UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

(Other instructions on reverse side)

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

b. TYPE OF WELL: OIL WELL [XX] GAS WELL [ ] OTHER — SINGLE ZONE [XX] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: COG OPERATING, LLC. (ERICK NELSON) 432-685-4341 (229137)

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: 1350' FNL & 1770' FWL SECTION 6 T26S-R38E LEA CO. NM
At proposed prod. zone: SAME Unit F

5. LEASE DESIGNATION AND SERIAL NO.: NM-0889

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ---

7. UNIT AGREEMENT NAME: ---

8. FARM OR LEASE NAME, WELL NO.: M.D. SELF # 9 (30105)

9. API WELL NO.: 30-025-37467

10. FIELD AND POOL, OR WILDCAT: Langlie Mattix SR-Q-N-GB

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SECTION 6 T26S-R38E

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

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 10 miles Southeast of Jal New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 1350'

16. NO. OF ACRES IN LEASE: 2240

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.: 120'

19. PROPOSED DEPTH: 3400'

20. ROTARY OR CABLE TOOLS: ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3033' GR.

22. APPROX. DATE WORK WILL START*: WHEN APPROVED

23. 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 surfacewith Redi-mix
12¼"	J-55 8 5/8"	32#	975'	400 Sx. circulate cement
7 7/8"	J-55 5½"	15.5#	3400'	250 Sx. estimate top cem. 2400'

WITNESS

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.

CAPITAN CONTROLLED WATER BASIN

2. Drill 12¼" hole to 975'. Run and set 975' of 8 5/8" 32# J-55 ST&C casing. Cement with 200 Sx. of 35/65 Class "C" cement + 2% CaCl, + ¼# Flocele/Sx., tail in with 200 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. Circulate cement to surface.

3. Drill 7 7/8" hole to 3400'. Run and set 3400' of 5½" 15.5# J-55 LT&C casing. Cement with 250 Sx. of Class "C" cement + additives, estimate top of cement 2400' from surface.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

SUBJECT TO LIKE
APPROVAL BY STATE

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

24.

SIGNED Joe T. Janica TITLE Agent DATE 07/25/05

(This space for Federal or State office 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 thereon.

CONDITIONS OF APPROVAL, IF ANY:

KZ

APPROVED BY /s/ Joe G. Lara TITLE ACTING FIELD MANAGER DATE SEP 2 1 2005

*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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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	Pool Code	Pool Name
30-025-37467	37240	Langlie Mattix SR-QN-GB

Property Code	Property Name	Well Number
301053	M.D. SELF	9

OGRID No.	Operator Name	Elevation
229137	COG OPERATION LLC	3033'

Surface Location

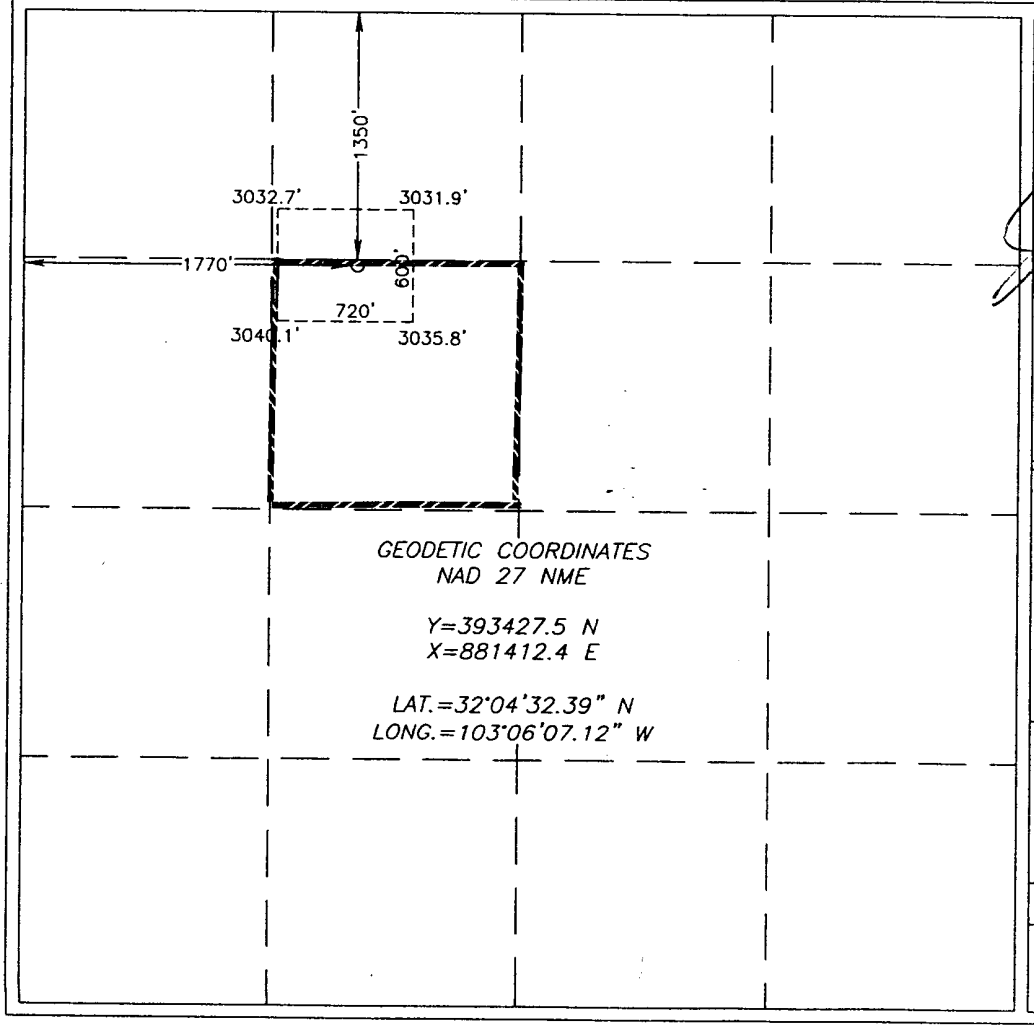
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	6	26-S	38-E		1350	NORTH	1770	WEST	LEA

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	Joint or Infill	Consolidation Code	Order No.
40			NSL-5247

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Joe T. Janica
Signature

Joe T. Janica
Printed Name

Agent
Title

07/25/05
Date

SURVEYOR CERTIFICATION

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 supervison, and that the same is true and correct to the best of my belief.

MARCH 15, 2005
Date Surveyed DEL

Signature & Seal of Professional Surveyor

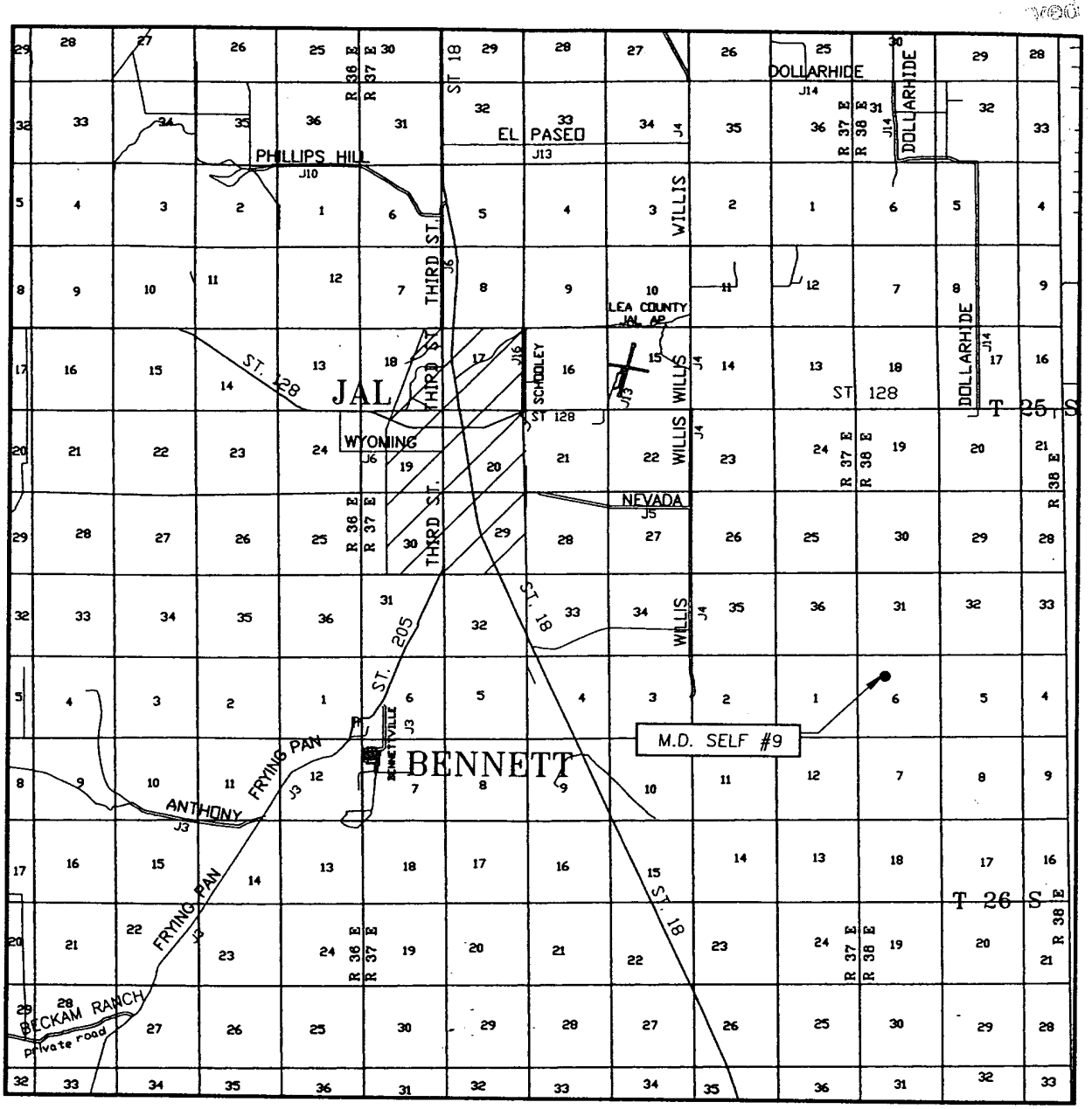
GARY G. EIDSON
NEW MEXICO
12641
REGISTERED PROFESSIONAL SURVEYOR

3/21/05

05.11.0455

Certificate No. GARY EIDSON 12641

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 6 TWP. 26-S RGE. 38-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1350' FNL & 1770' FWL

