

OCD-HOBBS

793

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

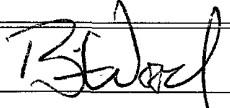
## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER		5. Lease Serial No. <b>LC-057210</b>
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <b>SWD</b> <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator <b>COG Operating LLC 229137</b>		7. If Unit or CA Agreement, Name and No. N/A
3a. Address <b>550 W. Texas, Suite 1300 Midland, TX 79701</b>	3b. Phone No. (include area code) <b>(432) 686-3021</b>	8. Lease Name and Well No. <b>Federal B I #1 37277</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface <b>480' FSL &amp; 1980' FWL Unit N</b> At proposed prod. zone <b>SAME</b>		9. API Well No. <b>30-025-27068</b>
14. Distance in miles and direction from nearest town or post office* <b>5 miles south of Maljamar, NM</b>		10. Field and Pool, or Exploratory <b>SWD; Wolfcamp</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>480'</b>	16. No. of acres in lease <b>1,200</b>	11. Sec., T. R. M. or Blk. and Survey or Area <b>28-17s-32e NMPM</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>781' (#261)</b>	19. Proposed Depth <b>11,555'</b>	12. County or Parish <b>Lea</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3,938' GL</b>	22. Approximate date work will start* <b>05/25/2008</b>	13. State <b>NM</b>
20. BLM/BIA Bond No. on file <b>NMB000215</b>		
23. Estimated duration <b>2 weeks</b>		

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature 	Name (Printed/Typed) <b>BRIAN WOOD</b>	Date <b>04/19/2008</b>
---	---	---------------------------

Title <b>CONSULTANT</b>	PHONE: (505) 466-8120 FAX: (505) 466-9682
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Approved by (Signature) <b>/s/ DAVID D. EVANS</b>	Name (Printed/Typed) <b>/s/ DAVID D. EVANS</b>	Date <b>JUL 23 2008</b>
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Title <b>FIELD MANAGER</b>	Office <b>CARLSBAD FIELD OFFICE</b>
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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, are attached.**APPROVAL FOR TWO YEARS**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

\*(Instructions on page 2)

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

RECEIVED

JUL 25 2008

HOBBS OCD

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

ORM APPROVED  
OMB No 1004-0137  
Expires: March 31, 2007

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

**SUBMIT IN TRIPLICATE**- Other instructions on reverse side.1. Type of Well  
☐ Oil Well ☐ Gas Well ☒ Other2. Name of Operator  
COG Operating LLC3a. Address  
550 West Texas Ave., Suite 1300, Midland, TX 797013b. Phone No. (include area code)  
432 686-30214. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
480' FSL & 1980' FWL 28-17s-32e NMPM5. Lease Serial No.  
LC-0572106. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.  
Federal B I #19. API Well No.  
30-025-2706810. Field and Pool, or Exploratory Area  
SWD; Wolfcamp11. County or Parish, State  
Lea County, NM

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Will change from 2-7/8" to 3-1/2" flush joint plastic coated tubing.  
No change in planned perforations.  
No change in planned packer depth.  
No increase in pressure beyond that currently authorized (SWD-1093).

cc: BLM, Fairchild

14. I hereby certify that the foregoing is true and correct
- 
- Name (Printed/Typed)

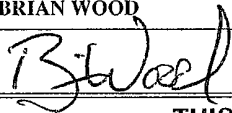
BRIAN WOOD

(PHONE 505 466-8120)

Title CONSULTANT

(FAX 505 466-9682)

Signature



Date

06/16/2008

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ DAVID D. EVANS

Title

FIELD MANAGER

Date

JUL 23 2008

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

(Instructions on page 2)

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 & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease- 4 Copies  
Fee Lease- 3 Copies  
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-27068</b>	Pool Code <b>96135</b>	Pool Name <b>SWD; WOLFCAMP</b>
Property Code <b>37277</b>	Property Name <b>FEDERAL BI</b>	Well Number <b>1</b>
OGRID No. <b>229137</b>	Operator Name <b>COG OPERATING LLC.</b>	Elevation <b>3938.9'</b>

Surface Location

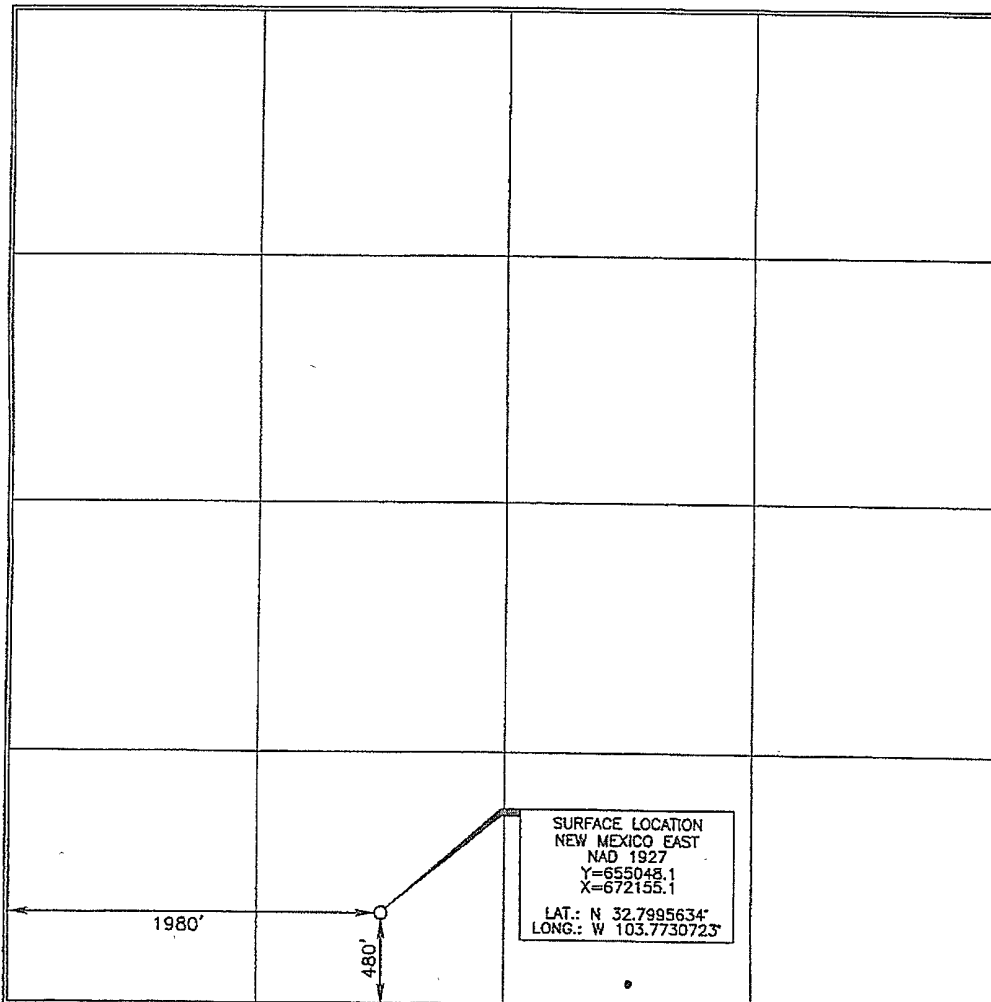
UL or lot no. <b>N</b>	Section <b>28</b>	Township <b>17 SOUTH</b>	Range <b>32 EAST, N.M.P.M.</b>	Lot Idn	Feet from the <b>480'</b>	North/South line <b>SOUTH</b>	Feet from the <b>1980'</b>	East/West line <b>WEST</b>	County <b>LEA</b>
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Bottom Hole Location 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
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Dedicated Acres	Joint or Infill	Consolidation Code	Order No. <b>SWD-1093</b>
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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 that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

