

Surface Use Plan  
COG Operating, LLC  
Lusk Deep Unit A #29H  
SL: 355' FNL & 660' FWL      ULD  
Section 17, T19S, R32E  
BHL: 330' FSL & 660' FWL      ULM  
Section 17, T19S, R32E  
Lea County, New Mexico

HOBBS OCD

DEC 17 2013

RECEIVED

---

## SURFACE USE AND OPERATING PLAN

### 1. Existing & Proposed Access Roads

- A. The well site survey and elevation plat for the proposed well is attached with this application. It was staked by Harcrow Surveying, Artesia, NM.
- B. All roads to the location are shown on the Location Verification 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. The road route to the well site is depicted in Exhibit #2. The road highlighted in Exhibit #2 will be used to access the well.
- C. Directions to location: See attached 600' x 600' well pad diagram.
- 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. Roads will be maintained according to specifications in section 2A of this Surface Use and Operating Plan.

### 2. Proposed Access Road:

The Elevation Plat shows that 169' 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, cattle guard, gates, low water crossings or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the actual well site if available. If not available onsite, caliche will be hauled from the nearest BLM approved caliche pit.

*Surface Use Plan*  
*COG Operating, LLC*  
*Lusk Deep Unit A #29H*  
*SL: 355' FNL & 660' FWL      UL D*  
*Section 17, T19S, R32E*  
*BHL: 330' FSL & 660' FWL      UL M*  
*Section 17, T19S, R32E*  
*Lea County, New Mexico*

---

- 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 actual well site if available. If not available onsite, caliche will be hauled from the nearest BLM approved caliche pit.

### **3. Location of Existing Well:**

The One-Mile Radius Map shows existing wells within a one-mile radius of surface hole location and the bottom hole location.

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

- A. COG Operating LLC does operate a production facility on this federal unit.
- B. If the well is productive, contemplated facilities will be as follows:
  - 1) Production will be sent to the Lusk Deep Unit A #22H facility.
  - 2) The tank battery and facilities including all flow lines and piping will be installed according to API specifications.
  - 3) A map showing the proposed route for the flow line from the Lusk Deep Unit A #29H to the Lusk Deep Unit A #22H facility is attached as Exhibit 4. It is proposed to lay a 2 7/8" J-55 steel surface line approximately 900' in length. Anticipated pressure is less than 125#. The line will carry produced water, oil and gas to the existing facility.
  - 4) Any additional caliche will be obtained from the actual well site. If caliche does not exist or is not plentiful from the well site, the caliche will be hauled from a BLM approved caliche pit. Any additional construction materials will be purchased from contractors.
  - 5) It will be necessary to run electric power if this well is productive. Power will be provided by Central Valley Electric Coop. 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:

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.

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

Obtaining caliche: One 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 site. A caliche permit will be obtained from BLM prior to obtaining caliche. 2400 cubic yards is the maximum 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 160' X 160' area is used within the proposed well site to remove caliche.
- C. Subsoil is removed and stockpiled within the surveyed well pad.
- 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.
- G. 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 the Well Site Layout or survey plat.

In the event that no caliche is found onsite, caliche will be hauled in from a BLM approved caliche pit or other established mineral pit. A BLM mineral material permit will be acquired prior to obtaining any mineral material from BLM pits or land.

**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. Human waste and grey water will need to be properly contained and disposed of. Proper disposal and elimination of waste and grey water may include but are not limited to portable septic systems and/or portable waste gathering systems (i.e. portable toilets).
- F. 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 Harcrow Surveying, is shown in the Elevation Plat. Dimensions of the pad and pits are shown on the Rig Layout. V door direction is East. Topsoil, if available, will be stockpiled per BLM specifications. Because the pad is almost level no major cuts will be required.
- B. The Rig Layout Closed-Loop exhibit 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. We propose to not complete the required interim reclamation at this time due to the high probability that a second well will be drilled off the same location in the near future. If the second well is not drilled and interim reclamation is completed, it will be completed as per Exhibit 3. Interim Reclamation will take place after the both wells have been completed. The pad will be downsized by reclaiming the areas not needed for production operations. The portions of the pad that are not needed for production operations will be re-contoured to its original state as much as possible. The caliche that is removed will be reused to either build another pad site or for road repairs within the lease. The stockpiled topsoil will then be spread out reclaimed area and reseeded with a BLM approved seed mixture. In the event that the well must be worked over or

*Surface Use Plan*  
*COG Operating, LLC*  
*Lusk Deep Unit A #29H*  
*SL: 355' FNL & 660' FWL      UL D*  
*Section 17, T19S, R32E*  
*BHL: 330' FSL & 660' FWL      UL M*  
*Section 17, T19S, R32E*  
*Lea County, New Mexico*

---

maintained, it may be necessary to drive, park, and/or operate machinery on reclaimed land. This area will be repaired or reclaimed after work is complete.