ELEVATION 3033'

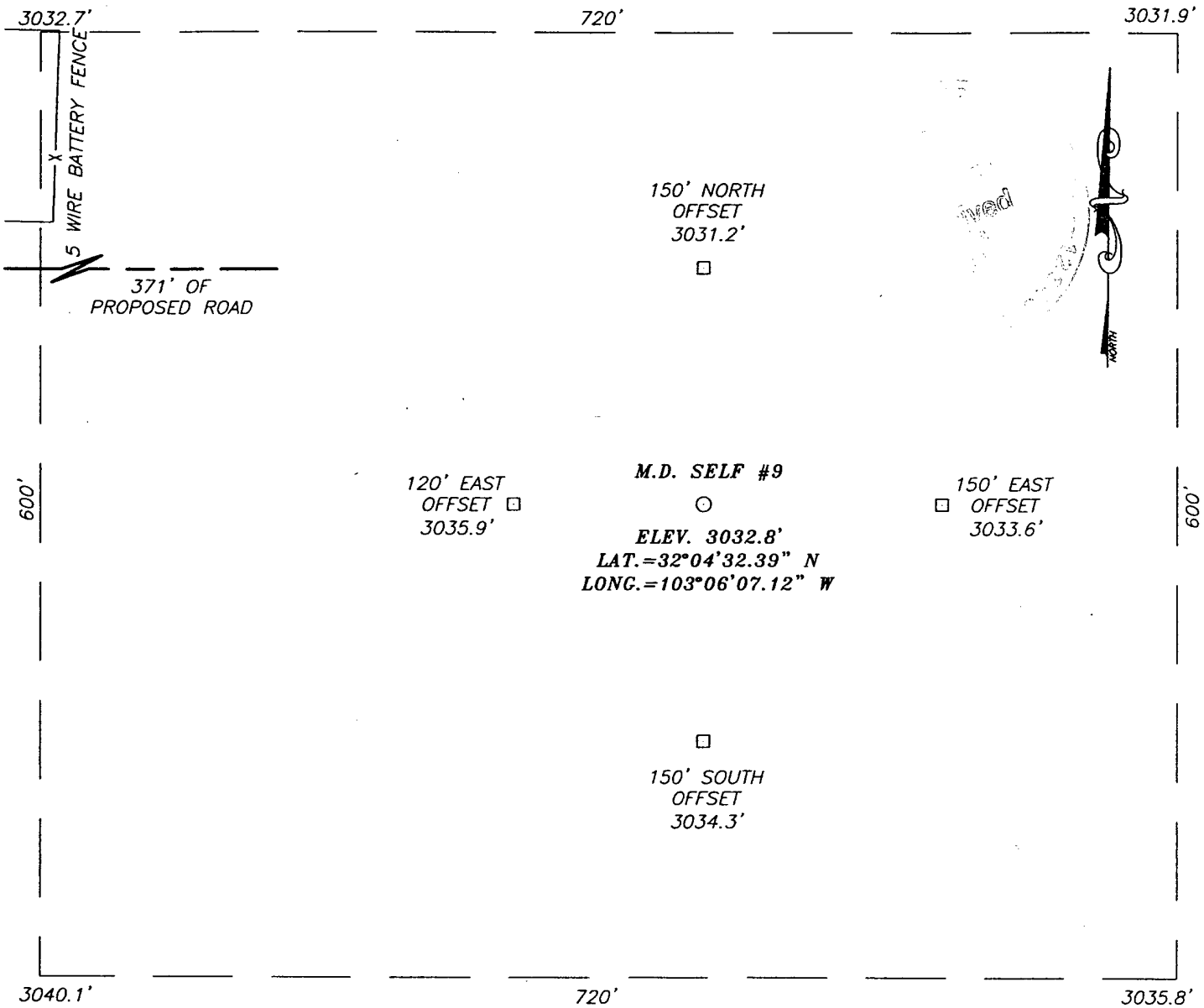
OPERATOR COG OPERATING LLC

LEASE M.D. SELF

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

SECTION 6, TOWNSHIP 26 SOUTH, RANGE 38 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #18 AND ST. HWY. #128 IN JAL. GO EAST ON ST. HWY. #128 APPROX. 4.6 MILES. TURN RIGHT (SOUTH) AT LEASE ROAD AND GO SOUTH APPROX. 3.2 MILES. FOLLOW PROPOSED ROAD SURVEY APPROX. 371' EAST TO THIS LOCATION.

100 0 100 200 Feet

Scale: 1"=100'

PROVIDING SURVEYING SERVICES SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO

HOBBS, N.M. 88240

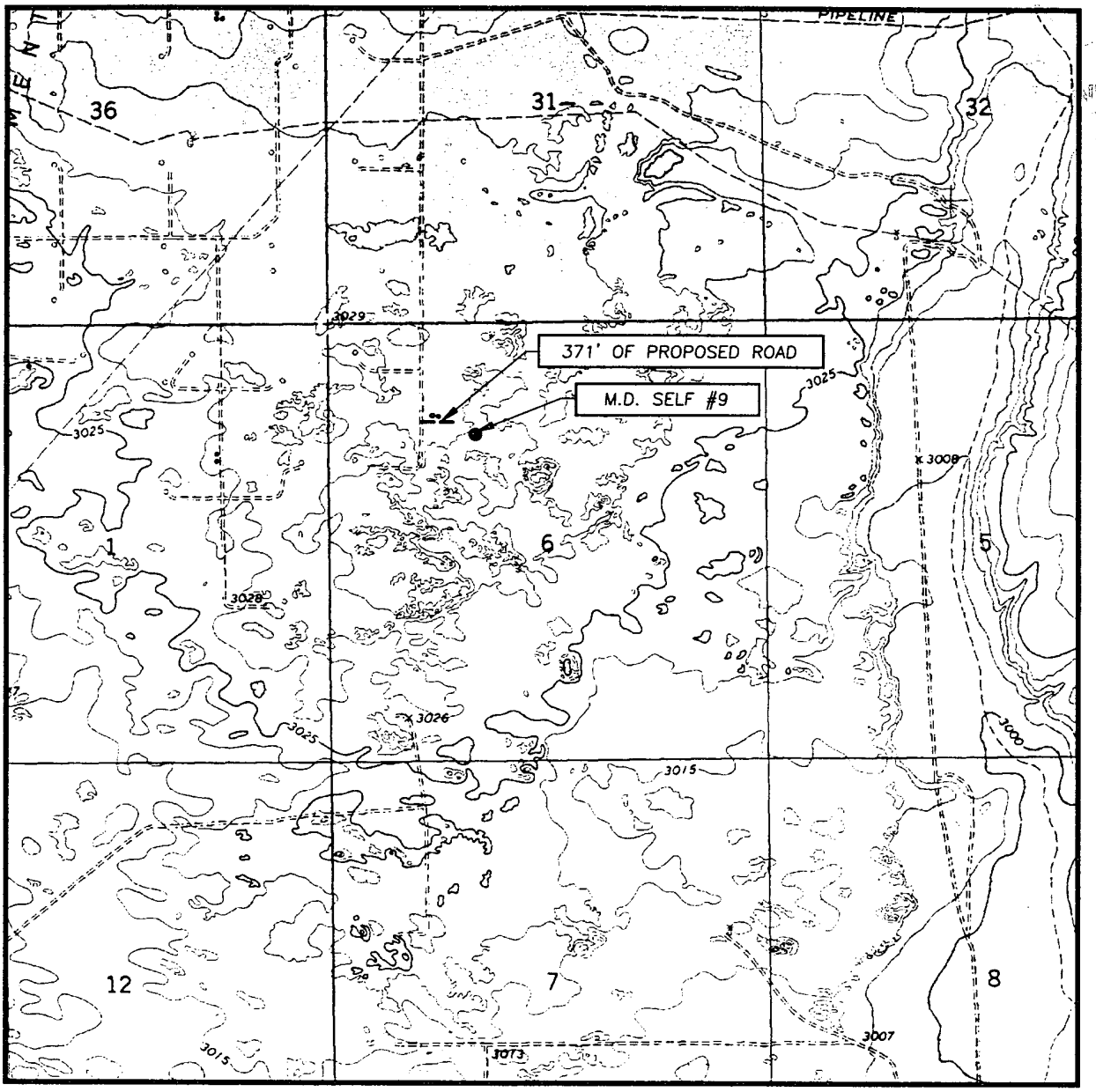
(505) 393-3117

COG OPERATION LLC

M.D. SELF #9 WELL
LOCATED 1350 FEET FROM THE NORTH LINE
AND 1770 FEET FROM THE WEST LINE OF SECTION 6,
TOWNSHIP 26 SOUTH, RANGE 38 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 03/15/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.0455	Dr By: D. LOVE	Rev 1: N/A	
Date: 03/18/05	Disk: CD#4	05110455	Scale: 1"=100'

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
JAL SE, TEX.-N.M. - 5'
CONTOURS IN SHIFTING SAND -25'

SEC. 6 TWP. 26-S RGE. 38-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1350' FNL & 1770' FWL

ELEVATION 3033'

OPERATOR COG OPERATING LLC

LEASE M.D. SELF

U.S.G.S. TOPOGRAPHIC MAP
JAL SE, TEX.-N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

APPLICATION TO DRILL

COG OPERATING, LLC.
M. D. SELF # 9
UNIT "F" SECTION 6
T26S-R38E LEA CO. NM

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

1. Location of well: 1350' FNL & 1770' FWL SECTION 6 T26S-R38E

2. Ground Elevation above Sea Level: 3033' 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: 3400'

6. Estimated tops of geological markers:

Rustler Anhydrite	920'	7 Rivers	2690'
Salt	1050'	Queen	3120'
Yates	2400'		

7. Possible mineral bearing formations:

Yates	Oil
Queen	Oil

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40	20"	NA	NA	NA	Conductor
12¼"	0-975	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-3400'	5½"	15.5	8-R	LT&C	J-55

APPLICATION TO DRILL

COG OPERATING, LLC.
M. D. SELF # 9
UNIT "F" SECTION 6
T26S-R38E LEA CO. NM

9. CEMENTING & CASING SETTING DRPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
8 5/8"	Surface	Set 975' of 8 5/8" 32# J-55 ST&C casing. Cement with 200 Sx. of 35/65 CLASS "C" POZ + 2% CaCl, + ¼# Flocele/Sx, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
5½"	Production	Set 3400' of 5½" 15.5# J-55 LT&C casing. Cement with 250 Sx. of Class "C" cement + additives, estimate top of cement 2400'. Or 500' above the top of the upper most hydrocarbon producing interval.