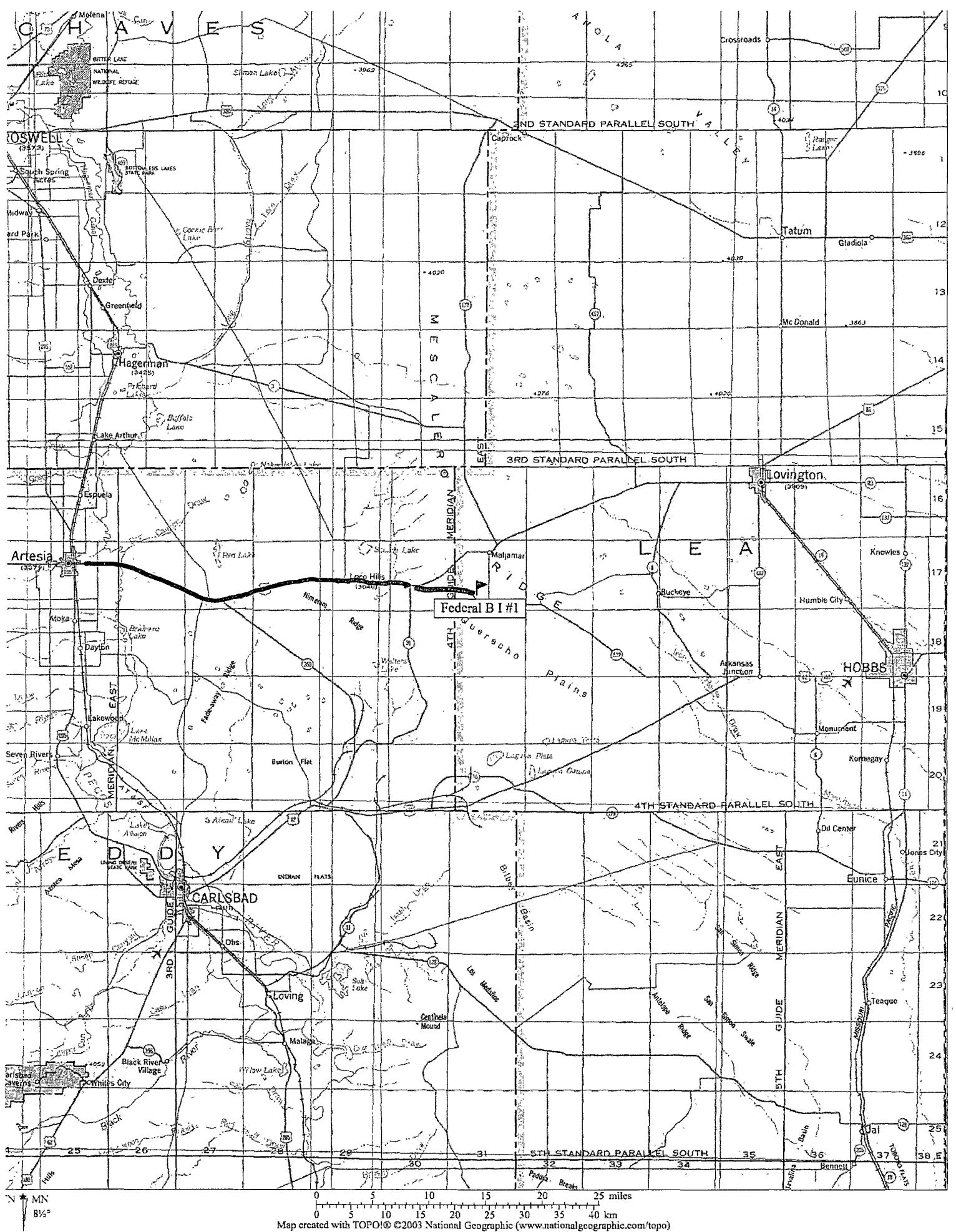
*Brian Wood*  
Signature  
Date  
**4-19-08**  
**BRIAN WOOD**  
Printed Name

