

*Surface Use Plan  
COG Operating, LLC  
Dodd Federal Unit #631  
956'FSL & 206" FEL  
Section 15, T-17-S, R-29-E, Unit P  
Eddy County, New Mexico*

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## SURFACE USE AND OPERATING PLAN

### 1. Existing & Proposed Access Roads

- A. The well site survey and elevation plat for the proposed well is shown in Exhibit #1. It was staked by John West Engineering, Hobbs, NM.
- B. All roads to the location are shown in the topographic map Exhibit #2. The existing lease roads are illustrated and are adequate for travel during drilling and production operations. Upgrading existing roads prior to drilling the well will be done where necessary.
- C. Directions to Location: From the intersection of U.S. HWY. #82 and Co. Rd. #214 (Barnaval Draw Rd.), go North on Co. Rd. #214 apprx 200 feet. Turn Right and go Northeast apprx 0.4 miles. Turn Left and go North apprx 0.5 miles. Turn Right and go Northeast approx 0.1 mile. Turn Right at proposed road survey stakes and go south apprx 27 feet. This location stake is apprx 212 feet Southwest. See Vicinity Map, Exhibit #3
- D. 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.

Do not  
follow these  
directions.  
See COAs

### 2. Proposed Access Road:

Exhibit #4 shows that ~~27.5'~~ <sup>0'</sup> of new access road will be required for this location. If any road is required it will be constructed as follows:

- A. The maximum width of the running surface will be 14'. The road will be crowned, ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.
- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattleguard, gates, low water crossings or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM approved caliche pit or reserve pit area.

### 3. Location of Existing Well:

Exhibit #5 shows all existing wells within a one-mile radius of this well.

As shown on this plat there are numerous wells producing from the San Andres and Yeso formations.

**4. Location of Existing and/or Proposed Facilities:**

- A. COG Operating LLC does operate a production facility on this lease.
- B. If the well is productive, contemplated facilities will be as follows:
  - 1) Production will be sent to the Dodd Federal North tank battery located at the Dodd Federal #43 well location. The facility location is shown in Exhibit #5.
  - 2) The tank battery and facilities including all flow lines and piping will be installed according to API specifications.
  - 3) Any additional caliche will be obtained from a BLM approved caliche pit. Any additional construction materials will be purchased from contractors.
  - 4) Proposed flow lines, will follow an archaeologically approved route to the Dodd Federal tank battery located at the Dodd Federal #43 well location. The flowline will be SDR 7 3" poly line laid on the surface and will be approximately 2980' in length.
  - 5) It will be necessary to run electric power if this well is productive. Power will be provided by CVE and they will submit a separate plan and ROW for service to the well location.
  - 6) If the well is productive, rehabilitation plans will include the following:
    - a) The original topsoil from the well site will be returned to the location, and the site will be re-contoured as close as possible to the original site.

**5. Location and Type of Water Supply:**

The well will be drilled with combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads shown in Exhibit #2. If a commercial fresh water source is nearby, fast line may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

**6. Source of Construction Materials:**

All caliche required for construction of the drill pad and proposed new access road (approximately 2500 cubic yards) will be obtained from a BLM approved caliche pit or the reserve pit.

**7. Methods of Handling Water Disposal:**

- A. The well will be drilled utilizing a closed loop mud system. Drill cuttings will be held in roll-off style mud boxes and taken to an NMOCD approved disposal site.
- B. Drilling fluids will be contained in steel mud pits.
- C. Water produced from the well during completion will be held temporarily in steel tanks and then taken to an NMOCD approved commercial disposal facility.
- D. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved landfill. No toxic waste or hazardous chemicals will be produced by this operation.
- E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. In the event of a dry hole only a dry hole marker will remain.

**8. Ancillary Facilities:**

No airstrip, campsite or other facilities will be built as a result of the operation on this well.

**9. Well Site Layout:**

- A. The drill pad layout, with elevations staked by John West Engineering, is shown in Exhibit #4. Dimensions of the pad and pits are shown on Exhibit #6. V door direction is West. Topsoil, if available, will be stockpiled per BLM specifications. Because the pad is almost level no major cuts will be required.
- B. Exhibit #6 also shows the proposed orientation of closed loop system and access road. No permanent living facilities are planned, but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.