10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 2000 PSI working pressure B.O.P., consisting of a stripper head instead of an annular preventor, blind rams, and pipe rams. This B.O.P. will be nippled up on the 8 5/8" surface casing. No abnormal pressures are expected while drilling this well, estimated pressures are not to exceed 1500PSI. Testing of B.O.P. will be done by an independent testing party. The B.O.P. will be worked once in each 24 Hr. period, and the blind rams will be tested when the drill pipe is out of hole on trips. Exhibit "E-1" shows a hydraulic operated closing unit.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-975'	8.4-9.1	28-35	NC	Fresh water using paper to control seepage and sweeps to clean hole.
975-3400'	10.0-10.4	28-40	NC/20cc*	Brine water using lime to control pH, Gel to control viscosity, use starch to control water loss.

* Water loss may have to be controled in order to run logs, DST's, cores and casing.

APPLICATION TO DRILL

COG OPERATING, LLC.
M. D. SELF # 9
UNIT "F" SECTION 6
T26S-R38E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

A. Open hole logs: Dual Laterolog SNP, LDT, Micro SFL, Gamma Ray, Caliper from TD back to the 8 5/8" casing shoe.

B. Cased hole logs: Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.

C. No DST's or cores are planned at this time.

D. A mud logger may be used if it is deemed necessary.

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 1600 PSI, and Estimated BHT 130°.

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 15 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 Queen 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 H_2S safety instructor to the following:

   A. Characteristics of H_2S
   B. Physical effects and hazzards
   C. Proper use of safety equipment and life support systems.
   D. Principle and operation of H_2S 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. H_2S 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, H_2S 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.

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 seperator will be brought into service along with H_2S scavengers if necessary.

SURFACE USE PLAN

COG OPERATING, LLC.
M. D. SELF # 9
UNIT "F" SECTION 6
T26S-R38E LEA CO. NM

1. EXISTING AND PROPOSED ROADS: Area maps: Exhibit "B" is a reproduction of a County General Hi-way map showing access roads to the location. Exhibit "C" is a reproduction of a USGS Topographic map showing existing roads in close proximity to the location and the proposed access roads. All existing roads will be maintained in a condition equal to or better than their current conditions. All new roads will be constructed to BLM specifications.

   A. Exhibit "A" shows the location of the proposed well site as staked.

   B. From Jal New Mexico take State Hi-way 128 East for 5.9 miles± turn Right and go approximately 3.4 miles and location is on the East side of road.

   C. Exhibit "C" is a topogrophic map that shows roads, and location of well.

2. PLANNED ACCESS ROADS: No new roads will be required well will be drilled on existing location .

   A. The access road will be crowned and ditched to a 12' wide traveled surface with a 40' Right-Of-Way.

   B. Gradient on all roads will be less than 5% if possible.

   C. Turn-outs will be constructed where necessary.

   D. If needed roads will be surfaced to the BLM requirements with material obtained from a local source.

   E. Center line of new road will be flagged.

   F. The new road will be constructed to utilize low water crossings where drainage currently exists, and culverts will be installed where necessary.

3. EXHIBIT "A-1" SHOWS THE BELOW LISTED TYPE WELLS WITHIN A 1 MILE RADIUS:

   A. Water wells - Windmill approximately 1.3 miles North of location.

   B. Disposal wells - None known

   C. Drilling wells - None known

   D. Producing wells - As shown on Exhibit "A-1"

   E. Abandoned wells - As shown on Exhibit "A-1"

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 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.

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.
M. D. SELF # 9
UNIT "F" SECTION 6
T26S-R38E 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 surfaceis owned by D.K. Boyd of Midland, Texas, the minerals are owned by The U.S. Department of Interior and is administered by The Bureau of Land Management. Surface is used for grazing of livestock and the production of oil and gas.

C. An Archaeological survey has been done and is filed with the Bureau of Land Management in The Carlsbad Field Office.

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
ERICK NELSON 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 : 07/25/05
TITLE : Agent

