

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1625 N. French Drive
Hobbs, NM 88240

OMB NO. 1004-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐ SECRETARY'S POTASH

b. TYPE OF WELL
OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
COG OPERATING, LLC. 229137 (ERICK NELSON 432-685-4342)

3. ADDRESS AND TELEPHONE NO.
550 WEST TEXAS AVENUE SUITE 1300 MIDLAND, TEXAS 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface
610' FWL & 2030' FSL SECTION 12 T22S-R32E LEA CO. NM
At proposed prod. zone SAME "L"

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE
Approximately 30 miles East of Carlsbad, New Mexico

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 610'

16. NO. OF ACRES IN LEASE 640

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320'

19. PROPOSED DEPTH 8900'

20. ROTARY OR CABLE TOOLS ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3653' GR.

22. APPROX. DATE WORK WILL START WHEN APPROVED

5. LEASE DESIGNATION AND SERIAL NO.
NM-85937

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME WELL NO.
PROHIBITION # 12
FEDERAL # 4 34806

9. AP WELL NO.
30-025-37227

10. FIELD AND POOL, OR WILDCAT
RED TANK-BONE SPRING 51683

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SECTION 12 T22S-R32E

12. COUNTY OR PARISH 13. STATE
LEA CO. NEW MEXICO

PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor	NA	40'	Cement to surface with Redi-mix
17 1/2"	H-40J-55 13 3/8"	48# & 54.5#	950'	900 Sx. circulate cement
12 1/2"	HCK-55J-55 8 5/8"	32#	4600'	1500 Sx. " " "
7 7/8"	N-80 J-55 5 1/2"	17#	8900'	500 Sx. Est Top of Cement 6000'

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
CARLSBAD CONTROLLED WATER BASIN
2. Drill 17 1/2" hole to 950'. Run and set 950' of 13 3/8" casing as follows: 300' of 13 3/8" 54.5# J-55 ST&C, 400' of 13 3/8" 48# H-40 ST&C, 250' of 13 3/8" 54.5# J-55 ST&C casing. Cement with 700 Sx. of 35/65 Class "C" POZ, tail in with 200 Sx. of Class "C" + 2% CaCl, circulate cement to surface.
3. Drill 12 1/2" hole to 4600'. Run and set 4600' of 8 5/8" 32# J-55 & HCK-55 ST&C casing. Cement with 1300 Sx. of 50/50 POZ Class "C" light cement + additives. Tail in with 200 Sx. of Class "C" cement, circulate cement to surface.
4. Drill 7 7/8" hole to 8900'. Run and set 8900' of 5 1/2" 17# J-55 & N-80 LT&C casing. Cement with 500 Sx. of Class "H" Premium Plus cement + additives, estimate top of cement 6000' from surface.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout prevention program, if any.

24. SIGNED Jesse T. Juen TITLE Agent DATE 03/14/05
(This space for Federal or State police use)

PERMIT NO. _____ APPROVAL DATE _____
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations.
CONDITIONS OF APPROVAL IF ANY:

/s/ Jesse J. Juen

ACTING STATE DIRECTOR

MAY - 2 2005

APPROVED BY _____ TITLE _____ DATE _____

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico

Energy, Minerals and Natural Resources Department

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-37227	Pool Code 51683	Pool Name RED TANK-BONE SPRING
Property Code 34806	Property Name PROHIBITION 12 FEDERAL	Well Number 4
OGRID No. 229137	Operator Name COG OPERATING LLC	Elevation 3653'

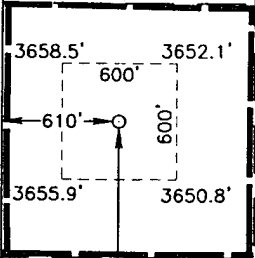
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	12	22-S	32-E		2030	SOUTH	610	WEST	LEA

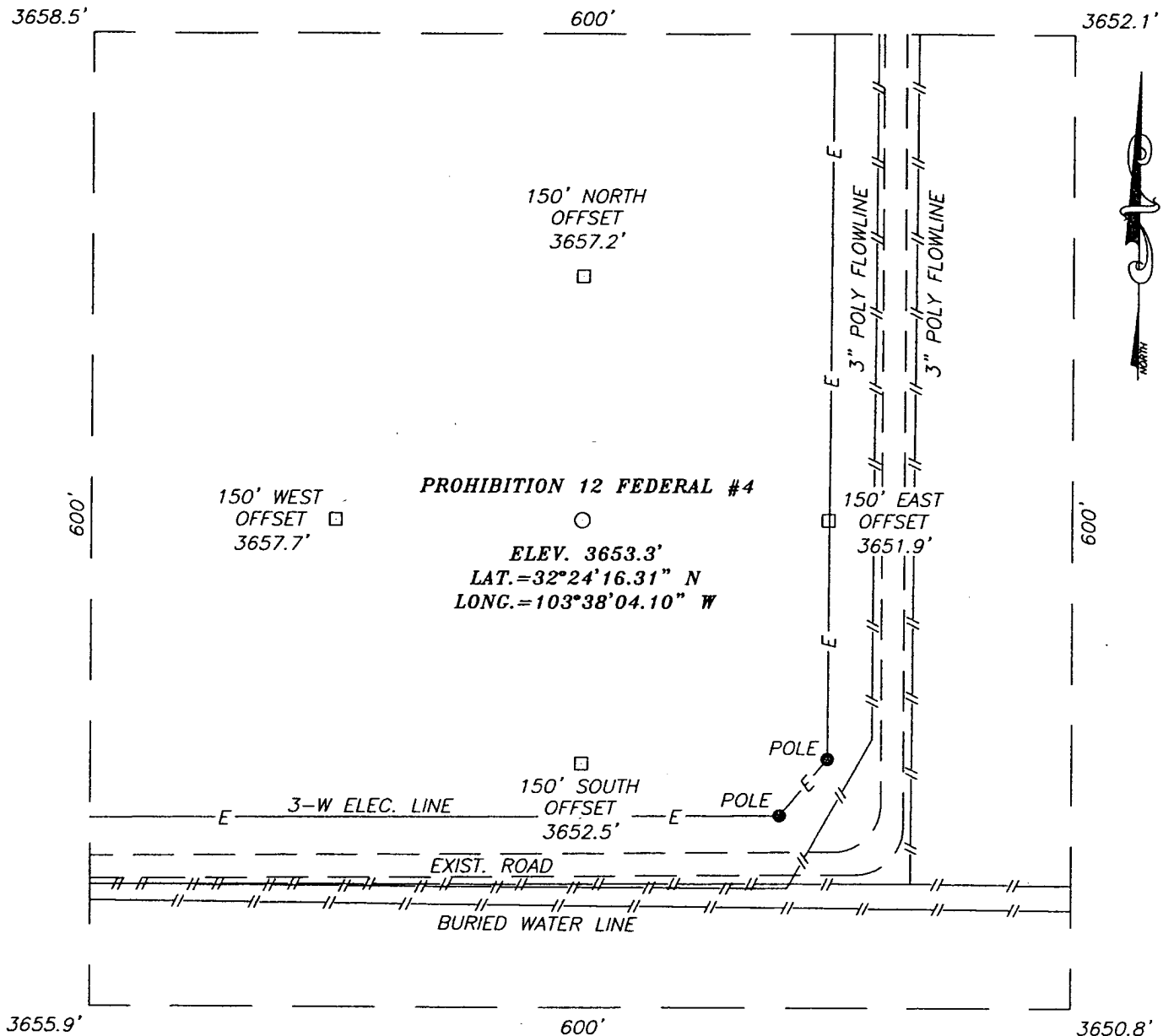
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40		Joint or Infill	Consolidation Code		Order No.				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