**10. Plans for Restoration of the Surface:**

- A. The location and road will be rehabilitated as recommended by the BLM.
- B. Upon completion of proposed operations, if the well is completed, the reserve pit area will be closed as outlined in Section 4.6 above within the same prescribed time. Any additional caliche required for facilities will be obtained from a BLM approved caliche pit. Topsoil removed from the drill site will be used to re-contour the pit area to its original natural level and re-seeded as per BLM specifications.

**11. Surface Ownership:**

- A. The surface is owned by the U.S. Government and is administered by the Bureau of Land Management. The surface is multiple uses with the primary uses of the region for grazing of livestock and the production of oil and gas.
- B. The surface tenant for this site is Bogel Farms, Lewis Derrick, P O Box 441, Artesia, NM 88211.
- C. The proposed road routes and surface location will be restored as directed by the BLM.

**12. Other Information:**

- A. The area around the well site is grassland and the topsoil is sandy. The vegetation is moderately sparse with native prairie grasses, some mesquite and shinnery oak. No wildlife was observed but it is likely that mule deer, rabbits, coyotes and rodents traverse the area.
- B. There is no permanent or live water in the immediate area.
- C. There are no dwellings within 2 miles of this location.
- D. If needed, a Cultural Resources Examination is being prepared by Southern New Mexico Archaeological Services, Inc. P.O. Box 1, Bent New Mexico, 88314, phone # 505-671-4797 and the results will be forwarded to your office in the near future. Otherwise, **COG will be participating in the Permian Basin MOA Program.**

**13. Bond Coverage:**

Bond Coverage is Nationwide Bond # 000215

**14. Lessee's and Operator's Representative:**

The COG Operating LLC representative responsible for assuring compliance with the surface use plan is as follows:

John Coffman,  
Drilling Superintendent  
COG Operating LLC  
550 W. Texas, Suite 1300  
Midland, TX 79701  
Phone (432) 683-7443 (office)  
(432) 631-9762 (cell)

Erick Nelson.  
Division Operations Manager  
COG Operating LLC  
550 W. Texas, Suite 1300  
Midland, TX 79701  
Phone (505) 746-2210 (office)  
(432) 238-7591 (cell)

*Surface Use Plan*  
*COG Operating, LLC*  
*Dodd Federal Unit #631*  
*956'FSL & 206" FEL*  
*Section 15, T-17-S, R-29-E, Unit P*  
*Eddy County, New Mexico*

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I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements make in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or COG Operating, LLC, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 29<sup>th</sup> day of November, 2010.

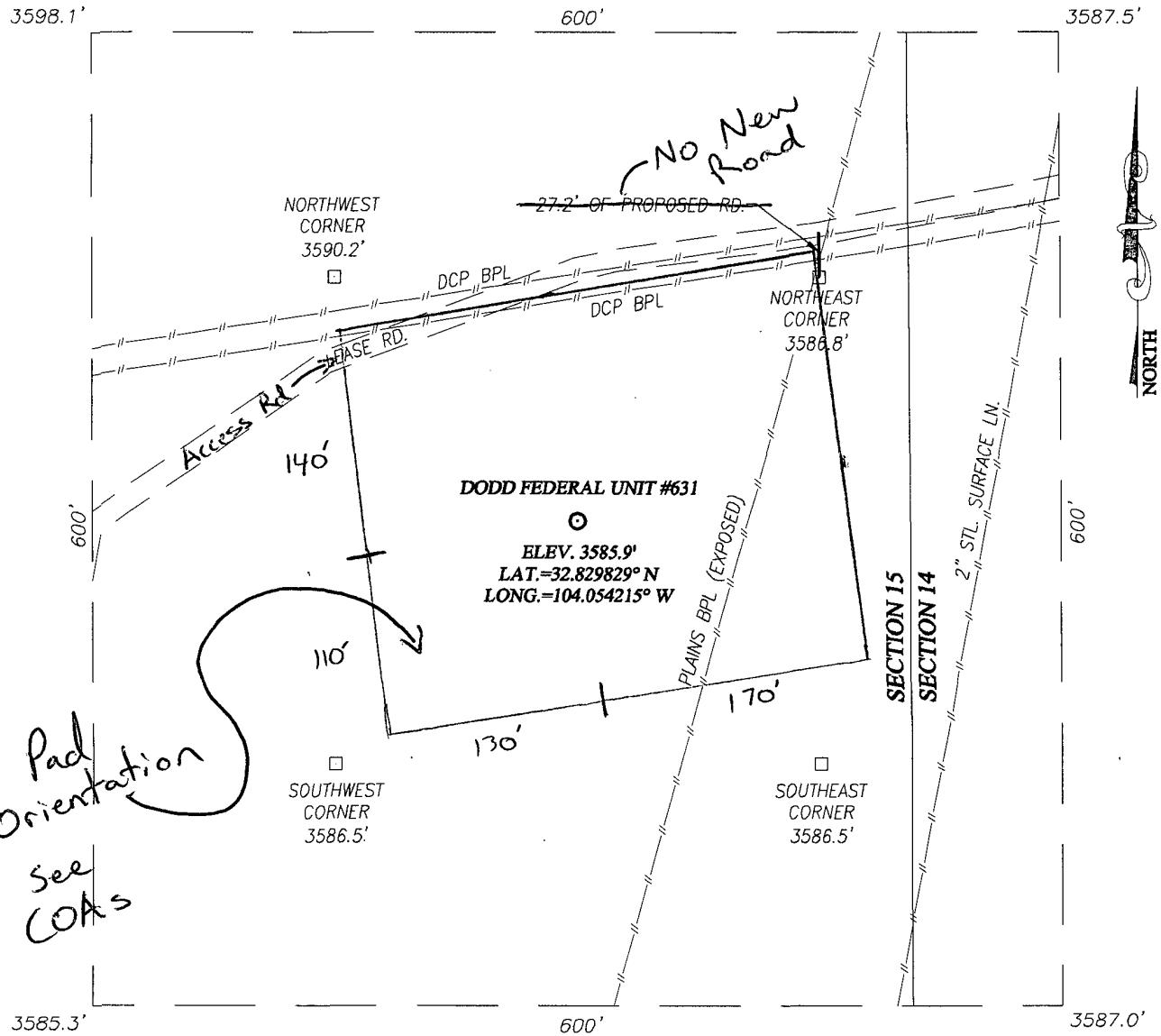
Signed:



