Mexico take U.S. Hi-way 62-180 toward Carlsbad New Mexico go approximately 38 miles to mile post 67, turn South on Co Road C-29 go 14 miles to Mills Ranch Road, turn Left (East) follow lease road East & Northeast for approximately 7 miles, turn North on lease road 1.2 miles, turn Right (East) go l mile to location.
 - C. Exhibit "C" shows proposed roads, powerlines and flowlines that will be required to produce these wells.

2. PLANNED ACCESS ROADS: Approximately 1200' of new road will be constructed.

- A. The access roads will be crowned and ditched to a 12' wide travel surface with a 40' Right-of-Way.
- B, Gradient of all roads will be less than 5.00%.
- C. If turn-outs are necessary they will be constructed.
- D. If needed roads will be surfaced with a mimimum of 4" of caliche. This material will be obtained from a local source.
- E. Center-line for new roads will be flagged. Earth-work will be will be done as field conditions require.
- F. Culverts will be placed in the access road if they are necessary. The roads will be constructed to utilaze low water crossings for drainage as required by topography.
- 3. LOCATIONS OF EXISTING WELLS IN A ONE MILE RADIUS. EXHIBIT "A-1"
 - A. Water wells One approximately 1.25 miles Southwest of location
 - B. Dispusal wells One approximately .9 miles west of location.
 - C. Drilling wells None known
 - D. Producing wells As shown on Exhibit "A-1"
 - E. Abandoned wells As shown on Exhibit "A-1"

COG OPERATING LLC. PROHIBITION "12" FEDERAL # 10 UNIT "K" SECTION 12 T22S-R32E LEA CO. NM

4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Possible routes of pipelines, flowlines and powerlines are shown on Exhibit "C".

5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped to location in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction material will be obtained from the excavation of drill site, if additional material is needed it will be obtained from a local source and transported over the access roads as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE MATERIAL:

A. Drill cuttings will be disposed of in the reserve pits.

- B. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by the supplier, including broken sacks.
- D. Waste water from living quaters will be drained into holes with a minium of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-John will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for furthed drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pips will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

8. ANCILLARY FACILITIES:

A. No camps or air strips will be constructed on location.

COG OPERATING LLC. PROHIBITION "12" FEDERAL # 10 UNIT "K" SECTION 12 T22S-R32E LEA CO. NM

- 9. WELL SITE LAYOUT:
 - A. Exhibit "D" shows the proposed well site layout.
 - B. This Exhibit shows the location of reserve pit, sump pits, and living facilities.
 - C. Mud pits in the active circulating system will be steel pits and the reserve pits will be unlined unless subsurface conditions encontered during pit construction indicate that a plastic liner is required to contain lateral migration.
 - D. If needed the reserve pits will be lined with polyethelene. The pit liner will be no less than 6 mils thick and the liner will be extended at least 3 feet over the top of the dikes and secured in place to keep edge of liner in place.
 - E. The reserve pit will be fenced on three sides and fenced with four strands of barbed wire during drilling and completionphases. The 4th side will be fenced after drilling operations are complete and the drilling rig has moved out. If the well is a producer the mud pits will remain fenced in until the mud has dried up enough to break out the pits and reclaimed according to BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE:

Rehabilitation of the location and reserve pits will be allowed to dry properly, fluids may be moved and disposed of in accordance with article 7-E as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any will be reshaped to the original configuration with provisions made to alleviate furture erosion. In case of the well completed as a producer the drilling pad will be necessary to construct production facilities. After the area has been shaped and contoured top soil from the spoil pile will be placed over the disturbed area to the extent possible so that revegetation procedures can be accomplished to comply with the BLM specifications.

If the well is a dry hole the pad and road area will be contoured to match the existing terrain. Top soil will be spread to the extent possible and revegetation will be carried out according to the BLM specifications.

Should the well be a producer the previously noted procedures will apply to those areas which are not required for production facilities.

