

Well Name: LONG ARROYO WH FEDERAL	Well Location: T14S / R27E / SEC 11 / SESE /	County or Parish/State: CHAVES / NM
Well Number: 2	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM18612	Unit or CA Name:	Unit or CA Number:
US Well Number: 300056338600S1	Well Status: Producing Gas Well	Operator: EOG RESOURCES INCORPORATED

Accepted for record – NMOCD gc 7/20/2021

Notice of Intent

Type of Submission: Notice of Intent	Type of Action Plug and Abandonment
Date Sundry Submitted: 07/12/2021	Time Sundry Submitted: 03:46
Date proposed operation will begin: 08/06/2021	
Procedure Description: Please see attached. Thank you.	

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Long_Arroyo_WH_Federal_2_7_12_21_20210712154624.pdf

Conditions of Approval

Specialist Review

Conditions_of_Approval_20210719141934.pdf

General_Conditions_of_Approval_20210719141933.pdf

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Well Number: 2	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM18612	Unit or CA Name:	Unit or CA Number:
US Well Number: 300056338600S1	Well Status: Producing Gas Well	Operator: EOG RESOURCES INCORPORATED

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: TINA HUERTA	Signed on: JUL 12, 2021 03:46 PM
Name: EOG RESOURCES INCORPORATED	
Title: Regulatory Specialist	
Street Address: 104 SOUTH FOURTH STREET	
City: Artesia	State: NM
Phone: (575) 748-4168	
Email address: tina_huerta@eogresources.com	

Field Representative

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: JENNIFER SANCHEZ	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5756270237	BLM POC Email Address: j1sanchez@blm.gov
Disposition: Approved	Disposition Date: 07/19/2021
Signature: Jennifer Sanchez	

EOG Resources, Inc. plans to plug and abandon this well as follows:

1. MIRU all safety equipment as needed. NU BOP. POOH with production equipment.
2. Set a CIBP at 7858 ft with 45 sx Class H cement on top to 7250 ft. WOC and tag. This will cover Morrow, Atoka, Strawn and L Canyon tops.
3. Spot a 25 sx Class C cement plug from 6936 ft – 6558 ft. This will cover Cisco top.
4. Perforate at 6134 ft. Spot a 45 sx Class C cement plug from 6134 ft – 5650 ft. WOC and tag. This will cover Wolfcamp top and TOC, in/out plug.
5. Perforate at 5074 ft. Spot a 40 sx Class C cement plug from 5074 ft – 4907 ft. WOC and tag. This will cover Abo top, in/out plug.
6. Perforate at 4276 ft . Spot a 35 sx Class C cement plug from 4276 ft – 4130 ft. WOC and tag. This will cover Tubb top, in/out plug.
7. Perforate at 2844 ft. Spot a 30 sx Class C cement plug from 2844 ft – 2719 ft. WOC and tag. This will cover Glorieta top, in/out plug.
8. Perforate at 1554 ft. Spot a 30 sx Class C cement plug from 1554 ft – 1416 ft. WOC and tag. This will cover San Andres top and intermediate casing, in/out plug.
9. Perforate at 896 ft. Spot a 35 sx Class C cement plug from 896 ft – 758 ft. WOC and tag. This will cover Queen and Seven Rivers top, in/out plug.
10. Perforate at 733 ft. Spot a 30 sx Class C cement plug from 733 ft – 615 ft. WOC and tag. This will cover Yates top, in/out plug.
11. Perforate at 450 ft. Spot a 30 sx Class C cement plug from 450 ft – 332 ft. WOC and tag. This will cover surface casing shoe, in/out plug.
12. Perforate at 59 ft. Spot a 15 sx Class C cement plug from 59 ft up to surface. WOC and tag. Back fill as needed.
13. Cut off wellhead and install dry hole marker. Clean location as per regulated.