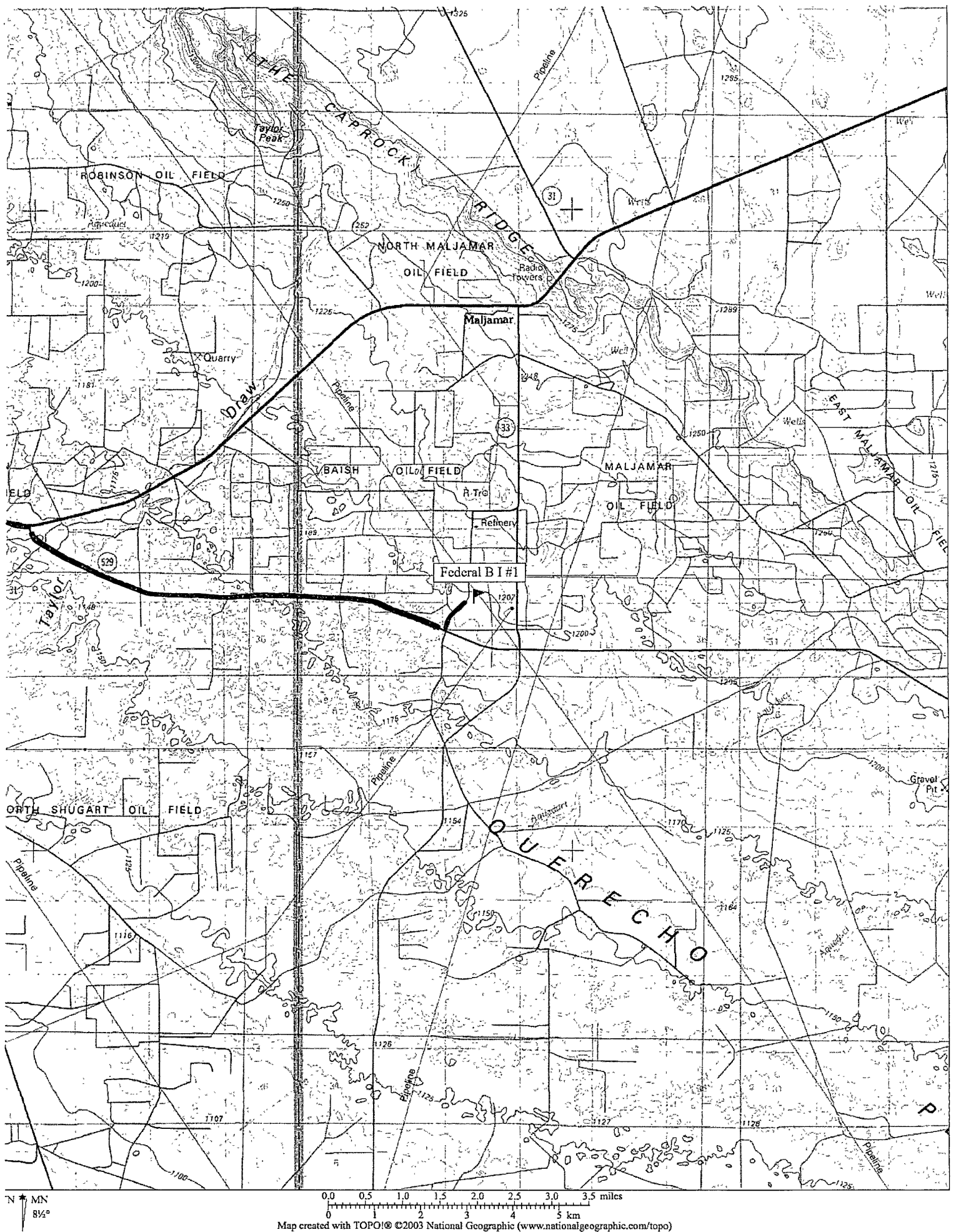
SURVEYOR CERTIFICATION

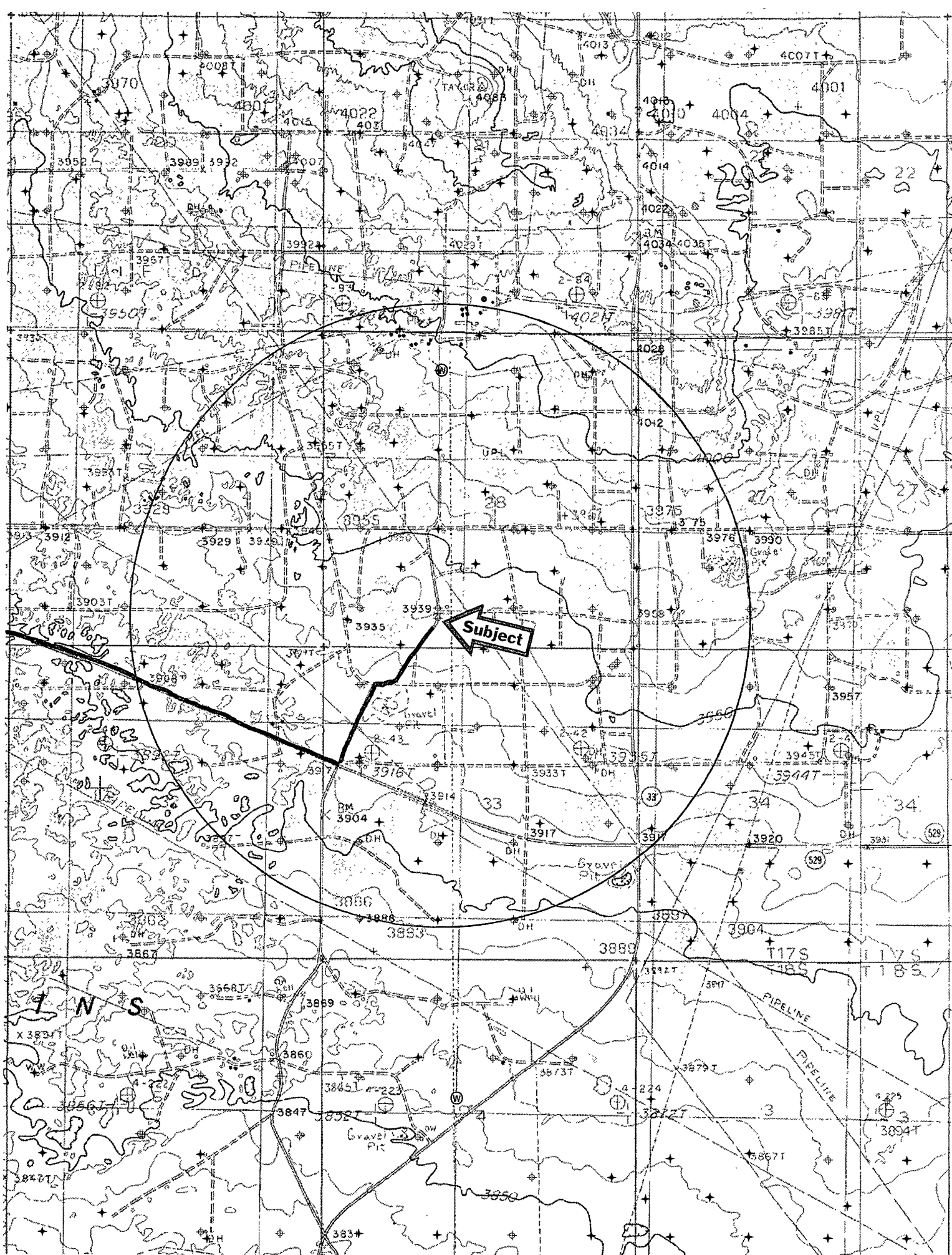
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

*Sergey A. Wood*  
Date of Survey  
**MARCH 13, 2008**  
Signature and Seal of Professional Surveyor  
Certificate Number  
**15079**

WO# 080313WL (Rev. A) (K2)

