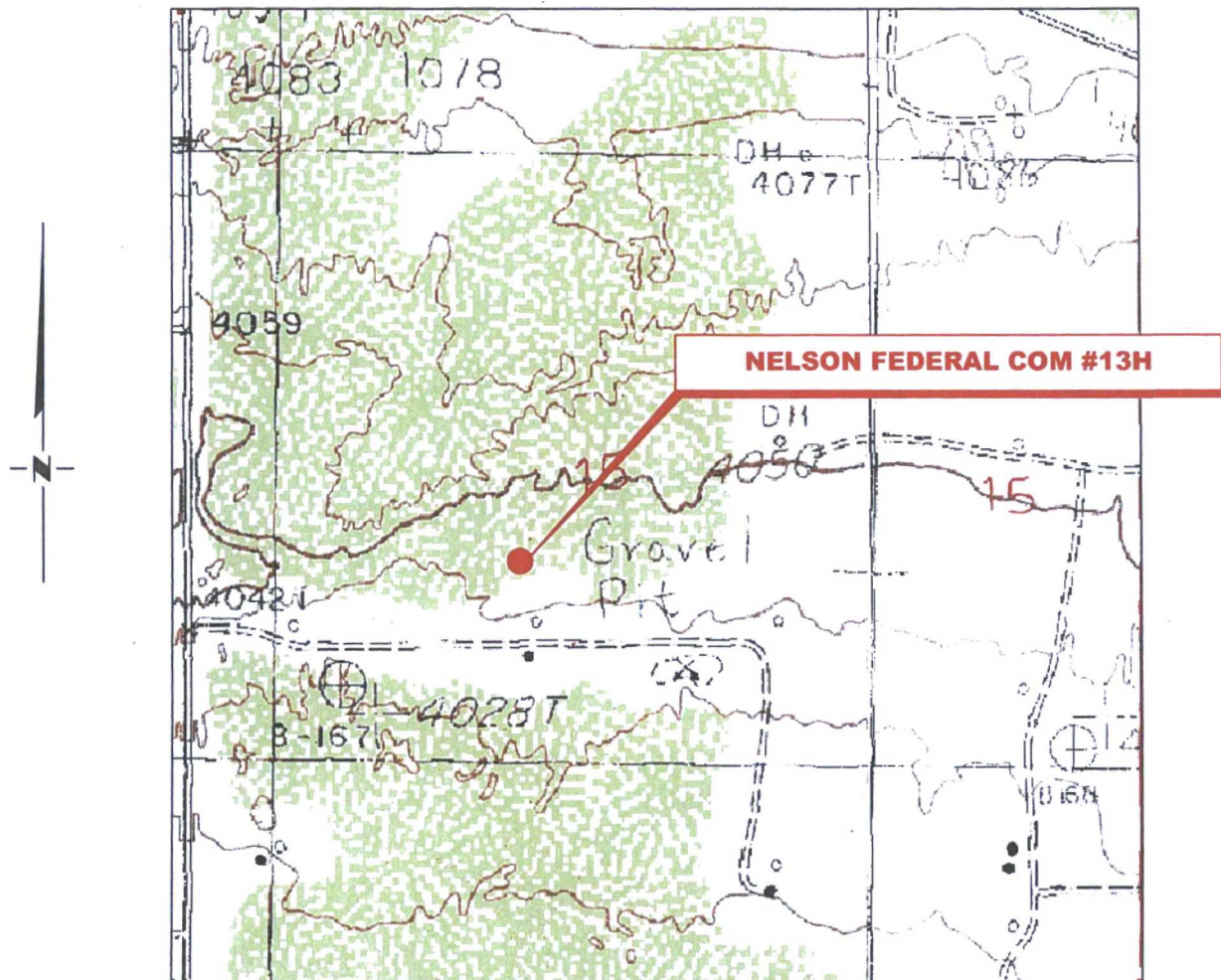


# LOCATION VERIFICATION MAP



**SECTION 15, TWP. 17 SOUTH, RGE. 32 EAST,  
N. M. P. M., LEA CO., NEW MEXICO**

OPERATOR: COG Operating, LLC  
LEASE: Nelson Federal Com  
WELL NO.: 13H  
ELEVATION: 4046'