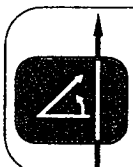
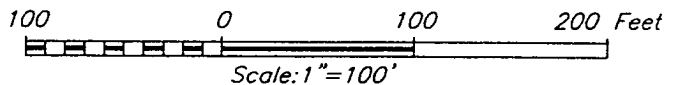
	<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=511588.1 N X=715688.2 E</p> <p>LAT.=32°24'16.31" N LONG.=103°38'04.10" W</p>
	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Joe T. Janica</i> Signature Joe T. Janica Printed Name Agent Title 03/14/05 Date</p>
	<p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>DECEMBER 29, 2004</p> <p>Date Surveyed Signature & Seal of Professional Surveyor <i>Gary E. Edson</i> 04.11.1741 Certificate No. GARY E. EDSON 12641</p>

SECTION 12, TOWNSHIP 22 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CO. RD. C-29
(CAMPBELL RD.) AND MILLS RANCH RD. GO EAST
ON MILLS RANCH RD. FOR 5.0 MILES TO A FORK
IN THE ROAD. TURN LEFT AND GO 1.7 MILES TO
AN INTERSECTION. TURN LEFT AND GO NORTH 1.0
MILES. TURN RIGHT AND GO EAST 0.7 MILES. THIS
LOCATION IS NORTH OF ROAD APPROX. 120'.



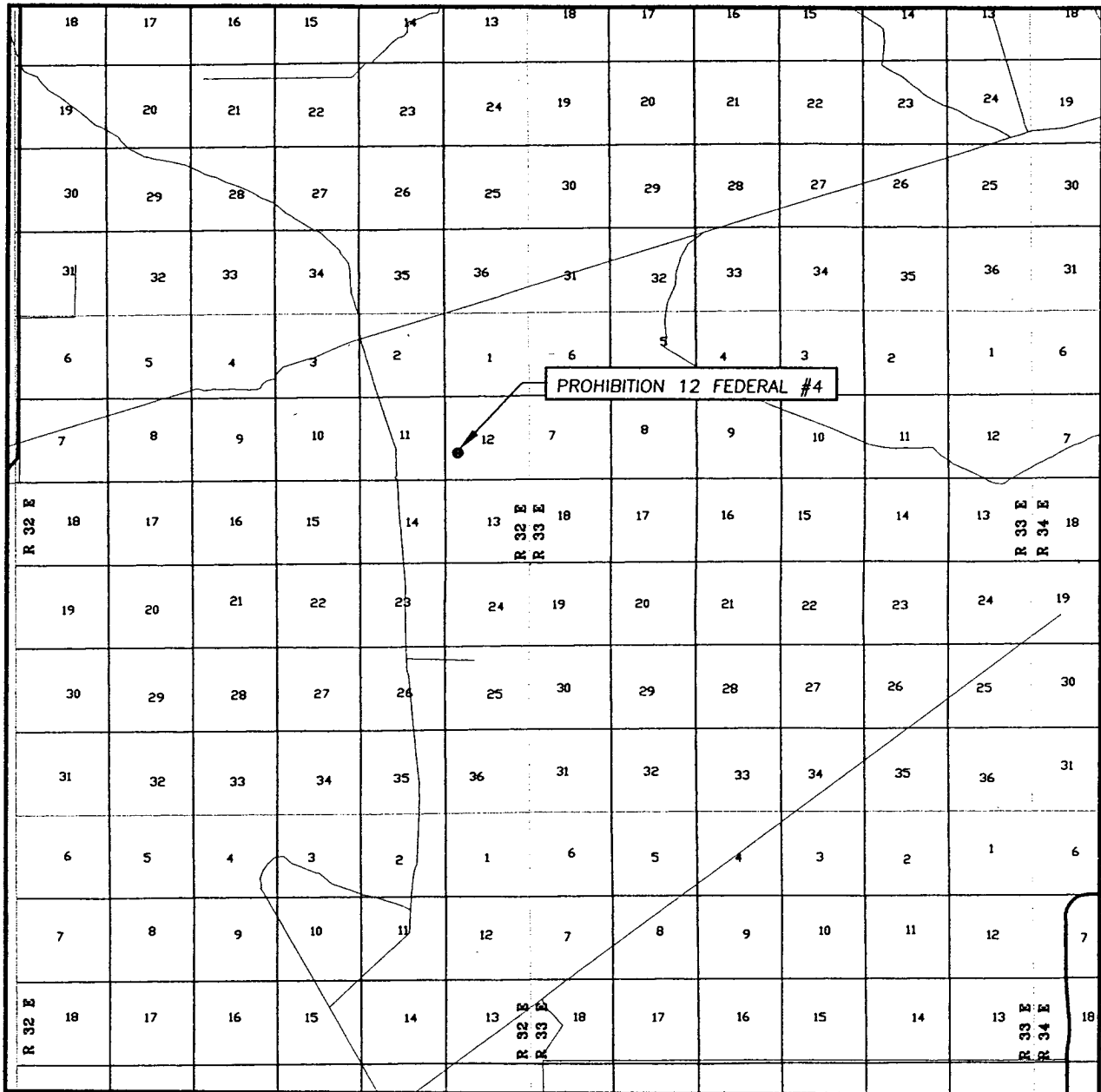
PROVIDING SURVEYING SERVICES
SINCE 1948
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

COG OPERATING LLC

PROHIBITION 12 FEDERAL #4 WELL
LOCATED 2030 FEET FROM THE SOUTH LINE
AND 610 FEET FROM THE WEST LINE OF SECTION 12,
TOWNSHIP 22 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

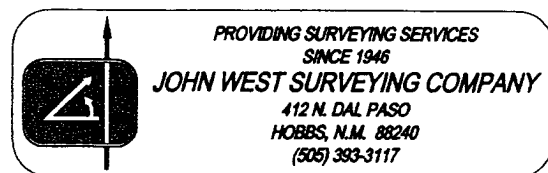
Survey Date: 12/29/04	Sheet 1 of 1 Sheets		
W.O. Number: 04.11.1741	Dr By: LA	Rev 1:N/A	
Date: 1/04/05	Disk: CD#3	04111741	Scale: 1"=100'