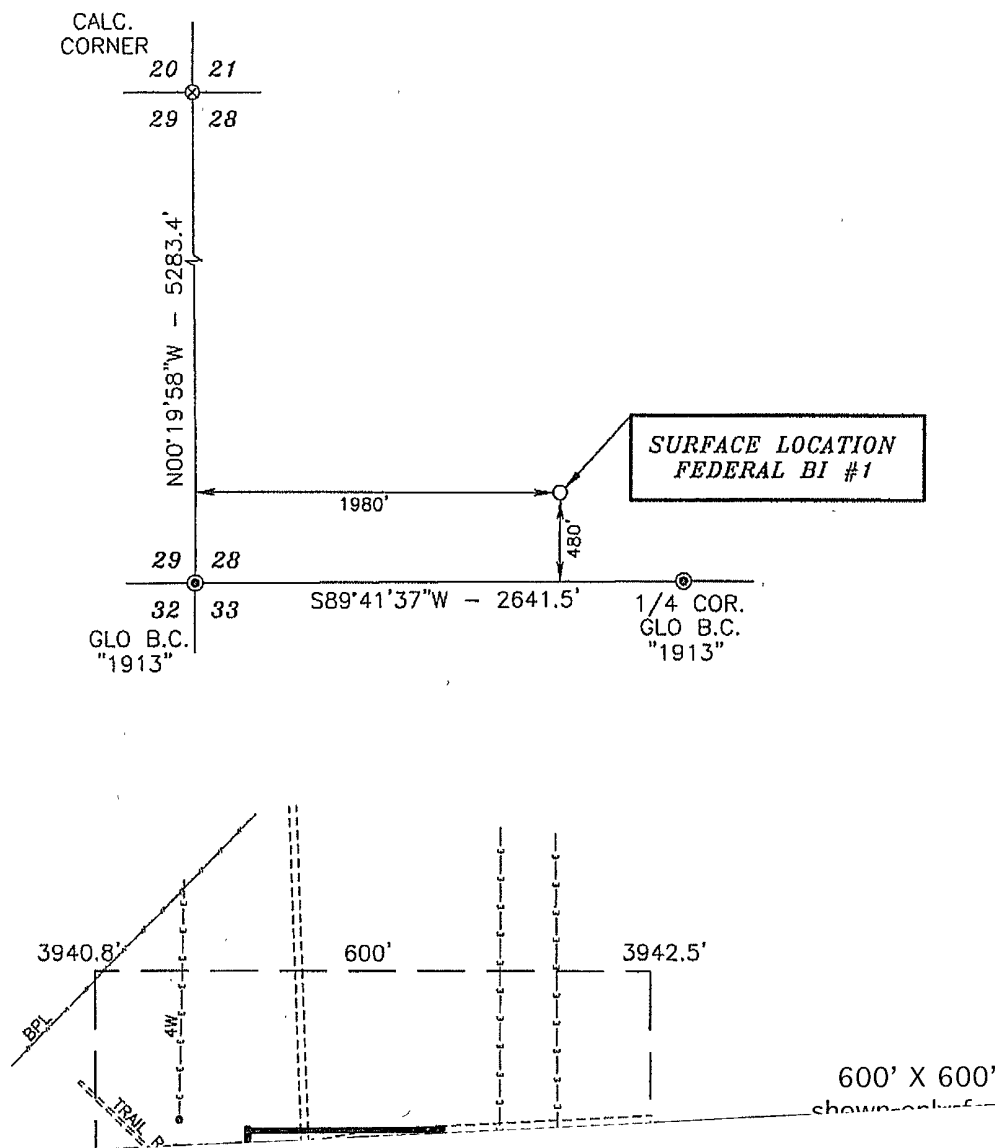




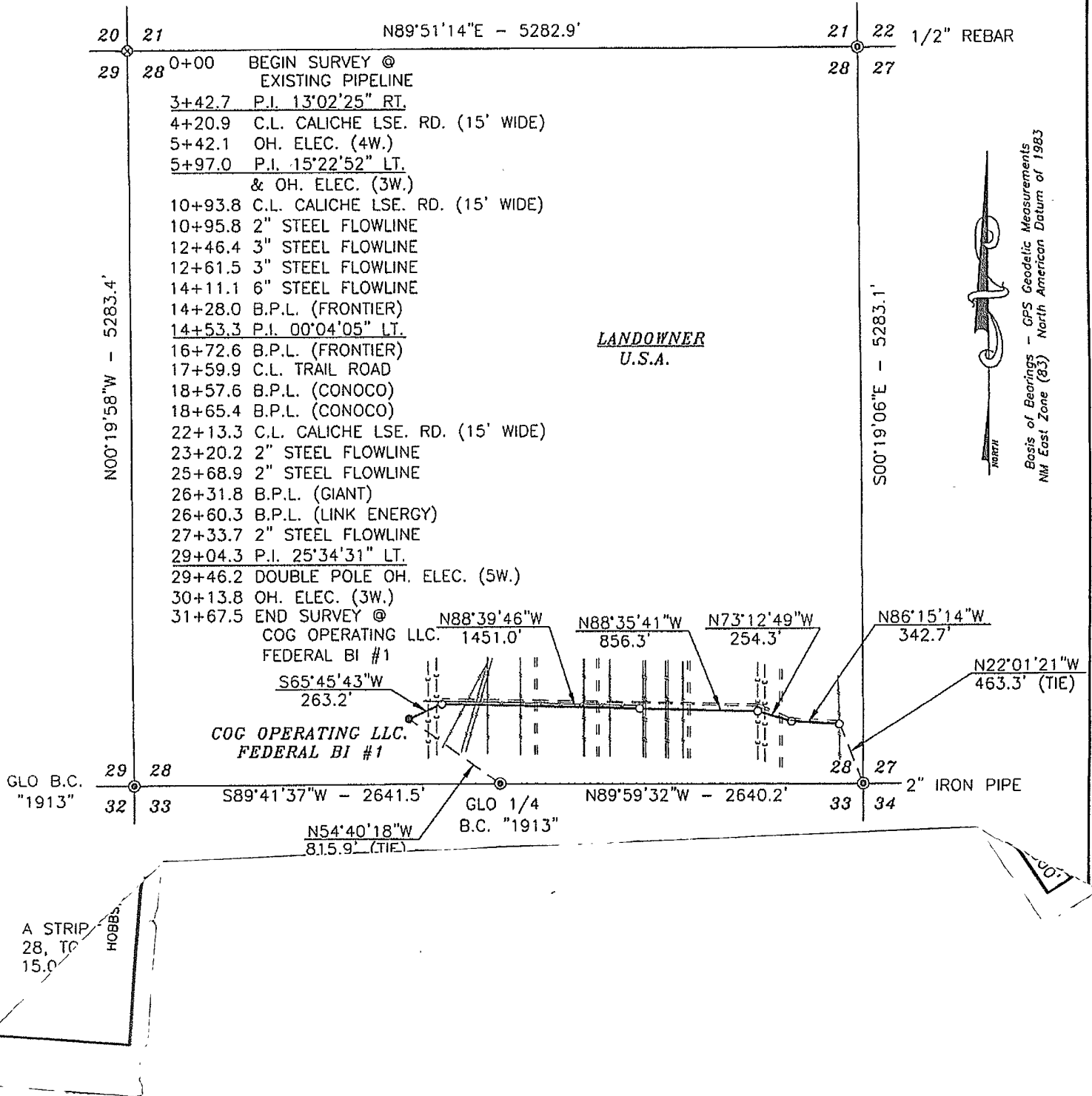


SECTION 28, TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M.,  
LEA COUNTY  
NEW MEXICO

Basis of Bearings - GPS Geodetic Measurements  
NM East Zone (83) North American Datum of 1983

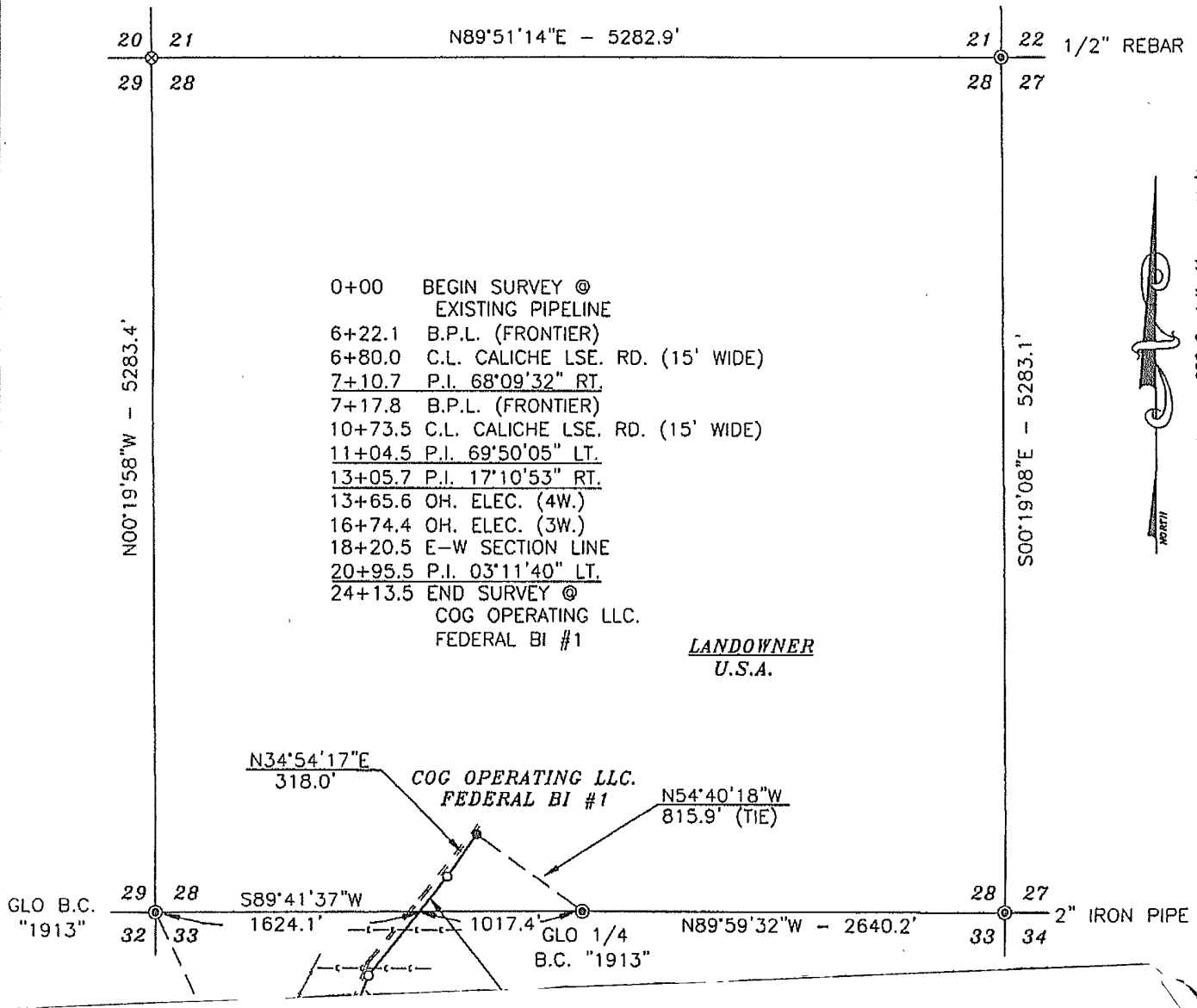


SECTION 28, TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M.,  
LEA COUNTY NEW MEXICO





SECTIONS 28 & 33, TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M.,  
LEA COUNTY NEW MEXICO



Basis of Bearings - GPS Geodetic Measurements  
NM East Zone (83) North American Datum of 1983

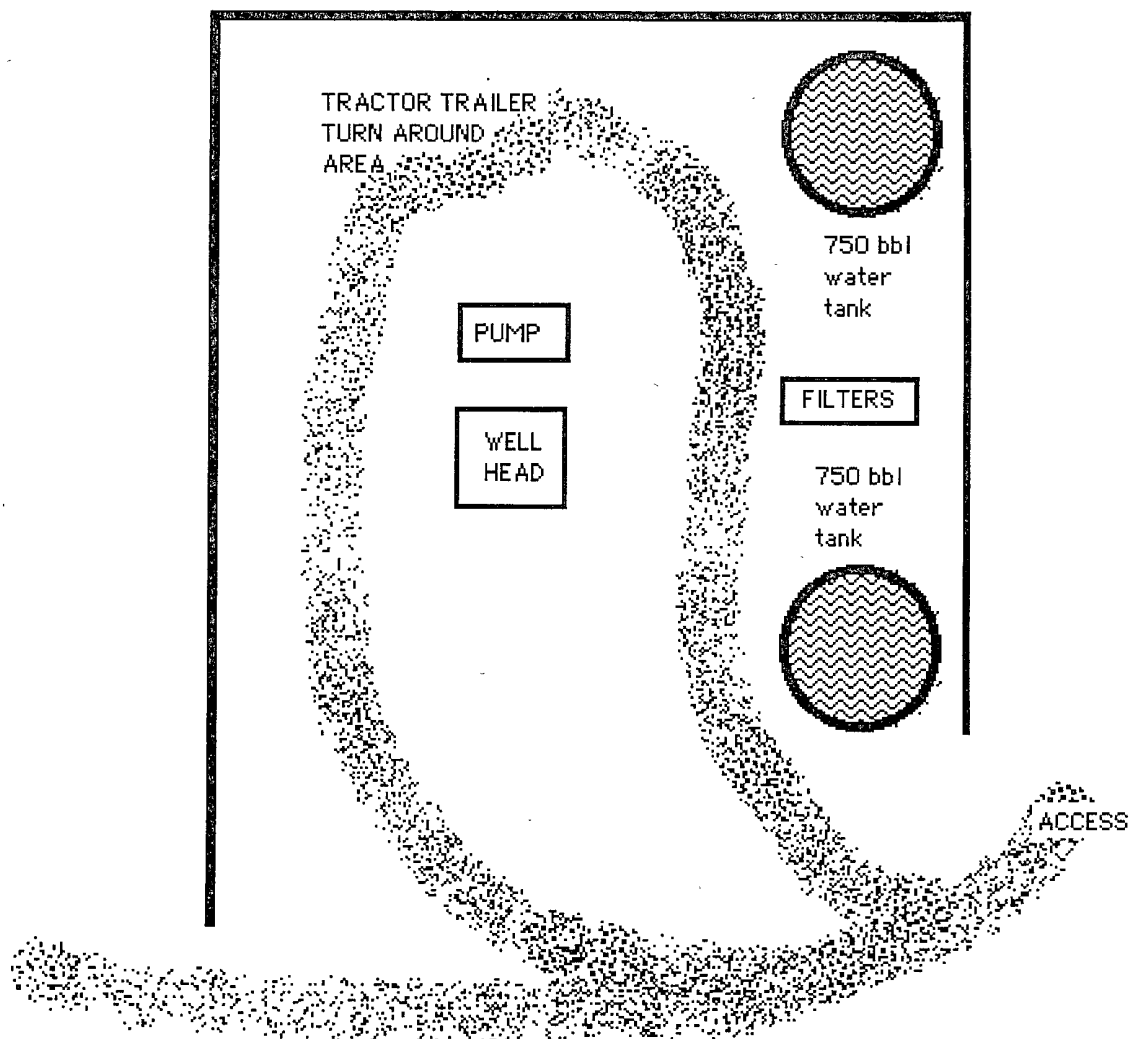
COG Operating LLC  
Federal B I #1  
480' FSL & 1980' FWL  
Sec. 28, T. 17 S., R. 32 E.  
Lea County, New Mexico

