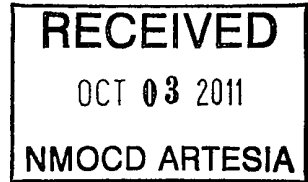


30-015-39472

COG OPERATING LLC
MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Magura 8 Federal #4H
SHL: 330' FNL & 2080' FWL
BHL: 330' FSL & 1980' FWL
Section 8 T26S R26E
Eddy County, New Meexico



This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. The well was staked by John West Surveying Company.
- b. Exhibit 2 is a portion of a topo map showing the well and roads in the vicinity of the proposed location. The proposed wellsite and the access route to the location are indicated in red on Exhibit 2. Right of way using this proposed route is being requested if necessary.
- c. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

DIRECTIONS:

From the Hwy. #62 and caliche CR # 424 (Dillahunty Rd.) Go east-southeast on CR #424 approx. 8.0 miles, turn left on caliche CR #425 (Gypsum Rd.) and go north 1.2 miles, the location is on the right (east) 250'.

PLANNED ACCESS ROAD:

COG will be using a proposed access road of 110' coming in from the west side of the pad.

2. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

In the event the well is found productive, the Magura 8 Federal #4H

- A. tank battery would be utilized and the necessary production equipment will be installed at the well site. See Exhibit #4.
- B. All flowlines will adhere to API standards
- C. If electricity is needed, power will be obtained from Central Valley Electric. Central Valley Electric will apply for ROW for their power lines.

- D. If the well is productive, rehabilitation plans are as follows:
- i. The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original state.

3. LOCATION AND TYPES OF WATER SUPPLY:

This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in Exhibit #2. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drill rig. In these cases where a poly pipeline is used to transport water for drilling purposes, the existing and proposed road shown in Exhibit "2" will be utilized.

5. CONSTRUCTION MATERIALS:

All Caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche. Will use BLM recommended use of extra caliche from other locations close by for roads, if available.

6. METHODS OF HANDLING WASTE MATERIAL:

- a. All trash, junk and other waste material will be removed from the wellsite within 30 days after finishing drilling and/or completion operations. All 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 an approved sanitary landfill.
- b. The supplier, including broken sacks, will pick up slats remaining after completion of well.
- c. 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.
- d. Disposal of fluids to be transported by an approved disposal company.

6. ANCILLARY FACILITIES:

No campsite or other facilities will be constructed as a result of this well.

7. WELLSITE LAYOUT:

- a. Exhibit 1 shows the proposed well site layout with dimensions of the pad layout.
- b. This exhibit indicates proposed location of reserve and sump pits if utilized and living facilities.
- c. Mud pits in the active circulating system will be steel pits and a closed loop system will be utilized.

8. PLANS FOR SURFACE RECLAMATION:

- a. After finishing drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The original top soil will again be returned to the pad and contoured, as close as possible, to the original state.
- b. The location and road will be rehabilitated as recommended by the BLM.
- c. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

9. SURFACE OWNERSHIP:

The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas. The proposed road routes and the surface location will be restored as directed by the BLM.

10. OTHER INFORMATION:

- a. The area surrounding the well site is grassland. The vegetation is moderately sparse with native prairie grass and mesquite bushes. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- b. There is no permanent or live water in the general proximity of the location.
- c. If the well is deemed commercially productive, caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography. Reserve pit will not be used on this location therefore no reclamation is needed.
- d. Topsoil will be stockpiled on the EAST SIDE of the location until it is needed for interim reclamation described in paragraph above.

12. OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:

Rand French, Regulatory Supervisor
COG Operating LLC
Artesia, NM 88210
Phone (575)748-6940
Cell (432) 254-5556

