Form 3160-5 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

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

Lease Serial No.		
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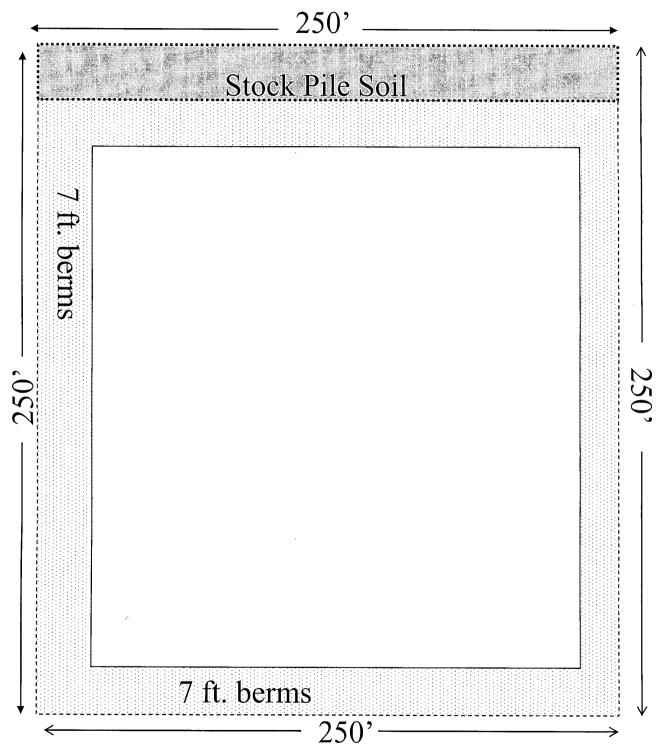
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Succession Converted Con	SUBMIT IN TRIPLICAT	rse side.	7. If Unit or CA/Agreement, Name and/or No.					
2. Name of Operator COG Operating LLC 3a. Address 550 W. Texas Ave., Suite 1300 Midland, TX 79701 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) S22 SE44 of B C Federal Lease N/2 NE/4 of G C Federal Lease SECTION 20, 17S, R32E 11. County of Parish, State LEA, NM 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOIICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION New Construction Production (Start/Resume) Water Shut-Off Well Integrity	Type of Well							
3b. Phone No. (include area code) 432-685-4385 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) S/2 SE/4 of B C Federal Lease N/2 NE/4 of G C Federal Lease SECTION 20, 17S, R32E 11. County or Parish, State LEA, NM 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Acidize Deepen Alter Casing Fracture Treat Reclamation Well Integrity Subsequent Report Final Abandonment Notice Convert to Injection Plug Back 13. Describe Proposed or Completed Operation (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration to If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and 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 following completion of the involved operations. If the operation results in a multiple completion or recompleted, Final Abandonment Notice shall be filed only after all requirements, including reclamation, have been completed, and the operator 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 A plat of the proposed location and drawing of the frac pit are attached for your review. O-0.25 - 38 9.24 30 -0.25 - 39 4.47 DEC 1 4 2010				8. Well Name and No. B C Federal & G C Federal Leases				
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) S/2 SE/4 of B C Federal Lease N/2 NE/4 of G C Federal Lease SECTION 20, 17S, R32E 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Acidize Deepen Request to eon Fracture Treat Reclamation Recomplete Other Request to eon Frac Pit Subsequent Report Casing Plug and Abandon Plug Back Water Disposal Subsequent Report Convert to Injection Plug Back Water Disposal 13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration to following completion of the involved operations. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and 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 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 testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator 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 #8/2 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. O-0.25 - 38 9.29 30-0.25 - 39 4.68 DEC 14 2010		Tot M N 4 1 1						
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12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Acidize Deepen Reclamation Recomplete Reclamation Recomplete Casing Repair Change Plans Plug and Abandon Plug Back Water Disposal Convert to Injection Plug Back Water Disposal Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration to fif the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and 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 following completion of the involved operations. If the operation results in a multiple completion or recompleted. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator 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 8/2 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. PLECEIVED DEC 14 2010	S/2 SE/4 of B C Federal Lease SECTION 20, 17S, R32E			11. County or Parish, State				
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Acidize Deepen Production (Start/Resume) Water Shut-Off Reclamation Well Integrity Subsequent Report Casing Pepair New Construction Recomplete Production (Start/Resume) Final Abandonment Notice Convert to Injection Plug and Abandon Temporarily Abandon Frac Pit 13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration to If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and 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 following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 31604 shall be filed testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator determined that the site is ready for final inspection.) **COG Operating LLC respectfully requests permission to construct a frac pit on the \$82 SE/4 of the B C FEDERAL LEASE and the \$87 SE/4 of the B C FEDERAL LEASE A plat of the proposed location and drawing of the frac pit are attached for your review. **RECEIVED** **DEC 1 4 2010**	12. CHECK APPROPRIA	E BOX(ES) TO INDICATE NATUR	RE OF NOTICE, REPO	ORT, OR OTHER DATA				
Notice of Intent	OF SUBMISSION	TY	PE OF ACTION					
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 testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator 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 8/2 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. O-025-38829 30-025-39471 DEC 14 2010	ice of Intent Insequent Report al Abandonment Notice Alter Casi Char Convertible Proposed or Completed Operation e proposal is to deepen directionally or r	Casing Fracture Treat Repair New Construction e Plans Plug and Abandon rt to Injection Plug Back Clearly state all pertinent details, including estion complete horizontally, give subsurface location	Reclamation Recomplete Temporarily Abando Water Disposal mated starting date of any pr ns and measured and true ver	Well Integrity Other Request to construct Frac Pit Toposed work and approximate duration thereof. Trical depths of all pertinent markers and zones.				
and the 2/2 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. 0-025-38929 30-025-34932 0-025-39471 0-025-39417 30-025-39268 DEC 14 2010	owing completion of the involved operating has been completed. Final Abandon, rmined that the site is ready for final insp	ns. If the operation results in a multiple comp ent Notices shall be filed only after all require ction.)	oletion or recompletion in a numents, including reclamation	new interval, a Form 3160-4 shall be filed once in, have been completed, and the operator has				
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2-25-39417 30-25-39268 UEC 142010	5-38829	30-025-34932	ur review.	ECEIVED				
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30-025-39470 30-025-39515	25-39470							
30-025-39857 30-026-39262	25-39857		~ a ~ -					
30-025-38714 30-025-39267 30-025-39697 14. Thereby certify that the foregoing is true and correct			30 <i>~</i> 02	25-39697				