PAGE 13

1" = 50'



NORTH



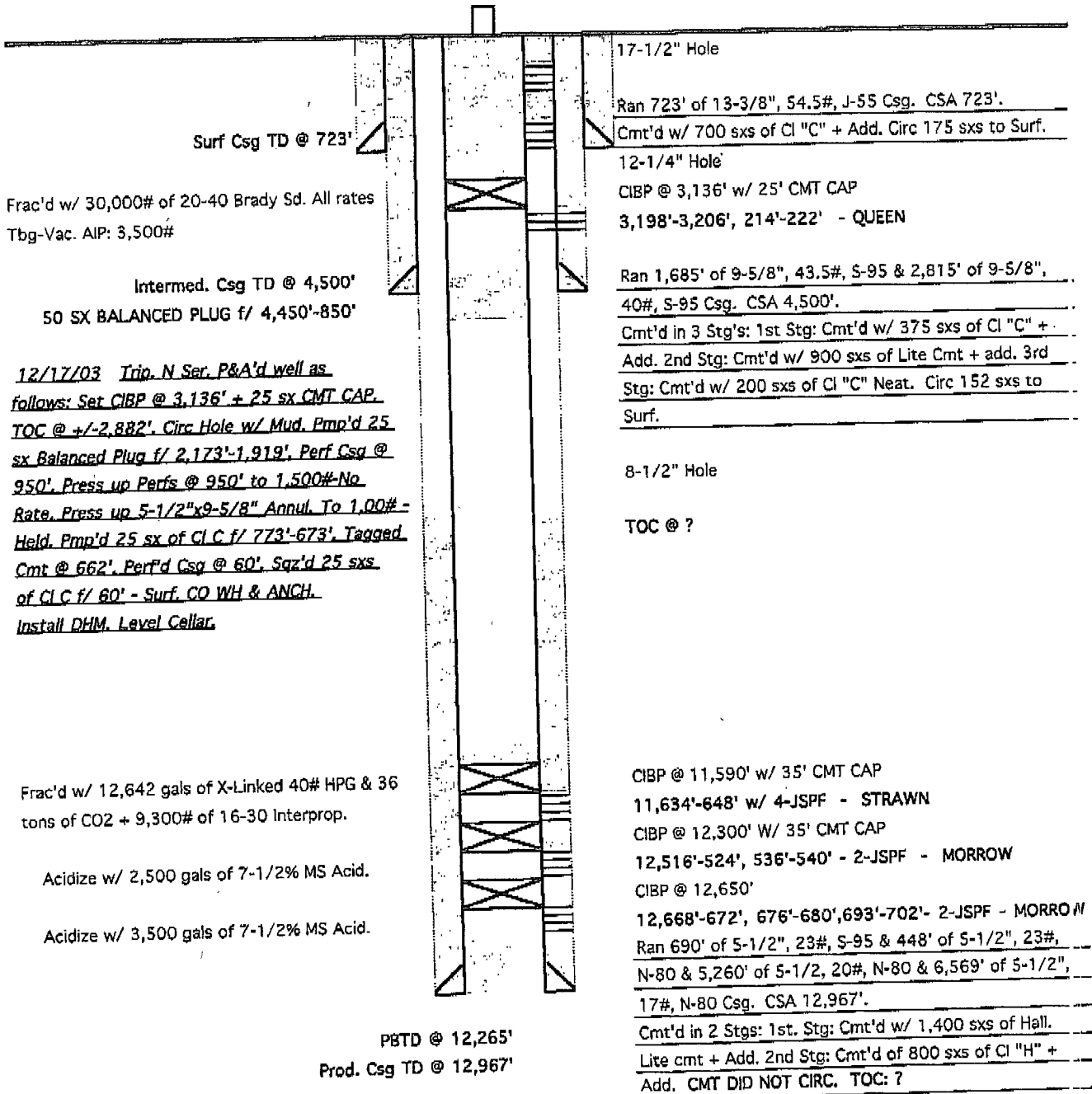
P&amp;A'd

# FEDERAL BI #1 WELL BORE DIAGRAM

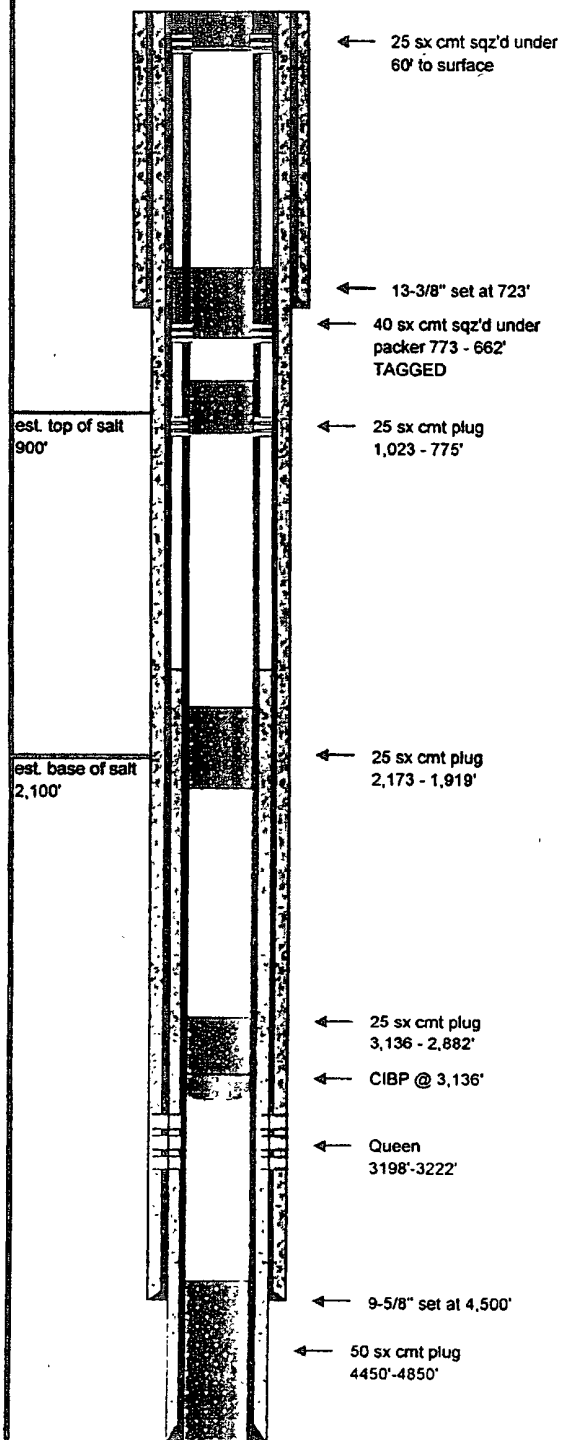
P&amp;A'd

LEGAL: 480' FSL & 1980' FWL, Unit N, Sec. 28, T-17-S,R-32-E, Lea County, NM, NMPM  
 API#: 30-025-27068 FED. LSE #: LC-057210  
 ELEV: 3,941' - GL