VICINITY MAP

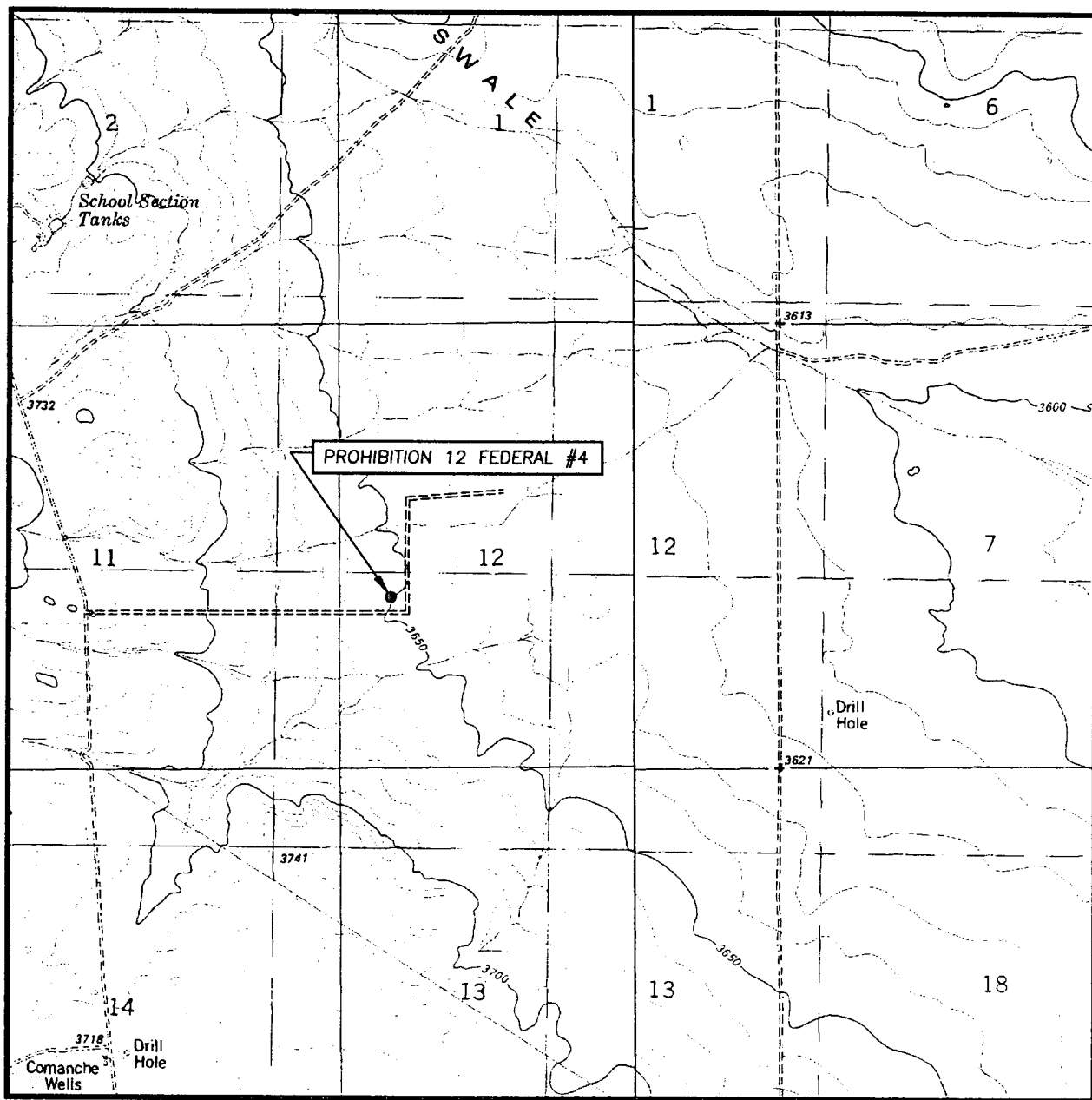


SCALE: 1" = 2 MILES

SEC. 12 TWP. 22-S RGE. 32-E
 SURVEY N.M.P.M.
 COUNTY LEA
 DESCRIPTION 2030' FSL & 610' FWL
 ELEVATION 3653'
 OPERATOR COG OPERATING LLC
 LEASE PROHIBITION 12 FEDERAL



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
THE DIVIDE, N.M.
GRAMA RIDGE, N.M.

SEC. 12 TWP. 22-S RGE. 32-E

SURVEY _____ N.M.P.M. _____

COUNTY _____ LEA _____

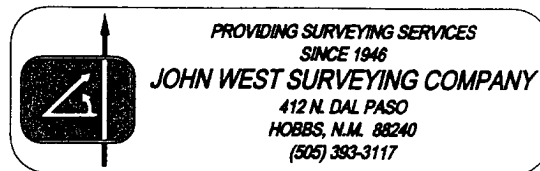
DESCRIPTION 2030' FSL & 610' FWL

ELEVATION 3653'

OPERATOR COG OPERATING LLC

LEASE PROHIBITION 12 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
THE DIVIDE, GRAMA RIDGE, N.M.



APPLICATION TO DRILL

COG OPERATING, LLC.
PROHIBITION "12" FEDERAL # 4
UNIT "L" SECTION 12
T22S-R32E EDDY 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: 2030' FSL & 610' FWL SECTION 12 T22S-R32E LEA CO. NM
2. Ground Elevation above Sea Level: 3653' 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'
Salt	1220'
Delaware	4800'
Bone Spring	8780'
7. Possible mineral bearing formations:

Bone Spring	Oil
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8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-950'	13 3/8"	48 & 54.5	8-R	ST&C	H-40 J-55
12¼"	0-4600'	8 5/8"	32#	8-R	ST&C	HCK-55 J-55
7 7/8"	0-8900'	5½"	17#	8-R	LT&C	N-80 J-55

APPLICATION TO DRILL

COG OPERATING, LLC.
PROHIBITION "12" FEDERAL # 4
UNIT "L" SECTION 12
T22S-R32E EDDY CO. NM

9. Cementing and Setting Depth

13 3/8"	Surface	+/-950'	Set +/- 950' of 13 3/8" 48#/54.5# H40 STC casing. Cement w/ 700 sx 35:65 Poz: "C" cement + additives followed by 200 sx Class "C" + 2% CaCl2 Circulate cement
8 5/8"	Intermediate	+/-4600'	Set +/- 4600' of 8 5/8" 32# J-55 & HCK-55 STC casing. Cement w/ 1300 sx 50:50 Poz: "C" light cement + additives followed by 200 sx Class "C" cement. Circulate cement.
5-1/2"	Production	+/-8900'	Set +/- 8900' of 5-1/2" 17# N-80 & J-55 LTC casing. Cement w/ 500 sx Class "H" plus additives. Est TOC @ +/- 6000'