SURFACE USE PLAN

COG OPERATING LLC. PROHIBITION "12" FEDERAL # 10 UNIT "K" SECTION 12 T22S-R32E LEA CO. NM

11. OTHER INFORMATION:

- A. Topography consists of low lying sand dunes with a low dip to the South-East general strike trending Northeast-Southwest. Vegetation consists of meaquite, snake weed, limited shinnery, and native grasses.
- B. The surface is owned by The U.S. Depratment of Interior and is administered by tThe Bureau of Land Management. The Surface is used to graze livestock and for the production of oil & gas.
- C. An archaeological survey will be conducted and the results will be filed with The Bureau of Land Management Carlsbad Field office in Carlsbad NM.
- D. There are no domestic dwellings located within one mile of the location.

12. OPERATORS REPRESENTIVE:

Before construction:

TIERRA EXPLORATION, INC. P.O. BOX 2188 HOBBS, NEW MEXICO 88241 JOE T. JANICA OFFICE PHONE 505-391-8503 During and after construction:

COG OPERATING, LLC. 550 WEST TEXAS AVE SUITE 1300 MIDLAND, TEXAS 79701 ERIČK NELSON 432-683-7443

13. <u>CERTIFICATION:</u> I hereby certify that I or persons under my direct supervision have inspected the proposed drill site and access route, that I am familiar with the conditions which currently exist, that the statements made in this plan are to the best of my knowledge, are true and correct, and that the work associated with the operations proposed herein will be performed by COG OPERATING, LLC. it's contractors/subcontractors is in the conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME 02/02/06 DATE TITLE Agent