- B. Final Reclamation: Upon plugging and abandoning the well all caliche for well pad and lease road will be removed and surface will be recountoured to reflect its surroundings as much as possible. Caliche will be recycled for road repair or reused for another well pad within the lease. If any topsoil remains, it will be spread out and the area will be re-seeded with a BLM approved mixture and re-vegetated as per BLM orders.

#### **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 is Kenneth Smith, Inc., 267 Smith Ranch Road, Hobbs, NM 88240.
- 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 Statewide Bonds # NMB000215 and NMB000740

*Surface Use Plan*  
*COG Operating, LLC*  
*Lusk Deep Unit A #29H*  
*SL: 355' FNL & 660' FWL      UL D*  
*Section 17, T19S, R32E*  
*BHL: 330' FSL & 660' FWL      UL M*  
*Section 17, T19S, R32E*  
*Lea County, New Mexico*

---

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

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

Sheryl Baker  
Drilling Superintendent  
COG Operating LLC  
2208 West Main Street  
Artesia, NM 88210  
Phone (575) 748-6940 (office)  
(432) 934-1873 (cell)

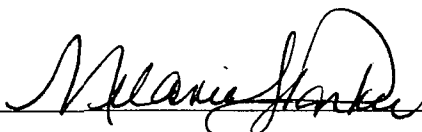
Ray Peterson  
Drilling Manager  
COG Operating LLC  
One Concho Center  
600 W Illinois Ave  
Midland, TX 79701  
Phone (432) 685-4304 (office)  
(432) 818-2254 (business)

Surface Use Plan  
COG Operating, LLC  
Lusk Deep Unit A #29H  
SL: 355' FNL & 660' FWL      UL D  
Section 17, T19S, R32E  
BHL: 330' FSL & 660' FWL      UL M  
Section 17, T19S, R32E  
Lea County, New Mexico

---

### OPERATOR CERTIFICATION

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 made 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 20<sup>th</sup> day of September, 2013.

Signed: \_\_\_\_\_

Printed Name: Melanie J. Parker

Position: Regulatory Coordinator

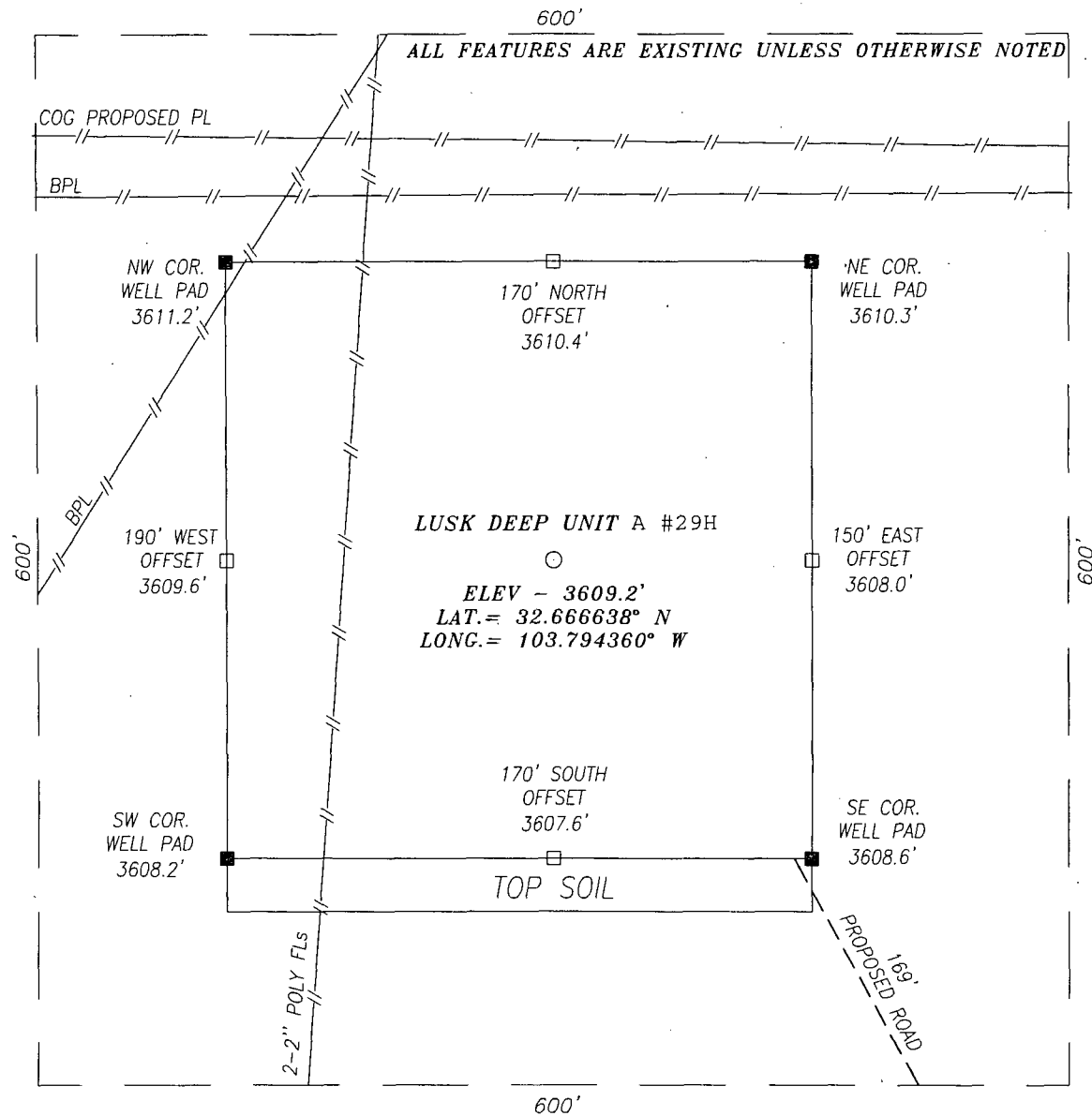
Address: 2208 W. Main Street, Artesia, NM 88210