Printed Name: Carl Bird  
Position: Drilling Engineer  
Address: 550 W. Texas, Suite 1300, Midland, Texas 79701  
Telephone: (432) 683-7443  
Field Representative (if not above signatory): Same  
E-mail: cbird@conchoresources.com

**SECTION 15, TOWNSHIP 17 SOUTH, RANGE 29 EAST, N.M.P.M.**  
EDDY COUNTY

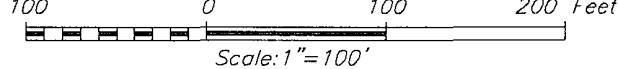
NEW MEXICO



**DIRECTIONS TO LOCATION**

~~FROM THE INTERSECTION OF U.S. HWY. #82 AND CO. RD. #214 (BARNAL DRAW RD.), GO NORTH ON CO. RD. #214 APPROX. 200 FEET. TURN RIGHT AND GO NORTHEAST APPROX. 0.4 MILES. TURN LEFT AND GO NORTH APPROX. 0.5 MILES. TURN RIGHT AND GO NORTHEAST APPROX. 0.1 MILE. TURN RIGHT AT PROPOSED ROAD SURVEY STAKES AND GO SOUTH APPROX. 27 FEET. THIS LOCATION STAKE IS APPROX. 212 FEET SOUTHWEST.~~

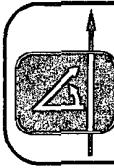
*Do not follow  
these directions.  
See COAs.*



**COG OPERATING, LLC**

DODD FEDERAL UNIT #631 WELL  
LOCATED 956 FEET FROM THE SOUTH LINE  
AND 206 FEET FROM THE EAST LINE OF SECTION 15,  
TOWNSHIP 17 SOUTH, RANGE 29 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO