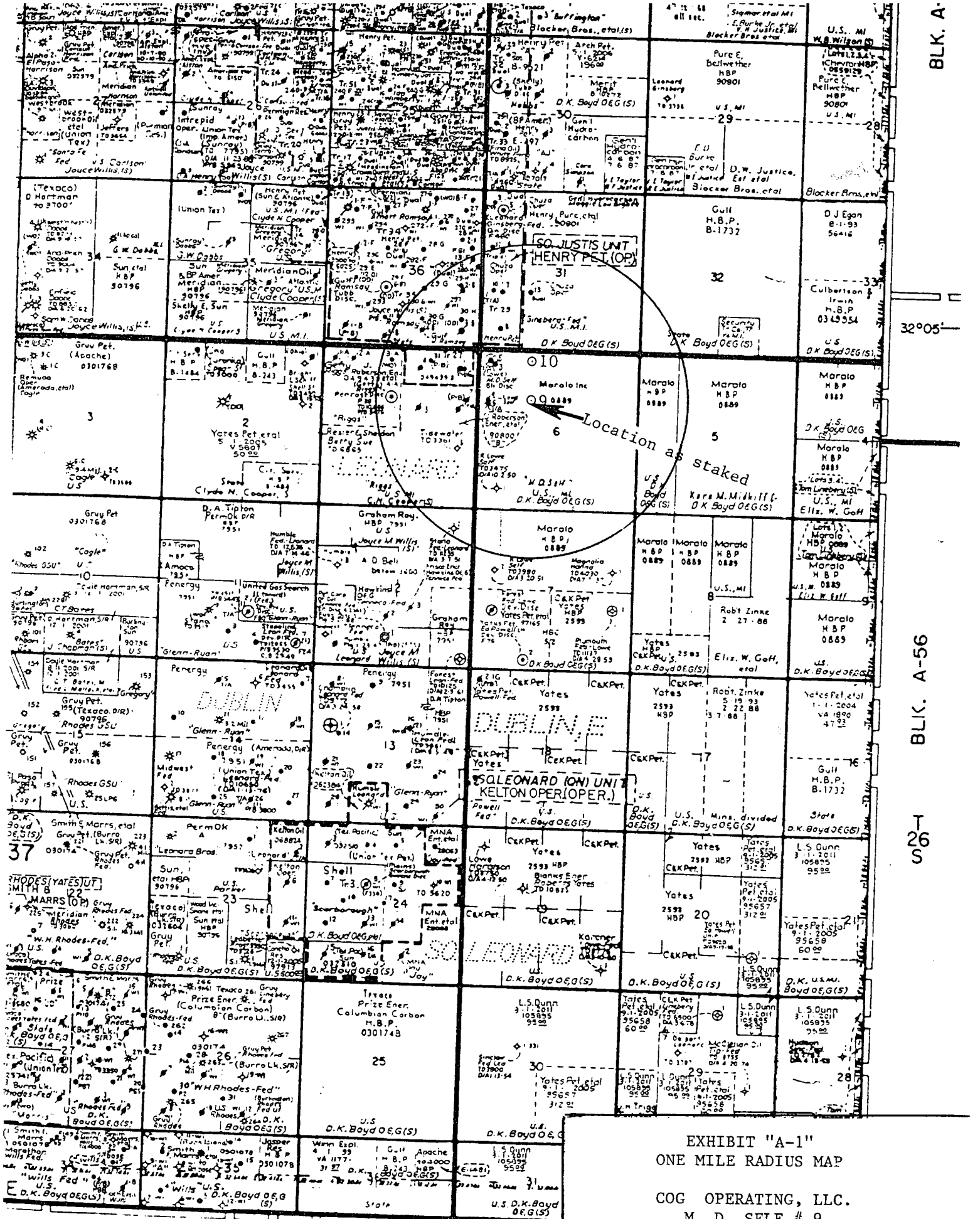


EXHIBIT "A-1"
ONE MILE RADIUS MAP

COG OPERATING, LLC.
M. D. SELF # 9
UNIT "F" SECTION 6
T26S-R38E LEA CO. NM

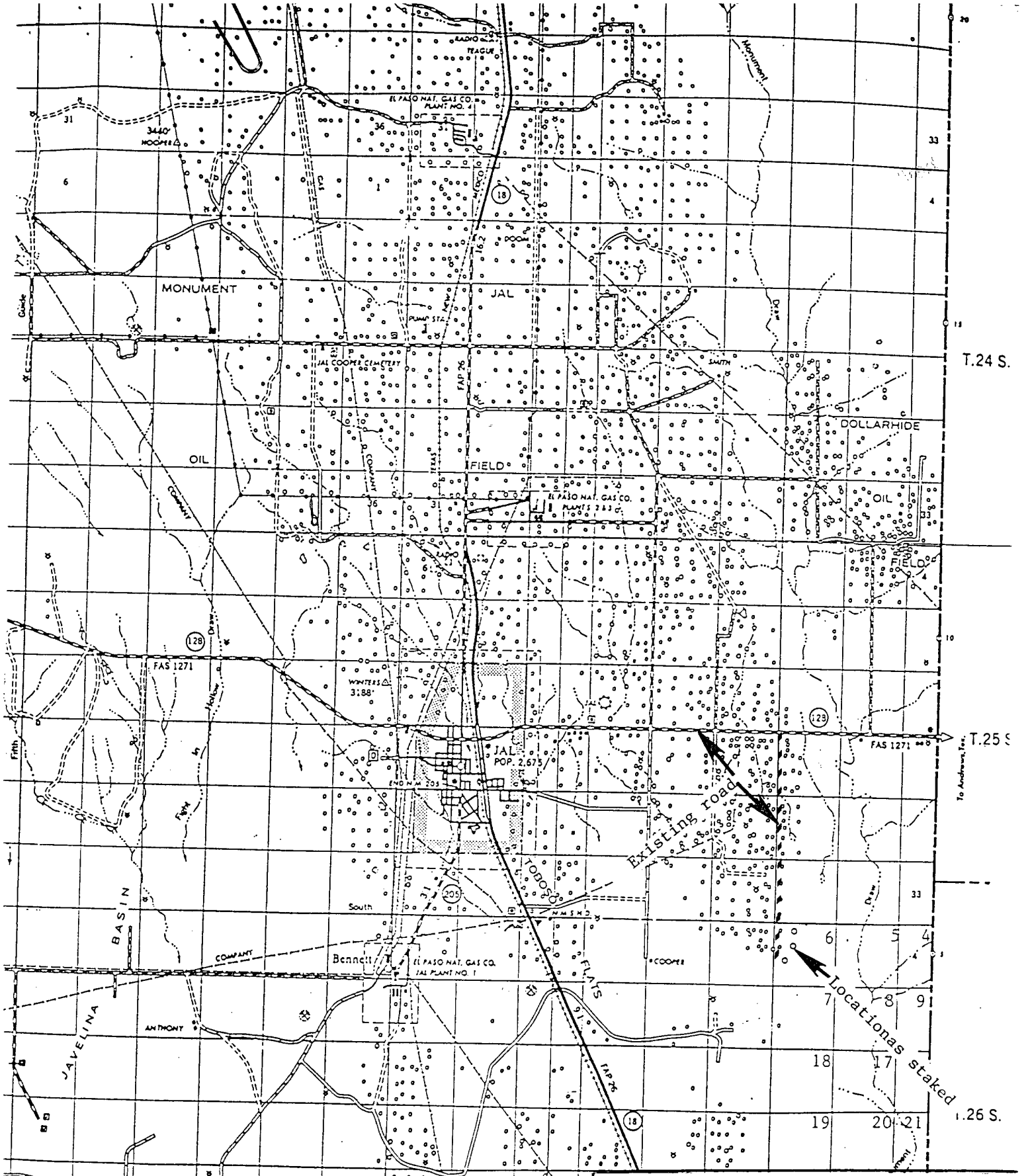


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

COG OPERATING, LLC.
M. D. SELF # 9
UNIT "F" SECTION 6
T26S-R38E LEA CO. NM

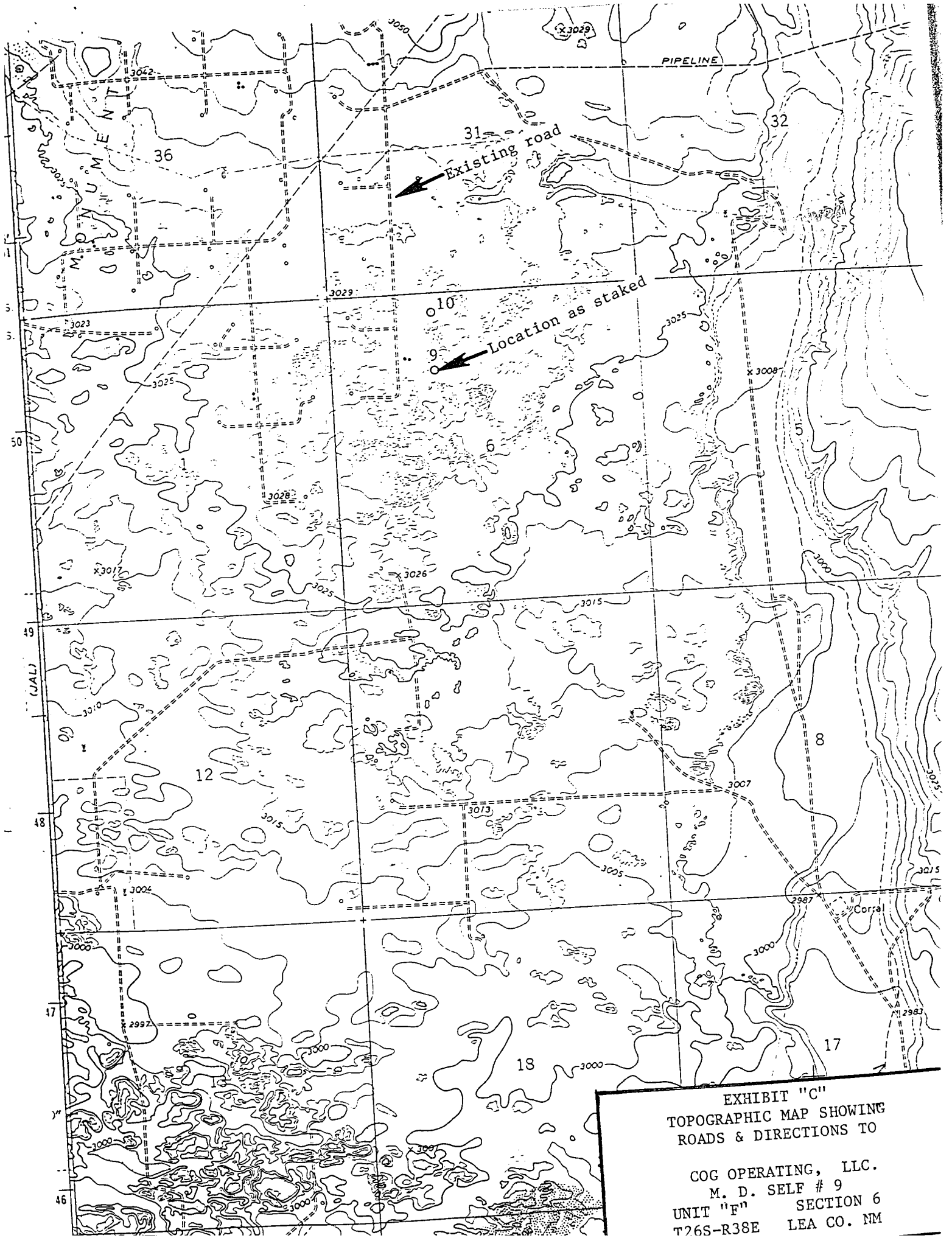
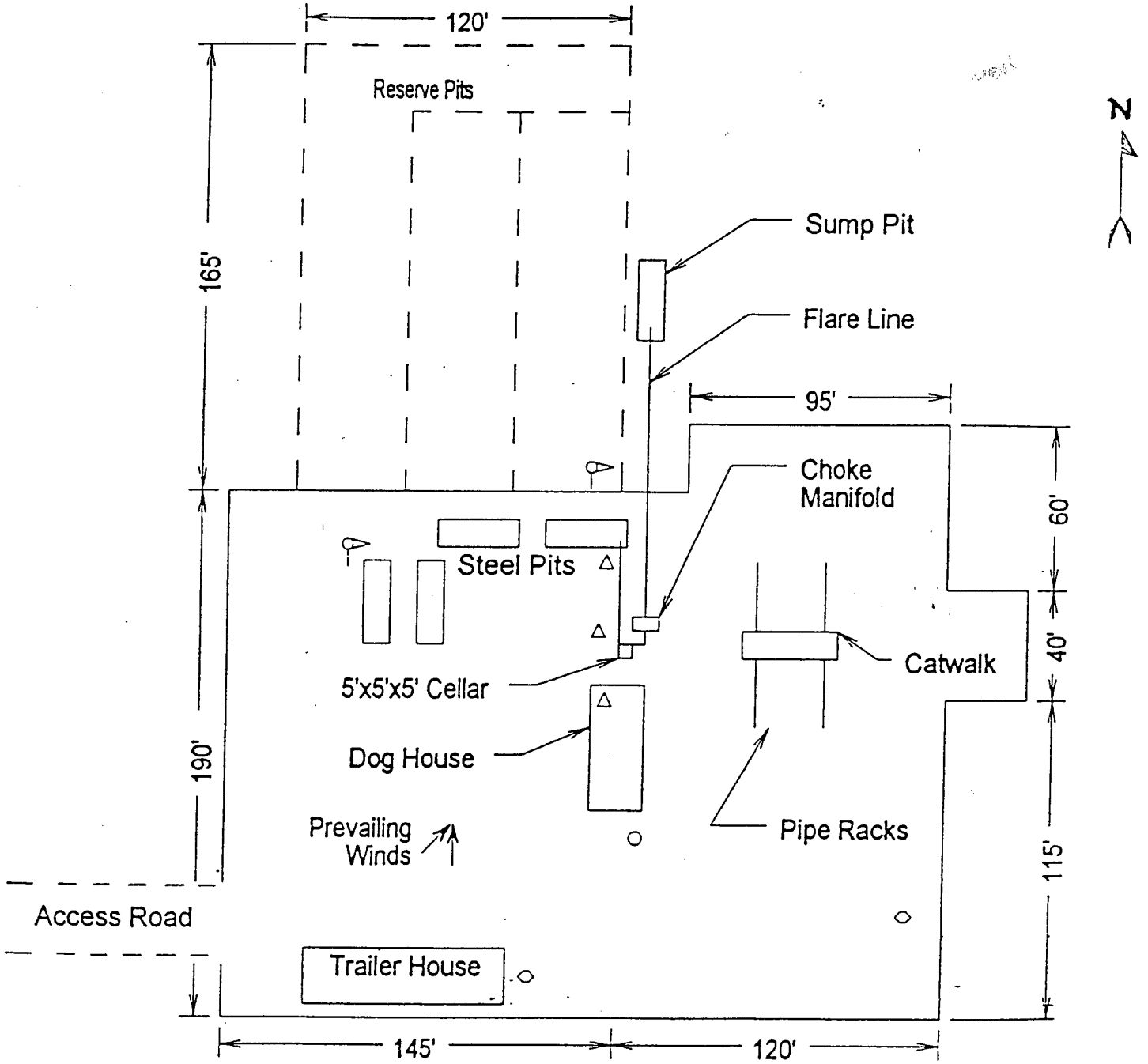


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

COG OPERATING, LLC.
M. D. SELF # 9
UNIT "F" SECTION 6
T26S-R38E 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.
M. D. SELF # 9
UNIT "F" SECTION 6
T26S-R38E LEA CO. NM

