Form 3160-5 (April 2004)

3a Address

1. Type of Well ✓ Oil Well □ □

2. Name of Operator COG Operating LLC

550 W. Texas Ave., Suite 1300 Midland, TX 79701

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

S/2 SE/4 of B C Federal Lease

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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.

☐ Gas Well □□

FORM APPROVED
OM B No. 1004-0137
Expires: March 31, 2007

5. Lease Serial No.

NMLC-029405A & NMLC-029405B

If Indian, Allottee or Tribe Name 7. If Unit or CA/Agreement, Name and/or No. N/A 8. Well Name and No. B C Federal & G C Federal Leases 9. API Well No.

> 10. Field and Pool, or Exploratory Area Maljamar; Yeso, West

11. County or Parish. State

44500

N/2 NE/4 of G C	Federal Lease SECTIO	ON 20, 17S, R32E	LEA, 1	NM	
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
TYPE OF SUBMISSION		TYF	E OF ACTION		
Notice of Intent Subsequent Report Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injection	Deepen Fracture Treat New Construction Plug and Abandon Plug Back	Production (Start/Resume) Reclamation Recomplete Temporarily Abandon Water Disposal	Water Shut-Off Well Integrity Other Frac Pit	

3b. Phone No. (include area code)

432-685-4385

SECTION 20, 17S, R32E

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 recomplete 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 recompletion 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.)

COG Operating LLC respectfully requests permission to construct a frac pit on the 8/2 SE/4 of the B C FEDERAL LEASE and the X/2 NE/4 of the G C FEDERAL LEASE.

A plat of the proposed location and drawing of the frac pit are attached for your review. 30-025-38829 30-025-34932

30-025-39471

30-025-39268

30-025-39263

30-025-39470 30-025-39515 30-025-39857 30-026-39262

30-025- 39267 30-025-38714

RECEIVED

DEC 1 4 2010 HOBBSOCD

30-025-39497

30 050 575						<u> </u>		
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)					-			
Robyn M. Odom	Title	Perm	itting Tech					
Signature Roby Chris	Date		11/03/2010	k	1	DE	C 1 6	2010
THIS SPACE FOR FEDERAL OR STATE OFFICE USE								
Approved by /s/ Don Peterson	Ti	tle	FIELD MANAGER	Date	DEC	11	0 2010)
Conditions of approval, if any, are attached. Approval of this notice does not warrant certify that the applicant holds legal or equitable title to those rights in the subject leas which would entitle the applicant to conduct operations thereon.		ffice	CARLSBAD FIELD	OFFI	CE			

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.

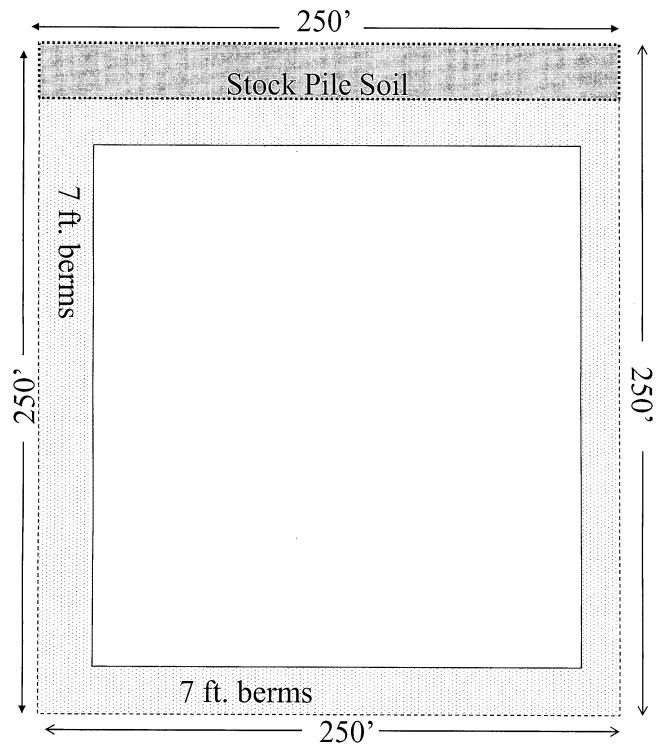
30-025-38713

30-025-39417

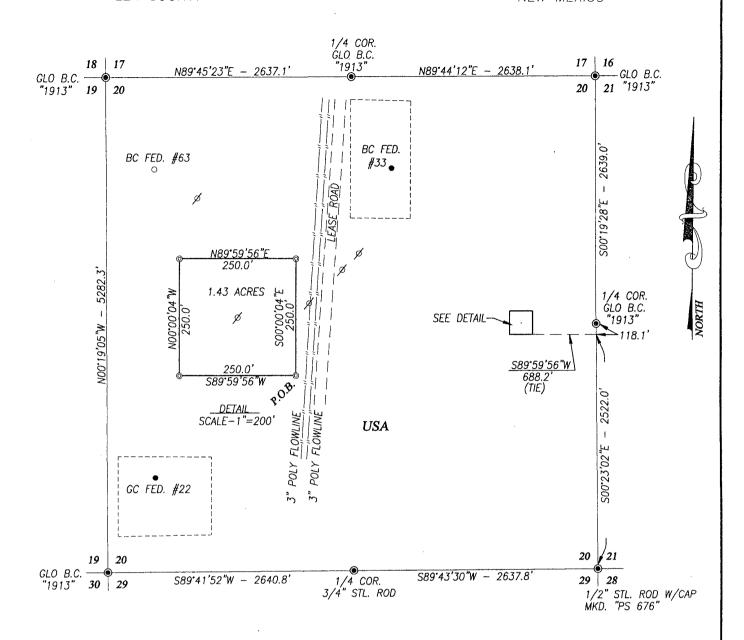
30-025-39950

COG OPERATING LLC BURCH KEELY UNIT LEASE FRAC PIT

Section 24, T17S, R29E



SECTION 20, TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M. LEA COUNTY NEW MEXICO



