		NMOCD					
В	UNITED STATES EPARTMENT OF THE INTERI SUREAU OF LAND MANAGEME	NT	FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018 5. Lease Serial No.				
SUNDRY Do not use th		NMLC054280					
abandoned we		6. If Indian, Allottee or Tribe Name					
SUBMIT IN		7. If Unit or CA/Agreement, Name and/or No.					
1. Type of Well Ø Oil Well Gas Well Ot		8. Well Name and No. MCINTYRE A EAST FEDERAL 20					
2. Name of Operator COG OPERATING LLC		9. API Well No. 30-015-36909					
3a. Address 600 W ILLINOIS AVE MIDLAND, TX 79701	Ph: •	hone No. (include area code) 432-685-4332		to Grayhi	ORIETAYESO		
4. Location of Well <i>(Footage, Sec., 7)</i>				11. County or Parish,	ら~ ン 戸		
Sec 20 T17S R30E Mer NMP	1585FSL 525FEL			EDDY COUNT	7, NM 7850 9		
12. CHECK THE A	PPROPRIATE BOX(ES) TO IN	IDICATE NATURE OI	F NOTICE, F	REPORT, OR OT	HER DATA		
TYPE OF SUBMISSION		TYPE OF	FACTION				
Notice of Intent		Deepen	Productic	on (Start/Resume)	U Water Shut-Off		
Subsequent Report		Hydraulic Fracturing	Reclamat		Well Integrity		
☐ Final Abandonment Notice	- • ·	 New Construction Plug and Abandon 	Recomple	ete rily Abandon	Other		
		Plug Back	U Water Di	•			
MCINTYRE A East Federal # We are going to set a CIBP a have our PBTD @ 4,360?. W 3,520?-4,000?. Ideally, we lik bottom hole assembly room a desired rathole space, this giv later time.	fully requests to recomplete this v 20 at 4,400? (50? above the YESO p ve plan to have our top perfs from the to have 200?-300? of rathole b and prevent tubing from getting s ves COG the option to re-enter th	perfs) w/ 40? of CMT on n 3,215? ? 3,480? and t pelow our bottom perfs t tuck with sand. In addit	top of the plu oottom perfs f to give our tion to having	fröm R	ECEIVED		
Equipment Pull Procedure ? MIRU WSU, NU BOP ? Unset pump and POOH wit		SEE AT CONDI	TACHH TIONS	242 200	THAPTESIA OCT.		
14. I hereby certify that the foregoing i	is true and correct. Electronic Submission #420995 For COG OPERAT Committed to AFMSS for proces	verified by the BLM Wel TING LLC, sent to the Ca ssing by JENNIFER SANC	/ Il Information : avisbad QHEZ on 05/23	System 3/2018 ()			
Namc (Printed/Typed) KANICIA	CASTILLO		RER	APPROVED /			
Signature (Electronic	Submission)	Date 05/22/20					
	THIS SPACE FOR FE	DERAL OR STATE	ORFICEUS	E MAY 23/	918 / A/L		
Approved_By				EAU OF LAND	NAGENDATE		
Conditions of approval, if any, are attach certify that the applicant holds legal or ec- which would entitle the applicant to cond	uitable title to those rights in the subject		A	CARLSBAD FIELD			
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent	3 U.S.C. Section 1212, make it a crime for statements or representations as to any t	or any person knowingly and matter within its urisdiction.	willfully to mak	te to any department o	r agency of the United		
(Instructions on page 2) ** OPERA	TOR-SUBMITTED ** OPERA	ATOR-SUBMITTED	/ * OPERATO	DR-SUBMITTED			
		p	wP	7-13-18	-		

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Additional data for EC transaction #420995 that would not fit on the form