10. Pressure Control Equipment: After setting 13-3/8" casing and installing 3000 psi casing head, NU 13-5/8" 3000 psi annular BOP. Test annular BOP, casing, and manifold with clear fluid to 1350 psi with rig pump
- After setting 8-5/8" casing and installing 3000 psi casing spool, NU 3000 psi double ram BOP and 3000 psi annular BOP. Test double ram BOP and manifold to 3000# with clear fluid and test annular to 1500 psi using an independent tester

11. Proposed Mud Circulating System

Interval	Mud Wt.	Visc.	FL	Type Mud System
0'- 950'	8.4-9.2	28-35	NC	Fresh water native mud w/ paper for seepage and sweeps. Lime for PH
950'- 4600'	10.0- 10.2	28-35	NC	Brine mud, lime for PH and paper for seepage and sweeps.
4600' - 8400'	8.4 - 8.5	NC	NC	Drill section with fresh water circulating the reserve utilizing periodic sweeps of paper as needed for seepage control and solids removal.
8400' - 8900'	8.4-8.5	32-34	25cc	Increase vis w/ salt gel and drop fluid loss with starch. Paper for sweeps. Circulate steel pits

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 the viscosity and water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

COG OPERATING, LLC.
PROHIBITION "12" FEDERAL # 4
UNIT "L" SECTION 12
T22S-R32E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Run Dual Induction log, SNP, LDT, Gamma Ray, Caliper from TD back to the 8 5/8" casing shoe. Run Gamma Ray and Neutron from 8 5/8" casing shoe back to surface.
- B. Mud logger may be rigged up on the hole a 4600' and remain on the hole to TD.
- C. No cores or DST's are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S 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 4500 PSI, and Estimated BHT 170°.

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 25 days. If production casing is run then an additional 30 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 Bone Spring formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized as an oil well.

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - 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. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of bloop 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" & "E-1"
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 the location is near to a dwelling a closed DST will be performed.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

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 H_2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H_2S scavengers if necessary.

SURFACE USE PLAN

COG OPERATING, LLC.
PROHIBITION "12" FEDERAL # 4
UNIT "L" SECTION 12
T22S-R32E EDDY CO. NM

1. 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 West toward Carlsbad New Mexico go 38± miles to CR-29, turn Left South go 14 miles to Mills Ranch Road. Turn Left (East follow main traveled road 7.2± miles, turn North go 1.2 miles turn Right (East) go .7 miles to location on the North side of road.
 - C. Exhibit "C" shows the proposed roads and flowlines along with powerlines and gas flowlines.
2. PLANNED ACCESS ROADS: No new roads will be required.
 - 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 minimum 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 utilize 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 2 miles South of location.
 - B. Disposal wells - One approximately .8 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"

SURFACE USE PLAN

COG OPERATING, LLC.
PROHIBITION "12" FEDERAL # 4
UNIT "L" SECTION 12
T22S-R32E EDDY 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. Exhibit "C" shows proposed routes of roads, flowlines and powerlines.

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 quarters will be drained into holes with a minimum 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 further 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.

SURFACE USE PLAN

COG OPERATING, LLC.
PROHIBITION "12" FEDERAL # 4
UNIT "L" SECTION 12
T22S-R32E EDDY CO. NM

9. WELL SITE LAYOUT

- A. Exhibit "D" shows the proposed well site layout.
- B. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- C. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with polyethelene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B 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 erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

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 # 4
UNIT "L" SECTION 12
T22S-R32E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of low lying sand dunes on the North side of a low rise over looking the San Simon Swale. Soil consists of loose sands, tan in color. Vegetation consists of yucca, cholla, desert holly, broom snakeweed, prickly pear and various native grasses.
- B. Surface is owned by the U.S. Department of Interior and is administered by the Bureau of Land Management. The surface is leased to ranchers for grazing of live stock.
- C. An archaeological survey will be conducted on the location and access roads, this report will be filed with the Carlsbad Field office Bureau of Land Management.
- D. There are no domestic dwellings located within one mile of the location.

12. OPERATORS REPRESENTATIVE:

Before construction:

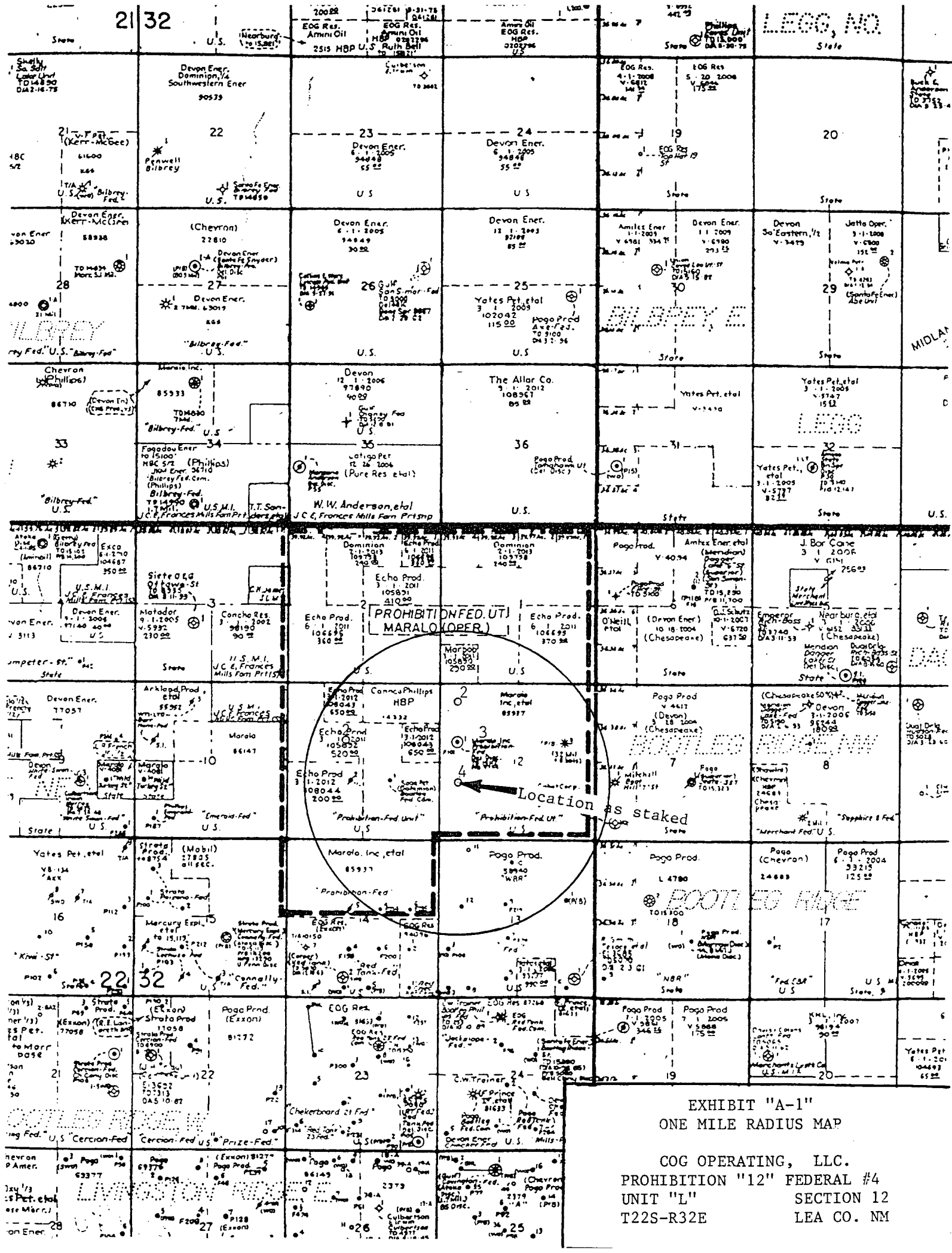
TIERRA EXPLORATION, INC.
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
JOE T. JANICA
OFFICE PHONE 505-391-8503