LOCATION: 2358' FSL & 1895' FWL  
CONTOUR INTERVAL: 10'  
USGS TOPO. SOURCE MAP:  
Maljamar, NM (P. E. 1985)

Firm No.: TX 10193838 NM 4655451

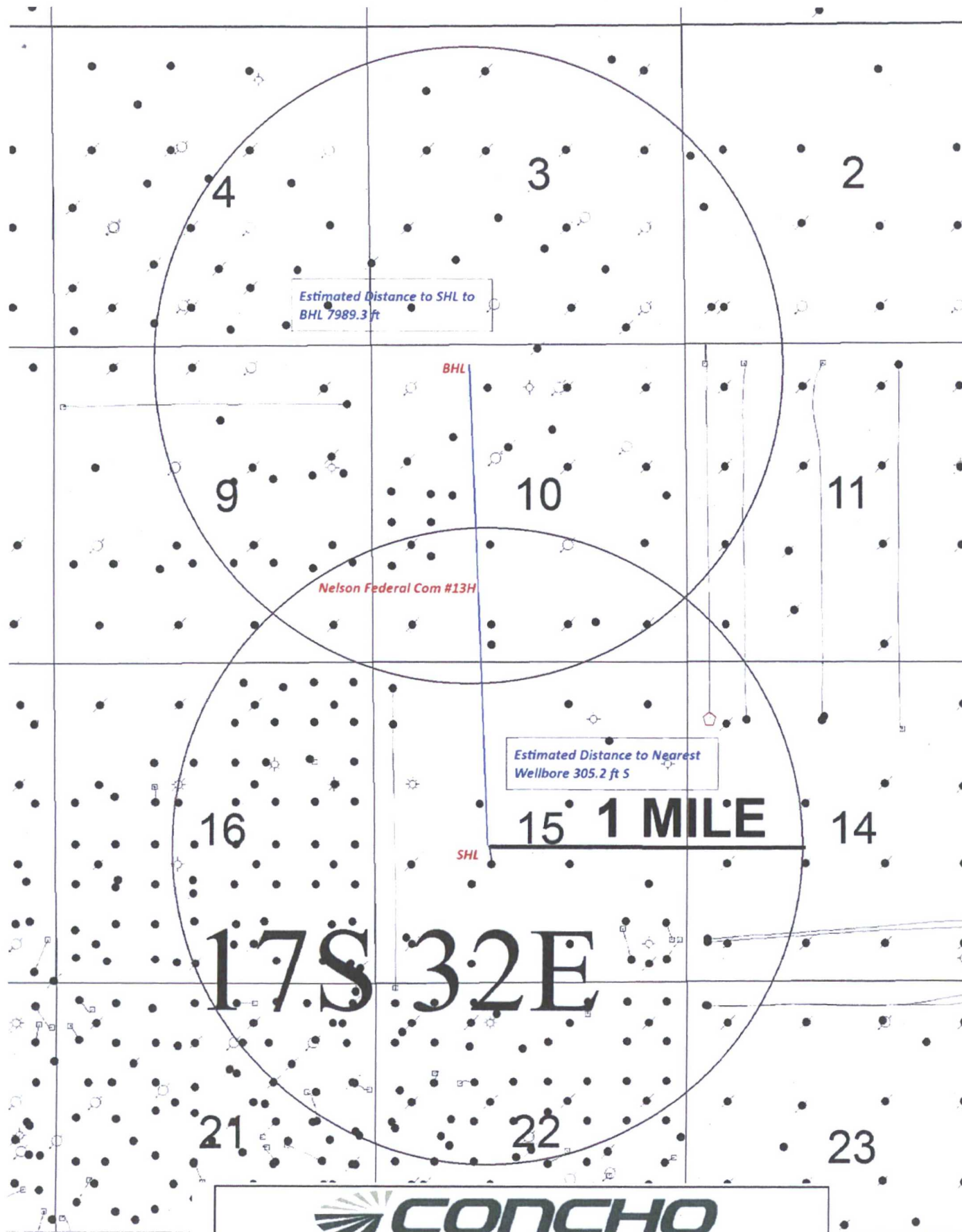
Copyright 2015 - All Rights Reserved

NO.	REVISION	DATE
JOB NO.:	LS1603118	
DWG. NO.:	1603118LVM	

## RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1"=1000'
DATE: 4-4-16
SURVEYED BY: BC/HD
DRAWN BY: JR
APPROVED BY: RMH
SHEET : 1 OF 1