Telephone: (575) 748-6940

Field Representative (if not above signatory): Rand French

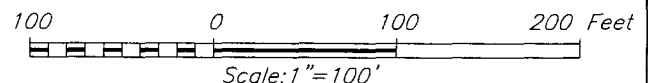
E-mail: [mparker@concho.com](mailto:mparker@concho.com)

SECTION 17, TOWNSHIP 19 SOUTH, RANGE 32 EAST, N.M.P.M.,  
LEA COUNTY NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF LUSK RD. AND CR #126A (MALJAMAR RD.) GO NORTH ALONG CR #126A MALJAMAR ROAD APPROX. 1 MILE. TURN RIGHT (EAST) ONTO A CALICHE ROAD. GO APPROX 600' AND WELL IS 440' NORTHWEST.



HARCROW SURVEYING, LLC  
1107 WATSON, ARTESIA, N.M. 88210  
PH: (575) 513-2570 FAX: (575) 746-2158  
chad\_harcrow77@yahoo.com



COG OPERATING, LLC

LUSK DEEP UNIT A #29H  
LOCATED 355 FEET FROM THE NORTH LINE  
AND 660 FEET FROM THE WEST LINE OF SECTION 17,  
TOWNSHIP 19 SOUTH, RANGE 32 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO

SURVEY DATE: 03/21/2013

PAGE: 1 OF 1

DRAFTING DATE: 03/22/2013

APPROVED BY: CH

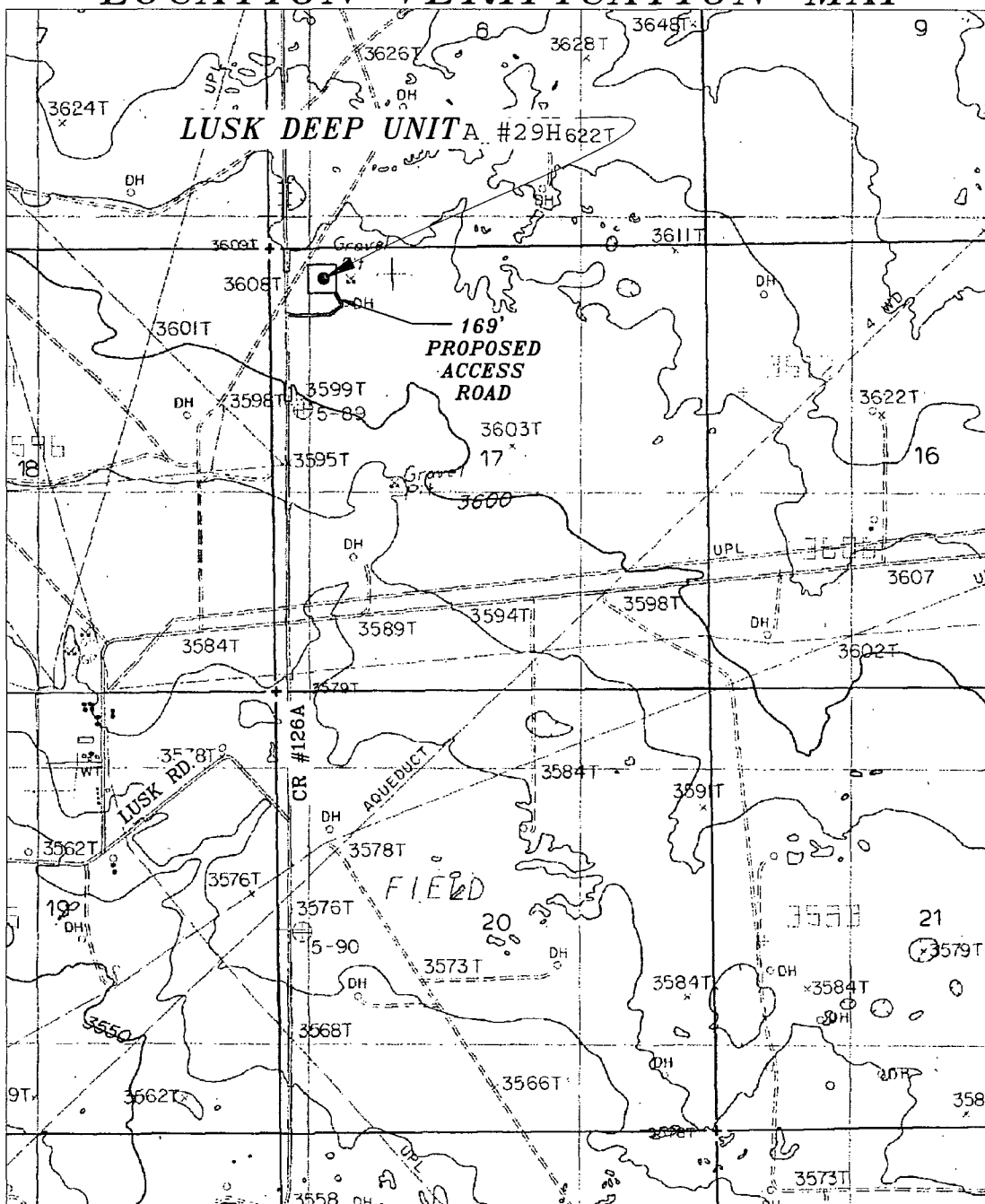
DRAWN BY: VD

FILE: 12-128



# EXHIBIT 2

## LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

SEC. 17 TWP. 19-S RGE. 32-E  
 SURVEY N.M.P.M.  
 COUNTY LEA STATE NEW MEXICO  
 DESCRIPTION 355' FNL & 660' FWL  
 ELEVATION 3609.2'  
 OPERATOR COG OPERATING, LLC  
 LEASE LUSK DEEP UNIT A  
 U.S.G.S. TOPOGRAPHIC MAP  
GREENWOOD LAKE, N.M.

### LEGEND:

- UPGRADED OR 2-TRACK RD.
- PROPOSED RD.
- CALICHE RD.