32. Additional remarks, continued

? PU scraper and scrape down to 4,450?
? RU Wireline
? Set CIBP @ 4,400?
? Wireline truck dump 40? Class C cement of top of CIBP
? Tag cement plug to verify depth of 4,360?
? Test Casing to 4,300 psi and report back to engineering if the pressure holds. ? Dump bail acid in the perf interval ? RIH w/ perforating guns and perforate San Andres Zone from 3,520?-4,000?, w/ 3 spf, 120? phasing, 54 holes ? NU 5K frac valve ? Secure wellbore ? RDMO WSU Tentative Recompletion Procedure ? RU Elite Well Services Frac Crew ? Acidize w/ 3,000 gals of 15% HCI. ? XL Frac zone w/ 375,000 # of sand. ? Record ISIP and FG, Get 5, 10, 15 min SIP ? Rig up Wireline ? RIH w/ WL and set Composite Plug @ 3,500? ? Perforate San Andres Zone from 3,215?-3,480?, w/ 3 spf, 120? phasing, 54 holes. ? Acidize w/ 3,000 gals of 15% HCI. ? XL Frac zone w/ 375,000 # of sand. ? Record ISIP and FG, Get 5, 10, 15 min SIP ? RDMO Elite

? RDMO Elite

Please see complete procedure, wellbore diagrams and C102's attached.

MCINTYRE A East Federal #20

We are going to set a CIBP at 4,400' (50' above the YESO perfs) w/ 40' of CMT on top of the plug to have our PBTD @ 4,360'. We plan to have our top perfs from 3,215' - 3,480' and bottom perfs from 3,520'-4,000'. Ideally, we like to have 200'-300' of rathole below our bottom perfs to give our bottom hole assembly room and prevent tubing from getting stuck with sand. In addition to having desired rathole space, this gives COG the option to re-enter the Glorietta/Yeso formation at a later time.

Equipment Pull Procedure

- MIRU WSU, NU BOP
- Unset pump and POOH with rod and tbg
- PU scraper and scrape down to 4,450'
- RU Wireline

5. Sat CIBP @.4,400

- Wireline truck dump 40' Class C cement of top of CIBP
- Test Casing to 4,300 psi and report back to engineering if the pressure holds.
- Dump bail acid in the perf interval
- RIH w/ perforating guns and perforate San Andres Zone from 5207450000, w/ 3 spf, 120° phasing, 54 holes
- NU 5K frac valve
- Secure wellbore
- RDMO WSU

Tentative Recompletion Procedure

- RU Elite Well Services Frac Crew
- Acidize w/ 3,000 gals of 15% HCl.
- XL Frac zone w/ 375,000 # of sand.
- Record ISIP and FG, Get 5, 10, 15 min SIP
- Rig up Wireline

. All w/ WL and set Composite Plug @ 3,500

- Perforate San Andres Zone from 3,245/3,480, w/ 3 spf, 120° phasing, 54 holes.
- Acidize w/ 3,000 gals of 15% HCl.
- XL Frac zone w/ 375,000 # of sand.
- Record ISIP and FG, Get 5, 10, 15 min SIP
- RDMO Elite