SENM SHELF AREA

Nelson Federal Com #13H

Sec. 15, T17S-R32E SHL 2258 FSL 1895 FW L, Unit K  
 Sec. 10, T17S-R32E SHL 330 FNL 1650 FW L, Unit C

Author:  
 L. Marley

All Wells

Date:  
 29 April, 2016

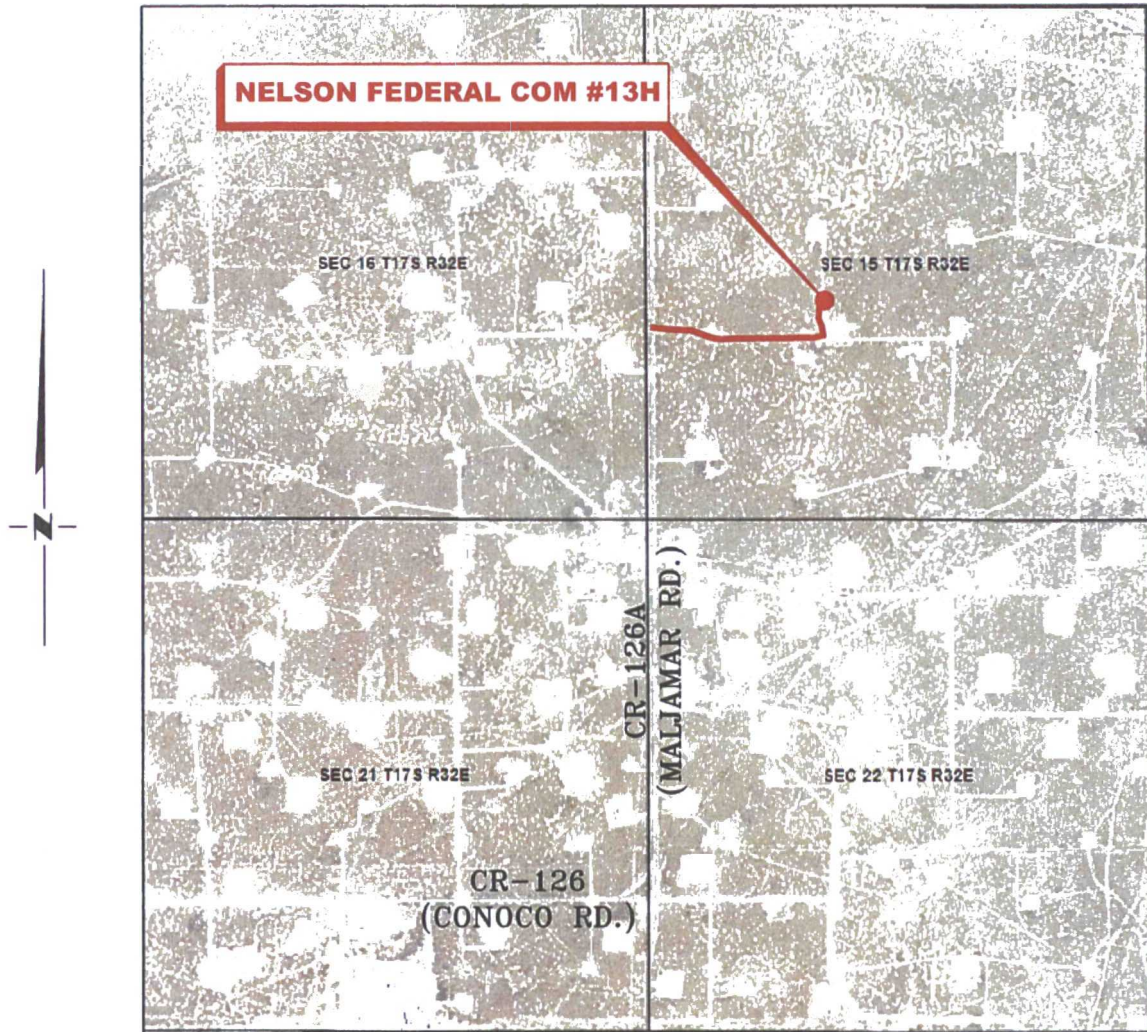
Scale:

Lm\_RA\_1mileRadius\_map.