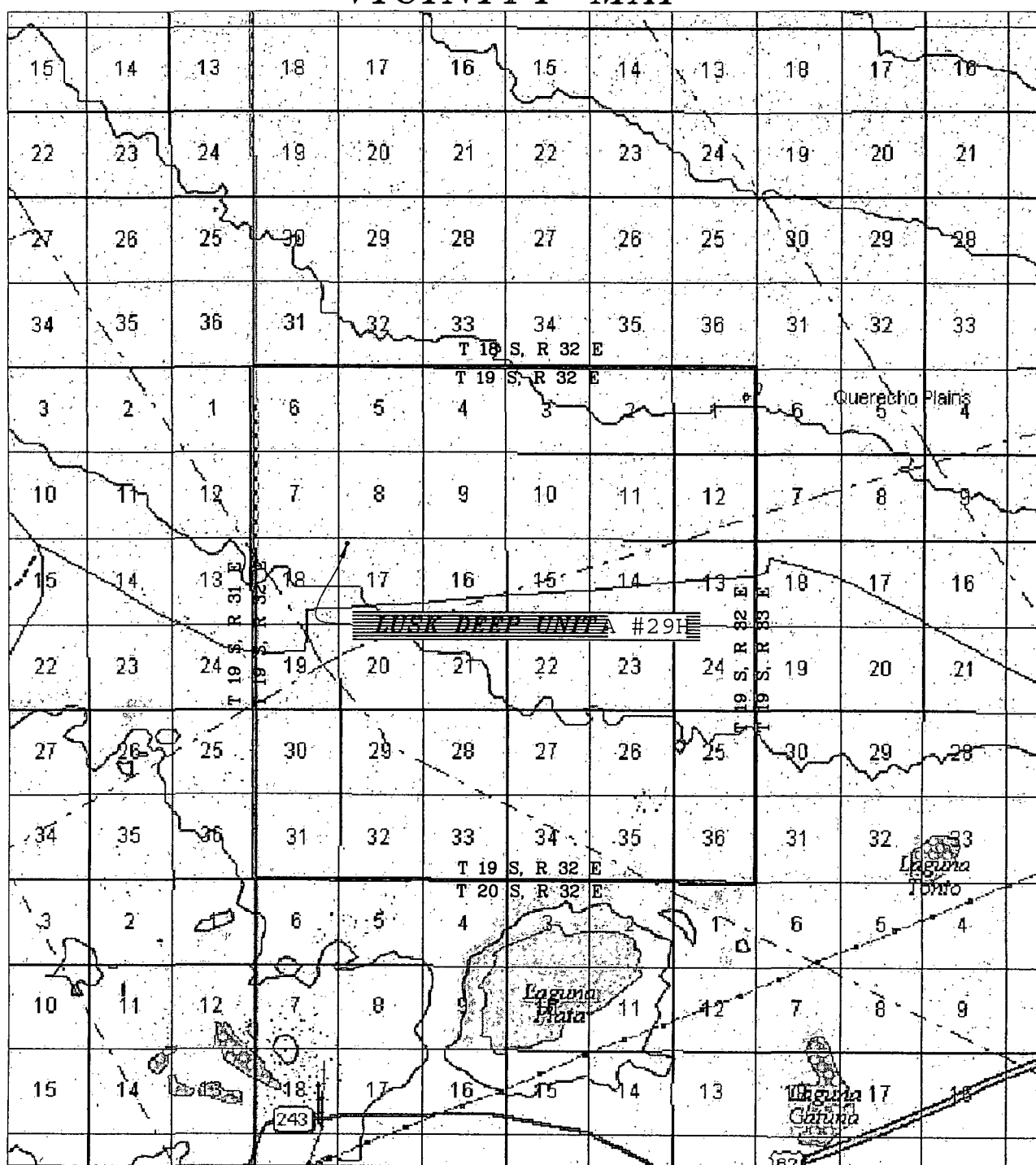
HARCROW SURVEYING, LLC  
 1107 WATSON, ARTESIA N.M. 88210  
 PH: (575) 513-2570 FAX: (575) 746-2158  
 chad\_harcrow77@yahoo.com



### COG OPERATING, LLC

SURVEY DATE: MAR. 21, 2013	PAGE: 1 OF 1
DRAFTING DATE: MAR. 22, 2013	
APPROVED BY: CH	DRAWN BY: DDSI FILE: 12-128

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 17 TWP. 19-S RGE. 32-E  
 SURVEY N.M.P.M.  
 COUNTY LEA STATE NEW MEXICO  
 DESCRIPTION 355' FNL & 660' FWL  
 ELEVATION 3609.2'  
 OPERATOR COG OPERATING, LLC  
 LEASE LUSK DEEP UNIT A

HARCROW SURVEYING, LLC  
 1107 WATSON, ARTESIA N.M. 88210  
 PH: (575) 513-2570 FAX: (575) 746-2158  
 chad\_harcrow77@yahoo.com