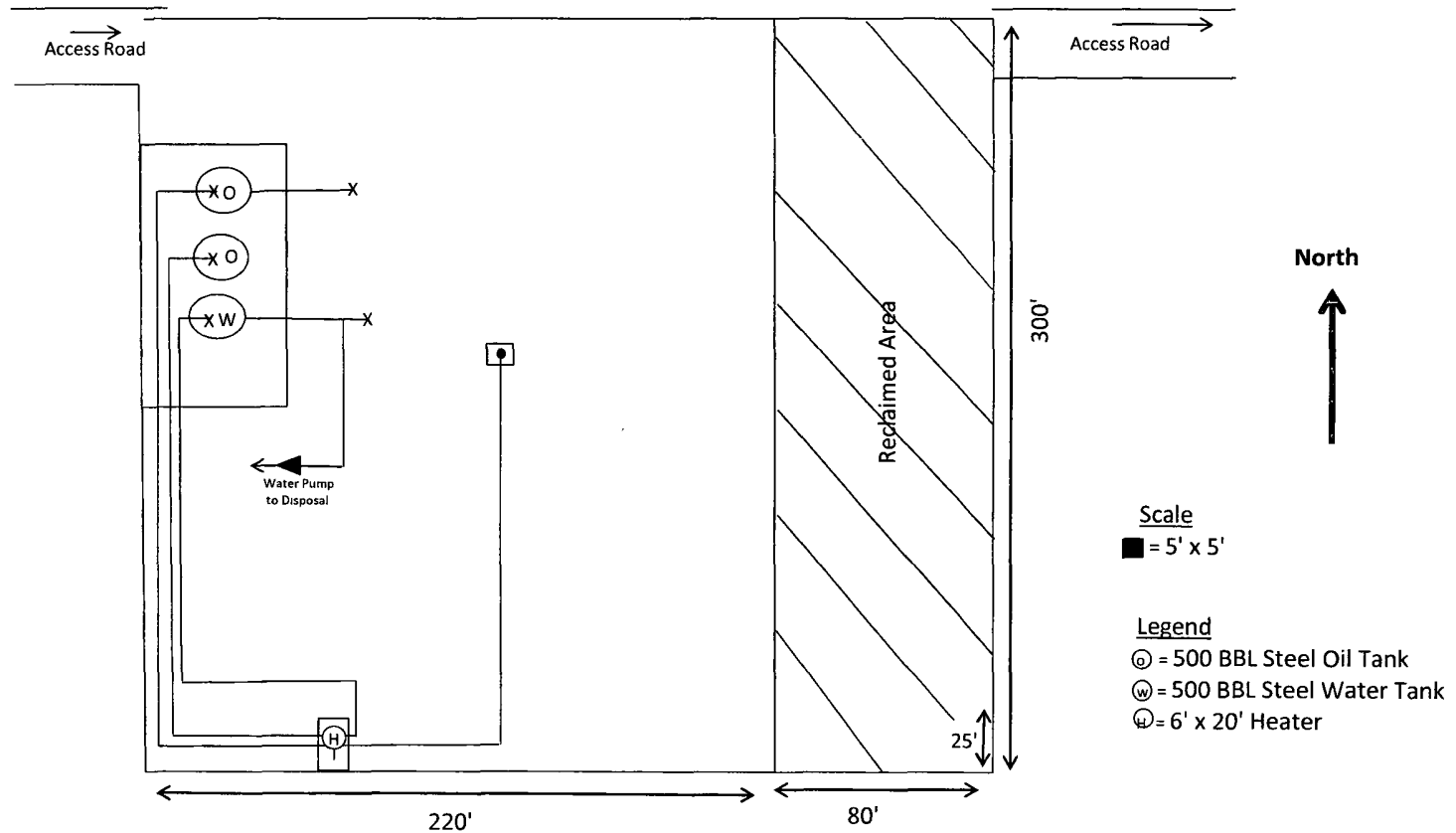
B. Through Drilling Operations

Sheryl Baker, Drilling Supervisor
COG Operating LLC
Artesia, NM 88210
Phone (575)748-6940
Cell (432)934-7873

Exhibit 4

Production Facility Layout

Magura 8 Federal #4H

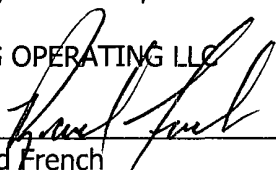


CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by COG Operating LLC and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