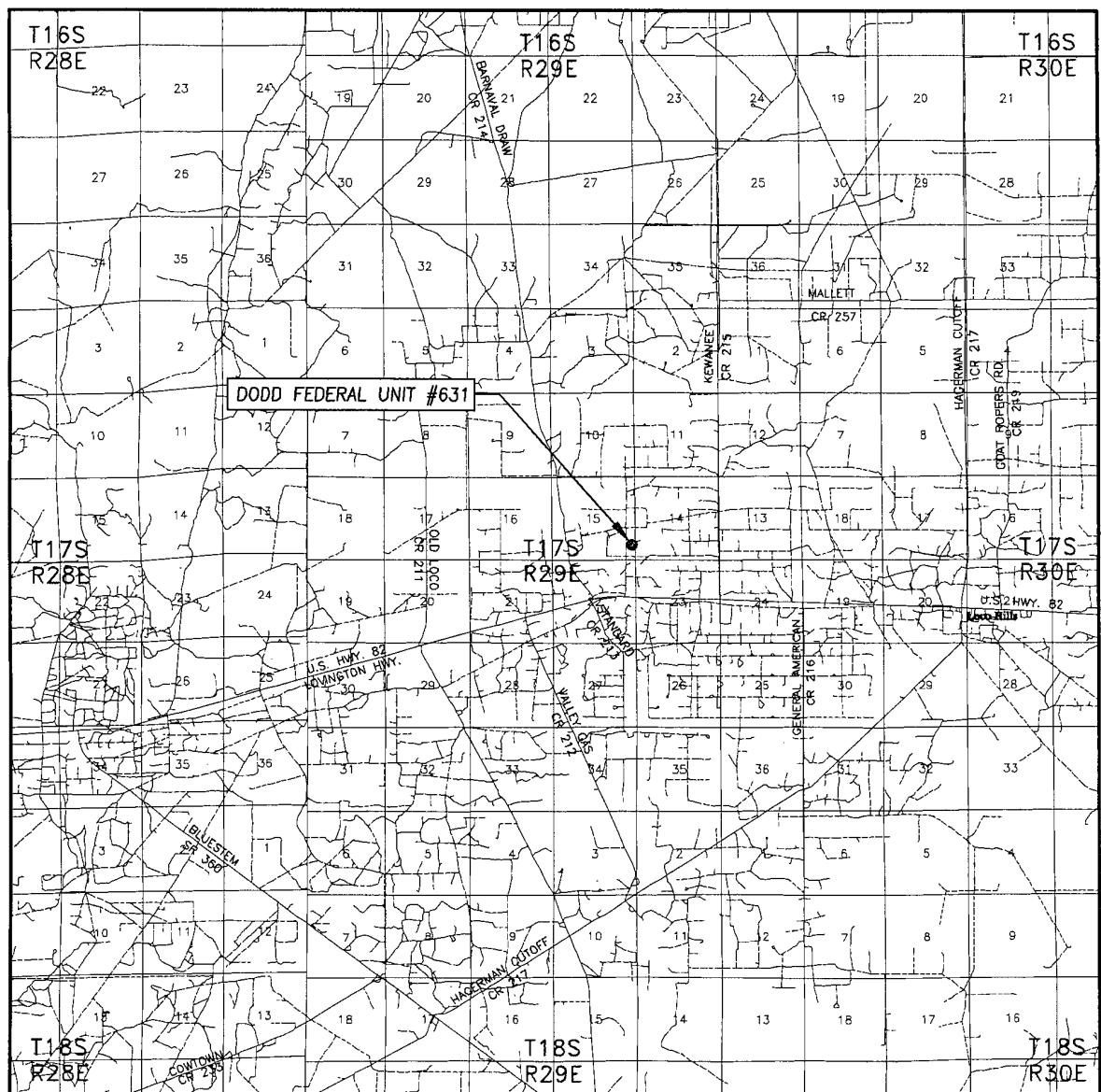
Survey Date: 11/1/10	Sheet 1 of 1 Sheets	
W.O. Number: 10.11.1485	Dr By: DSS	Rev 1:N/A
Date: 11/4/10	10111485	Scale: 1"=100'



PROVIDING SURVEYING SERVICES  
SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(575) 393-3117

TEN  
1311

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 15 TWP. 17-S RGE. 29-E

SURVEY N.M.P.M.

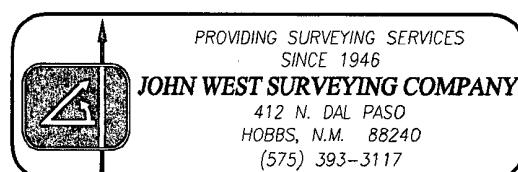
COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 956' FSL & 206' FEL