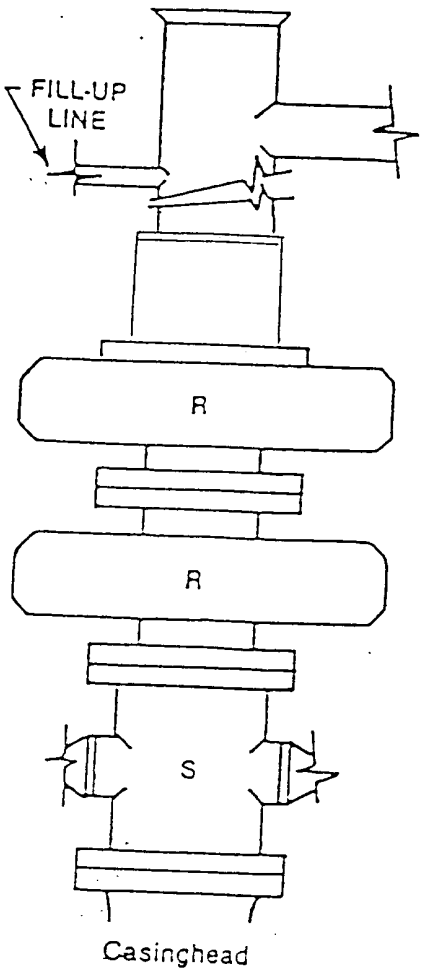


FIGURE K1-1. Recommended IADC Class 2 BOP stack, 2000 psi WP. Either SRd (left) or SA (right) arrangement is acceptable and drilling spool is optional.

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

COG OPERATING, LLC.
M. D. SELF # 9
UNIT "F" SECTION 6
T26S-R38E LEA CO. NM

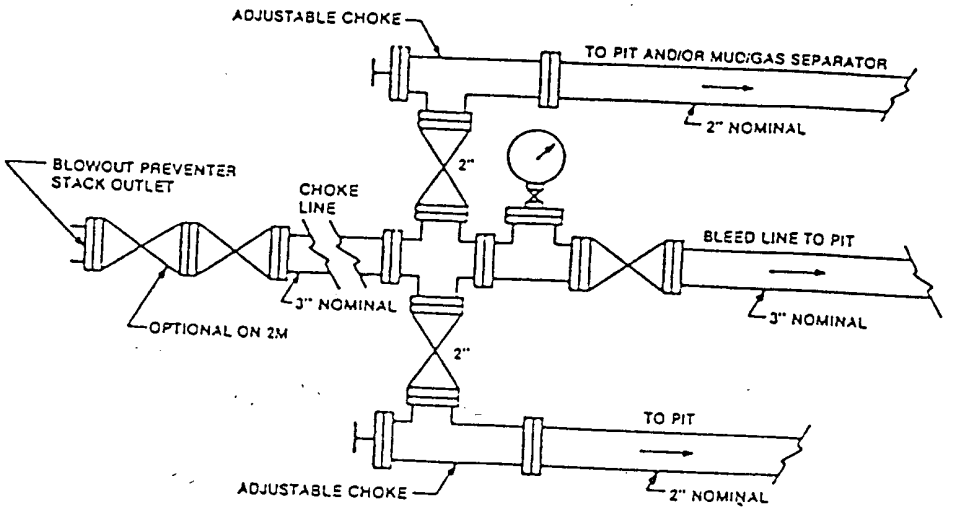


FIGURE K-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

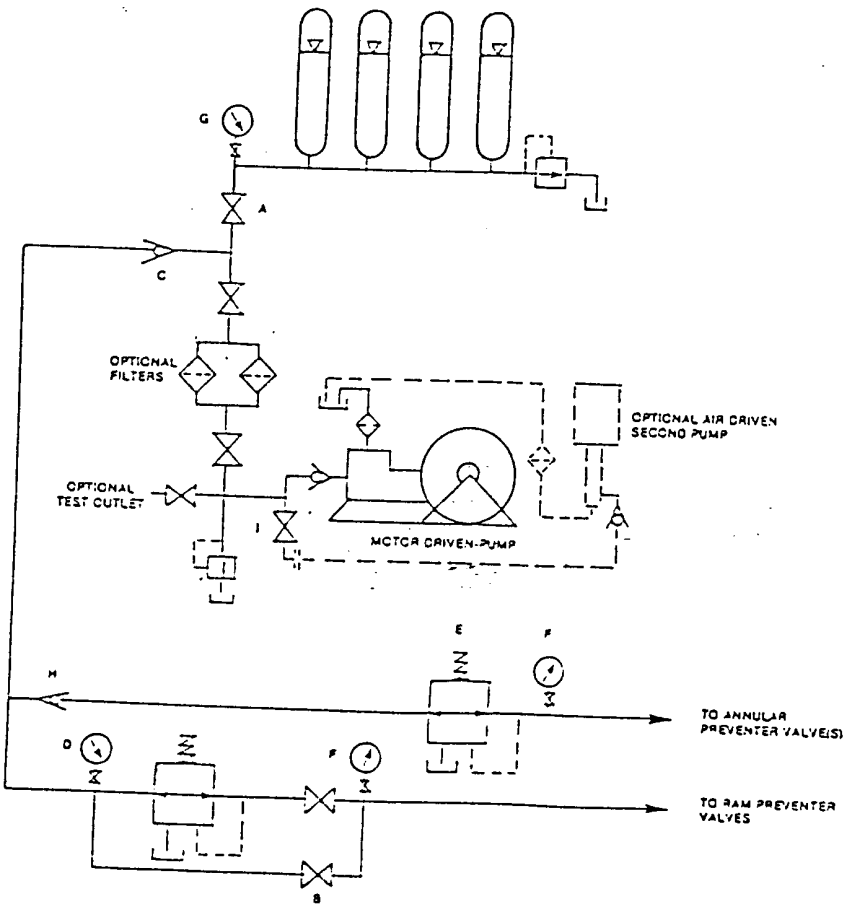


FIGURE K-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1
CHOKE MANIFOLD & CLOSING UNIT

COG OPERATING, LLC.
M. D. SELF # 9
UNIT "F" SECTION 6
T26S-R38E LEA CO. NM

COG OIL & GAS LP
Fasken Center, Tower II
550 W. Texas Ave., Ste. 1300
Midland, Texas 79701
(432) 683-7443
FAX 683-7441

May 11, 2005

Certified Mail, Return Receipt

D. K. Boyd Land & Cattle Co.
P.O. Box 11351
Midland, Texas 79702
Attention: Mr. D. K. Boyd

Dear Mr. Boyd:

As recently discussed with you, COG Oil & Gas LP and its General Partner, COG Operating LLC ("COG") are planning to conduct oil and gas drilling and related operations on surface property in Lea County, New Mexico (the "Lands") owned by D. K. Boyd Land & Cattle Co., d/b/a D. K. Boyd Oil and Gas Co., Inc., a Texas corporation ("Boyd"), at the locations more particularly described on Exhibit "A" attached hereto and incorporated herein by this reference. COG agrees that its usage of the surface of the Lands hereunder will substantially conform to the diagrams attached hereto as Exhibit "B" attached hereto and incorporated herein by this reference.

This letter agreement will evidence our agreement that, if COG drills said wells, COG will pay damages and settlements to Boyd according to the following provisions, and COG will conduct its surface operations as herein provided.

Prior to spudding, COG shall pay surface damages to Boyd of $10,000 per location for each well drilled to an ultimate depth below 4,500 feet but in no event below 8,000 feet and $3000 per location for each well drilled to any ultimate depth of 4,500 feet or less. In the event a well set forth on Exhibit "A" is drilled to a depth below 8,000 feet, COG shall pay surface damages in the amount of $15,0000. Such damages to include payment and settlement for the following:

- Well-site/facilities and location pads
- Construction of new roads
- Use of existing roads
- Flowlines (if above-ground, flowlines shall be steel tubing and follow the route as near as practical as set forth on Exhibit "B" page 1, or if buried the top of all flow lines shall be buried at a depth of twenty-four (24) inches below the surface or deeper)
- Power lines

COG shall comply with the rules and regulations as set forth by the regulatory body having jurisdiction in its implementation of its construction, drilling, workover, and pit reclamation procedures.

COG shall implement and follow the following drilling pit reclamation procedures for all pits constructed on the Subject Lands:

A. All pits in connection with operations hereunder shall be constructed using the double ditching method and the productive topsoil stockpiled separately from the unproductive bottom soil. The pits shall be adequately lined with plastic to prevent leakage of fluids and contamination into the soils beneath the pits.

B. COG shall remove the drilling rig and equipment from the drilling location within thirty (30) days after operations have been completed.

C. COG shall notify Boyd by telephone at (432) 685-1022 or by telecopier at (432) 683-7929 after drilling operations have been completed providing the location of the pits.

D. COG shall place a fence with at least four (4) strands of barbed wire around the pit area and allow the pits to dry by evaporation for up to six (6) months with the right to extend for an additional period of six (6) months if approved by the state and/or federal regulatory body having jurisdiction and shall follow the closure and restoration procedures set forth by the governing regulatory body.

E. COG shall fill the pits with soil stockpiled during pit construction using the clean uncontaminated caliche and soil other than the topsoil to fill the lower areas of the pits. At least the top twenty-four (24) inches of the pit area shall be covered with clean uncontaminated soil. The excavated area shall then be re-contoured to match the surrounding topography.

F. All reclaimed and disturbed areas of the surface shall be reseeded within ninety (90) days after pit reclamation procedures set forth above have been completed with a native grass seed mixture approved by Boyd. This seed mixture shall be planted on a date and time approved by Boyd in a manner consistent with like activities in the area of the subject Lands.

In the event there is a lease, discharge, spill, fire or any other damage to the Lands as a result of COG's operations hereunder ("Surface Damage"), COG shall implement procedures in accordance with and otherwise comply with the rules and regulations of the governing jurisdictional regulatory body, and the following reclamation procedures shall be implemented:

A. COG shall notify Boyd immediately after the discovery of such occurrence by telephone at (432) 685-1022 or by telecopier at (432) 683-7929 with the location, amount, type of released material and the surface area covered by the release or damage.

