U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Well Name	Well Number	US Well Number	Lease Number	Case Number	Operator
GIN AND	703H	3002548436	NMNM120906	NMNM120906	COG
GIN AND	701H	3002548434	NMNM120906	NMNM120906	COG
GIN AND	702H	3002548435	NMNM120906	NMNM120906	COG

## **Notice of Intent**

Sundry ID: 2757453 Type of Submission: Notice of Intent Date Sundry Submitted: 10/23/2023 Date proposed operation will begin: 10/23/2023

Type of Action: APD Change Time Sundry Submitted: 08:16

Sundry Print Report

**Procedure Description:** COG Operating requests permission to perform a Bradenhead Cement Job previously approved by BLM as detailed on the attached procedure for Gin and Tectonic Federal Com 701H, 702H, and 703H.

## **NOI Attachments**

**Procedure Description** 

COP\_Offline\_Bradenhead\_Intermediate\_Documentation\_3\_11\_23\_\_Rev2\_20231023081526.pdf

## Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

**Operator Electronic Signature: STAN WAGNER** 

Signed on: OCT 23, 2023 08:15 AM

Name: COG OPERATING LLC

Title: Regulatory Advisor

Street Address: 600 WEST ILLINOIS AVE

City: MIDLAND

Phone: (432) 253-9685

Email address: STAN.S.WAGNER@CONOCOPHILLIPS.COM

State:

State: TX

## Field

Representative Name:

Street Address:

City:

Phone:

Email address:

## **BLM Point of Contact**

BLM POC Name: CHRISTOPHER WALLS BLM POC Phone: 5752342234 Disposition: Approved Signature: Chris Walls

BLM POC Title: Petroleum Engineer BLM POC Email Address: cwalls@blm.gov Disposition Date: 11/21/2023

Zip:

#### Received by OCD: 11/28/2023 2:37:26 PM

<i>Teceiveu by OCD</i> . 11/20/2023	2.37.20 I M				ruge 5 of
June 2019)     UNITED STATES       DEPARTMENT OF THE INTERIOR       BUREAU OF LAND MANAGEMENT				FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021	
					77 11 X X
Do not use this abandoned well	form for proposals Use Form 3160-3 (A	to drill or to re-enter an APD) for such proposals	5.	6. If Indian, Allottee of	r Tribe Name
SUBMIT I	NTRIPLICATE - Other instr	ructions on page 2		7. If Unit of CA/Agree	ement, Name and/or No.
1. Type of Well				1	
Oil Well Ga	Well Other			8. Well Name and No.	
2. Name of Operator				9. API Well No.	
3a. Address		3b. Phone No. <i>(include area code</i> )	e)	10. Field and Pool or E	Exploratory Area
4. Location of Well (Footage, Sec., 7	.,R.,M., or Survey Description			11. Country or Parish,	State
12. CH	IECK THE APPROPRIATE E	BOX(ES) TO INDICATE NATURE	E OF NOT	LICE, REPORT OR OTH	IER DATA
TYPE OF SUBMISSION		TY	PE OF AC	TION	
Notice of Intent	Acidize	Deepen Hydraulic Fracturing	Proc	duction (Start/Resume) lamation	Water Shut-Off Well Integrity
Subsequent Report	Casing Repair	New Construction	Rec	omplete porarily Abandon	Other
Final Abandonment Notice	Convert to Injectior	n Plug Back	Wat	er Disposal	
13. Describe Proposed or Completed the proposal is to deepen direction the Bond under which the work we completion of the involved operar completed. Final Abandonment I is ready for final inspection.)	Operation: Clearly state all po- nally or recomplete horizontal vill be perfonned or provide th titons. If the operation results i Notices must be filed only after	ertinent details, including estimated Ily, give subsurface locations and n e Bond No. on file with BLM/BIA in a multiple completion or recomp r all requirements, including reclan	d starting on neasured a letion in a nation, hav	late of any proposed wo nd true vertical depths o d subsequent reports mus new interval, a Form 31 ve been completed and th	rk and approximate duration thereof. If f all pertinent markers and zones. Attach st be filed within 30 days following 60-4 must be filed once testing has been ne operator has detennined that the site

14. I hereby certify that the foregoing is true and correct. Name ( <i>Printed/Typed</i> )			
	ſitle		
Signature	Date		
THE SPACE FOR FEDE	RAL OR STATE	OFICE USE	
Approved by			
	Title		Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant of 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.	or se Office		
Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any any false, fictitious or fraudulent statements or representations as to any matter within	person knowingly and its jurisdiction.	willfully to make to any d	lepartment or agency of the United States

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the

SPECIFIC INSTRUCTIONS

use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13:* Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

#### NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

either shown below, will be issued by or may be obtained from the local Federal office.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

### **Additional Information**

#### **Batch Well Data**

GIN AND TECTONIC FEDERAL COM 701H, US Well Number: 3002548434, Case Number: NMNM120906, Lease Number: NMNM120906, Operator:COG OPERATING LLC