6/9/2011
Date

COG OPERATING LLC



Rand French
Regulatory Supervisor

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

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

Date: June 10, 2011

Lease #: NMNM103597
Magura 8 Federal #4H

Legal Description: Sec. 12 – T19S – R31E
Eddy County, New Mexico

Formation(s): Bone Spring

Bond Coverage: Statewide

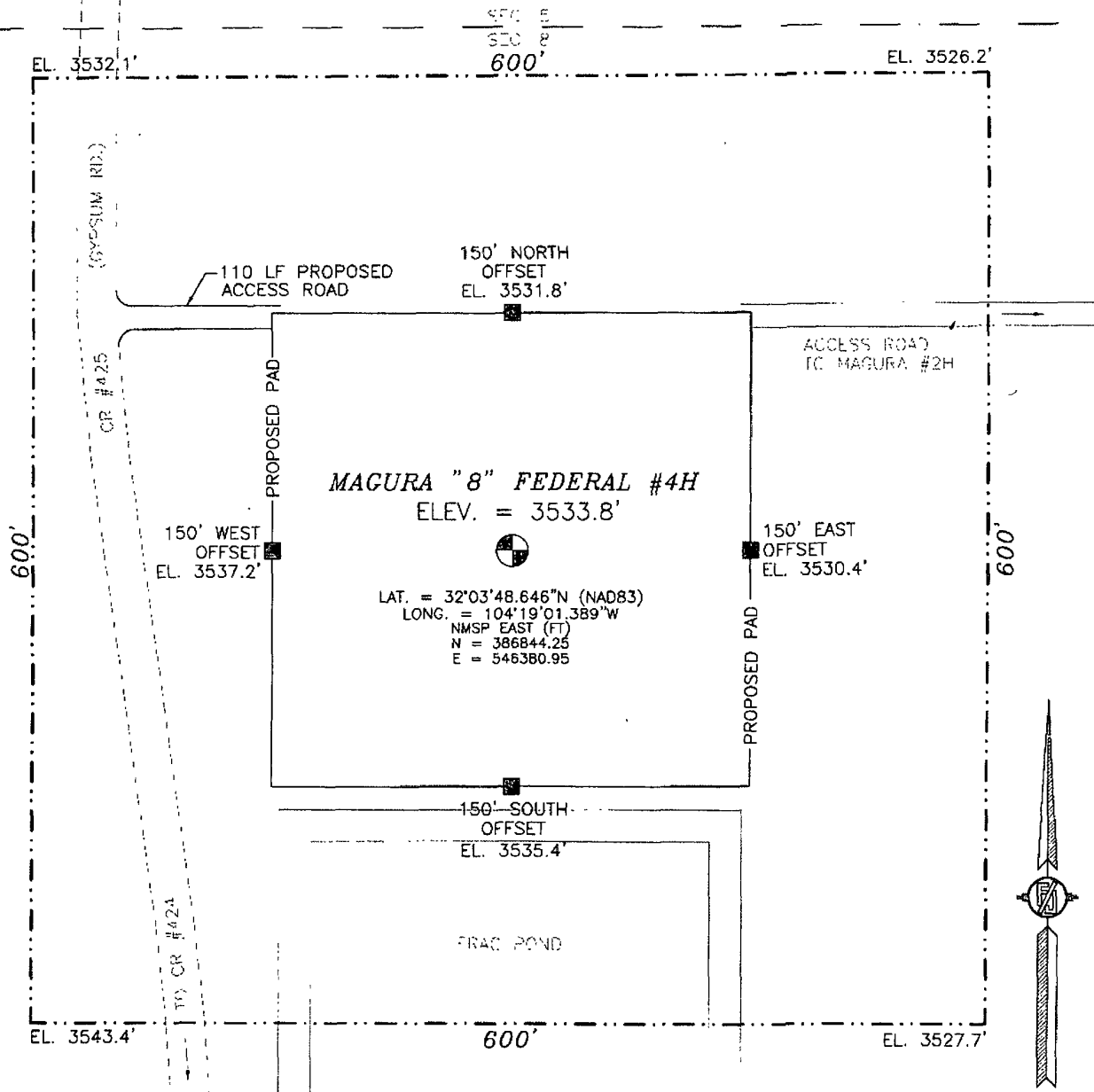
BLM Bond File #: NMB00215

COG OPERATING LLC

A handwritten signature in cursive script, appearing to read 'Mayte Reyes', is written over a horizontal line.