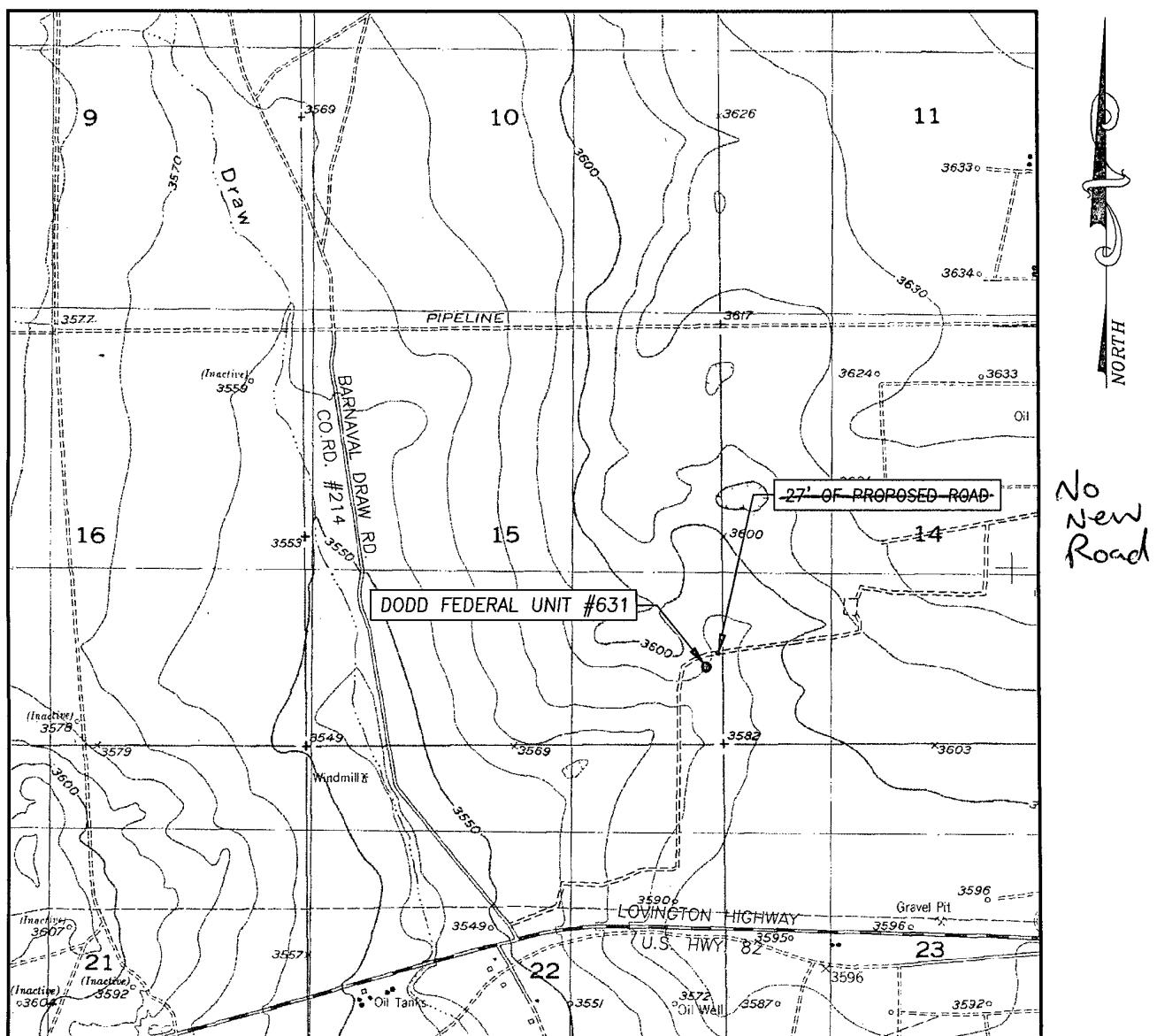
ELEVATION 3586'

OPERATOR COG OPERATING, LLC

LEASE DODD FEDERAL UNIT



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
RED LAKE SE, N.M. - 10'

SEC. 15 TWP. 17-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

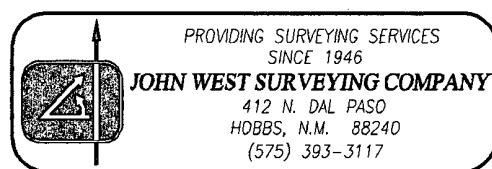
DESCRIPTION 956' FSL & 206' FEL

ELEVATION 3586'

OPERATOR COG OPERATING, INC.

LEASE DODD FEDERAL UNIT

U.S.G.S. TOPOGRAPHIC MAP  
RED LAKE SE, N.M.











