Re	ceived by MCD: \$74/2021 7:50:10 AM U.S. Department of the Interior BUREAU OF LAND MANAGEMENT		Sundry Print Report 05/04/2021
$\left( \right)$	Well Name: MERCILESS 13 FED COM	Well Location: T25S / R32E / SEC 13 / NWNE / 32.1370323 / -103.626757	County or Parish/State: LEA / NM
	Well Number: 706H	Type of Well: OIL WELL	Allottee or Tribe Name:
	Lease Number: NMNM110835	Unit or CA Name:	Unit or CA Number:
	<b>US Well Number:</b> 300254767300X1	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES

#### **Notice of Intent**

Type of Submission: Notice of Intent

Date Sundry Submitted: 04/28/2021

Date proposed operation will begin: 04/18/2021

Type of Action Other Time Sundry Submitted: 06:15

**Procedure Description:** EOG respectfully requests an amendment to our approved APD for this well to reflect the following changes: Update casing program to current design

#### **Surface Disturbance**

Is any additional surface disturbance proposed?: No

#### **NOI Attachments**

#### **Procedure Description**

Wellhead\_10.75x8.75x6\_csg\_Cactus\_SDT\_3141\_1\_20210428061523.pdf

10.75\_40.5\_lb\_ft\_J55\_STC\_20210428061507.pdf

8.75\_38.5\_lb\_ft\_P110EC\_SPRINT\_SF\_IR778\_ENG\_CDS43\_rev0\_20210428061444.pdf

Merciless\_13\_Fed\_Com\_706H\_Permit\_Info\_\_\_\_Revised\_casing\_3.10.2021\_REV\_2\_20210428061418.pdf

6.000in\_24.50\_VST\_P110EC\_VAM\_SFC\_Draft\_CDS\_USA\_\_1\_20210408132653.pdf

6.000in\_24.50\_\_0.400in\_Wall\_\_VST\_P110EC\_DWC\_C\_IS\_CDS\_AB\_20210408132653.PDF

10\_M\_Choke\_Manifold\_20210315093426.pdf

EOG\_BLM\_10M\_Annular\_Variance\_\_\_\_9.675\_in\_20210315093426.pdf

Co\_Flex\_Hose\_Test\_Chart\_20210315093426.pdf

Co\_Flex\_Hose\_Certification\_20210315093426.pdf

Received by OCD: 5/4/2021 7:50:10 AM Well Name: MERCILESS 13 FED COM	Well Location: T25S / R32E / SEC 13 / NWNE / 32.1370323 / -103.626757	County or Parish/State: LEA/
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5.500in\_20.00\_VST\_P110EC\_VAM\_SFC\_20210315093425.pdf

10\_M\_BOP\_Diagram\_9.675\_in\_20210315093425.pdf

5.500in\_20.00\_VST\_P110EC\_DWC\_C\_IS\_MS\_Spec\_Sheet\_20210315093425.pdf

## **Operator Certification**

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: STAR HARRELL Name: EOG RESOURCES INCORPORATED Title: Regulatory Specialist Street Address: 5509 CHAMPIONS DRIVE City: MIDLAND State: TX Phone: (432) 848-9161 Email address: Star\_Harrell@eogresources.com

## **Field Representative**

Representative Name: Eric BrormanStreet Address: 5509 CHAMPIONS DRIVECity: MIDLANDState: TXPhone: (432)556-1276Email address: Eric\_Brorman@eogresources.com

## **BLM Point of Contact**

BLM POC Name: CHRISTOPHER WALLS BLM POC Phone: 5752342234 Disposition: Approved Signature: Chris Walls Signed on: APR 28, 2021 06:15 AM

**Zip:** 79706

BLM POC Title: Petroleum Engineer BLM POC Email Address: cwalls@blm.gov Disposition Date: 05/03/2021

## **Revised Permit Information 3/10/2021:**

Well Name: Merciless 13 Fed Com #706H

Location:

SHL: 290' FNL & 2126' FEL, Section 13, T-25-S, R-32-E, Lea Co., N.M. BHL: 2541' FNL & 1669' FEL, Section 24, T-25-S, R-32-E, Lea Co., N.M.

## <u>Design A</u>

### Casing Program:

Hole		Csg				DF <sub>min</sub>	DF <sub>min</sub>	DF <sub>min</sub>
Size	Interval	OD	Weight	Grade	Conn	Collapse	Burst	Tension
13"	0'-1,000'	10.75"	36#	J-55	LTC	1.125	1.25	1.60
9.875"	0'-11,110'	8.75"	29.7#	HCP-110	FXL	1.125	1.25	1.60
7.875"	0'-11,780'	6"	24.5#	P-110EC	VAM SFC	1.125	1.25	1.60
7.875"	11,780' - 19,822'	5.5"	20#	P-110EC	DWC/C-IS	1.125	1.25	1.60
					MS			

Variance is requested to wave the centralizer requirements for the 8-3/4" casing in the 9-7/8" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 9-7/8" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to wave any centralizer requirements for the 6" and 5-1/2" casing in the 7-7/8" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 7-7/8" hole interval to maximize cement bond and zonal isolation.