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)								
Robyn M. Odom	Title	Pern	nitting Tech					
Signature John Jan	Date		11/03/2010	k	4	DEC	16	2010
THIS SPACE FOR FEDERAL	OR S	TAT	E OFFICE USE				-1	
Approved by /s/ Don Peterson	T	`itle	FIELD MANAGER	Date	DEC	10	2010	
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office	CARLSBAD FIELD	OFFIC	CE			

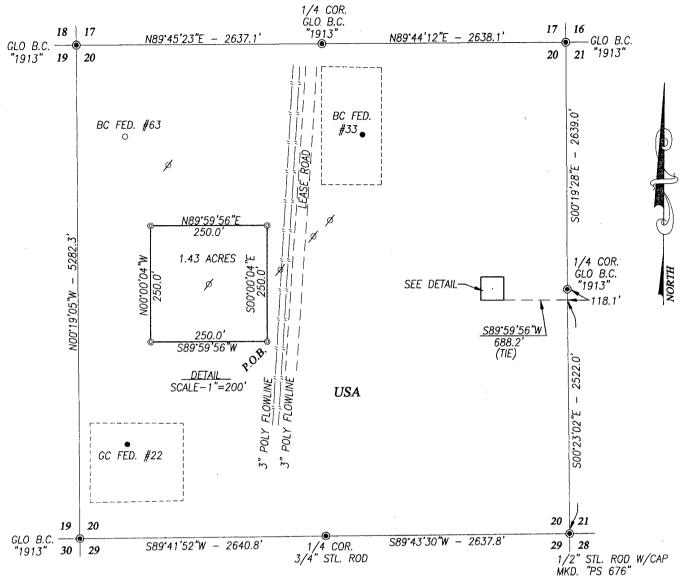
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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 OF THE NORTHEAST 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 SOO"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 NOO'00'04"W 250.0 FEET; THEN N89'59'56"E 250.0 FEET; THEN SOO'00'04"E 250.0 FEET TO THE POINT OF BEGINNING, CONTAINING 1.43 ACRES MORE OR LESS.

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LEGEND

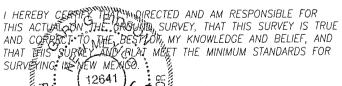
- DENOTES FOUND CORNER AS NOTED
- DENOTES SET SPIKE NAIL
- DENOTES PLUGGED AND ABANDONED WELL

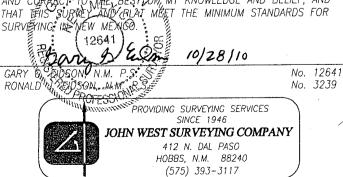
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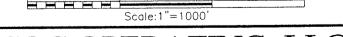
2000 FEET

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.







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, Supervisor, Environmental Protection (575)234-5909, **prior** to beginning surface reclamation operations.
- 9. Seeding is required: Use the following 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