SPUD DATE: 10/14/80  
 COMPL. DATE: 03/18/81



Before



Field Name:	Pearsall Queen		
County:	Lea	Well Type:	gas
State:	New Mexico	PBTD:	4,850
RRC District:		Drilling Commenced:	October 14, 1980
Section:	28	Drilling Completed:	March 18, 1981
Block:		Date Well Plugged:	December 19, 2003
Survey:	T-17-S; R-32-E	Longitude:	
		Latitude:	
		Freshwater Depths:	
API #:	42-025-27068		
Lease or ID:	LC 057210		

Casing					
Description	Size (inches)	Depth (feet)	TOC (feet)	Cement (sacks)	Hole Size (inches)
Surface:	13-3/8"	723	Surface	700	17-1/2"
Intermediate:	9-5/8"	4,500	Surface	1475	11"
Production:	5-1/2"	12,967	1,345	2200	8-1/2"

Existing Plugs					
Description	Top (feet)	Depth (feet)	Volume (sacks)	Volume (cu ft)	
1 Cement-Class C - Balanced	4,450	4,850	50	66	
2 CIBP	3,136	3,138			
3 Cement-Class C - Balanced	2,882	3,136	25	33	
4 Cement-Class C - Balanced	1,919	2,173	25	33	
5 Cement-Class C - Balanced	775	1,023	25	33	
6 Cement-Class C - perf & sqz'd	662 (tag'd)	773	40	53	
7 Cement-Class C - perf & sqz'd	surface	60	25	33	

Perforations			
Formation	Top (feet)	Depth (feet)	
Queen	3,198	3,222	

Formations		
Name	Top of Formation	
est. top of salt	900	
est. base of salt	2,100	

**Comments:**  
 Perforated at 950' for plug #5, unable to squeeze at 1,500 psi, pumped balanced plug.  
 Plugs #6 and #7 perforated and squeezed under packer.

Prepared By: Jim Newman  
 Date: December 22, 2003

**TRIPLE N**  
 SERVICES INC.  
 MIDLAND, TX

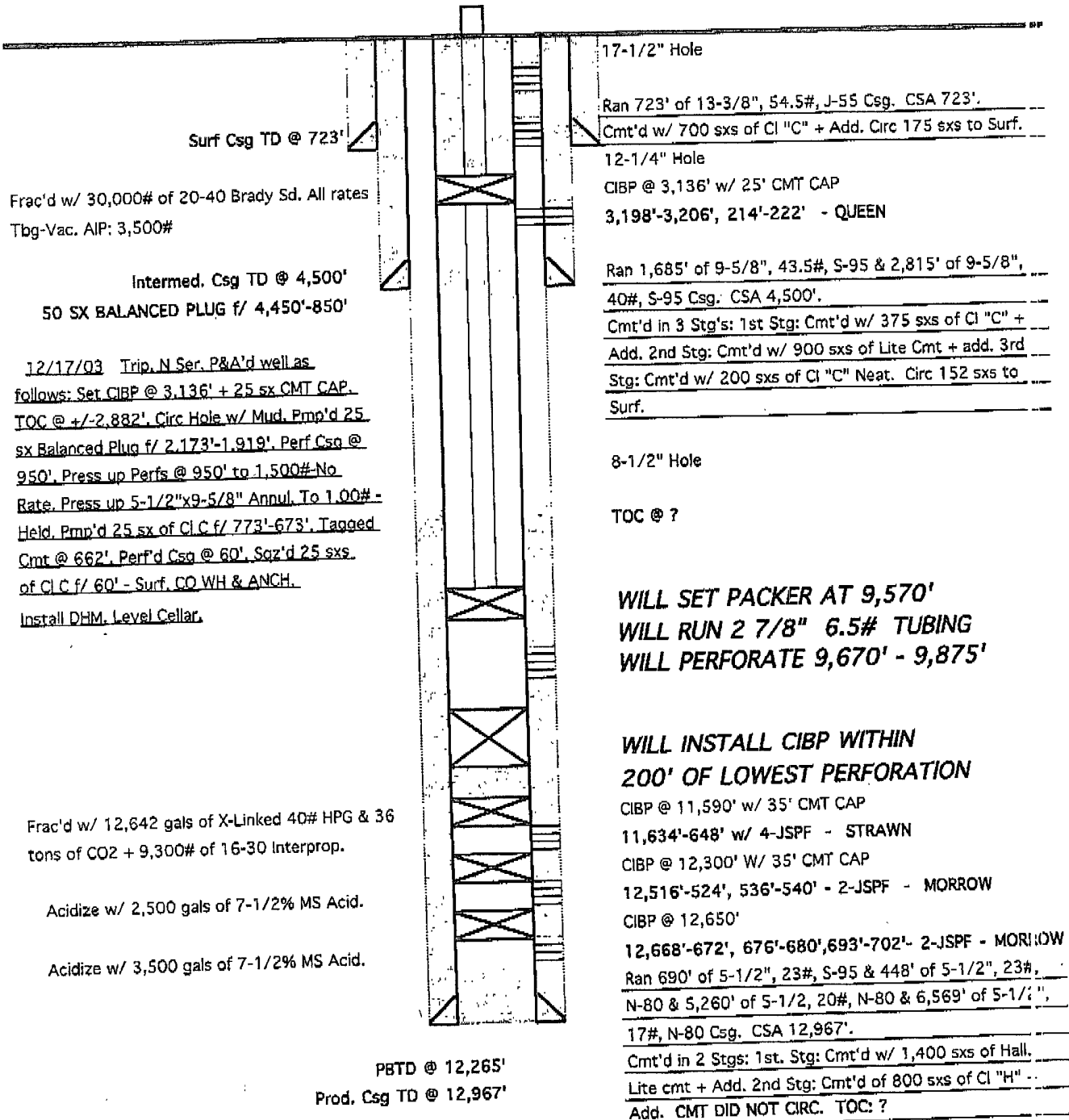
After

FEDERAL BI #1  
WELL BORE DIAGRAM

Conversion

LEGAL: 480' FSL & 1980' FWL, Unit N, Sec. 28, T-17-S,R-32-E, Lea County, NM, NMPM  
API#: 30-025-27068 FED. LSE #: LC-057210  
ELEV: 3,941' - GL

SPUD DATE: 10/14/80  
COMPL. DATE: 03/18/81



COG Operating LLC  
Federal B I #1  
480' FSL & 1980' FWL  
Sec. 28, T. 17 S., R. 32 E.  
Lea County, New Mexico

PAGE 1

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Quaternary	0'	10'	3,938'
Rustler	907'	917'	3,031'
Salado	1,000'	1,010'	2,938'
Yates	2,220'	2,230'	1,718'
Seven Rivers	2,500'	2,510'	1,438'
Queen	3,197'	3,207'	741'
Grayburg	3,566'	3,576'	372'
San Andres	3,940'	3,950'	-2'
Glorieta	5,796'	5,806'	-1,858'
Paddock	5,850'	5,860'	-1,912'
Bone Springs	6,220'	6,230'	-2,282'
Tubb	7,430'	7,440'	-3,492'
Drinkard	7,489'	7,499'	-3,551'
Abo	7,740'	7,750'	-3,802'
Upper Wolfcamp	9,329'	9,339'	-5,391'
<i>proposed packer</i>	<i>9,570'</i>	<i>9,580'</i>	<i>-5,632'</i>
<i>highest proposed perforation</i>	<i>9,670'</i>	<i>9,680'</i>	<i>-5,732'</i>
<i>lowest proposed perforation</i>	<i>9,875'</i>	<i>9,885'</i>	<i>-5,937'</i>
Lower Wolfcamp	10,094'	10,104'	-6,156'
Cisco	10,745'	10,755'	-6,807'
Strawn	11,453'	11,463'	-7,515'
Existing TOC on CIBP	11,555'	11,565'	-7,617'

(Well was drilled in 1980 to 12,992' as a Morrow test and subsequently plugged and abandoned in 2003. COG plans no operations below 11,555'.)

COG Operating LLC  
Federal B I #1  
480' FSL & 1980' FWL  
Sec. 28, T. 17 S., R. 32 E.  
Lea County, New Mexico

PAGE 2

## 2. NOTABLE ZONES

### Gas & Oil Zones

San Andres  
Strawn

### Water Zones

Quaternary

### Salt Zone

Salado

Water zones are protected with casing and cement.