Mayte Reyes
Regulatory Analyst

SECTION 8, TOWNSHIP 26 SOUTH, RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO



010 50 100 200
SCALE 1" = 100'

DIRECTIONS TO LOCATION:
FROM US HWY #62 AND CALICHE CR #424 (DILLAHUNTY RD.) GO EAST-
SOUTHEAST ON CR #424 APPROX. 8.0 MILES, TURN LEFT ON CALICHE
CR #425 (GYPSUM RD.) AND GO NORTH 1.2 MILES, THE LOCATION IS
ON THE RIGHT (EAST) 250'.

CR-425 N. @ 1.2 mi

SURVEY NO. 466

MADRON SURVEYING, INC.

COG OPERATING, LLC

MAGURA "8" FEDERAL #4H

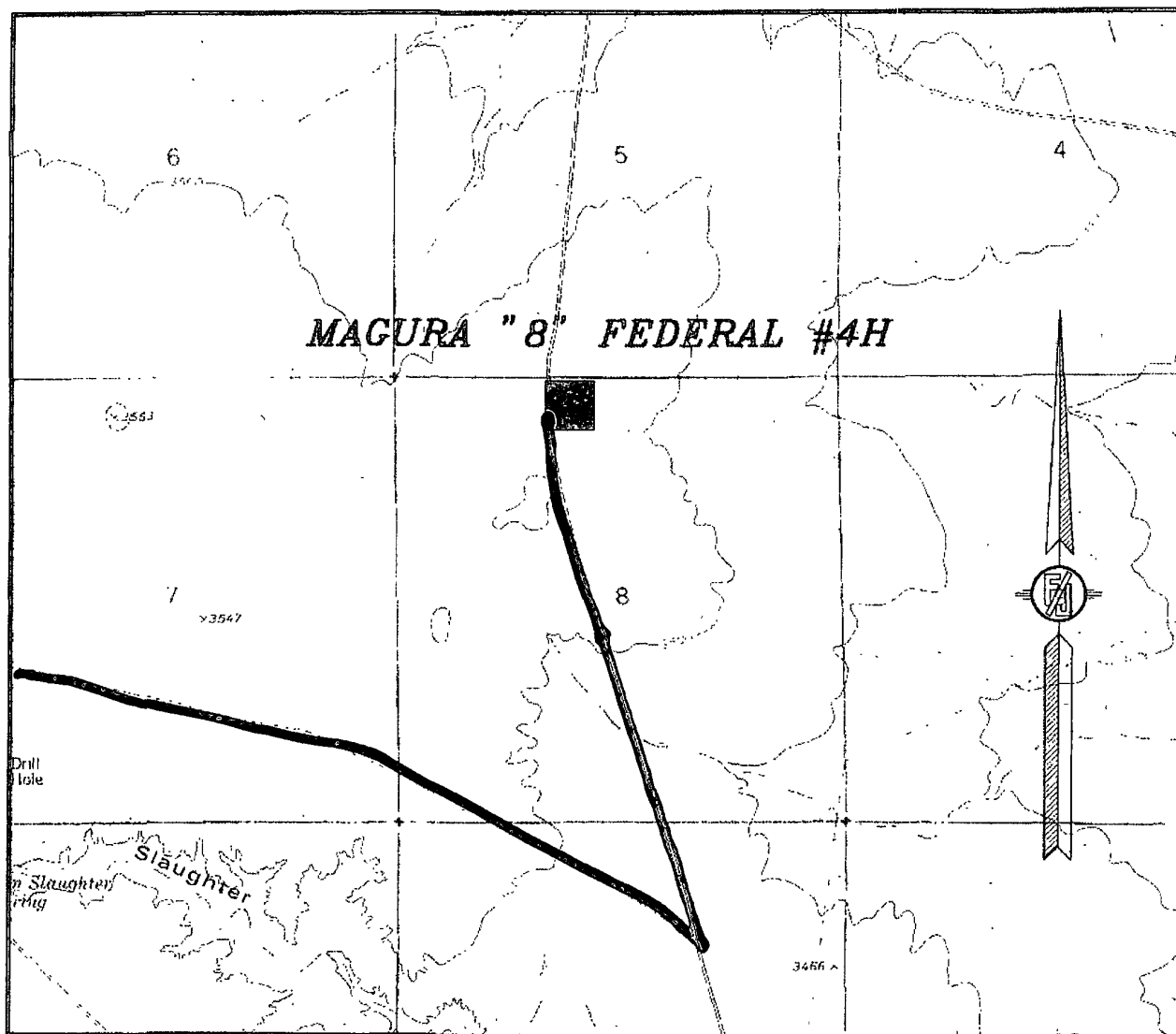
LOCATED 330 FT. FROM THE NORTH LINE
AND 2080 FT. FROM THE WEST LINE OF
SECTION 8, TOWNSHIP 26 SOUTH,
RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