j042-16-73 185 ℃	9 0579			Dense 7	5is¥	105
21,	22			1 19	20	D.E.6. 9 1 • V 4:
•	* Penwell Bilbrey	Devon Erer. 6 - 1 - 2005 94848 55 22	6. 1.2005 5484€ 55 至	H- ECG RE St Hor 19	Crown Oil 5 11 2009 V 1048 525 22	ł
U.S. Tool Bilbrey.	U.S. TPHOSE	U. S.	U. S.	Store .	Store	
Devon Ener 1 58338	(Chevron) 32810	Devon Ener. 6 - 1 - 2005 94849	Samson Res. 112934 \$400000	Amilex Emer. Devon Ener. 1-1-2007 1-1-2009 V \$301 331 21 V-6940	Devon Sa'Eastern, 1/2 Sundown Ener	<u>†</u>
63020 TO HERE &	(PE) (Forma fe Snyder)	30 22	,	V 6301 334 Z V - 6340 Rea 1 2 35 25 0 1 2000 - 10 1 20 5 25 0 1 2000 - 10 1 20 0 - 10 0 4 3 13 - 07	V-3413 V-6000 191 11 2 brites brie PB	
28		an siring Son Simor Fed		₩₩₩ ' ¹⁰	29 (Jordefferer)	•
тэнароо () 21 мл 227/ - (227) // (227)	Ц! Devon Erer, ₩2.7ны, 63019 Кб\$	• (C) (11) (11) (11) (11) (11) (11) (11)	3 · 1 · 2009 102042 Pogo Prod			
In Stand Stand Stand	"Bilbrey-Fed." U.S.	· U.S.	11500 Ave-Foj. To 9100 DA 3 21 36 U.S	Store	5	MID
xtú Ener byDryllips)	COG 02.6 HD S3533 C S3533 C S3637	Devon 12 · 1 · 2005 97890	The Allar Co. 5. 1. 2012 108557	Yotes Act, et al	Yates Pet.etal 3 - 1 - 7005	†
BETIO (DEVON EN)	7144	9029 + Conney For + Conney For Conney F	95 23		v.5747 1512	
33	"Bilbrey-Frd." U.S. Fagodow Ener 34	U.S. 	36	Jane 3 31		
**	NBC S/2 (Philkos) JKM Ener, 36710 Bibray Fed. Com. (Philkos)	(P) 12.26-2004 Martine (Pure Res.e.ful) Pri Star.	Pogofrod fondrowkur (Dei Disc)			
^d Bilbrey-Fed." U.S.	Bilbrey-Fed. To:1940 OUS, M.I. T.T. Son-	W.W. Anderson,etal	U. S.	JIJTur 4	915777 17612147 8255 Srere	L
Arota (Kierral) XM Ditta O dibryra XM Ditta O dibryra KM (Kierral) KM (Kierral) KM (Kierral)	DIAL MINL JOIDL BEIN	J C. C. Fronces Mills forn Prisnp 1. C. Fronces Mills forn Prisnp 1. Dominion Echa Pris 2. 1. 2013 [6] 221 1. 2013 [6] 221 2. 2020 [1] 211	Alter	Ji. Hie & J. O.K. J HOULE : 2 modile 1 Poor trad. Amtex Ener etal	J. Bor Cane	
1 2010 \$ 350 m	e Sieteorg 1° 81	Echa Prod.	2 701) 105358 24623_	V 40 14 (Mendion) Dogger Gelia Proportional (III Son Sumar-	3 1 250°F	
SOLUS.	Offour St DAN BH-93 3 Matoder 11 ConchaRes	Echo Prod. [PROHIBIT]		1+ 10 5100 (Piles P/s 1, 100 1. 500 (Piles P/s 1, 100 1. 500 (D. 500)	Store Herchant Comparing	
Devan Ener- V-3113 V-5.	Histoder Concho Res 9 - 1.2005 ⊗1 9 - 1.2005 31 9 - 1.2005 31 230 ∞ 90 ±	Echo Prod. [PROHIBIT	OPER. 1 1 4 1 2011	O'Neill, 1 (Devon Ener.) 10-1-2067 etal 10-18-1004 v-6720 (Chesapeake) 637.59	Cich-Boss 1 3 1 2000	ତ୍
"Trumpeter- St." •1 State	II.S. M.I. Store U.C. & Frances Mills Fam Prils	U.S.	Morposh Liosado 2508 U.S.	JANN 7 1-221-	Barrow - Fr v esse 33 11 Basilissa ichiessonate) Brondon Deolorin Conversion Deolorin Conversion Deolorin Conversion Deolorin Conversion Deolorin Conversion Deolorin Storre - Orra	
R. Frenty 77051	Arklond Prod , etal , ; sssz , USM , wm.tro	Echo Prod Connes Phillips 13.1-2012 HBP 106043 1 HBP	2 COG O 8.G	Pogo Prod. V:4617		'⊗
<u></u>	ment for fair 200	Latig: TEchoProd	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(Creson) a 1d (construct) (Cresoreuxe)	(Chesupecke 50 314- Heraut Sciass Devon 1997 - Heraut Sciass 31 - 12005 - 1997	Duaj U AUOSS DSCL DIA 3