## **Cement Program**:

	No.	Wt.	Yld	
Depth	Sacks	ppg	Ft <sup>3</sup> /sk	Slurry Description
1,00'	290	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl <sub>2</sub> + 0.25
10-3/4"				lb/sk Cello-Flake (TOC @ Surface)
	80	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2%
				Sodium Metasilicate (TOC @ 800')
11,780'	540	14.2	1.11	1 <sup>st</sup> Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 +
8-3/4"				3% Microbond (TOC @ 7,176')
	1,220	14.8	1.5	2 <sup>nd</sup> Stage (Bradenhead squeeze): Class C + 3% Salt + 1%
				PreMag-M + 6% Bentonite Gel (TOC @ surface)
19,822'	750	14.2	1.31	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3%
6" x 5-1/2"				Microbond (TOC @ 11,280')

Additive	Purnose
Bentonite Gel	Lightweight/Lost circulation prevention
Calcium Chloride	Accelerator
Cello-flake	Lost circulation prevention
Sodium Metasilicate	Accelerator
MagOx	Expansive agent
Pre-Mag-M	Expansive agent
Sodium Chloride	Accelerator
FL-62	Fluid loss control
Halad-344	Fluid loss control
Halad-9	Fluid loss control
HR-601	Retarder
Microbond	Expansive Agent

EOG requests variance from minimum standards to pump a two stage cement job on the 8-3/4" intermediate casing string with the first stage being pumped conventionally with the calculated TOC at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 1,000 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. Top of cement will be verified by Echo-meter.

EOG will include the final fluid top verified by Echo-meter and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

EOG will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

india i rogrami				
Depth	Туре	Weight (ppg)	Viscosity	Water Loss
0 – 1,000'	Fresh - Gel	8.6-8.8	28-34	N/c
1,000' - 11,100'	Brine	10.0-10.2	28-34	N/c
11,100' - 11,990'	Oil Base	8.7-9.4	58-68	N/c - 6
11,990' - 19,822'	Oil Base	10.0-14.0	58-68	3 - 6
Lateral				

#### **Mud Program**:

290' FNL 2126' FEL Section 13 T-25-S, R-32-E

**Revised Wellbore** 

API: 30-025-47673

KB: 3,522' GL: 3,497'









# 10,000 PSI BOP Annular Variance Request

EOG Resources request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack. The component and compatibility tables along with the general well control plans demonstrate how the 5000 psi annular BOP will be protected from pressures that exceed its rated working pressure (RWP). The pressure at which the control of the wellbore is transferred from the annular preventer to another available preventer will not exceed 3500 psi (70% of the RWP of the 5000 psi annular BOP).

#### 1. Component and Preventer Compatibility Tables

The tables below outlines the tubulars and the compatible preventers in use. This table, combined with the drilling fluid, documents that two barriers to flow will be maintained at all times.

9-7/8" & 8-3/4" Intermediate Hole Section					
		10M psi requirement	t		
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	4.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
HWDP	4.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
Jars	4.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
DCs and MWD tools	6.500 - 8.000"	Annular	5M	-	-
Mud Motor	6.750 - 8.000"	Annular	5M	-	-
Intermediate casing	7.625″	Annular	5M	-	-
Open-hole	-	Blind Rams	10M	-	-

6-3/4" Production Hole Section					
		10M psi requirement	t		
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	4.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
HWDP	4.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
DCs and MWD tools	4.750 – 5.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
Mud Motor	4.750 – 5.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
Mud Motor	5.500 - 5.750"	Annular	5M	-	-
Production casing	5.500"	Annular	5M	Upper 3.5 - 5.5" VBR	10M
				Lower 3.5 - 5.5" VBR	10M
Open-hole	-	Blind Rams	10M	-	-

VBR = Variable Bore Ram



## 2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the EOG Resources drilling supervisor's office on location, and on the rig floor. All BOP equipment will be tested as per Onshore O&G Order No. 2 with the exception of the 5000 psi annular which will be tested to 100% of its RWP.