# VICINITY MAP

NOT TO SCALE



*SECTION 15, TWP. 17 SOUTH, RGE. 32 EAST,  
N. M. P. M., LEA CO., NEW MEXICO*

OPERATOR: COG Operating, LLC  
LEASE: Nelson Federal Com  
WELL NO.: 13H

LOCATION: 2358' FSL & 1895' FWL  
ELEVATION: 4046'

Firm No.: TX 10193838 NM 4655451

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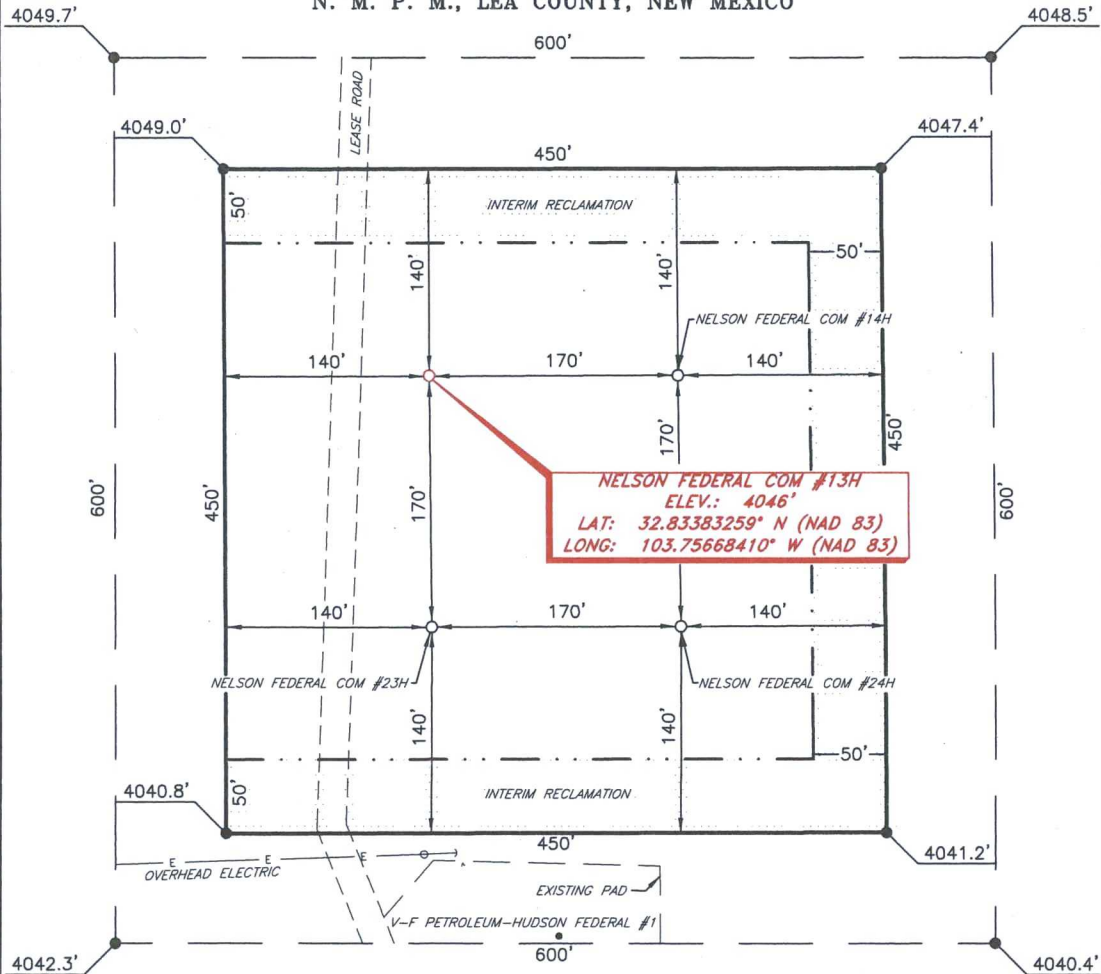
NO.	REVISION	DATE
JOB NO.:	LS1603118	
DWG. NO.:	1603118VM	

# RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: NTS
DATE: 4-4-16
SURVEYED BY: BC/HD
DRAWN BY: JR
APPROVED BY: RMH
SHEET : 1 OF 1

COG OPERATING, LLC  
INTERIM RECLAMATION  
NELSON FEDERAL COM #13H  
(2358' FSL & 1895' FWL)  
SECTION 15, T17S, R32E  
N. M. P. M., LEA COUNTY, NEW MEXICO



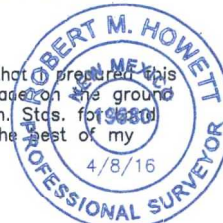
DIRECTIONS TO LOCATION

From the intersection of CR-126A (Maljamar Rd.) and CR-126 (Conoco Rd);  
Go North on CR-126A for approx. 1.1 miles to lease road on the right;  
Turn right and go East for approx. 0.3 miles lease road on the left;  
Turn left and go North for approx. 491 feet to proposed location on the right.

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for 1980 Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

*Robert M. Howett*

Robert M. Howett NM PS 19680



SCALE: 1" = 100'  
0 50 100

BEARINGS ARE  
NAD 83 GRID - NM EAST  
DISTANCES ARE GROUND

Firm No.: TX 10193838 NM 4655451

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NO.	REVISION	DATE
JOB NO.:	LS1603118	
DWG. NO.:	1603118REC	

**RRC**

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 100'
DATE: 4-4-2016
SURVEYED BY: BC/HD
DRAWN BY: JR
APPROVED BY: RMH
SHEET : 1 OF 1