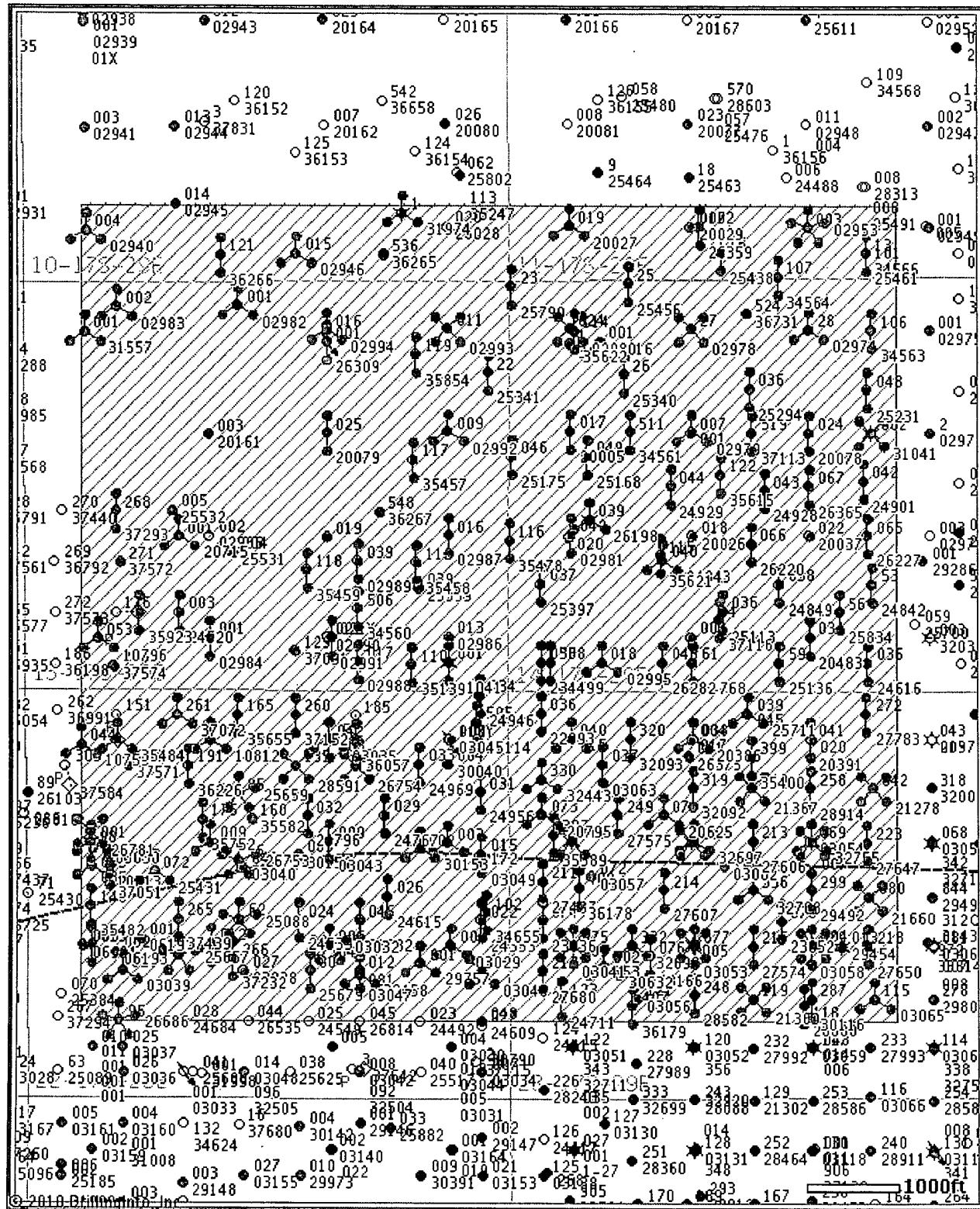






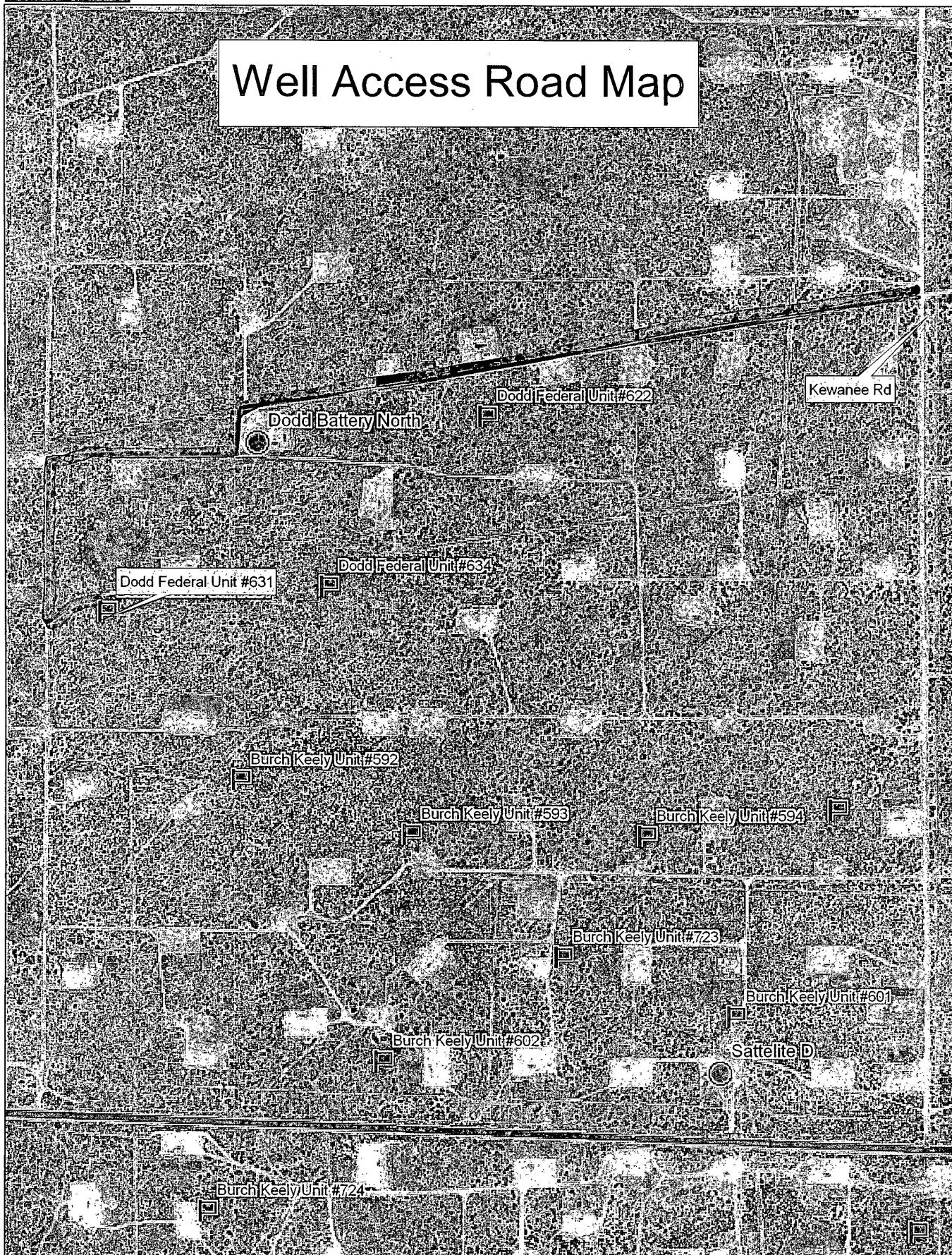
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30-015-25531	STEVENS OPERATING CORPORATION or HANAGAN PETROLEUM CORP	EDDY	S:15, T:17S, R:29E	PRE-ONGARD WELL	004	1/1/1970		No	link		PO	Active Permit	TEMP1582000107
30-015-25532	STEVENS OPERATING CORPORATION or HANAGAN PETROLEUM CORP	EDDY	S:15, T:17S, R:29E	PRE-ONGARD WELL	005	1/1/1970		No	link		PO	Active Permit	TEMP1608547781
30-015-26375	STEVENS OPERATING CORPORATION or HANAGAN PETROLEUM CORP	EDDY	S:23, T:17S, R:29E	PRE-ONGARD WELL	001	1/1/1970		No	link		PO	Active Permit	TEMP1153903350

## Offset wells to Dodd Federal Unit #631



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# Well Access Road Map



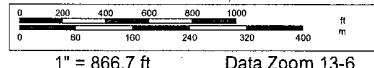
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Scale 1 : 10,400