#### General Procedure While Drilling

- 1. Sound alarm (alert crew)
- 2. Space out drill string
- 3. Shut down pumps (stop pumps and rotary)
- 4. Shut-in Well (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
  - a. SIDPP and SICP
    - b. Pit gain
    - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

## General Procedure While Tripping

- 1. Sound alarm (alert crew)
- 2. Stab full opening safety valve and close
- 3. Space out drill string
- 4. Shut-in (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
  - a. SIDPP and SICP
    - b. Pit gain
    - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

#### General Procedure While Running Production Casing

- 1. Sound alarm (alert crew)
- 2. Stab crossover and full opening safety valve and close
- 3. Space out string

- 4. Shut-in (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
  - a. SIDPP and SICP
    - b. Pit gain
    - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

#### General Procedure With No Pipe In Hole (Open Hole)

- 1. Sound alarm (alert crew)
- 2. Shut-in with blind rams. (HCR and choke will already be in the closed position.)
- 3. Confirm shut-in
- 4. Notify toolpusher/company representative
- 5. Read and record the following:
  - a. SICP
  - b. Pit gain
  - c. Time
- 6. Regroup and identify forward plan

#### General Procedures While Pulling BHA thru Stack

- 1. PRIOR to pulling last joint of drillpipe thru the stack.
  - a. Perform flowcheck, if flowing:
  - b. Sound alarm (alert crew)
  - c. Stab full opening safety valve and close
  - d. Space out drill string with tool joint just beneath the upper variable bore rams.
  - e. Shut-in using upper variable bore rams. (HCR and choke will already be in the closed position.)
  - f. Confirm shut-in
  - g. Notify toolpusher/company representative
  - h. Read and record the following:
    - i. SIDPP and SICP
    - ii. Pit gain
    - iii. Time
  - i. Regroup and identify forward plan
- 2. With BHA in the stack and compatible ram preventer and pipe combo immediately available.
  - a. Sound alarm (alert crew)
  - b. Stab crossover and full opening safety valve and close
  - c. Space out drill string with upset just beneath the upper variable bore rams.
  - d. Shut-in using upper variable bore rams. (HCR and choke will already be in the closed position.)
  - e. Confirm shut-in
  - f. Notify toolpusher/company representative
  - g. Read and record the following:
    - i. SIDPP and SICP

- ii. Pit gain
- iii. Time
- h. Regroup and identify forward plan
- 3. With BHA in the stack and NO compatible ram preventer and pipe combo immediately available.
  - a. Sound alarm (alert crew)
  - b. If possible to pick up high enough, pull string clear of the stack and follow "Open Hole" scenario.
  - c. If impossible to pick up high enough to pull the string clear of the stack:
  - d. Stab crossover, make up one joint/stand of drillpipe, and full opening safety valve and close
  - e. Space out drill string with tooljoint just beneath the upper variable bore ram.
  - f. Shut-in using upper variable bore ram. (HCR and choke will already be in the closed position.)
  - g. Confirm shut-in
  - h. Notify toolpusher/company representative
  - i. Read and record the following:
    - i. SIDPP and SICP
    - ii. Pit gain
    - iii. Time
  - j. Regroup and identify forward plan

## **Hose Inspection Report**

## ContiTech Oil & Marine

Customer	Customer Reference #	CBC Reference #	<b>CBC</b> Inspector	Date of Inspection
H&P Drilling	740021604	COM906112	A. Jaimes	10/17/2016

# Hose Manufacturer Contitech Rubber Industrial

Hose Serial #	62429	Date of Manufacture	05/2012	
Hose I.D.	3"	Working Pressure	10000PSI	
Hose Type	Choke and Kill	Test Pressure	15000PSI	
Manufacturing Sta	ndard API 16C			
Connections				
End A: 3.1/16" 10	(Psi API Spec 6A Type 6BX Flange	End B: 3.1/16" 10Kpsi API Spec 6A Type 6BX Flange		
<ul> <li>No damage</li> </ul>		No damage		
Material: Carbon S	Steel	Material: Carbon Steel		
Seal Face: BX154		Seal Face: BX154		
Length Before Hyd	ro Test: 16'	Length After Hydro tes	<b>t:</b> 16'	

**Conclusion:** Hose #62429 passed the external inspection with no notable damages to the hose armor. Internal borescope of the hose showed no damage to the hose liner. Hose #62429 passed the hydrostatic pressure test by holding a pressure of 15,000PSI for 60 minutes. <u>Hose #62429 is suitable for continued service.</u>

**Recommendations**: In general the hose should be inspected on a regular on-going basis. The frequency and degree of the inspection should as a minimum follow these guidelines:

Visual inspection: Every 3 months (or during installation/removal) Annual: In-situ pressure test Initial 5 years service: Major inspection 2nd Major inspection: 8 / 10 years of service (Detailed description of test regime available upon request, ISS-059 Rev 04)

\*\*NOTE: There are a number of critical elements in the hose that cannot be thoroughly checked through standard inspection techniques. Away from dissecting the hose body, the best way to evaluate the condition of the hose is through review of the operating conditions recorded during the hose service life, in particular maximums and peak conditions.

Checked By: Jeremy Mckay Date: 10/25/2016 QF97



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

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

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

COMMENTS

Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	26772
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### COMMENTS

Created By	Comment	Comment Date
jagarcia	Accepted for Record	7/28/2021

COMMENTS

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Action 26772

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

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

CONDITIONS

Operator:	OGRID:
EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	7377
	Action Number:
	26772
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By	Condition	Condition Date
jagarcia	None	7/28/2021

CONDITIONS

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Action 26772