## 3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical 3,000 psi model is on PAGE 3. An 8-5/8" x 11" 3,000 psi double ram BOP system with a choke manifold and mud cross will be tested to 300 psi and then to 3,000 psi. Upper and lower Kelly cocks with valve handle and subs to fit all drill string connections which are in use will be available on the rig floor.

Tests will be run when:

- 1) installed
- 2) anytime a pressure seal is broken *all to be tested* (~~test only affected equipment~~)
- 3) at least once every 20 days *see Onshore order 2*
- 4) blind & pipe rams will be activated each trip, but no more than daily

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and tested before drilling surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated daily to ensure good mechanical working order and this inspection recorded on the daily drilling report. Preventers and casing will be pressure tested before drilling casing cement plugs. Maximum expected bottom hole pressure will be  $\leq 4,000$  psi.



"Mark Fairchild"  
<MFairchild@conchoresources.com>

06/30/2008 03:23 PM

To <Wesley\_Ingram@NM.BLM.Gov>

cc "Erick Nelson" <ENelson@conchoresources.com>, "Morris Keith" <MKeith@conchoresources.com>, "brian wood" <brian@permitswest.com>

bcc

Subject COG's SWD Application for the Federal BI

Wesley, thanks for visiting with me.

1. Re entry fluid type and description: Fluid to be fresh water base, range of 8.6 to 9.2 ppg. Any requirement for viscosity to be achieved by use of polymer additives.
2. Do not yet have rig date, will forward that to you as soon as available. I have requested a date two weeks hence. Would that work for you? We really need to get this well going.

Thanks and G'g'em

Mark A. Fairchild

Office: 432-686-3021

Cell: 432-230-7170





COG Operating LLC  
 Federal B I #1  
 480' FSL & 1980' FWL  
 Sec. 28, T. 17 S., R. 32 E.  
 Lea County, New Mexico

PAGE 4

#### 4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Pounds per foot</u>	<u>Grade</u>	<u>Age</u>	<u>Depth Set</u>	<u>Cement Top</u>
17-1/2"	13-3/8"	54.5	J-55	1980	723'	surface
12-1/4"	9-5/8"	43.5	S-95	1980	1,685'	
+12-1/4"	9-5/8"	40	S-95	1980	2,815'	
					4,500'	surface
8-1/2"	5-1/2"	23	S-95	1980	690'	
8-1/2"	5-1/2"	23	N-80	1980	448'	
8-1/2"	5-1/2"	20	N-80	1980	5,260'	
+ 8-1/2"	5-1/2"	17	N-80	1980	6,569'	
					12,967'	1,345'

Surface casing was cemented to the surface with 700 sacks Class C. Circulated 175 sacks to the surface.

Intermediate casing was cemented to the surface with 1,475 sacks in three stages. First stage: 375 sacks Class C. Second stage: 900 sacks light. Third stage: 200 sacks Class C Neat. Circulated 152 sacks to the surface.

Production casing was cemented to 1,345' with 1,400 sacks Halliburton light with additives and 800 sacks Class H with additives.

#### 5. MUD PROGRAM

As needed to clean well bore.

#### 6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. Compensated neutron form density, dual laterolog Micro SFL, and compensated porosity neutron logs are on file

COG Operating LLC  
Federal B I #1  
480' FSL & 1980' FWL  
Sec. 28, T. 17 S., R. 32 E.  
Lea County, New Mexico

PAGE 5

with the NMOCD. COG will run a cement bond log.

#### 7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected.

#### 8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take about two weeks to drill out the plugs and complete the well. Operation sequence is:

COG will blade location, dig cellar around casing, and weld on 5-1/2" bell nipple. COG will pick up a 4-1/2" bit and drill out surface plug then run in the hole and drill out the cement cap and CIBP at 3,136'. COG will continue in the hole and drill out the cement plug located from 4,450' - 4,850'. COG will continue to run in the hole to 10,800' and circulate the well clean.

After circulating the well clean, will POOH and run cement bond log from PBTD (11,555') to surface. COG will notify OCD and BLM of planned MIT test.

Next, COG will run in the hole with a standard packer at set at 9,570' (same depth as injection packer) and perform a standard MIT test to insure mechanical integrity. If the MIT fails, then COG will locate holes and determine whether they want to fix and continue with conversion or plug well back out.

Following the MIT test, COG will rig up wireline truck and perforate the disposal interval from 9,670' - 9,875' with 2 shots per foot, 180° phasing.

COG will run in hole with 5-1/2" nickel plated Arrowset packer with on/off tool and plastic coated tubing to a depth of 9,570', pump packer fluid, and set packer at 9,570'.

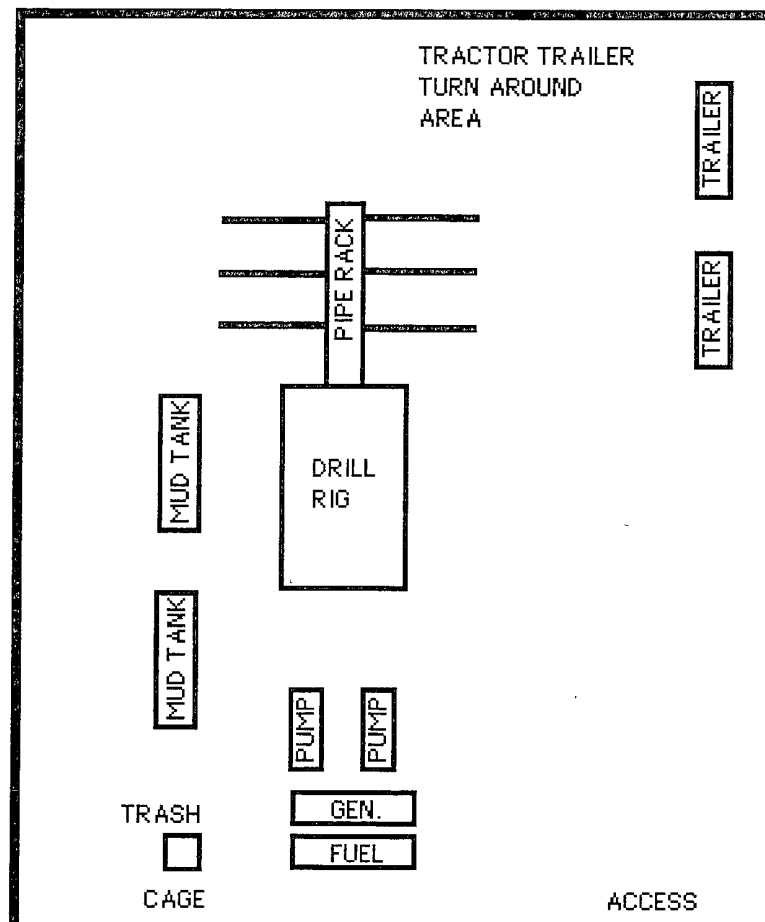
COG Operating LLC  
Federal B I #1  
480' FSL & 1980' FWL  
Sec. 28, T. 17 S., R. 32 E.  
Lea County, New Mexico

PAGE 17

1" = 50'



NORTH



Submit 3 Copies To Appropriate District Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., 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

Form C-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. 30-025-27068
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. NMLC-057210
7. Lease Name or Unit Agreement Name FEDERAL B I
8. Well Number 1
9. OGRID Number 229137
10. Pool name or Wildcat SWD; Wolfcamp

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <u>SWD</u>	
2. Name of Operator COG Operating LLC	
3. Address of Operator 550 W. Texas Ave., Suite 1300, Midland, TX 79701	
4. Well Location Unit Letter: N 480' FSL & 1980' FWL Section 28 Township 17 South Range 32 East NMPM Lea County	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3,938' GL	
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>	
Pit type: <u>DRILLING</u> Depth to Groundwater: <u>&gt;150'</u> Distance from nearest fresh water well: <u>&gt;1,000'</u> Distance from nearest surface water: <u>&gt;300'</u>	
Pit Liner Thickness: <u>N/A</u> Below-Grade Tank: Volume _____ bbls; Construction Material: <u>N/A</u>	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: DRILLING PIT ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Will use steel mud tanks instead of pit.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any 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 ☐.