GIN AND TECTONIC FEDERAL COM 702H, US Well Number: 3002548435, Case Number: NMNM120906, Lease Number: NMNM120906, Operator:COG OPERATING LLC

GIN AND TECTONIC FEDERAL COM 703H, US Well Number: 3002548436, Case Number: NMNM120906, Lease Number: NMNM120906, Operator:COG OPERATING LLC

		Wt.	Yld	Slurry Description		
Depth	No. Sacks	ppg	Ft3/sk			
	465	15.6	1.196	1st Stage: Halliburton Halcem (TOC @ Brushy Canyon)		
11,945'						
	1000	14.8	1.519	2nd Stage (Bradenhead squeeze): Halliburton Thixotropic Halcem + 5% Cal-Seal 60, .6% HR-800 + 10% Salt + 3% Microbond		
9-7/8″						
	400	14.8	1.332	Top out Slurry: Halliburton Halcem (TOC @ surface)		

#### **Casing Program:**

COG Production LLC requests variance from minimum standards to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a 1000 sack bradenhead squeeze with planned cement from the Brushy Canyon to surface. After the bradenhead squeeze, 50 sacks of the 14.8 ppg top out slurry will be pumped followed by shutting down and waiting on cement (WOC) 2 hours. After 2 hours, if necessary, a top out consisting of 350 sacks of Halliburton's Halcem at 14.8 ppg (1.332 yld) will be executed as a contingency. When washing valves, 2 bbls of water will be utilized. If the valves still contain cement, washing will occur in 1 bbl increments up to a maximum of 5 bbls.

COG Production will run a cement bond log (CBL) after the cement job is performed to evaluate the quality of the cement job.

#### Wellhead & Offline Cementing:

COG Production LLC respectfully requests a variance from the minimum standards for well control equipment testing of Onshore Order No. 2 (item III.A.2.a.i) to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with Batch Drilling & Offline cement operations to include the following:

- Full BOPE test at first installation on the pad.
- Full BOPE test every 21 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- After the well section is secured, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad.
- TA cap will also be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- See attached "Offline Cement Intermediate Operational Procedure"

COG Production LLC believes that the combination of drilling fluid inside the casing, the abandonment plug with BPV, casing and annular valves and the TA cap provide multiple barriers to ensure complete closure of the wellbore prior to skidding/walking the rig.

## Bradenhead Cementing Procedure for Intermediate Casing

- 1. R/U cement head and test lines
- 2. Pump first stage conventionally down the 7-5/8" intermediate casing
  - a. 15.6 ppg slurry with TOC @ the Brushy Canyon
- 3. Displace with drilling fluid and bump plug
- 4. Bump at 500 psi over FCP, hold 5 mins.
- 5. Bleed back to cement truck to check floats
- 6. Rig up on 10-3/4" x 7-5/8" annulus by lining up to pump down both valves.
- 7. Establish injection rate and displace annulus with FW
- 8. Pump bradenhead squeeze with 14.8 ppg thixotropic slurry
  - a. Limit pressure to 1500 psi (10-3/4" surf csg test)
- 9. After pumping 14.8 ppg thixotropic slurry, pump 50 sacks of 14.8 ppg top out slurry to flush valves of thixotropic cement.
- 10. WOC 2 hours
- 11. Top out with 350 sacks of 14.8 ppg top out slurry. If more cement is necessary, note in report and notify BLM.
- 12. Displace cement with fresh water and clear valves. Start with 2 bbls of fresh water. If more water is necessary, 1 bbl increments will be used to a maximum of 5 bbls.
- 13. Shut down and monitor the shut-in pressure on the 10-3/4" x 7-5/8" annulus.

## Summarized Operational Procedure for Intermediate Casing

- 1. Run casing as per normal operations.
  - a. Float equipment is equipped with two back pressure valves rated to a minimum of 5,000 psi.
- 2. Land intermediate casing on mandrel hanger through BOP.
  - a. If casing is unable to be landed with a mandrel hanger, then the casing will be cemented online.
  - b. If time from landing mandrel hanger to skidding/walking rig off well exceeds 8 hours, BLM will be notified.
- 3. Break circulation and confirm no restrictions.
  - a. Ensure no blockage of float equipment and appropriate annular returns.
  - b. Perform flow check to confirm well is static.
- 4. Set pack-off
  - a. If utilizing a fluted/ported mandrel hanger, ensure well is static on the annulus and inside the casing by ensuring pipe is full of drilling fluid, remove landing joint, and set annular packoff through BOP. Pressure test to 5,000 psi for 10 min.
  - b. If utilizing a solid mandrel hanger, ensure well is static on the annulus and inside the casing by ensuring pipe is full of drilling fluid. Pressure test seals to 5,000 psi for 10 min. Remove landing joint through BOP.
- 5. After confirmation of both annular barriers and the two casing barriers, install TA plug/BPV and pressure test to 5,000 psi for 10 min. Notify the BLM with intent to proceed with nipple down and offline cementing.