Wellbore schematics attached

Long Arroyo WH Federal 2 Current

Sec-TWN-RNG:
FOOTAGES:Sec. 11-14-27E
660' FSL & 660' FELAPI: 30-005-63386
GL: 3520
KB:

CASING DETAIL

#	HOLE SIZE	SIZE	WGHT	GRADE	Top	Bottom	Sx Cmt	Circ/TOC	TOC Method
A	14 3/4	11 3/4	42	H-40	0	400	700	Circ	
B	11	8 5/8	24	J-55	0	1,504	600	Circ	
C	7 7/8	4 1/2	11.6	P-110	0	8,125	555	5720	CBL/CCL/GR

FORMATION TOPS

	Formation	Top		Formation	Top
	Yates	683		Atoka	7608
	Seven Rivers	820		Morrow Clastics	7818
	Queen	846		Austin Cycle	7946
	San Andres	1469		Chester	7962
	Glorieta	2794			
	Tubb	4226			
	Abo	5024			
	Wolfcamp	6084			
	Cisco	6886			
	Lower Canyon	7330			
	Strawn	7480			

TUBING DETAIL

#	Joints	Description	Length	OD	ID	Grade	Wt (lb/ft):	Top (ftKB):	Btm (ftKB):
		2 3/8" Tubing							7,839
		Packer							7,850

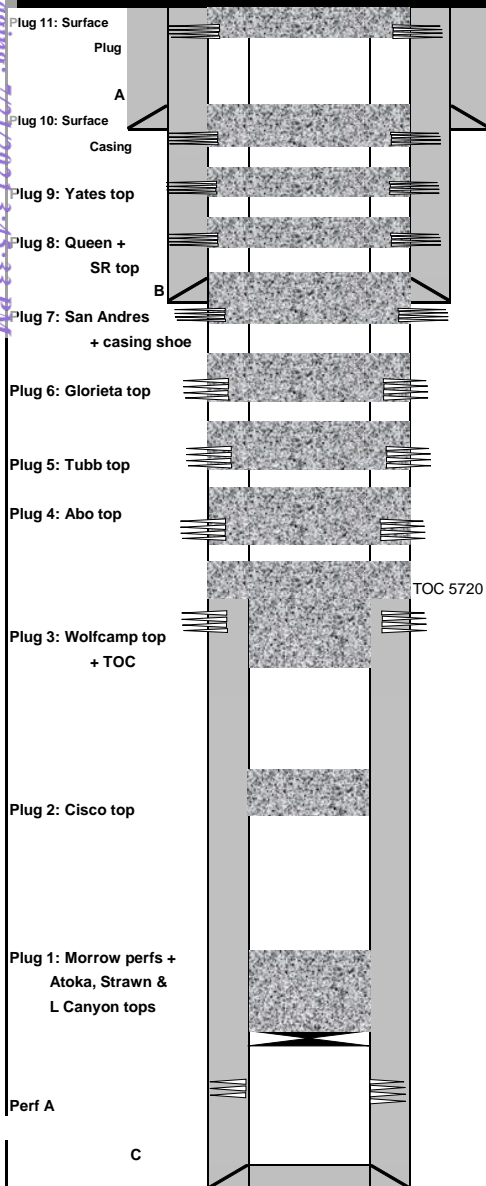
Perforation Detail

	Formation	Top	Bottom	Treatment			
A	Morrow	7,908	7,944	Acidized w/1500 gals 7 1/2% Morrow acid w/25% water/methanol mix w/1000 scf per bbl N2 & ball sealer. Frac's w/18606g 70Q CO2 foam & 59000# econoprop			

PBTD: 8,082 MD
TD: 8,125 MD

Prepared by: NF

Long Arroyo WH Federal 2 Proposed



PBTD: 8,082 MD
TD: 8,125 MD

Sec-TWN-RNG: Sec. 11-14-27E
FOOTAGES: 660' FSL & 660' FEL

API: 30-005-63386
GL: 3520
KB:

CASING DETAIL

#	HOLE SIZE	SIZE	WGHT	GRADE	Top	Bottom	Sx Cmt	Circ/TOC	TOC Method
A	14 3/4	11 3/4	42	H-40	0	400	700	Circ	
B	11	8 5/8	24	J-55	0	1,504	600	Circ	
C	7 7/8	4 1/2	11.6	P-110	0	8,125	555	5720	CBL/CCL/GR