B. COG shall remove all freestanding fluids and/or contaminating materials from the surface.

C. COG shall have the damage site assessed by a qualified person or company within five (5) working days to obtain and document:
   i. Exact location
   ii. Description of the type and the amount or the release or damage
   iii. Photographs of the site

D. COG shall conduct additional response activities and/or site assessments if found to be necessary after review. A site assessment shall include, but not be limited to a determination of the extent of surface and subsurface damage or contamination caused by such Surface Damage, as well as the formulation of recommended reclamation procedures. If it is determined that a site assessment is required, COG shall have a work plan prepared and submitted to the NMOCD (or governing regulatory body having jurisdiction) with a copy provided to Boyd within 30 days.

E. COG shall remove soil contaminated by such Surface Damage by excavating the horizontal and the vertical extent of the damaged area until analytical results indicate a total petroleum hydrocarbon (TPH) concentration less than 5000 PPM and a chloride concentration less than 5000 PPM, or as set forth in regulatory requirements, above background levels. If other contaminates are present, they shall be removed to the recommended limits set forth in the assessment report.

F. COG shall stockpile the excavated soil on plastic in a stressed vegetation area.

G. COG shall sample the stockpiled soil to determine TPH and chloride levels.

H. COG shall remove all soils with TPH and/or chloride concentrations greater than 5000 PPM.

I. If feasible, depending on volume, soil type and type of contamination, COG in accordance with applicable regulatory guidelines may blend soils with a TPH and/or chloride concentration of less than 5000 PPM with clean uncontaminated soil to reduce the contamination levels in the resulting composite soil to TPH and/or chlorides concentrations of less than 1000 PPM.

J. COG may use the blended soil described above in subparagraph I to backfill the excavated areas, but only if the blended soils have been analytically tested and determined to contain less than 1000 PPM of TPH and chlorides. An adequate amount of topsoil will be added in order to promote natural revegetation.

K. COG shall pay Boyd fifteen cents ($0.15) per square foot for the damaged or contaminated area that is off wellsite and facility locations and remit payment to Boyd within (30) days after the damage is identified or found.

COG agrees to pay Boyd $4.00 per yard for any caliche taken from and used on the Lands; provided, COG shall use only such caliche from the Lands which has been approved for use by Boyd. An accounting for the amount of caliche used and the payment thereof shall be remitted to Boyd within sixty (60) days of usage.

No water is to be used from the Lands in COG's operations hereunder.

COG shall not construct any gate, gap, cattle guard or other opening in any fence without Boyd's written consent, which consent will not be unreasonably withheld. COG will not install a permanent gate or cattle guard in any fence line without the written consent of Boyd. Gaps in fences will be closed by restoring the fence to at least the same condition as existed prior to COG's operations hereunder.

COG shall maintain and keep in good repair all roads constructed and/or used by COG, its representatives, agents and contractors. COG agrees to leave all roads used on the Subject Lands in connection with operations hereunder in good condition when it abandons the use of a road. COG shall post and maintain permanent twenty (20) mile per hour speed limit signs on said roads for operations hereunder. If COG, its employees, representatives, agents or contractors exceed the twenty (20) mile per hour speed limit, COG will pay one hundred dollars ($100) per occurrence to Boyd within fifteen (15) days after Boyd provides evidence of violation, the type and license number of vehicle and the date and time of alleged violation. COG, its employees, representatives, agents and contractors will not enter the Lands with a firearm on their person or in their vehicle. Upon violating the firearm provision, COG, its employees, representatives, agents or contractors will pay five hundred dollars ($500) per occurrence to Boyd within fifteen (15) days after Boyd provides COG with written evidence of a violation of this provision setting forth the date, time, the name of the party in violation of this provision and the circumstances surrounding the violation.

COG will, at all times during its operations hereunder, keep the Lands in a safe and clean condition, and will not scatter or allow the scattering by its representatives of any type of waste, broken equipment, used cans or containers on the Lands, but shall keep the Lands free and clear of all such refuse.

After drilling is completed, if a well is a dry hole, or if a well is completed as a producer, after the well is finally plugged and abandoned, COG will remove all machinery, tanks, pipes, valves, materials, structures and equipment used in connection with operations for the well either (i) on or before ninety (90) days after abandonment of drilling operations if the well is a dry hole, or (ii) on or before six (6) months after final plugging and abandonment of the well, if said well is completed as a producer. COG shall also, within said period, remove caliche (except as has been used for roads) and concrete arising from COG's operations hereunder. In addition, within six(6) months of completion of drilling, COG shall fill in any and all ditches, ruts and depressions and fill in and level all excavations and pits arising from COG's operations hereunder and

generally restore the Lands to as near as practical as existed prior to COG's operations thereon.

Upon completion of drilling, all cleared or disturbed areas across range or pasture land will be reseeded with native grass seed.

Boyd agrees that the herein stated considerations are sufficient and in full and final payment, settlement and discharge of any and all injuries, damages or inconvenience arising out of or relating to COG's operations on the Lands, except for loss of livestock, damage to water wells, or hazardous spills as hereinafter provided.

In addition to the damages paid or provided for in other provisions of this agreement, COG agrees to pay Boyd, its tenants or lessees, for any and all reasonable losses or damages to livestock arising out of COG's operations hereunder, including any loss, damage or injury caused by livestock escaping from the Lands or livestock of others entering thereon through any openings or gaps made in fences, or caused to be made in fences, on the Lands by any of COG's agents, contractors, employees or invitees.

COG agrees to indemnify and hold Boyd harmless from and against any and all claims, damages, causes of action or suits of whatsoever nature (including reasonable attorney's fees and costs and expenses incident thereto) arising in favor of any third party on account of personal injury, death or property damage arising out of COG's operations hereunder, save and except those attributable to Boyd's sole negligence, gross negligence or willful misconduct.

COG agrees to indemnify, hold harmless, and defend Boyd, Boyd's heirs and assigns, employees and agents, and each of them, from and against all losses, liabilities, claims, fines, expenses, costs (including reasonable attorney's fees, costs and expenses incident thereto) and causes of action caused by or arising out of breach of any hazardous material or other environmental laws applicable to any waste material, hazardous substance or other regulated substances, on or below the surface of the Lands or the presence, disposal, release of all waste, hazardous substance or other regulated substance from the Lands into the atmosphere or into or upon land or any water course or body of water, including ground water, which are caused by COG's operations on the Lands under this agreement.

Boyd agrees to not make public disclosure of the subject matter of this letter agreement without prior express written approval of COG.

If this letter agreement represents the full and final agreement in this regard, please execute as provided below and return one fully executed copy to the undersigned at the above letterhead address.

This agreement may not be assigned in whole or in part by COG without the prior written consent of Boyd, which consent will not be unreasonably withheld.

This agreement is contractual and binding upon the undersigned, their heirs, representatives, successors and assigns. The terms of this agreement are contractual and not a mere recital. With respect to all the terms and conditions of this agreement time is of the essence. The undersigned further state that each ahs carefully read the above and foregoing agreement, know and understand the contents thereof, and execute same of their own free act.

If this agreement is acceptable, please execute in the space provided below and return one copy to the undersigned.

COG OIL & GAS LP
By COG OPERATING LLC,
GENERAL PARTNER

By: _____
JAN P. SPRADLIN

AGREED TO AND ACCEPTED THIS
2nd DAY OF June, 2005.

D.K. BOYD LAND & CATTLE CO.
d/b/a D.K. BOYD OIL & GAS CO.

By: _____
D.K. BOYD
Its: President

Final 060705

Exhibit "A"

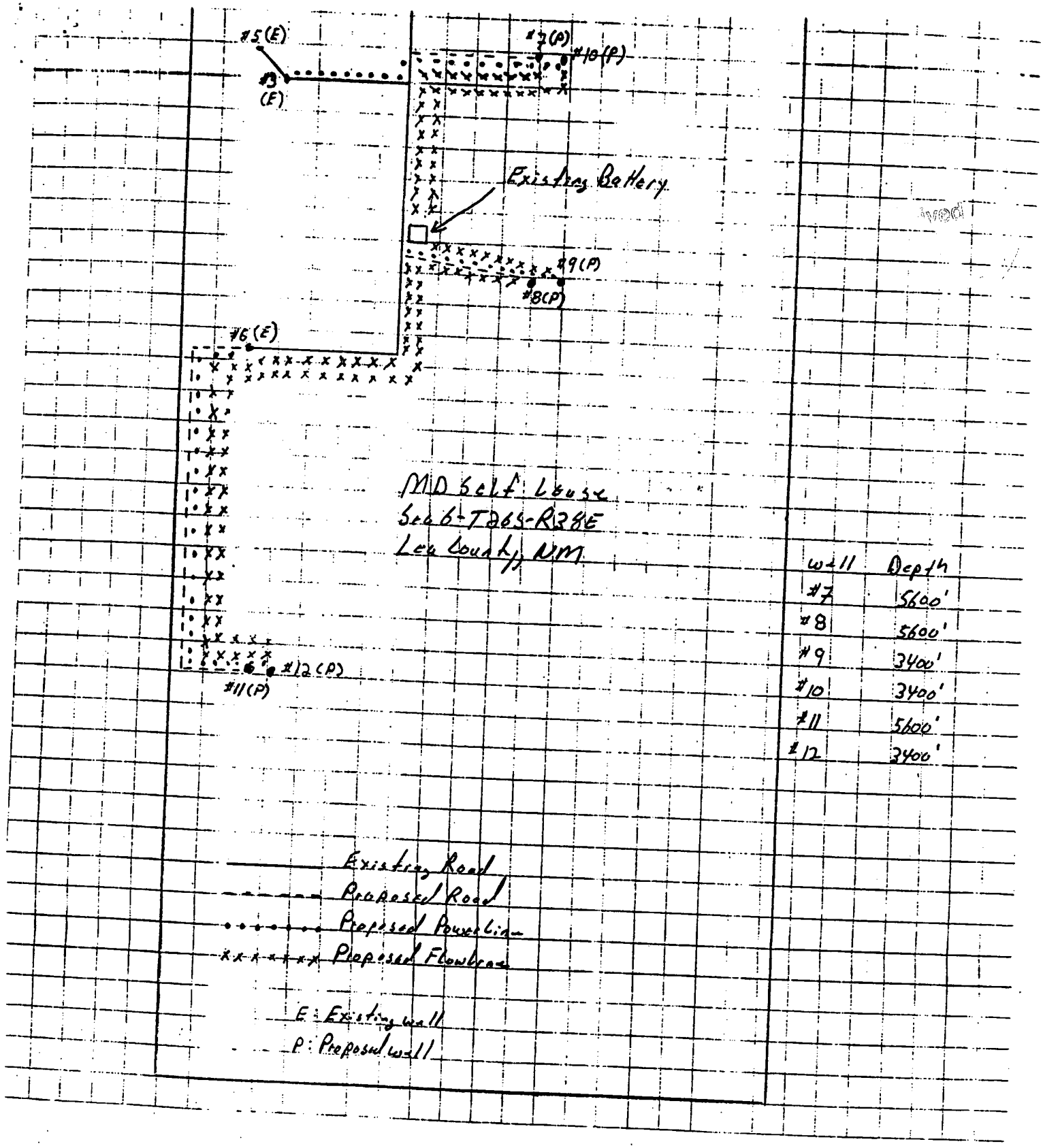
Attached to and made a part of that certain Letter Agreement dated May 11, 2005 by and between COG Oil & Gas LP and its General Partner, COG Operating LLC and D.K. Boyd Land & Cattle Co.