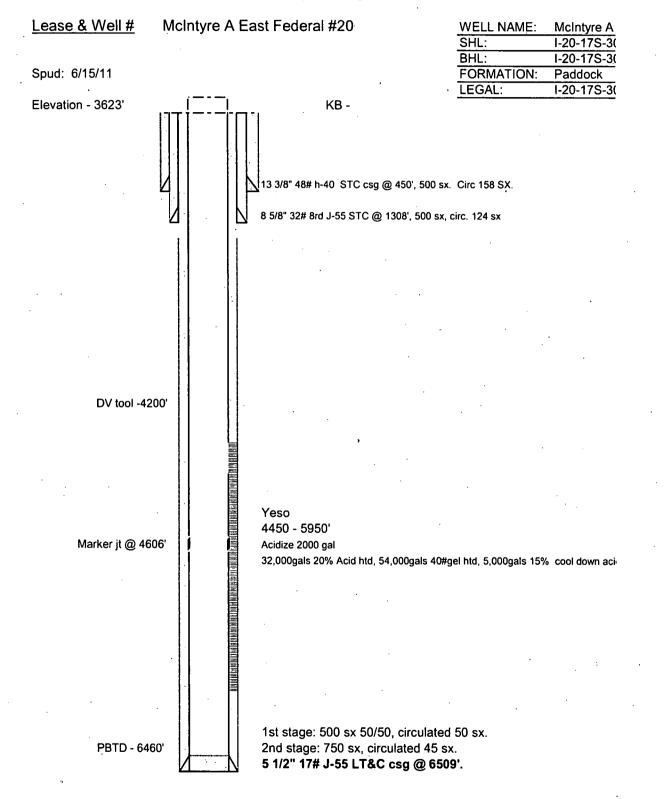
Return to Production Procedure

- MIRU WSU
- RIH with bit and bailer to drill out composite plug
- Clean out fill to new 28000023609
- RIH with production tubing as follows:
 - o (96) jts 2-7/8" J55 6.5# tbg
 - o (1) 2' marker joint
 - o (2) jts 2-7/8" J55 6.5# tbg
 - o TAC @3,185'
 - o (26) jts 2-7/8" J55 6.5# tbg
 - o SN @ 4,030'

- o (1) Cavins Desander D2705
- o (5) Jts 2-7/8" BPMA
- o EOT @ 4,193'
- ND BOP, set TAC, flange up WH
- RIH w/ rod design as follows:
 - o (1) 26' x 1-1/2" SMPR
 - o (1) 4' x 7/8" rod sub
 - o (72) 7/8" D rods
 - o (75) 3/4" D rods
 - o (14) 1-5/8" K bars
 - o (1) 25-150 RHBC-20' Pump
 - Please reuse as many rods as possible and pull the rest from inventory
- PLEASE ADJUST UNIT TO 7.5 SPM
- Hang on, load tubing and note pump action and alignment
- Clean location

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- Update rod and tubing detail in Well View
- All charges will hit recompletion AFE (800/500) code
- PWOP and contact Robby Miller before turning on
- RDMO, TOTP