- a. Minimum 4 hrs notice.
- 6. With the well secured and BLM notified, nipple down BOP and secure on BOP handler.
  - a. Note, if any of the barriers fail to test, the BOP stack will not be nippled down until after the cement job has concluded and tail cement has reached 500 psi
- 7. Skid/Walk rig off current well.
- 8. Confirm well is static before removing TA Plug.
  - a. Cementing operations will not proceed until well is under control. (If well is not static, notify BLM and proceed to kill)
  - b. Casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing, if needed.
  - c. Well control plan can be seen in Section B, Well Control Procedures.
  - d. If need be, rig can be moved back over well and BOP nippled back up for any further remediation.
- 9. Rig up return lines to take returns from wellhead to pits and rig choke.
  - a. Test all connections and lines from wellhead to choke manifold to 5,000 psi high for 10 min.
  - b. If either test fails, perform corrections and retest before proceeding.
  - c. Return line schematics can be seen in Figure 2.
- 10. Remove TA Plug/BPV from the casing.
- 11. Install offline cement tool.
  - a. Current offline cement tool schematics can be seen in Figure 1 (Streamflo)
- 12. Rig up cement head and cementing lines.
  - a. Pressure test cement lines against cement head to 80% of casing burst for 10 min.
- 13. Break circulation on well to confirm no restrictions.
  - a. If gas is present on circulation, well will be shut in and returns rerouted through gas buster.
  - b. Max anticipated time before circulating with cement truck is 6 hrs.
- 14. Pump cement job as per plan.
  - a. At plug bump, test casing to 0.22 psi/ft or 1500 psi, whichever is greater.
  - b. If plug does not bump on calculated displacement, shut down and wait 8 hrs or 500 psi compressive strength, whichever is greater before testing casing.
- 15. Confirm well is static and floats are holding after cement job.
  - a. With floats holding and backside static:
    - i. Remove cement head.
  - b. If floats are leaking:
    - i. Shut-in well and WOC (Wait on Cement) until tail slurry reaches 500 psi compressive strength and the casing is static prior to removing cement head.
  - c. If there is flow on the backside:
    - i. Shut in well and WOC until tail slurry reaches 500 psi compressive strength. Ensure that the casing is static prior to removing cement head.
- 16. Remove offline cement tool.
- 17. Install night cap with pressure gauge for monitoring.
- 18. Test night cap to 5,000 psi for 10 min.

#### **Example Well Control Plan Content**

#### A. Well Control Component Table

The table below, which covers the cementing of the <u>5M MASP (Maximum Allowable Surface Pressure)</u> <u>portion of the well</u>, outlines the well control component rating in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the BOP nippled up to the wellhead.

Intermediate hole section, 5M requirement

Component	RWP
Pack-off	10M
Casing Wellhead Valves	10M
Annular Wellhead Valves	5M
TA Plug	10M
Float Valves	5M
2" 1502 Lo-Torque Valves	10M

#### **B. Well Control Procedures**

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while circulating and cementing through the Offline Cement Adapter.

**General Procedure While Circulating** 

- 1. Sound alarm (alert crew).
- 2. Shut down pumps.
- 3. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
- 4. Confirm shut-in.
- 5. Notify tool pusher/company representative.
- 6. Read and record the following:
  - a. SICP (Shut in Casing Pressure) and AP (Annular Pressure)
  - b. Pit gain
  - c. Time
  - d. Regroup and identify forward plan to continue circulating out kick via rig choke and mud/gas separator. Circulate and adjust mud density as needed to control well.

#### General Procedure While Cementing

- 1. Sound alarm (alert crew).
- 2. Shut down pumps.
- 3. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
- 4. Confirm shut-in.
- 5. Notify tool pusher/company representative.
- 6. Open rig choke and begin pumping again taking returns through choke manifold and mud/gas separator.

- 7. Continue to place cement until plug bumps.
- 8. At plug bump close rig choke and cement head.
- 9. Read and record the following
  - a. SICP and AP
  - b. Pit gain
  - c. Time
  - d. Shut-in annulus valves on wellhead

#### General Procedure After Cementing

- 1. Sound alarm (alert crew).
- 2. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
- 3. Confirm shut-in.
- 4. Notify tool pusher/company representative.
- 5. Read and record the following:
  - a. SICP and AP
  - b. Pit gain
  - c. Time
  - d. Shut-in annulus valves on wellhead



Figure 2: Back Yard Rig Up



\*All lines rated to 10M working pressure

\*\*Cement head rated to 7.5M working pressure

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

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District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave	Action Number:
Midland, TX 79701	289142
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By	Condition	Condition Date
pkautz	WHEN PERFOMING A BRADENHEAD CEMENT JOB A CBL MUST BE RUN BEFORE AND AFTER THE BRADENEAD CEMENT JOB.	1/17/2024

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CONDITIONS

Action 289142