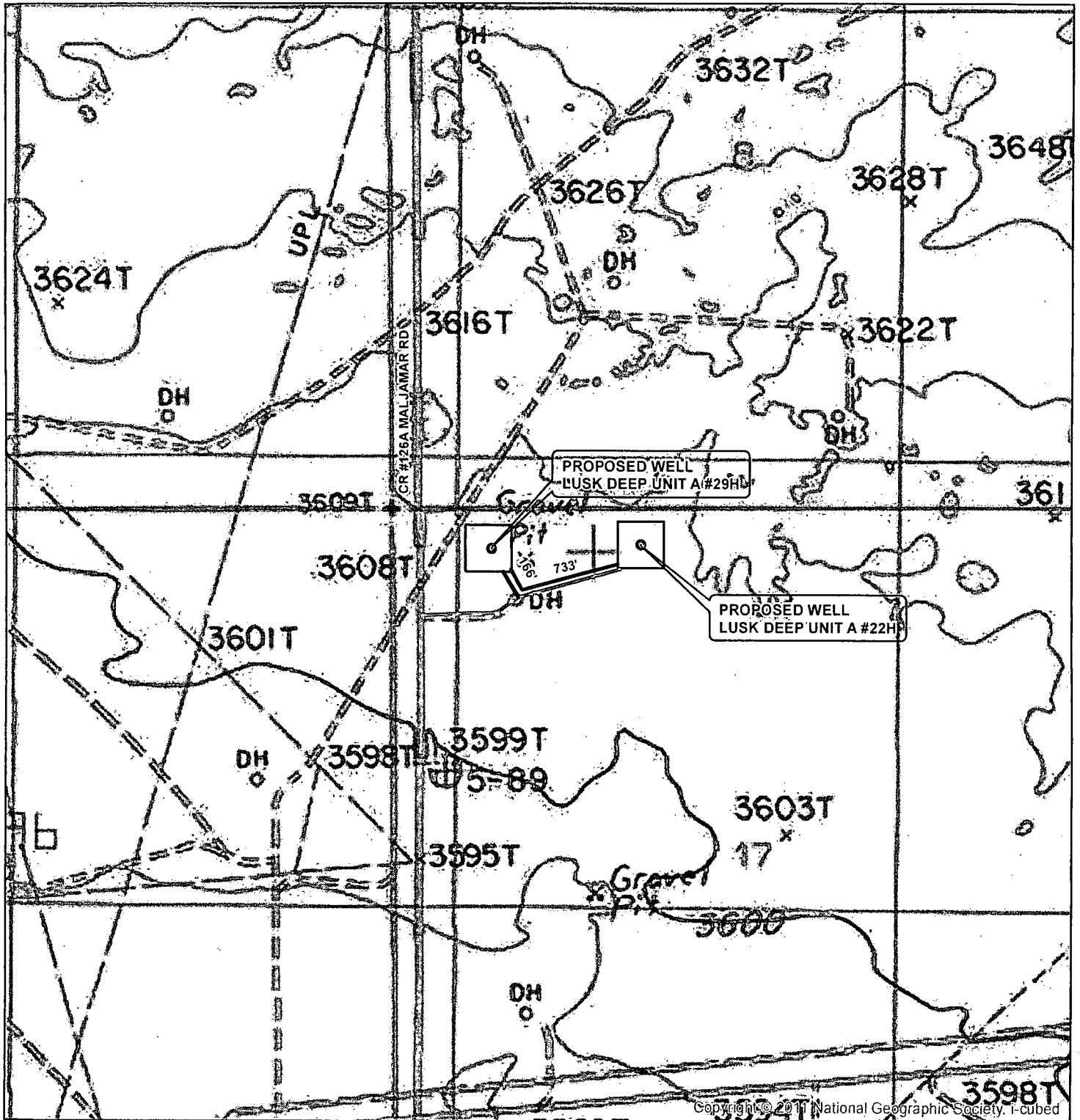


## COG OPERATING, LLC

SURVEY DATE: MAR. 21, 2013	PAGE: 1 OF 1
DRAFTING DATE: MAR. 22, 2013	
APPROVED BY: CH	DRAWN BY: DDSI FILE: 12-128

# EXHIBIT 4

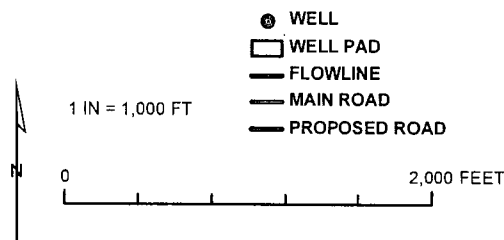
## FLOWLINE MAP



SEC. 17, TWP. 19S, RGE. 32E  
 SURVEY: N.M.P.M  
 COUNTY: LEA STATE: NEW MEXICO  
 DESCRIPTION: LUSK DEEP UNIT  
 A #29H, #22H FLOWLINE