## Flow Line Route Map

Dodd Federal North Battery

Dodd Federal #631

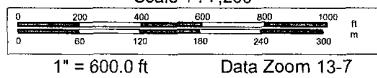
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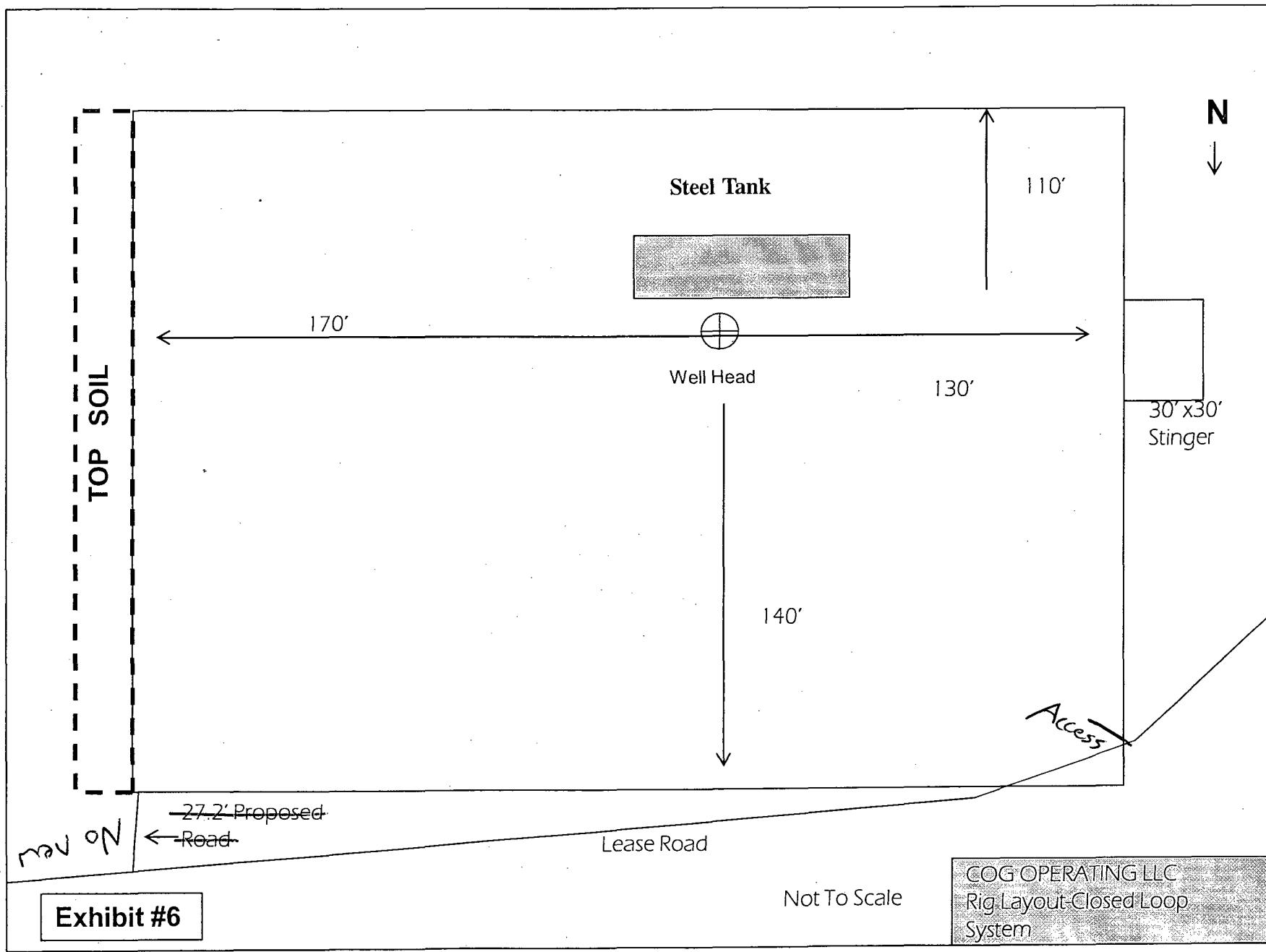
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Scale 1 : 7,200





310

N  
↓

This area will be reclaimed to the anchors on steel pit side. 50' will be reclaimed towards the wellhead

60' will be  
reclaimed  
on backside  
of pad

anchor

anchor



Well Head



anchor



anchor

Stinger  
remov  
-ed  
30' x 30'  
Stinger

250

Exhibit #6

Not To Scale

COG OPERATING LLC  
Rig Layout-Closed Loop  
Interim reclamation plan