Otion C. Mills For Preds	Les 6. 61 10	5202 "Boorfeg Fee Con" 650 00 5202 "Boorfeg Fee Con" 650 00 Echo 2		and the first of the second	(Stowing) 8	, in ,
And Same and State	The here's 2	Echo ?rod 1 1 3-1-2012 Fr. (Comminion) 10804 Fr. (Comminion) 20029 Fr. Com.	2 _ Sog Cabet Carp.	# ARST TEL DETOIS JET	(Chevran) Her 24683 (
State U.S. Pla	PIGT U.S.	"A christian Ford Unit"	11 "Autotion For Locat	ALLAN TI	Chesa" L	
Yates Pet stal	Strata Prod. 18754 27825 alisec.		Pogo Prod.		Page Page Prod (Chevron) 6.1.2004 53215	·
Arx Arx 5w0 × 1/A 3	1 Strote	*Prahibition-Fex*	50940 "WRR"	Starked Starked Starked	24683 - 125 00	
16 Pit2 •	Strata Prod 15 Strate Fred	EQUART 14 ECOR	100	1015300 HCH4 I 18	56 AARE	Sec. 95
PISO 2 *Kiwi-St* PI11	P. 1 P212 (Prai (arosa (S.))	1/4/0/50 [94/0/5 	Si moo Fed	(1) (5) (1) (5	• #2	()))
	32 " Connolly-	La (mail us (mail actions)		012-2-3 CI - "NBR" Stote	"Indian" US, M	Aller Co 8-1 2010 1 7532 30357
Therron V3) 2. 412 3 Strate 5 Oxy V3) 2. 412 rss Prod. And 3P Amer V3) (Excent) ((R.E. Lance)	(El xon) Pogo Prnd. Strata Prod (Exxon)	EOG Res	(W Troner 200 Res. 87:64 Prince Stor of Philling and Eog (Storage 19 57 - Storage Control (Storage) 01 230 - Storage Control (Storage) Dia 10 10 81 Food Com.	Pogo Prod Pogo Prod	U.S. Store, 9 KHL, 176 Stat. 7007	
etal il tomorr	17058 1 17018 Prod 17018 Prod 101900 1 101900 1 101900 1 101900 1 101900 1 101900 1 101900 1 101900 1 101900 1 10190	10 (001 (N 100)	Fed Some fe Ener.	7 1 2005 V 3841 V 5068 346 26 175 20 546 26 175 20	000151 (01)45 78194 (001) Frd 50 50 (14) 152 (14) 152 (14) 152 (14) 152 (14) 152 (14) 152 (14) 152 (14) 152 (14) 152 (14) 152 (15) 152	Yates
El Ch Corry Dise	でく ア・ション しんん しんしょう しょうしん しょうしん しょうしん しょうしん しょうしん しょうしん しょうしん しょうしん しょうしょう ひょうしょう しょうしょう しょう	s 23	(Ma) To Issue (Ma) To Issue (The State of State (The State of State of State (The State of State of State of State of State (The State of State (The State of S	1 19	Marchonts Lasta Ca USIM 17 20	6 1 104 61
18150	E13652 13 707313 0A5-10-62 772	Creckerboard 23 For " igrreas	Tretall - Dror Err	Bootleg Ridge-St.	Vares (Vares) (Pet stal)	
smaking Fed." U.S "Cercion Fed	Cercion Fed US "Prize-Fed"	Site Red Tonte + 231 Site 231 red - + 231 Site	S Fed. Com Sum Fed. Deron Ergr. U.S. Mills-Fed	Concho Pesi	6	
	Pero 3 ([xxon)8127* 69376 • Pego Prod 5 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Pogo to Pogo HA MA	mile 2 1 16 1237	Wagner Oit Pego Prod. (Cal-Mon etal) v-3526	Seaboard Gil Clara	
Oxy 1/3 1 Total			Gur) (Compared and Compared			
1 · bese Marr.) Devon Ener 1 · 1 · 2006 · Piot •	27 (Ex+ord)	F47% Cylbertson H°26 Cropertson 1 471A Duk 4-16-45	× 25	EXHIBIT "A ONE MILE RADI		
3.1.2006 Piot -	Fries T Prist Fiso	5 0 ¹⁴ Councilor fed "	T Store (w) 34 Fixe (w) pioz Covington	COG OPERATING	. LLC.	
	red U.S. rrizeicd 52	Rod Tonk - 1 + 1 + 1 + A	PR PR	COHIBITION "12" F	EDERAL # 10	
	B Popo Prod.	Pogo Proul saia 754	V 1512 UN	IIT "K" 2S-R32E	SECTION 12 LEA CO. NM	1
-			• •			