MAY 20, 2011

JCI SCOUT- CANAL
(575) 736-3072

CARLSBAD, NEW MEXICO

SECTION 8, TOWNSHIP 26 SOUTH, RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



CONTOUR INTERVAL:
JUMPING SPRING

NOT TO SCALE

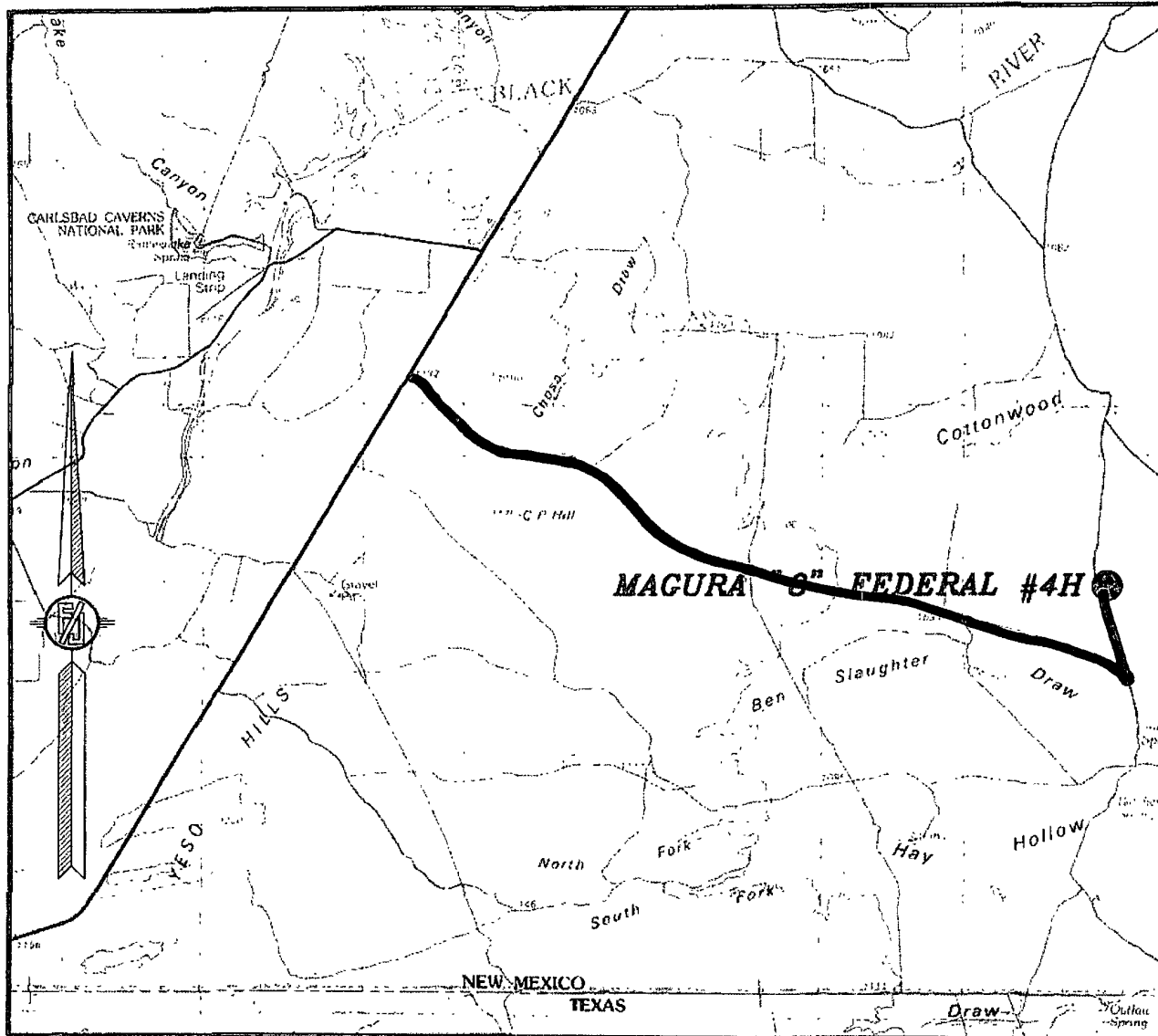
COG OPERATING, LLC
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RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