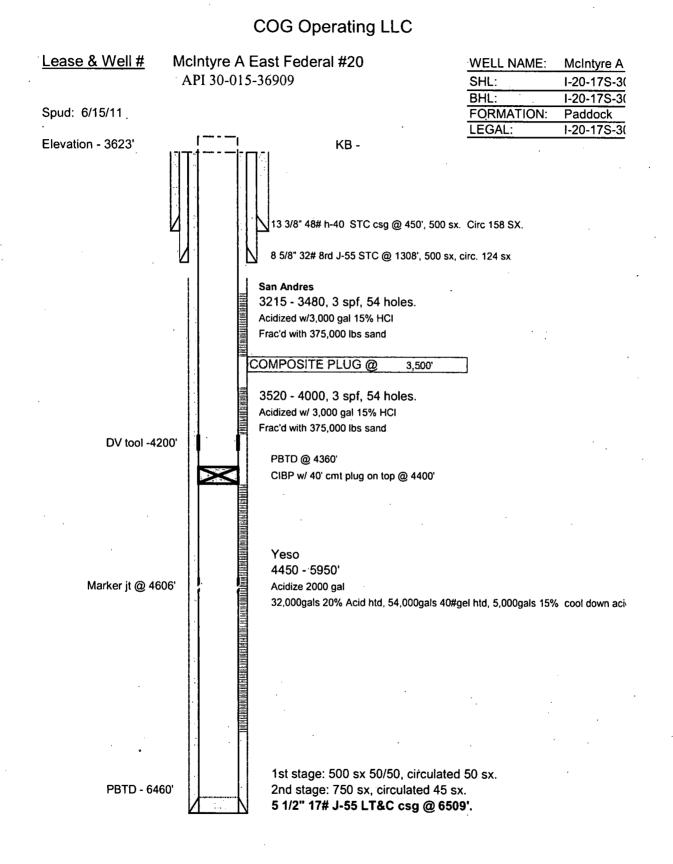


COG Operating LLC

5/22/2018

McIntyre A East Federal #20 Wellbore diagram

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5/22/2018

McIntyre A East Federal #20 Wellbore diagram updated

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DISTRICT I LOSS N. FRENCE DR., ROSBS, NK 06240 Form C-102											
DISTRICT II OIL CONSERVATION DIVISION Revised October 12, 2 ISOL V. CRAND AVENUE. ARTESTA, NY 56210 OIL CONSERVATION DIVISION Submit to Appropriate District OF DISTRICT III 1220 SOUTH ST. FRANCIS DR. State Lease - 4 Cop DISTRICT III Santa Fe, New Mexico 87505 Fee Lease - 3 Cop							istrict Office - 4 Copies				
1000 Rio Brazos R	d., Aztec, Ni					•				•	
DISTRICT IV 1220 S. ST. FRANCES DR., SANTA FR. MK 87505 WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Name							C AMENDI	AMENDED REPORT			
API NumberPool CodePool Name30-15-3690996718LOCO HILLS; GLORIETA-YESO											
Property Code 37566			Property Name MCINTYRE "A" EAST FEDERAL						Well Number 20		
OGRED No. 229137		Operator Name COG OPERATING, LLC						Elevation 3637'			
Surface Location											
UL or lot No.	Section	Township	Range	Lot Idn	Feet from th			Feet from the	1 '	County	
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UL or let No.	Section	Township	Range	Lot Idn	Feet from t			Feet from the	East/West line	County	
Dedicated Acres	· ·		Infill Consolidation Code Order No. NSL-5945								
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION											
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION OPERATOR CERTIFICAT I hereby certify that the inf herein is true and complete to th my knowledge and belief, and that organization eliter owns a working or unleased this working or to a robustary pooling agreement compulsory pooling order beretofo by the division. 8/10								ormstion e best of t this t laterest e lacation t this interest, at or a re entered 0/11 tte FION U location om field re same is y belief.			
BP 7-13-18											

DISTRICT I 1625 N. PRENCE DR., EDEBS, NM 66240

DISTRICT II 1301 V. GRAND AVENUE, ARVESTA, NN 66210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C~102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV 1220 S. ST. PRANCES D	R., SANTA PE.	NM 87505	WELL LO	CATION	AND ACE	REAG	E DEDICATI	·····	🗆 AMENDI	D REPORT	
API Number				Pool Code			Crauburg	Pool Name			
	.5-36909 28509 Grayburg Jackson; SR							Well Number			
WAINTVDE "A" EAST FEDERAL					20						
37566 MCINITIKE A EAST FEDERAL OGRID No. Operator Name					Elevation						
COG OPERATING, LLC						363	7'				
Surface Location											
UL or lot No.	Section	Township	Range	Lot Idn	Feet from t	the	North/South line	Feet from the	East/West line	County	
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			Bottom	Hole Lo	cation If D	Differ	ent From Sur	face			
UL or lot No.	Section	Township	Range	Lot idn	Feet from t	the	North/South line	Feet from the	East/West line	County	
						÷					
Dedicated Acres	s Joint o	r Infill Co	nsolidation	Code Or	rder No.						
40							NSL-5945				
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED											
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Mcintyre A East Federal 20 30-015-36909 COG Operating LLC May 23, 2018 Conditions of Approval

Work to be completed by August 23, 2018.

1. Operator shall place a CIBP at 4,400' and place 40' Class C Cement on top of the CIBP. WOC and TAG.

Note: At a later date, operator will need to add 210' of cement to the CIBP to properly seal the Glorietta Formation and the DV tool.

- 2. Must conduct a casing integrity test before perforating and fracturing. Submit results to BLM. The CIT is to be performed on the production casing to max treating pressure. Notify BLM if test fails.
- 3. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.
- 4. Surface disturbance beyond the originally approved pad must have prior approval.
- 5. Closed loop system required.
- 6. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
- 7. Operator to have H2S monitoring equipment on location.
- 8. A minimum of a 2000 (2M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (2M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.

9. Subsequent sundry required detailing work done and completion report for the formation. Operator to include new well plat and well bore schematic of current well condition when work is complete.

10. See attached for general requirements.

JAM 052318

BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

General Requirements for Plug Backs

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within **<u>ninety (90)</u>** days from this approval.

If you are unable to plug back the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged back. Failure to do so will result in enforcement action.

2. <u>Notification:</u> Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. For wells in Eddy County, call 575-361-2822.

3. <u>Blowout Preventers</u>: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. <u>Mud Requirement:</u> Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.

5. <u>Cement Requirement</u>: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. Before pumping cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. <u>Subsequent Plug back Reporting</u>: Within 30 days after plug back work is completed, file one original and three copies of the Subsequent Report, Form 3160-5 to BLM. The report should give in detail the manner in which the plug back work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. <u>Show date work was completed</u>.

7. <u>Trash</u>: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.