Description of Lands:

Township 26 South – Range 38 East
Section 6: All
Lea County, New Mexico

Proposed Locations and depths:

1. M.D. Self #7 (5600') – 330' FNL & 1650' FWL
2. M.D. Self #8 (5600') – 1650' FWL & 1350' FNL
3. M.D. Self #9 (3400')– 1350' FNL & 1770' FWL
4. M.D. Self #10 (3400')– 330' FNL & 1770' FWL
5. M.D. Self #11 (5600') – 1980' FSL & 360' FWL
6. M.D. Self #12 (3400') – 1980' FSL & 490' FWL



well	Depth
#7	5600'
#8	5600'
#9	3400'
#10	3400'
#11	5600'
#12	3400'

Exhibit "B"

Attached to and made a part of that certain Letter Agreement dated May 11, 2005 by and between COG Oil & Gas LP and its General Partner, COG Operating LLC and D.K. Boyd Land & Cattle Co

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe. NM 87505

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

[1] API Number	[2] Pool Code	[3] Pool Name

[4] Property Code	[5] Property Name	[6] Well Number
	MD Self Lease	

[7] OGRID No.	[8] Operator Name	[9] Elevation
	COG Operating LLC	

[10] Surface Location

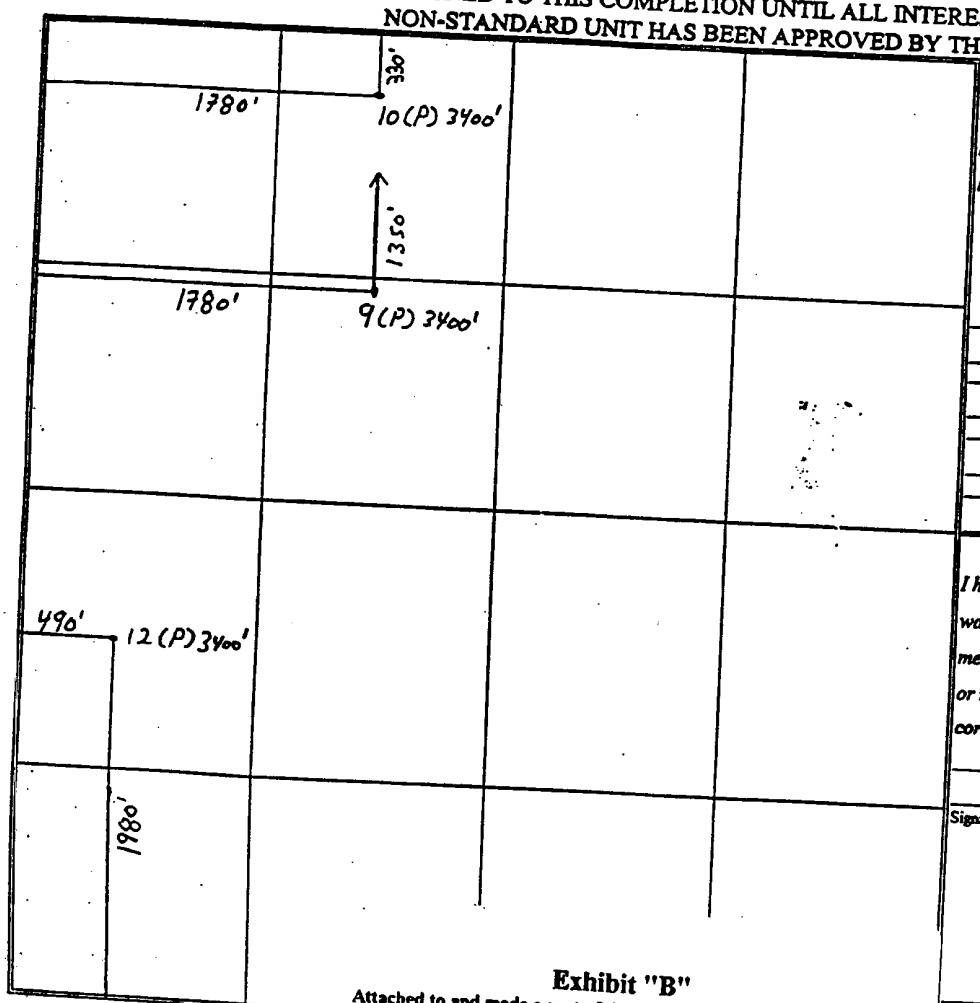
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	6	26	38						Lea

[11] 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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] 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



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

_____ Signature

_____

_____ Title

_____ Date

[18] SURVEYOR CERTIFICATION

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.

_____ Date of Survey

Signature and Seal of Professional Surveyer:

_____ Certificate Number

Exhibit "B"

Attached to and made a part of that certain Letter Agreement dated May 11, 2005 by and between COG Oil & Gas LP and its General Partner, COG Operating LLC and D.K. Boyd Land & Cattle Co

District I
1625 N. French Dr., Hobbs, NM 88240
District II
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1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe. NM 87505

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

[1] API Number	[2] Pool Code	[3] Pool Name

[4] Property Code	[5] Property Name	[6] Well Number
	MD Self Lease	

[7] OGRID No.	[8] Operator Name	[9] Elevation
	COG Operating LLC	

[10] Surface Location

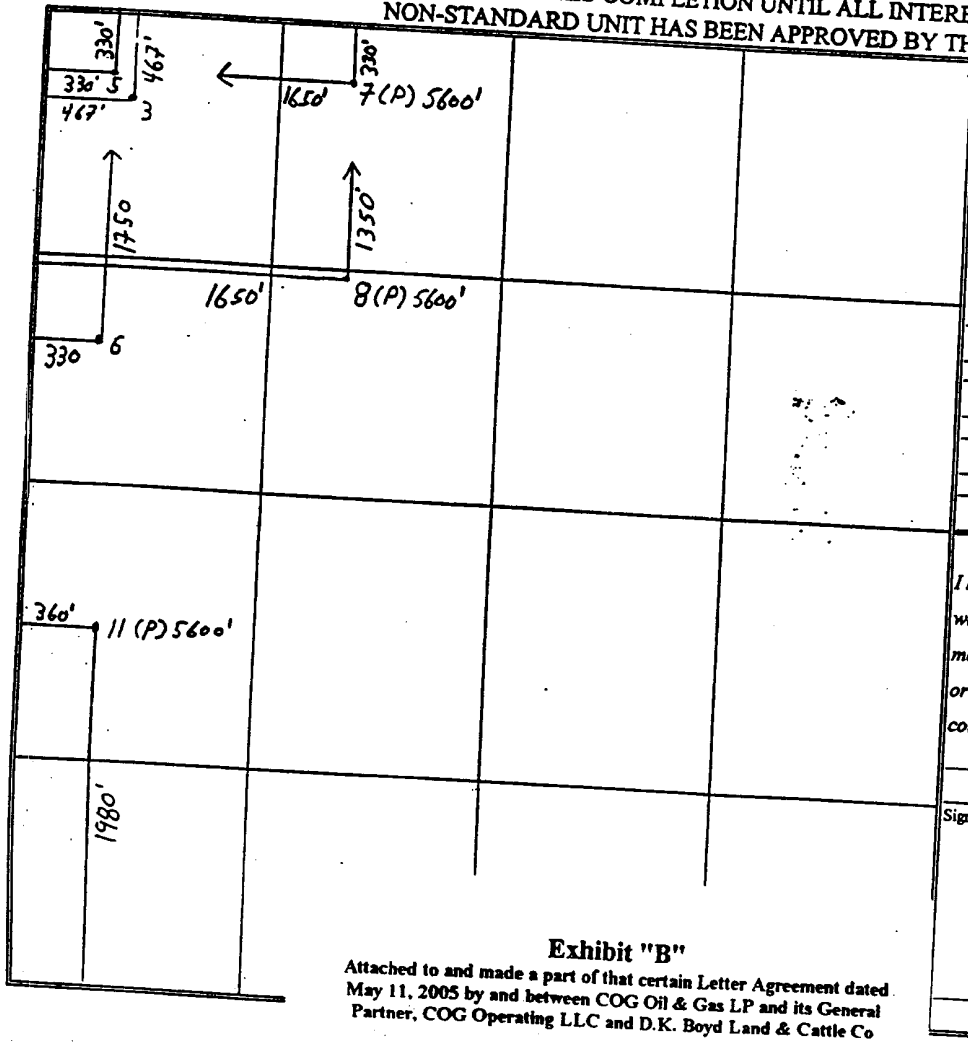
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	6	26	38						Lea

[11] 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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] 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



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature

Title

Date

[18] SURVEYOR CERTIFICATION

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.