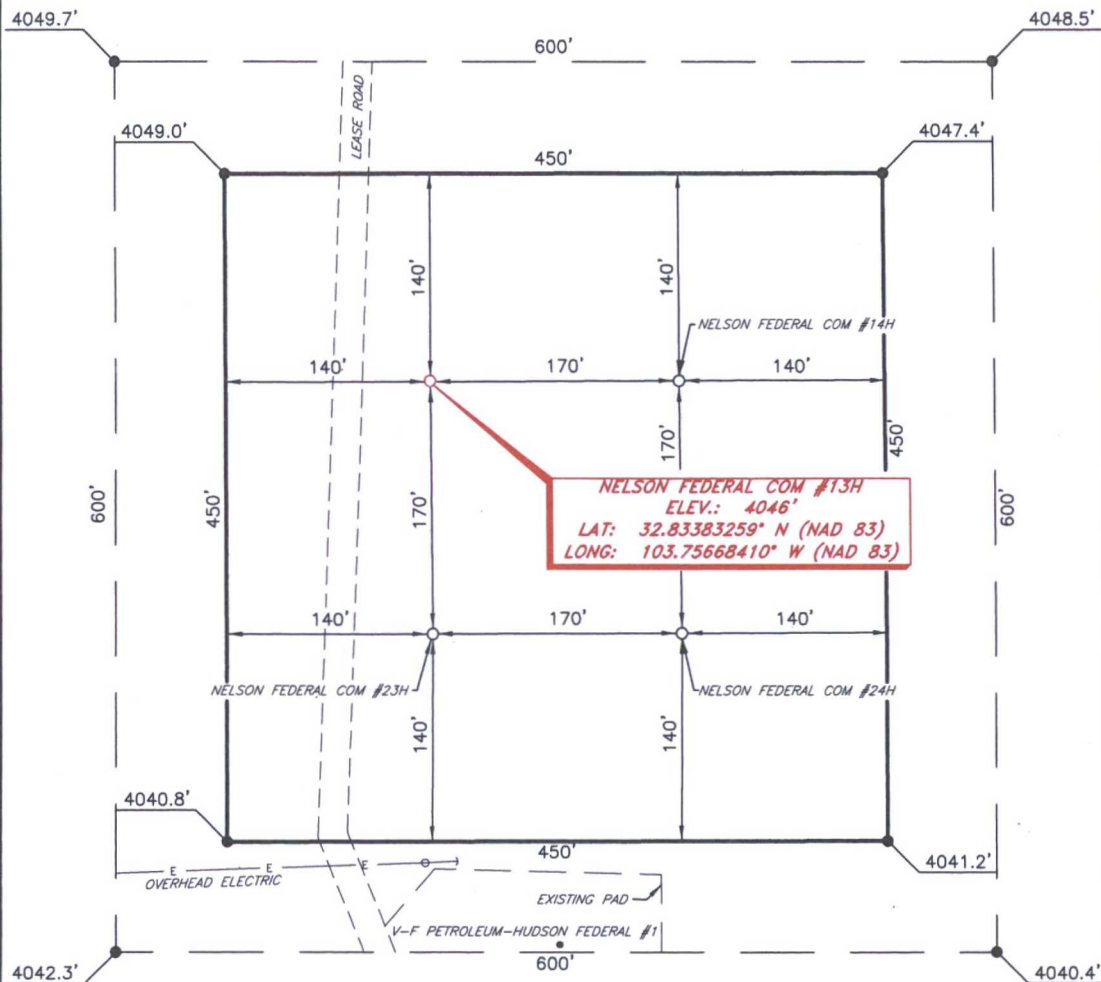
## **WELL SITE AND ROAD CONSTRUCTION**

### **1. Source of Construction Materials and Location "Turn-Over" Procedure:**

Obtaining caliche: The primary way of obtaining caliche to build locations and roads will be by "turning over" the location. This means, caliche will be obtained from the actual well sight. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cu. Yards is max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel:

- A. The top 6 inches of topsoil is pushed off and stockpiled along the side of the location.**
- B. An approximate 120' X 120' area is used within the proposed well site to remove caliche.**
- C. Subsoil is removed and piled alongside the 120' by 120' area within the pad site.**
- D. When caliche is found, material will be stock piled within the pad site to build the location and road.**
- E. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road.**
- F. Once well is drilled, the stock piled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche nor subsoil will be stock piled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in attached plat.**
  - In the event that no caliche is found onsite, caliche will be hauled in from a BLM approved caliche pit.

COG OPERATING, LLC  
NELSON FEDERAL COM #13H  
(2358' FSL & 1895' FWL)  
SECTION 15, T17S, R32E  
N. M. P. M., LEA COUNTY, NEW MEXICO



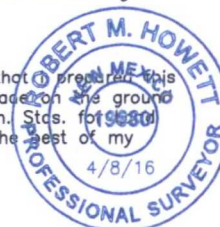
DIRECTIONS TO LOCATION

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Go North on CR-126A for approx. 1.1 miles to lease road on the right;  
Turn right and go East for approx. 0.3 miles lease road on the left;  
Turn left and go North for approx. 491 feet to proposed location on the right.

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

*Robert M. Howett*

Robert M. Howett NM PS 19680



SCALE: 1" = 100'  
0 50 100  
BEARINGS ARE  
NAD 83 GRID - NM EAST  
DISTANCES ARE GROUND

Firm No.: TX 10193838 NM 4655451

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NO.	REVISION	DATE
JOB NO.:	LS1603118	
DWG. NO.:	1603118PAD	

**RRC**

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 100'  
DATE: 4-4-2016  
SURVEYED BY: BC/HD  
DRAWN BY: JR  
APPROVED BY: RMH  
SHEET : 1 OF 1