SIGNATURE Brian Wood TITLE: CONSULTANT

DATE: APRIL 19, 2008

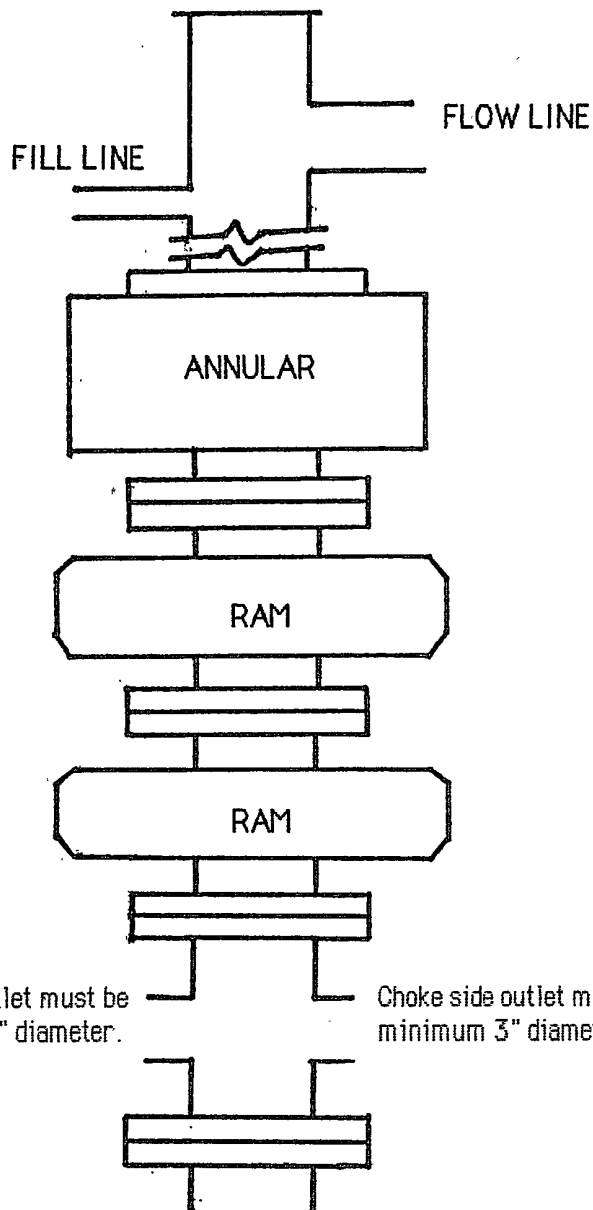
Type or print name: BRIAN WOOD

E-mail address: brian@permitswest.com

Telephone No.: (505) 466-8120

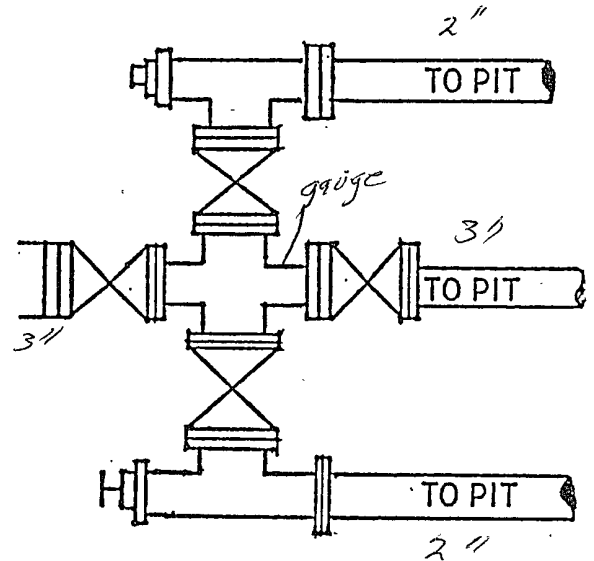
**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_



TYPICAL BOP STACK  
& CHOKE MANIFOLD

There will be at least 2 chokes and 2 choke line valves (3" minimum). The choke line will be 3" in diameter. There will be a pressure gauge on the choke manifold.



Kill line will be minimum 2" diameter and have 2 valves, one of which shall be a minimum 2" check valve.

Upper kelly cock will have handle available.  
Safety valve and subs will fit all drill string connections in use.  
All BOPE connections subjected to well pressure will be flanged, welded, or clamped.

# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG OPERATING LLC
LEASE NO.:	LC-057210
WELL NAME & NO.:	Federal BI No. 1
SURFACE HOLE FOOTAGE:	480' FSL & 1980' FWL
BOTTOM HOLE FOOTAGE:	' F L & ' F L
LOCATION:	Section 28, T. 17 S., R. 32 E., NMPM
COUNTY:	Lea County, New Mexico

## TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
  - Lesser Prairie Chicken
- ☐ **Construction**
  - Notification
  - Topsoil
  - Reserve Pit
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
- ☒ **Production (Post Drilling)**
  - Well Structures & Facilities
  - Pipelines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

## **I. GENERAL PROVISIONS**

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

## **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

## **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator 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 shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

## **IV. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

## **V. SPECIAL REQUIREMENT(S)**

### **WATER INJECTION PIPELINE TO THE SOUTHWEST WILL REQUIRE A ROW PERMIT.**

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1 through June 15 annually. 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 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known 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 ft. from the source of the noise.



## **CONSTRUCTION**

### **A. NOTIFICATION**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

### **B. TOPSOIL**

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

### **C. RESERVE PITS**

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

### **D. FEDERAL MINERAL MATERIALS PIT**

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (575) 234-5972.

### **E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

## VI. DRILLING

### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Lea County**

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,  
(575) 393-3612

1. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan should be activated 500 feet prior to drilling **out the CIBP at 3136'. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

### B. CASING – RE-ENTRY

1. **The 13-3/8" casing is set at 723' and cemented to surface.**

**A CIT is to be performed on the production casing per Onshore Oil and Gas Order 2.III.B.1.h prior to drilling the CIBP at 3136'. This will be after drilling the surface plug, the surface shoe plug, the top of Salt plug at 775', the base of Salt plug at 1919'. This will test all the perforations done during the plugging procedure. BLM inspector to witness.**

**Prior to drilling the cement plug at 4450', the Queen perforations are to be squeezed and pressure tested. BLM inspector to witness.**

2. **The 9-5/8" casing is set at 4500' and cemented to surface.**

**A CIT is to be performed on the entire production casing string per Onshore Oil and Gas Order 2.III.B.1.h prior to perforating. BLM inspector to witness.**

**Copy of CBL to be provided to BLM.**

3. **The 5-1/2" casing is set at 12967' and cemented to 1345' according to operator records.**
4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

**C. PRESSURE CONTROL**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. The tests shall be done by an independent service company.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

**WWI 071908**

## **VII. PRODUCTION (POST DRILLING)**

### **A. WELL STRUCTURES & FACILITIES**

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Containment Structures**

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color  
Shale Green, Munsell Soil Color Chart # 5Y 4/2

### **B. PIPELINES**

BLM LEASE NUMBER LC-057210  
COMPANY NAME COG Operating, LLC  
WELL NO. & NAME Federal B I #1

#### **BURIED PIPELINE STIPULATIONS**

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. 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.
2. 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 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way 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.

3. 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), or resulting from the activity of the Right-of-Way holder 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.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up 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 holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of **36** inches between the top of the pipe and ground level.

7. Blading of all vegetation will be allowed. Blading is defined as the complete removal of brush and ground vegetation. Clearing of brush species will be allowed. Clearing defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface. In areas where blading and/or clearing is allowed, maximum width of these operations will not exceed **35** feet.

8. The holder shall minimize disturbance to existing fences and other improvements on public lands. 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 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. No permanent gates will be allowed unless approved by the Authorized Officer.

9. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in row, piles, or berms, unless otherwise approved by the Authorized Officer. A berm will be left over the ditch line to allow for settling back to grade.

10. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

11. The holder will reseed. Seeding will be done according to the attached seeding requirements, using the following seed mix.

( ) seed mixture 1

( ) seed mixture 3

( **X** ) seed mixture 2

( ) seed mixture 4

12. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. 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 proper mitigation measures will be made by the Authorized Officer after consulting with the holder.





## **VIII. INTERIM RECLAMATION & RESERVE PIT CLOSURE**

### **A. INTERIM RECLAMATION**

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

The operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

## Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	11lbs/A

\*\*Four-winged Saltbush 5lbs/A

\* This can be used around well pads and other areas where caliche cannot be removed.

\*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed  
(Insert Seed Mixture Here)

## **X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS**

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.