During and after construction:

COG OPERATING, LLC.
550 WEST TEXAS AVE
SUITE 1300
MIDLAND, TEXAS 79701
ERICK NELSON
OFFICE PHONE 432-685-4342

13. CERTIFICATION: 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 : Joe T. Janica
DATE : 03/14/05
TITLE : Agent



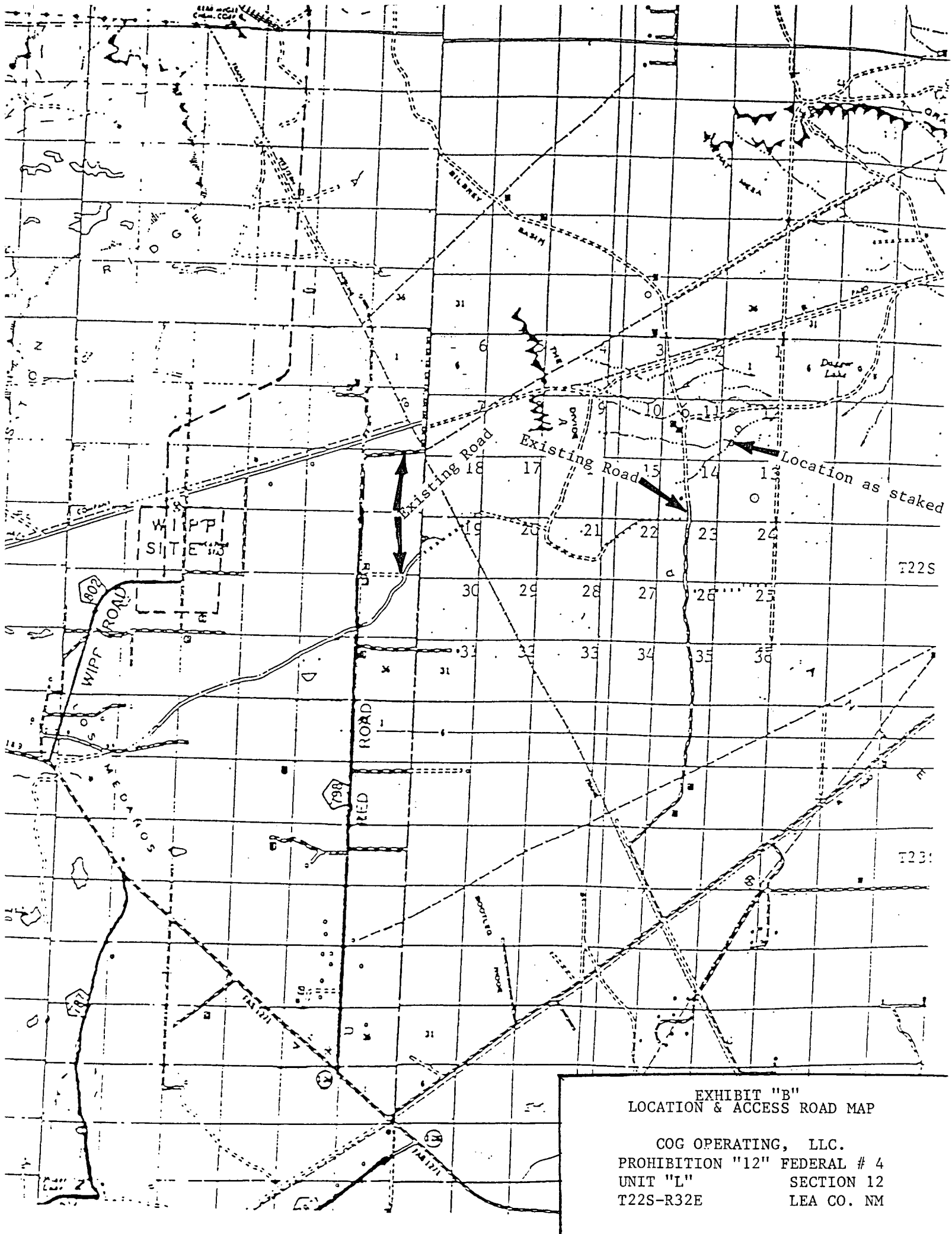


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

COG OPERATING, LLC.
PROHIBITION "12" FEDERAL # 4
UNIT "L" SECTION 12
T22S-R32E LEA CO. NM

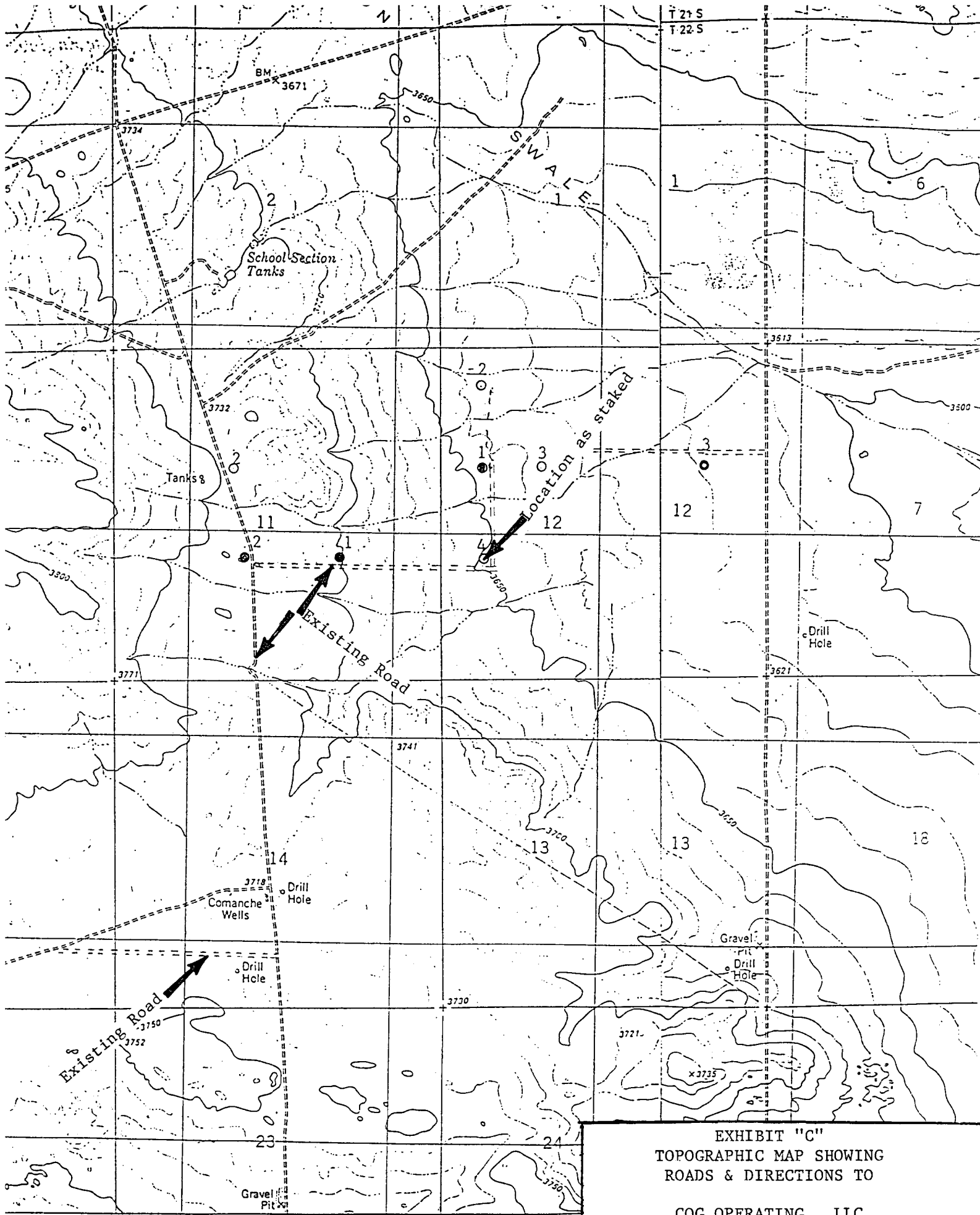
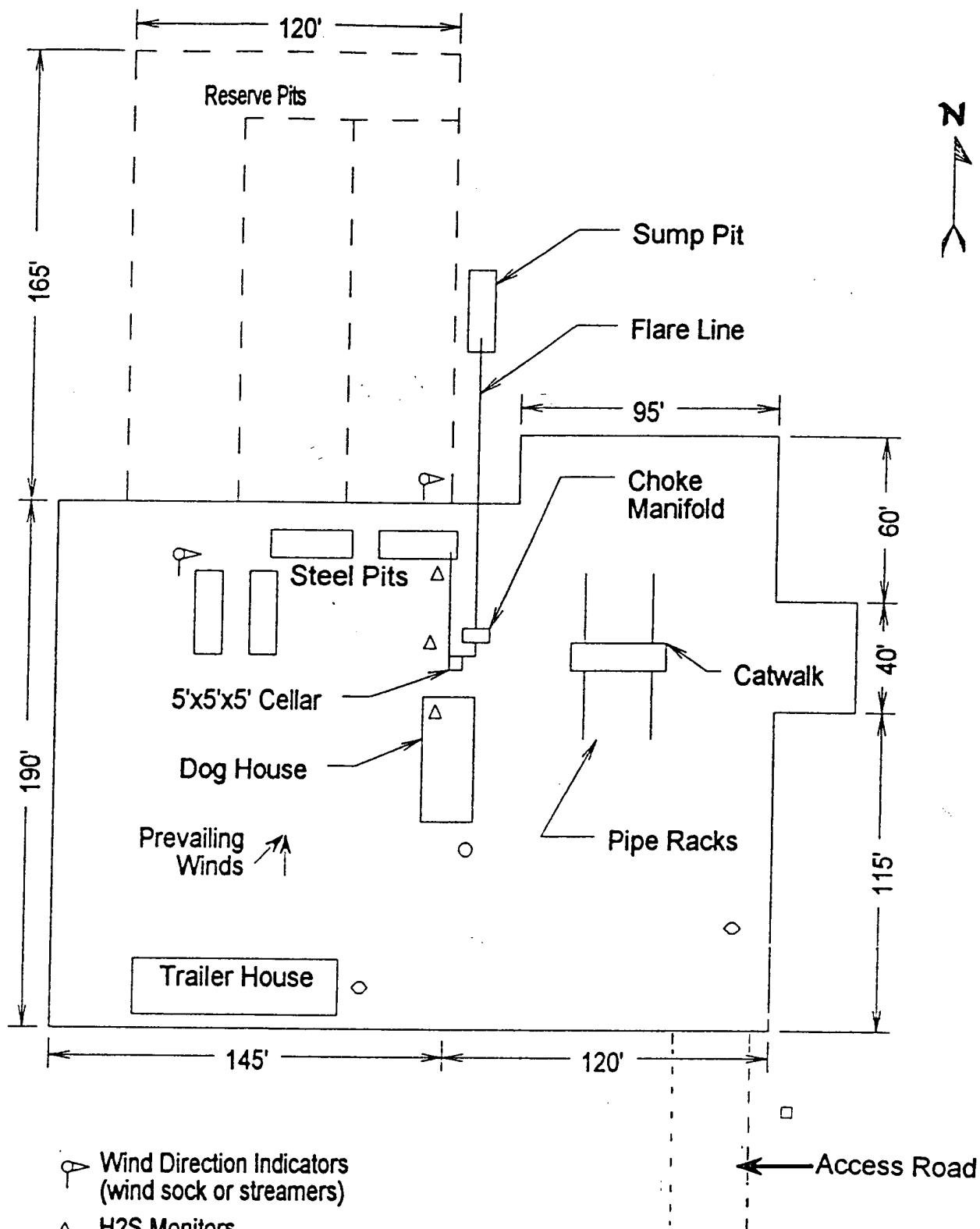