# Water Well Map

Legend

RA11684

32.848861, -103.735745 RA11684 pod2  
RA11684 pod3  
011  
17S32E

Google earth

© 2015 Google

700 ft

N

# Caswell Ranch Water Supply Map





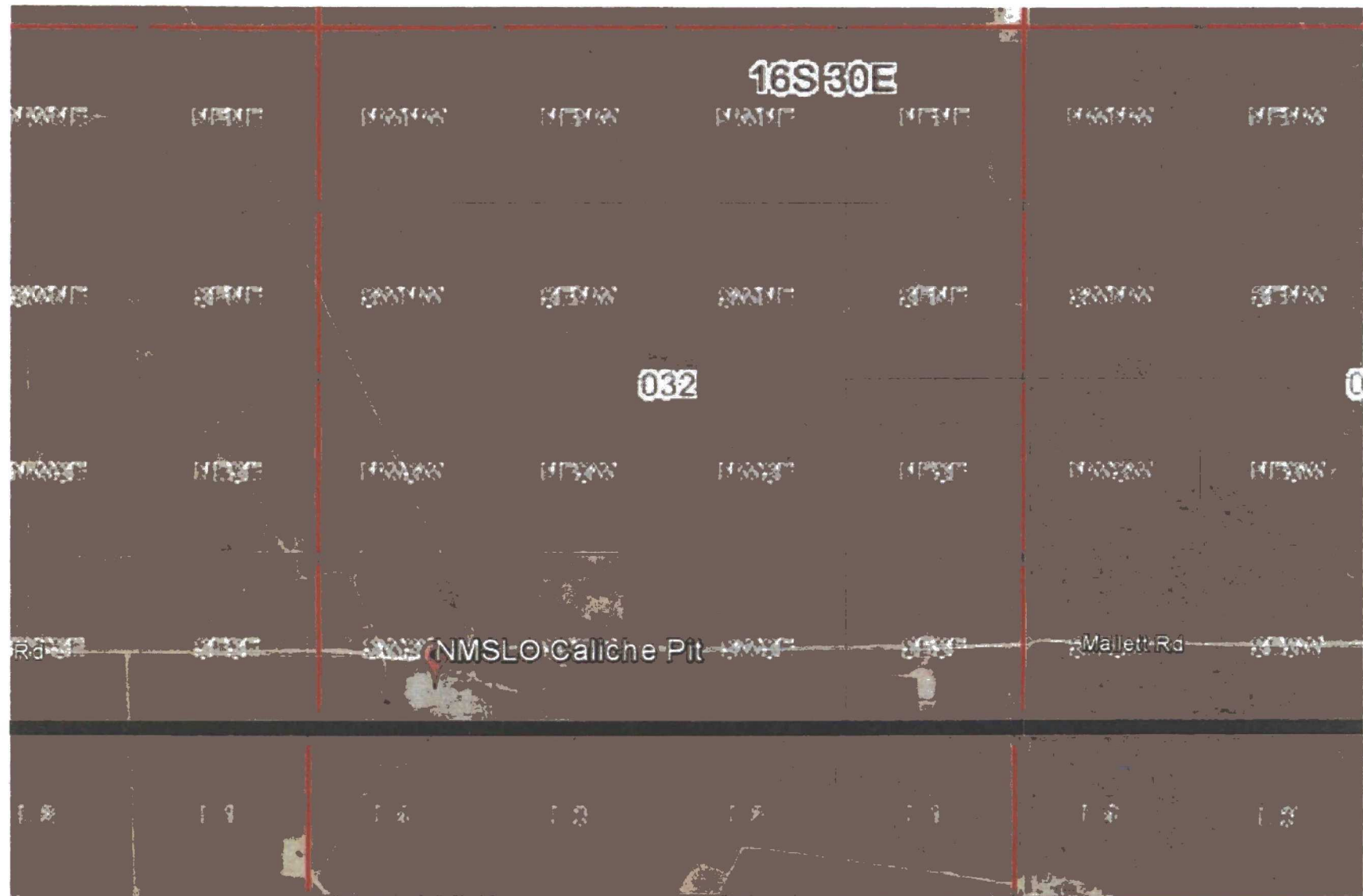
# Loco Hills Water Disposal Co. Water Well Map