MAY 20, 2011

SURVEY NO. 466

MADRON SURVEYING, INC. 101 SOUTH CANAL CARLSBAD, NEW MEXICO
(760) 706-8277

SECTION 8, TOWNSHIP 26 SOUTH, RANGE 26 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 VICINITY MAP



NOT TO SCALE

COG OPERATING, LLC
MAGURA "8" FEDERAL #4H
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 AND 2080 FT. FROM THE WEST LINE OF
 SECTION 8, TOWNSHIP 26 SOUTH,
 RANGE 26 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

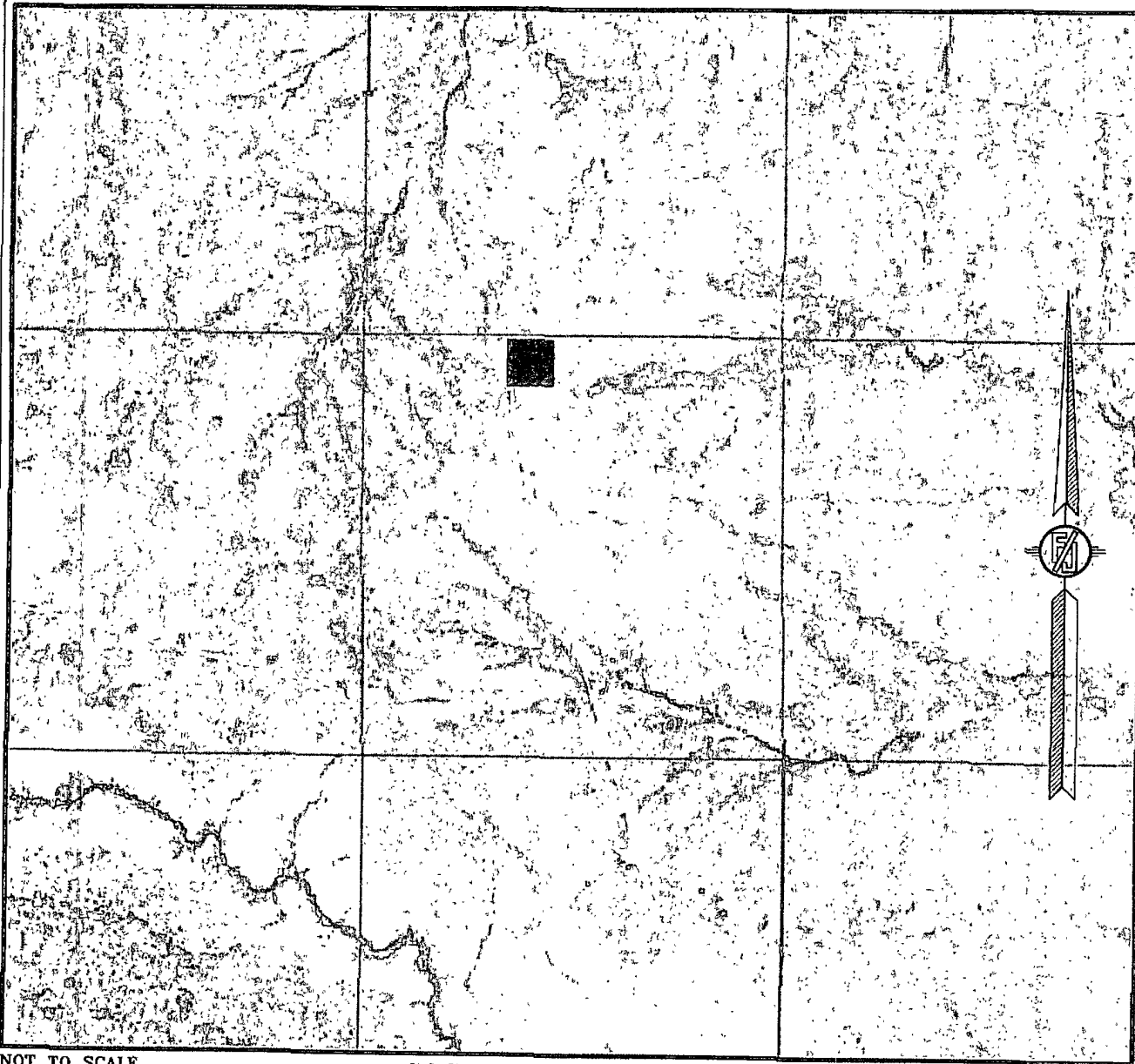
MAY 20, 2011

SURVEY NO. 466

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

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| J Bar Cane 6-1-2008 100840 29.22 | The Allor Co. 12-1-2009 103597 177.22 | Yates Drig, etal 5-1-2015 113938 280.22 (Marbob Ener) | Chevron 12-1-2007 100326 39.22 | Samson Res 7-1-2009 V 7086 500.22 | Yates Drig, etal 5-1-2015 113937 460.22 (Marbob) |
| 6 | 5 | 4 | 3 | 2 | 1 |
| The Allor Co. 12-1-2009 103597 177.22 | The Allor Co. 12-1-2009 103597 177.22 MAGNANA 8 FEB # 44 | Yates Drig, etal 5-1-2015 113939 460.22 (Marbob Ener) | Yates Drig, etal 5-1-2015 113937 460.22 (Marbob Ener) | Yates Drig, etal 5-1-2015 113937 460.22 (Marbob) | Yates Drig, etal 5-1-2015 113937 460.22 (Marbob) |
| 7 | 8 | 9 | 10 | 11 | 12 |