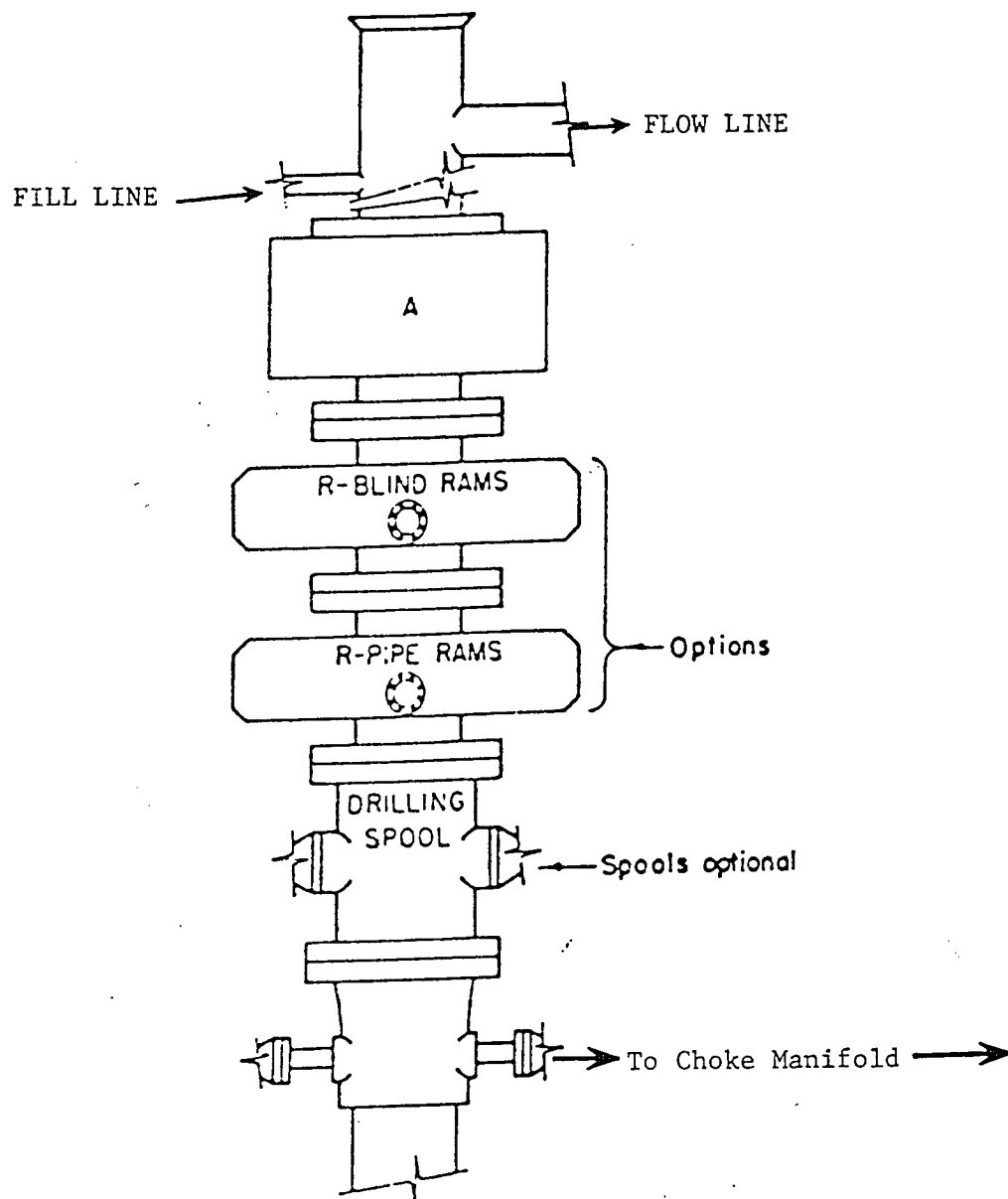
EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

COG OPERATING, LLC.
PROHIBITION "12 FEDERAL # 4
UNIT "L" SECTION 12
T22S-R32E LEA CO. NM



- ⊙ Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- Briefing Areas
- Remote BOP Closing Unit
- Sign and Condition Flags

EXHIBIT "D"
 RIG LAY OUT PLAT
 COG OPERATING, LLC.
 PROHIBITION "12" FEDERAL # 4
 UNIT "L" SECTION 12
 T22S-R32E LEA CO. NM