LENGTH: 899'  
 OPERATOR: COG OPERATING LLC  
 LEASE: LUSK DEEP UNIT A

W.O. # 13-639

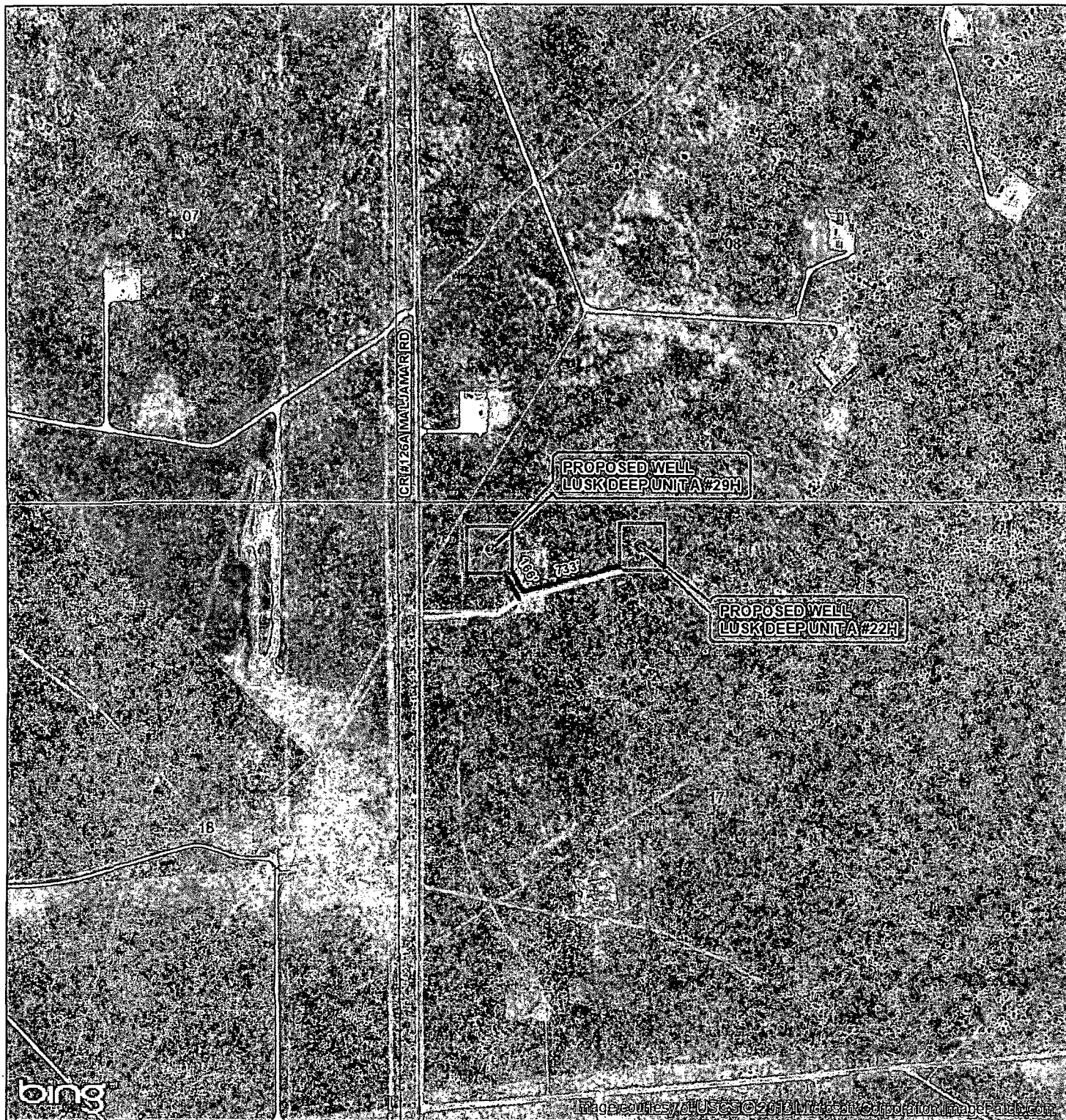


HARCROW SURVEYING, LLC  
 1107 WATSON, ARTESIA N.M. 88210  
 PH: (575) 513-2570 FAX: (575) 746-2158  
 chad\_harcrow77@yahoo.com



MAP DATE: 9/17/2013

# FLOWLINE MAP

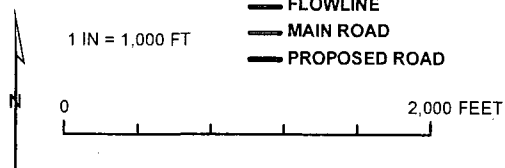


SEC. 17, TWP. 19S, RGE. 32E  
 SURVEY: N.M.P.M  
 COUNTY: LEA STATE: NEW MEXICO  
 DESCRIPTION: LUSK DEEP UNIT  
 A #29H, #22H FLOWLINE