Date of Survey

Signature and Seal of Professional Surveyer:

Certificate Number

Exhibit "B"

Attached to and made a part of that certain Letter Agreement dated May 11, 2005 by and between COG Oil & Gas LP and its General Partner, COG Operating LLC and D.K. Boyd Land & Cattle Co

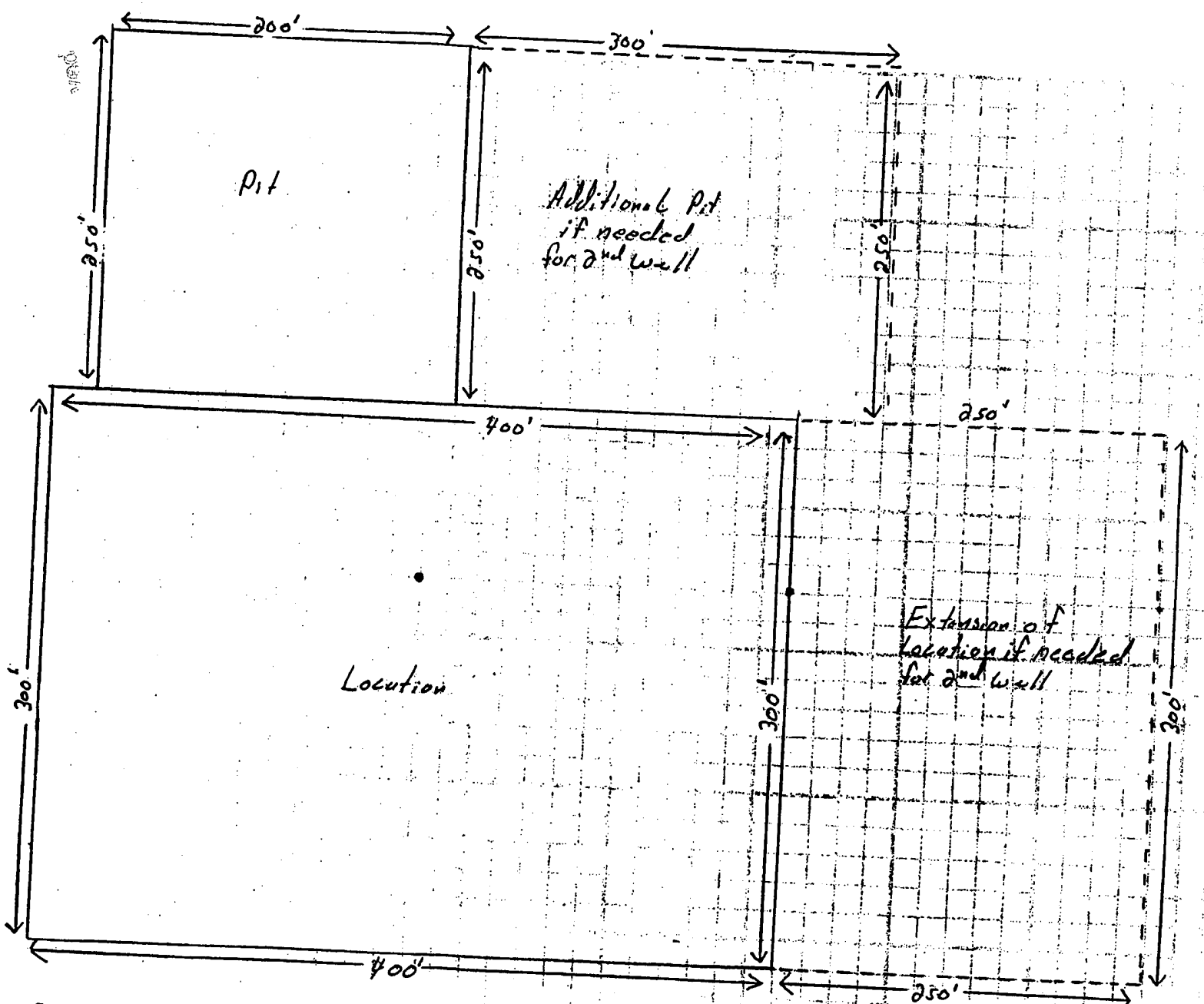


EXHIBIT "B"

Attached to and made a part of that certain Letter Agreement dated May 11, 2005 by and between COG Oil & Gas LP and its General Partner, COG Operating LLC and D. K. Boyd Land & Cattle Co.

Maximum Square Footage for Pit and Location

M. D. Self #7 & #10	320,000 square feet
M. D. Self #8 & #9	320,000 square feet
M. D. Self #11 & #12	320,000 square feet

If square footage exceeds amounts set forth above, COG agrees to pay Boyd an additional amount of $0.15 per square foot in excess of above stated square footage

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name COG Operating LLC. Well Name & No. M.D. Self #9
Location 1350 F N L & 1770 F W L Sec. 6, T. 26 S, R. 38 E.
Lease No. NM-0889 County Lea State New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

(X) Lesser Prairie Chicken (stips attached)
( ) San Simon Swale (stips attached)
( ) Flood plain (stips attached)
( ) Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(X) The BLM will monitor construction of this drill site. Notify the (X) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

(X) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____inches in depth. Approximately _____cubic yards of topsoil material will be stockpiled for reclamation.

( ) Other.

III. WELL COMPLETION REQUIREMENTS

( ) A Communlitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(X) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

( ) A. Seed Mixture 1 (Loamy Sites)
Side Oats Grama (*Bouteloua curtipendula*) 5.0
Sand Dropseed (*Sporobolus cryptandrus*) 1.0

(X) B. Seed Mixture 2 (Sandy Sites)
Sand Dropseed (*Sporobolus crptandrus)* 1.0
Sand Lovegrass (*Eragostis trichodes*) 1.0
Plains Bristlegrass (*Setaria magrostachya*) 2.0

( ) C. Seed Mixture 3 (Shallow Sites)
Side oats Grama (*Boute curtipendula*) 1.0

( ) D. Seed Mixture 4 (Gypsum Sites)
Alkali Sacaton (*Sporobollud airoides*) 1.0
Four-Wing Saltbush (*Atriplex canescens*) 5.0

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other.

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

(1) Lined as specified above and

(2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and it capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from the BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to processed by BLM.

TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the following lands: All of Section 6 T 26 S., R. 38 S.

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks know at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: COG Operating, LLC Well No. 9 - M. D. Self
Location: 1350' FNL & 1770' FWL sec. 6, T. 26 S., R. 38 E.
Lease: NM-0889

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at (505) 393-3612 in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: **8-5/8** inch **5-1/2** inch

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.

4. A Hydrogen Sulfide Contingency Plan should be activated prior to drilling in the **Yates** formation. A copy of the plan shall be posted at the drilling site.

II. CASING:

1. **8-5/8** inch surface casing should be set **at approximately 975 feet (25 feet into the top of the Rustler Anhydrite at approximately 950 feet),** below usable water and circulate cement to the surface. If cement does not circulate to the surface this BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string

2. Minimum required fill of cement behind the **5-1/2** inch production casing is **sufficient to tie back 500 feet above the uppermost perforation in the pay zone.**

III. PRESSURE CONTROL:

1. Before drilling below the **8-5/8** inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **2000** psi.

3. The BOPE shall be tested before drilling below the **8-5/8** inch surface casing as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

A. The results of the test will be reported to the BLM Hobbs Office at 414 West Taylor, Hobbs, New Mexico 88240.

B. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

C. Testing must be done in a safe workman like manner. Hard line connections shall be required.

BLM Serial Number: NM-0889
Company Reference: M.D. Self #9
Well No. & Name: COG Operating LLC.

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS
CARLSBAD FIELD OFFICE

A copy of the grant and attachments, including stipulations and map, will be on location during construction. BLM personnel may request to view a copy of your permit during construction to ensure compliance with all stipulations.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

A. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

B. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, *et. seq.*) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

C. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, *et. seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et. seq.*) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting there from, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times.

The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar.

Holder agrees to comply with the following stipulations:

1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

/__/ Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

/_X_/ Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

/__/ Flat-blading is authorized on segment(s) delineated on the attached map.

3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

/_x_/ 400 foot intervals.

/__/ _____ foot intervals.

/__/ locations staked in the field as per spacing intervals above.

/__/ locations delineated on the attached map.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

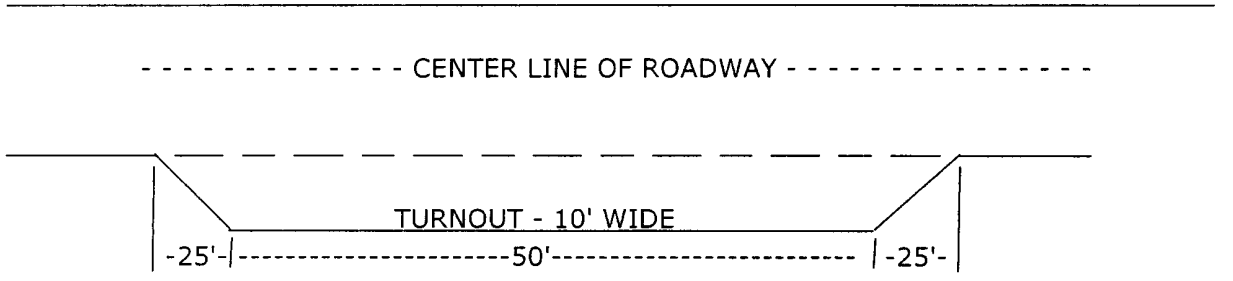
C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

spacing interval = $\frac{400'}{\text{road slope in \%}}$ + 100'

Example: 4% slope: spacing interval = $\frac{400}{4}$ + 100 = 200 feet

4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS:

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: M. D. SELF # 9 API #: 30-025-37467 U/L or Qtr/Qtr F Sec 6 T 26S R 38E
County: LEA Latitude 32°04'32.39" Longitude 103°06'07" NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☐ State ☐ Private ☐ Indian ☒

Pit	Below-grade tank	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☐ Thickness 12 mil Clay ☐ Volume 15M bbl	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.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more 0	(20 points) (10 points) (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 No 0	(20 points) (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 200 feet or more, but less than 1000 feet 1000 feet or more 0	(20 points) (10 points) (0 points) 0
	Ranking Score (Total Points) 0	0

Received JUL 26 2005 Hobbs OCD

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: 07/25/05
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.

Approval: SEP 20 2005
Date: _____
Printed Name/Title PETROLEUM ENGINEER Signature _____