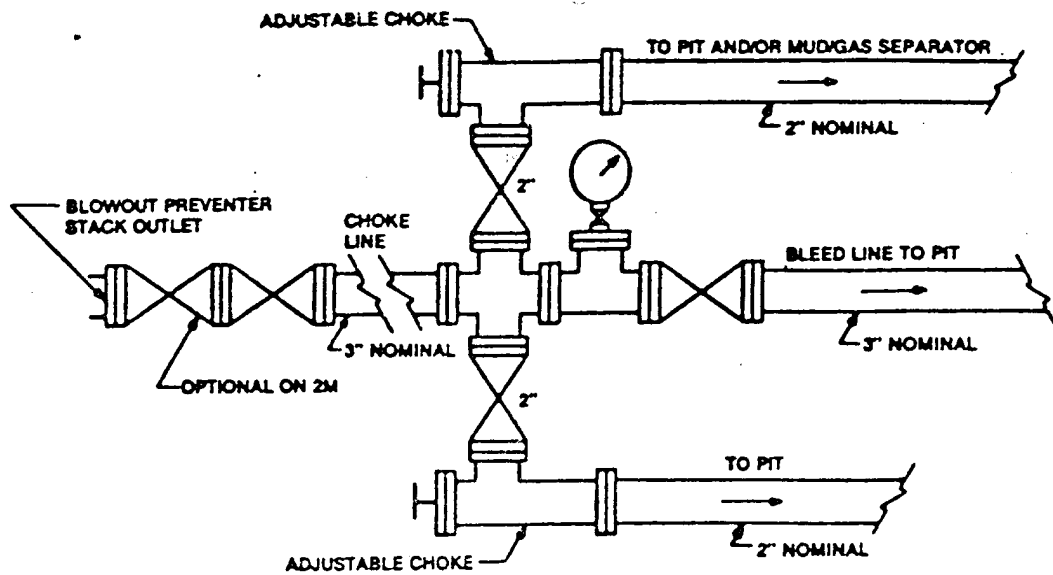


ARRANGEMENT SRRA

900 Series
3000 PSI WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

COG OPERATING, LLC.
PROHIBITION "12" FEDERAL # 4
UNIT "L" SECTION 12
T22S-R32E LEA CO. NM



Typical choke manifold assembly for 3M WP system

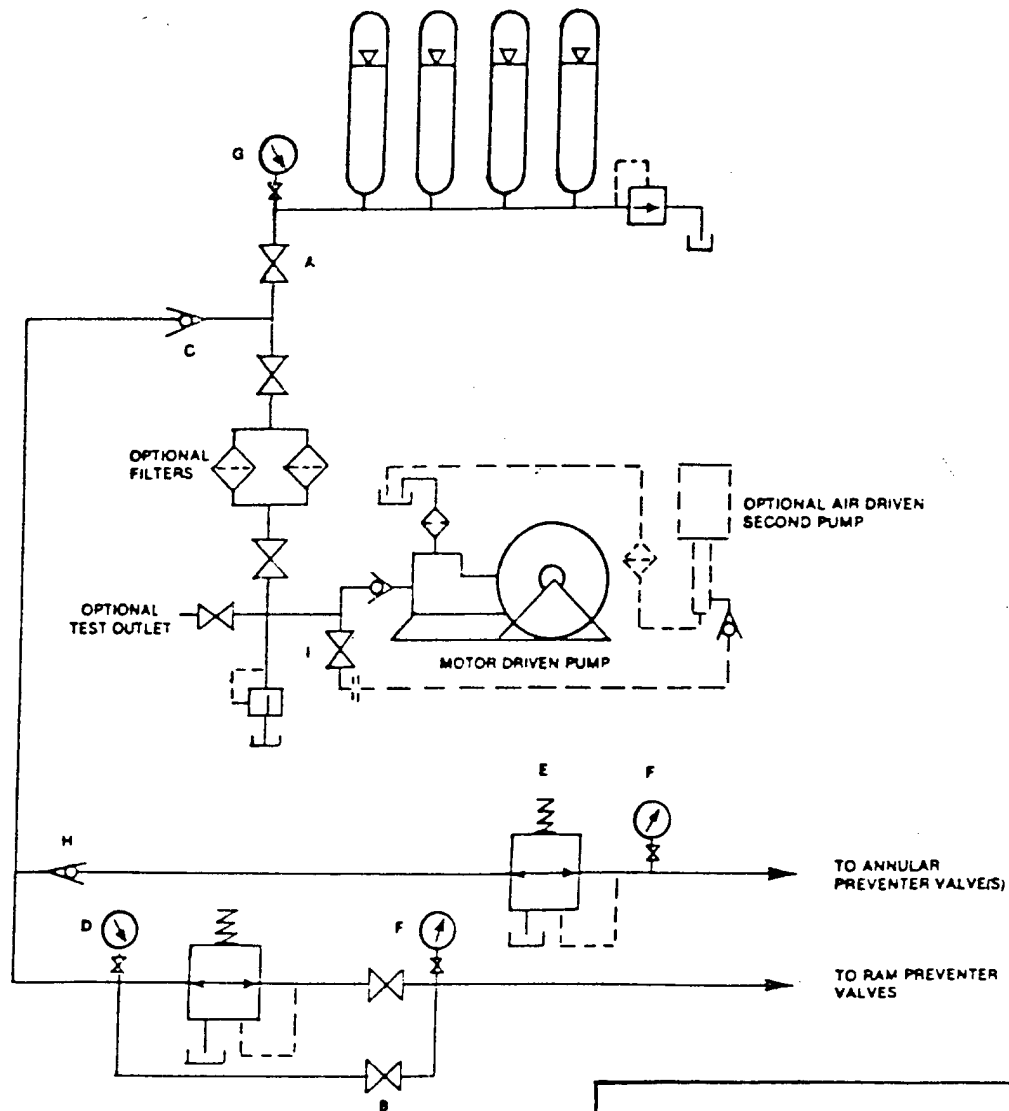


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

COG OPERATING, LLC.
PROHIBITION "12" FEDERAL # 4
UNIT "L" SECTION 12
T22S-R#2E LEA CO. NM

SURFACE USE PLAN

COG OPERATING, LLC.
PROHIBITION "12" FEDERAL # 4
UNIT "L" SECTION 12
T22S-R32E EDDY-CO. NM

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11. OTHER INFORMATION:

- A. Topography consists of low lying sand dunes on the North side of a low rise over looking the San Simon Swale. Soil consists of loose sands, tan in color. Vegetation consists of yucca, cholla, desert holly, broom snakeweed, prickly pear and various native grasses.
- B. Surface is owned by the U.S. Department of Interior and is administered by the Bureau of Land Management. The surface is leased to ranchers for grazing of live stock.
- C. An archaeological survey will be conducted on the location and access roads, this report will be filed with the Carlsbad Field office Bureau of Land Management.
- D. There are no domestic dwellings located within one mile of the location.

12. OPERATORS REPRESENTATIVE:

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
ERICK NELSON
OFFICE PHONE 432-685-4342

13. CERTIFICATION: 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 : Joe T. Janica

DATE : 03/14/05

TITLE : Agent



STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

OPERATOR NAME: COG OPERATING, LLC.

ADDRESS: 550 WEST TEXAS AVENUE
SUITE 1300

CITY,STATE, & ZIP: MIDLAND, TEXAS 79701

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The above operator accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below.

Lease No: NM-85937

Well name: PROHIBITION "12" FEDERAL #'s 2,3,4.

Legal Description of land: SECTION 12 T22S-R32E LEA CO. NM

Bond coverage: \$25,000 STATE WIDE
BOND # NMB-000215

Authorized Signature

Joe T. Janica

Title:

AGENT

Date: 03/17/05

District I
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

Form C-144
March 12, 2004

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 ☐

Operator: COG OPERATING, LLC. Telephone: 432-685-4342 e-mail address: _____
Address: 550 WEST TEXAS AVENUE SUITE 1300 MIDLAND, TEXAS 79701
Facility or well name: PROHIBITION "14" FED #1 #30-025-37227 or Qtr/Qtr "L" Sec 12 T 22S R 32E
County: LEA Latitude 32°24'16.3" Longitude 103°38'04.1" NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☐ Thickness 12 mil Clay ☐ Volume

15M bbl

Below-grade tank

Volume: _____ bbl Type of fluid: _____

Construction material: _____

Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high
water elevation of ground water.) 360'

Less than 50 feet

(20 points)

50 feet or more, but less than 100 feet

(10 points)

100 feet or more

0

(0 points)

0

Wellhead protection area: (Less than 200 feet from a private domestic
water source, or less than 1000 feet from all other water sources.)

Yes

(20 points)

No

0

(0 points)

0

Distance to surface water: (horizontal distance to all wetlands, playas,
irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet

(20 points)

200 feet or more, but less than 1000 feet

(10 points)

1000 feet or more

0

(0 points)

0

Ranking Score (Total Points)

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) Indicate disposal location:

onsite ☐ offsite ☐ If offsite, name of facility: _____ (3) Attach a general description of remedial action taken including remediation start date and end
date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample 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 pit or below-grade tank has
been/will be constructed or closed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

Date: 03/17/05

Printed Name/Title: Joe T. Janica/ Agent

Signature: Joe T. Janica

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.

Approved: MAY 11 2005

Date:

PETROLEUM ENGINEER

Printed Name/Title: PAUL F. KAUTZ

Signature: Paul F. Kautz