LENGTH: 899'  
 OPERATOR: COG OPERATING LLC  
 LEASE: LUSK DEEP UNIT A

W.O. # 13-639

- WELL
- WELL PAD
- FLOWLINE
- MAIN ROAD
- PROPOSED ROAD

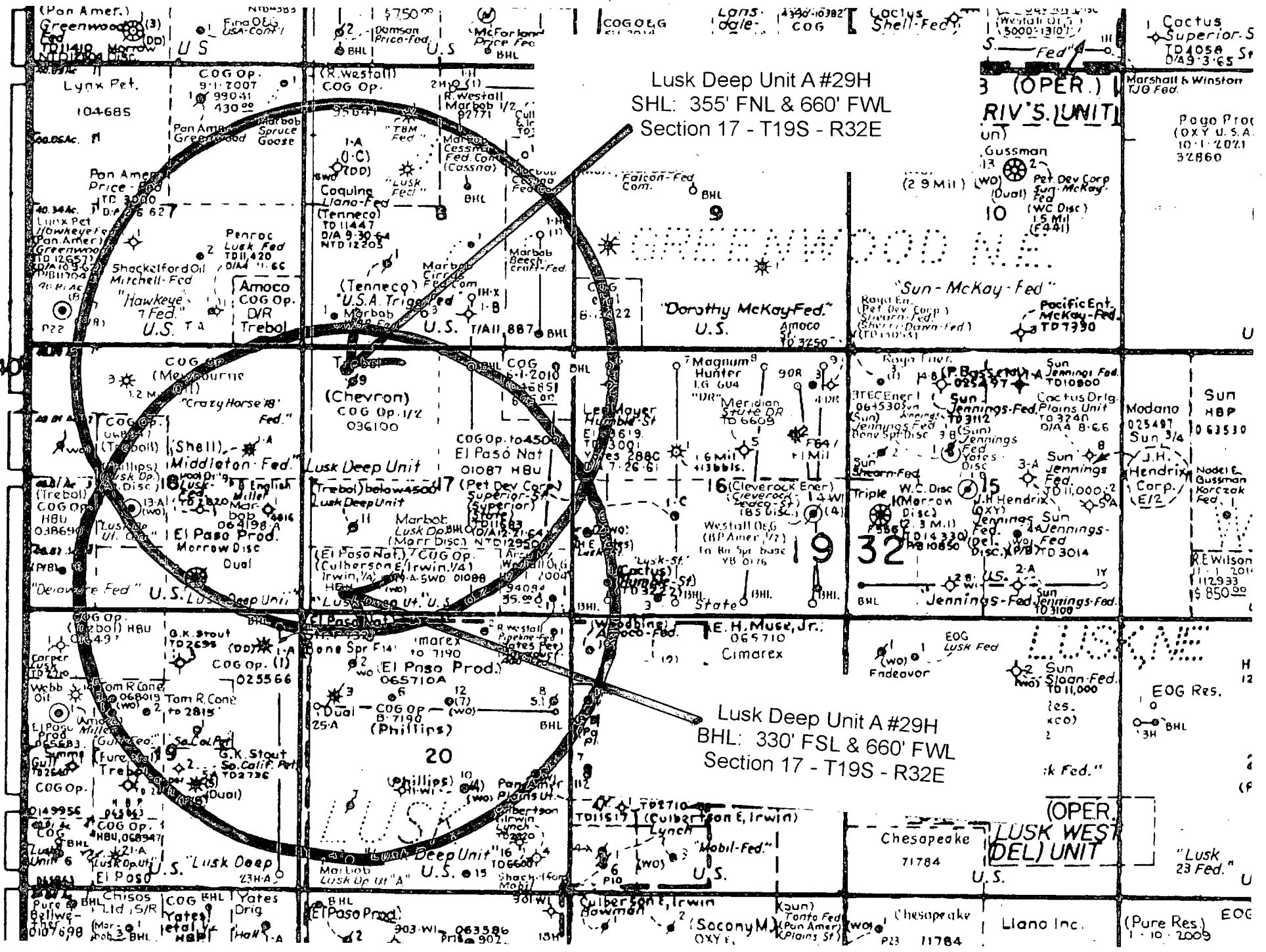


HARCROW SURVEYING, LLC  
 1107 WATSON, ARTESIA N.M. 88210  
 PH: (575) 313-2570 FAX: (575) 746-2158  
 chad\_harcrow77@yahoo.com



MAP DATE: 9/17/2013

T19S



Lusk Deep Unit A #29H  
SHL: 355' FNL & 660' FWL  
Section 17 - T19S - R32E

"Dorothy McKay Fed."  
U.S.

Lusk Deep Unit A #29H  
BHL: 330' FSL & 660' FWL  
Section 17 - T19S - R32E

3 (OPER.)  
RIV'S UNIT

(OPER.)  
LUSK WEST  
(DEL) UNIT

Cactus  
Superior-S  
TD105A  
0/49'3'65 S

Pago Prod  
(OXY U.S.A.)  
10-1-2021  
3/2860

Sun  
HBP  
025487  
Sun 3/4  
063530

RE Wilson  
11-2-2011  
112933  
1585000

EOG Res.  
BHL  
3H

"Lusk"  
23 Fed."

(Pure Res.)  
1-10-2009