DESCRIPTIOIN

A FRAC PIT SITUATED ON USA LAND IN THE NORTHEAST QUARTER AND THE SOUTHEAST QUARTER AND THE SOUTHEAST QUARTER AND THE SOUTHEAST QUARTER OF SECTION 20, TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THE PIT WHICH LIES S00°23'02"E ALONG THE EAST LINE OF SAID SECTION A DISTANCE OF 118.1 FEET AND S89°59'56"W 688.2 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION; THEN S89°59'56"W 250.0 FEET; THEN N00°00'04"W 250.0 FEET; THEN N89°59'56"E 250.0 FEET; THEN S00°00'04"E 250.0 FEET TO THE POINT OF BEGINNING, CONTAINING 1.43 ACRES MORE OR LESS.

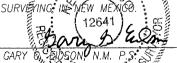
LEGEND

- DENOTES FOUND CORNER AS NOTED
- DENOTES SET SPIKE NAIL
- Ø DENOTES PLUGGED AND ABANDONED WELL

NOTE

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

I HEREBY CERTIFY THAT WILLIEUTED AND AM RESPONSIBLE FOR THIS ACTUAL ON THE GROUND, SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF, MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND GREAT MEET THE MINIMUM STANDARDS FOR SURVEYING INFORMEM MEXICO.



10/28/10

No. 12641 No. 3239

RONALD PROFESSION PROVIDING SURVEYING SEF

PROVIDING SURVEYING SERVICES
SINCE 1946

JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

1000 0 1000 2000 FEET

Scale:1"=1000'

COG OPERATING, LLC

SURVEY OF A FRAC PIT SITUATED IN SECTION 20, TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

Survey Date: 10/20/10	Sheet 1 of 1 Sheets
W.O. Number: 10.11.1553	Drawn By: LA
Date: 10/25/10	CAD File: 10111553

BLM LEASE NUMBER: NMLC 029405A & NMLC 029405B COMPANY NAME: COG Operating LLC ASSOCIATED WELL NO. & NAME: BC Federal & GC Federal Unit

FRAC POND CONDITIONS OF APPROVAL

A copy of the APD, Right-of-Way Request, or Sundry Notice and attachments, including stipulations, survey plat and diagram, will be on location during construction. BLM personnel may request to see a copy of your permit during construction to ensure compliance with all conditions of approval.

Holder agrees to comply with the following conditions of approval 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 permit.
- 2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated.
- 3. Required Standard Conditions of Approval:
 - Contact the Supervisory Environmental Protection Specialist, Jim Amos, at 575-234-5909 at least 24 hours prior to starting construction.
 - The frac pond will only be authorized to contain freshwater and testing of water quality is required. Additives are not allowed without consent of the authorized officer.
 - If at any time the water in the frac pond becomes polluted with salts or other contaminants, use of the frac pond will cease and desist, and all liquids will be removed from the frac pond and disposed of properly.
 - Confine all construction and maintenance activity to the authorized area.
 - Temporary pipelines flowing from the frac pond to the target well will be laid along existing roadways unless an exception has been granted by the authorized officer.
 - Mineral materials extracted during construction of the frac pond will be stored onlocation and/or used for constructing the frac pond.
 - The frac pond will be lined.
 - The operator shall stockpile topsoil approximately 25 feet outside the bermed perimeter of the pond in a low profile manner, reasonably protected from wind and water erosion

- Topsoil shall not be used for constructing the frac pond. The topsoil will be used for final reclamation purposes only.
- The frac pond shall be fenced on all sides.
- Frac pond boundary fences will be marked by using highly visible and/or reflective markers
- Inner walls of the frac pond will have a minimum of a 3:1 slope ratio in order to minimize the entrapment of fauna
- Install earthen erosion-control structures as are suitable for the specific terrain and soil conditions.
- The plastic lining will be removed prior to final abandonment
- Reclamation efforts will commence immediately after the frac pond is no longer needed for the purpose of completing wells.
- Within 3 months of completion of frac operations on associated wells, all earthwork and final reclamation must be completed. This includes reclaiming and/or removal of:

Any roads approved for use with the pond

Surface water lines

Tanks, pumps, fencing etc.

• Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Requirements for Operations and Final Reclamation:

- 4. If, during any phase of the construction, operation, maintenance, or termination of the frac pond, any pollutant should be released from the contaminated frac pond, the control and total removal, disposal, and cleaning up of such pollutant, wherever found, shall be the responsibility of holder, regardless of fault.
- 5. 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.

- 6. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf 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.
- 7. 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.
- 8. After all disturbed areas have been satisfactorily contoured and prepared for seeding the location needs to be revegetated with the seed mixture provided. Seeding may need to be repeated until revegetation is successful. Operators shall contact Jim Amos, Supervisòr, Environmental Protection (575)234-5909, **prior** to beginning surface reclamation operations.

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9.	2660	mg is	required:	Use the	TOHOWIHE	g seed mix.

() seed mixture 1	() seed mixture 3
() seed mixture 2	() seed mixture 4
(x) LPC mixture	() Aplomado Falcon mix

10. The topsoil to be stripped is approximately 6 inches in depth.

11. Special Stipulations:

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 1st through June 15th 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.

12. Upon failure of holder to control, dispose of, or clean up such discharge, or to repair all damages resulting there-from, 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.

EA File #11-161