FORMATION TOPS

	Formation	Top		Formation	Top
	Yates	683		Atoka	7608
	Seven Rivers	820		Morrow Clastics	7818
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	San Andres	1469		Chester	7962
	Glorieta	2794			
	Tubb	4226			
	Abo	5024			
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Perforation Detail

	Formation	Top	Bottom	Treatment		
A	Morrow	7,908	7,944	Acidized w/1500 gals 7 1/2% Morrow acid w/25% water/methanol mix w/1000 scf/bbl N2 & ball sealer.		
				Frac w/18,606g 70Q CO2 foam & 59,000# econoprop		

Plugs

#	SX	Class	Top	Bottom	Δ	Notes	Tag
1	45	H	7250	7858	608	Morrow Perfs, Atoka, Strawn & L Canyon tops	Y
2	25	C	6558	6936	378	Cisco top	N
3	45	C	5650	6134	484	Wolfcamp top and TOC, in/out plug	Y
4	40	C	4907	5074	167	Abo top, in/out plug	Y
5	35	C	4130	4276	146	Tubb top, in/out plug	Y
6	30	C	2719	2844	125	Glorieta top, in/out plug	Y
7	30	C	1416	1554	118	San Andres top and Int Csg, in/out plug	Y
8	35	C	758	896	138	Queen and SR top, in/out plug	Y
9	30	C	615	733	118	Yates top, in/out plug	Y
10	30	C	332	450	118	Surface casing, in/out plug	Y
11	15	C	0	59	59	Surface plug, in/out plug	Y

Prepared by: TH

**Long Arroyo WH Federal 2
30-005-63386
EOG Resources Incorporated
July 19, 2021
Conditions of Approval**

- 1. Operator shall place CIBP at 7,858' (50'-100' above topmost perf) and places 25 sx of Class H cement on top as proposed. WOC and TAG.**
- 2. Operator shall place a balanced Class C cement plug from 6,936'-6,558' as proposed.**
- 3. Operator shall perf and squeeze at 6,134'. Operator shall place a balanced Class C cement plug from 6,134'-5,650' as proposed to seal the top of the Wolfcamp. WOC and TAG.**
- 4. Operator shall perf and squeeze at 5,074'. Operator shall place a balanced Class C cement plug from 5,074'-4,907' as proposed to seal the top of the Abo. WOC and TAG.**
- 5. Operator shall perf and squeeze at 4,276'. Operator shall place a balanced Class C cement plug from 4,276'-4,130' as proposed. WOC and TAG.**
- 6. Operator shall perf and squeeze at 2,844'. Operator shall place a balanced Class C cement plug from 2,844'-2,719' as proposed to seal the top of the Glorieta. WOC and TAG.**
- 7. Operator shall perf and squeeze at 1,554'. Operator shall place a balanced Class C cement plug from 1,554'-1,454' to seal the 8-5/8" casing shoe. WOC and TAG.**
- 8. Operator shall perf and squeeze at 896'. Operator shall place a balanced Class C cement plug from 896'-758' as proposed. WOC and TAG.**
- 9. Operator shall perf and squeeze at 733'. Operator shall place a balanced Class C cement plug from 733'-615' as proposed. WOC and TAG.**
- 10. Operator shall perf and squeeze at 450'. Operator shall place a balanced Class C cement plug from 450'-350' to seal the 11-3/4" casing shoe and the Yates formation. WOC and TAG.**

11. Operator shall perf and squeeze at 100'. Operator shall place a balanced Class C cement plug from 100' - surface as proposed.

12. See Attached for general plugging stipulations.

JAM 07192021

BUREAU OF LAND MANAGEMENT
Roswell Field Office
2909 W. Second Street
Roswell, New Mexico 88201
575-627-0272

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 **ninety (90)** 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. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. Call 575-627-0205.

3. **Blowout Preventers:** 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. **Mud Requirement:** 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. **Cement Requirement:** 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. **Subsequent Plug back Reporting:** 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. **Show date work was completed.**

7. **Trash:** 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.

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

CONDITIONS

Action 36994

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 36994
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
gcordero	None	7/20/2021