ARRANGEMENT SRRA

SERIES 900 3000 PSI WP

EXHIBIT "E" SKETCH OF B.O.P. TO BE USED ON
COG OPERATING, LLC.
PROHIBITION "12" FEDERAL # 10
UNIT "K" SECTION 12
T22S-R32E LEA CO. NM







#10

U

A

UCB

District 1 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure
Is pit or below-grade tank covered by a "general plan"? Yes 🗌 No 🔽
Type of action: Registration of a pit or below-grade tank 🔯 Closure of a pit or below-grade tank 🗌

Address: 550 WEST TEXAS AVENUE SUITE 1300 Facility or well name: PROHIBITION "12" FED API	-378/C U/L or Otr/Otr K Sec 1	2 т 2	2SR32E	
County: Lea Latitude 32°24'15.9"Longitude 103	* 37 48" NAD: 1927 [] 1983 [] Su	urface Ow	ner Federal XX State [] P	rivate 🗌 Indian 🗌
WELL # 10				
<u>Pit</u>	Below-grade tank			
Type: Drilling 🖾 Production 🗌 Disposal 🗌	Volume:bbl Type of fluid:			
Workover 🔲 Emergency 🗌	Construction material:			
Lined 吾 Unlined □	Double-walled, with leak detection? Yes	🗌 If not.	soppen why not.	
Liner type: Synthetic 🗌 Thickness <u>12</u> mil Clay 🗌 Volume			6¹¹ (~	
<u>15M</u> _{bbl}		12	200	13
-	Less than 50 feet	12	(20-pojii:s)	t in t
Depth to ground water (vertical distance from bottom of pit to seasonal high	50 feet or more, but less than 100 feet	53	(10-points)	C I
water elevation of ground water.) 100+	100 feet or more	02	(0 points)	···· /0
	No.	12	(20 points)	
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	0		0
water source, or less than 1000 feet from all other water sources.)	No	0	(0 points), c	Ŭ
	Less than 200 feet		(20 points)	
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet		(10 points)	
irrigation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more	0	(0 points)	0
······································	Ranking Score (Total Points)	0		0
If this is a pit closure: (1) attach a diagram of the facility showing the pit's	relationship to other equipment and tanks. (2) Indicat	e disposal location:	<i></i>
onsite 🗌 offsite 🔲 If offsite, name of facility	(3) Attach a general description of remo	edial actio	on taken including remedia	tion start date and end
date. (4) Groundwater encountered: No 🗌 Yes 🔲 If yes, show depth belo	w ground surfaceft. and attac	ch sample	results. (5) Attach soil sa	mple results and a
diagram of sample locations and excavations.				

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described picor below-grade tank has been/will be constructed or closed according to NMOCD guidelines [Y. a general permit]. of an (attached) alternative OCD-approved plan]. Date: 03/06/06 Printed Name Title Joe T. Janica/ Agent Signatur

Your certification and NMOCD approval of this application closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and or regulations.

Approval: Date: <u>APR 1 9 2006</u>	
Printed Name: TitlePETROLEUM ENGINEER Signature	

March 12, 2004

Muli, Doni	na, EMNRD	
From:	Phillips, Dorothy, EMNRD	Sent: Wed 4/19/2006 8:37 AM
To:	Mull, Donna, EMNRD	
Cc:		
Subject:	RE: Financial Assurance Requirement	
Attachmen	ts:	

All have blanket bonds and do not appear on Jane's list.

From: Mull, Donna, EMNRD
Sent: Wednesday, April 19, 2006 8:36 AM
To: Phillips, Dorothy, EMNRD
Cc: Macquesten, Gail, EMNRD; Sanchez, Daniel J., EMNRD
Subject: Financial Assurance Requirement

Dorothy,

Is the Financial Assurance Requirement for these Operators OK?

Chesapeake Operating Inc (147179) EOG Resources Inc (7377) EverQuest Energy Corp (212929) Yates Petroleum Corp (25575) Marathon Oil Co (14021) Melrose Operating Co (184860) Patterson Petroleum LP (141928) COG Operating LLC (229137) Range Operating New Mexico (227588) Capataz Operating Inc (3659)

Please let me know. thanks Donna

https://webmail.state.nm.us/exchange/dmull/Inbox/RE:%20Financial%20Assurance%20Requirement.EM... 4/19/2006