| Samson Res. 8-1-2014 112259 300.22 | Chesapeake 5-1-2015 113941 500.22 | Samson Res 2-1-2010 V 7237 182.22 (Allor Co.) | Chesapeake 5-1-2015 113941 500.22 | Yates Drig, etal 5-1-2015 113940 690.22 (Marbob Ener) | Yates Drig, etal 5-1-2015 113940 690.22 (Marbob Ener) |
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| The Allor Co. 12-1-2009 103597 177.22 | Chesapeake 5-1-2015 113942 350.22 | Chesapeake 5-1-2015 113942 350.22 oil sec | Chesapeake 5-1-2015 113942 350.22 | Chesapeake 5-1-2015 113943 425.22 | Chesapeake 5-1-2015 113943 425.22 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| Chas. Clanton (S) | Chas. Clanton (S) | Chas. Clanton (S) | Chas. Clanton (S) | Chas. Clanton (S) | Chas. Clanton (S) |
| 29 | 28 | 27 | 26 | 25 | 24 |
| Nearburg Expl 5-1-2015 113944 300.22 | Nearburg Expl 5-1-2015 113944 300.22 | Yates Pet, etal 3-1-2011 105879 80.22 | Yates Pet, etal 3-1-2011 105879 80.22 | Samson Res 11-1-2015 114965 375.22 | Yates Pet, etal 5-1-2015 113943 425.22 |
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SECTION 8, TOWNSHIP 26 SOUTH, RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
USDA-MARCH, 2008

COG OPERATING, LLC
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RANGE 26 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SURVEY NO. 466

MAY 20, 2011

MADRON SURVEYING, INC. (505) 706-2642 CARLSBAD, NEW MEXICO