# Caswell Ranch Caliche Pit Map



# NMSLO Caliche Pit

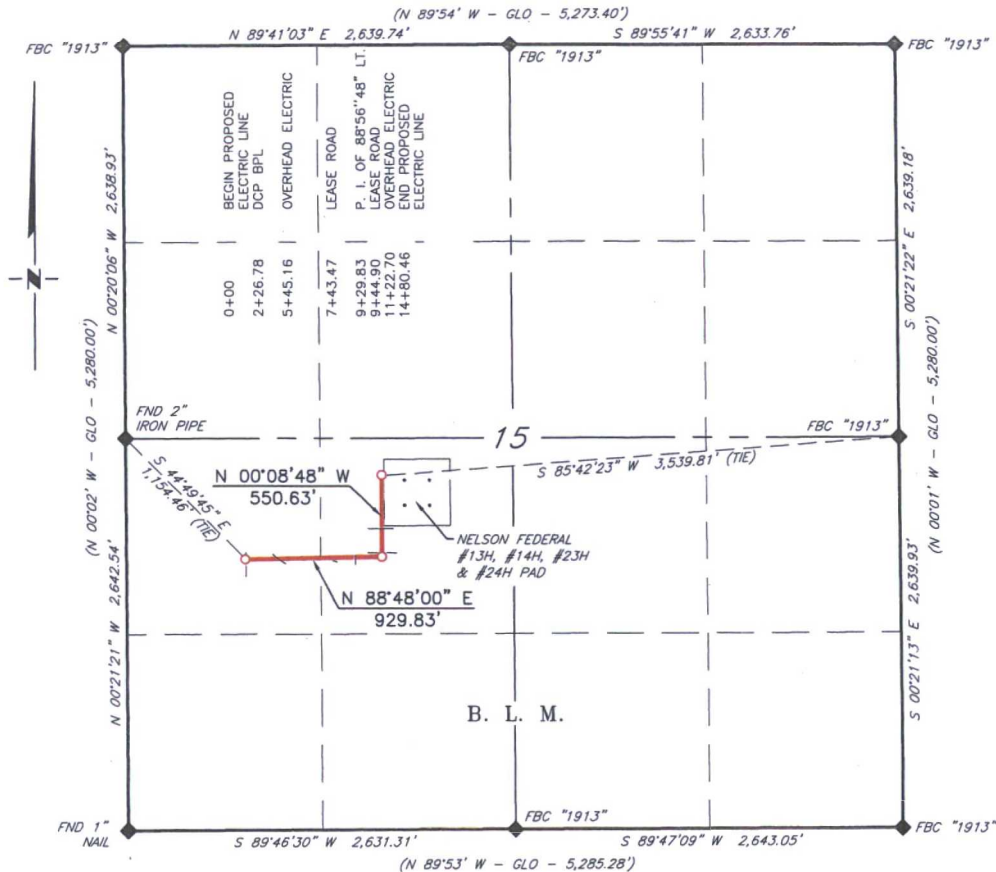




## Nelson Federal Com #13H Flowline Map



**COG OPERATING, LLC**  
**PROPOSED ELECTRIC LINE FOR THE NELSON FEDERAL**  
**#13H, #14H, #23H & 24H WELL LOCATIONS**  
**SECTION 15, T17S, R32E,**  
**N. M. P. M., LEA CO., NEW MEXICO**



**DESCRIPTION**

A strip of land 30 feet wide, being 1,480.46 feet or 89.725 rods in length, lying in Section 15, Township 17 South, Range 32 East, N. M. P. M., Lea County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. Land:

BEGINNING at Engr. Sta. 0+00.00, a point in the Southwest quarter of Section 15, which bears, S 44°49'45" E, 1,154.46 feet from a 2" iron pipe, found for the West quarter corner of Section 15;

Thence N 88°48'00" E, 929.83 feet, to Engr. Sta. 9+29.83, a P. I. of 88°56'48" left;

Thence N 00°08'48" W, 550.63 feet, to Engr. Sta. 14+80.46, the End of Survey, a point in the Southwest quarter of Section 15, which bears, S 85°42'23" W, 3,539.81 feet from a brass cap, stamped "1913", found for the East quarter corner of Section 15;

Said strip of land contains 1.020 acres, more or less, and is allocated by forties as follows:

NW 1/4 SW 1/4	30.822 Rods	0.350 Acres
NE 1/4 SW 1/4	58.903 Rods	0.670 Acres

SCALE: 1" = 1000'  
0 500 1000

BEARINGS ARE GRID NAD 27  
NM EAST  
DISTANCES ARE HORIZ. GROUND.

**LEGEND**

( ) RECORD DATA - GLO  
◆ FOUND MONUMENT  
AS NOTED

PROPOSED ELECTRIC LINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

*Robert M. Howett*

Robert M. Howett NM PS 19680



Firm No.: TX 10193838 NM 4655451

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NO.	REVISION	DATE

JOB NO.: LS1606227R  
DWG. NO.: 1606227-1

**RRC**

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'  
DATE: 11-2-2016  
SURVEYED BY: BK  
DRAWN BY: LPS  
APPROVED BY: RMH  
SHEET: 1 OF 1