

Well Name: LONG ARROYO WH
FEDERAL

Well Location: T14S / R27E / SEC 11 /
SWSW /

County or Parish/State:
CHAVES / NM

Well Number: 1

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMNM18612

Unit or CA Name:

Unit or CA Number:

US Well Number: 300056195300S1

Well Status: Producing Gas Well

Operator: EOG RESOURCES
INCORPORATED

Accepted for record – NMOCD gc 8/20/2021

Notice of Intent

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 07/08/2021

Time Sundry Submitted: 11:56

Date proposed operation will begin: 08/02/2021

Procedure Description: Please see attached. Thank you.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Long_Arroyo_WH_Federal_1_7_8_21_20210708115643.pdf

Well Name: LONG ARROYO WH
FEDERAL

Well Location: T14S / R27E / SEC 11 /
SWSW /

County or Parish/State:
CHAVES / NM

Well Number: 1

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMNM18612

Unit or CA Name:

Unit or CA Number:

US Well Number: 300056195300S1

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 08, 2021 11:56 AM

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: 07/13/2021

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 7646 ft with 3 sx Class H cement on top to 7611 ft. WOC and tag. This will cover Morrow top and perms.
3. Set a CIBP at 7439 ft with 13 sx Class H cement on top to 7248 ft. WOC and tag. This will cover Strawn top and perms.
4. Spot a 25 sx Class C cement plug from 7216 ft – 6848 ft. This will cover L Canyon top.
5. Spot a 25 sx Class C cement plug from 6786 ft – 6418 ft. This will cover Cisco top.
6. Spot a 25 sx Class C cement plug from 5922 ft – 5554 ft. This will cover Wolfcamp top.
7. Perforate at 5340 ft. Spot a 30 sx Class C cement plug from 5340 ft – 5182 ft. WOC and tag. This will cover TOC.
8. Perforate at 4942 ft. Spot a 38 sx Class C cement plug from 4942 ft - 4784 ft. WOC and tag. This will cover Abo top.
9. Perforate at 2000 ft. Spot a 30 sx Class C cement plug from 2000 ft – 1876 ft. WOC and tag. Less than 3000 ft plug.
10. Perforate at 1495 ft. Spot a 51 sx Class C cement plug from 1495 ft – 1296 ft. WOC and tag. This will cover casing shoe and San Andres top.
11. Perforate at 350 ft. Spot a 28 sx Class C cement plug from 350 ft – 241 ft. WOC and tag. This will cover casing shoe.
12. Perforate at 50 ft. Spot a 14 sx Class C cement plug from 50 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 1 Current

Sec-TWN-RNG: 11-14S-27E
 FOOTAGES: 660'FSL & 660'FWL

API: 30-005-61953
 GL: 3463
 KB:

CASING DETAIL

#	HOLE SIZE	SIZE	WGHT	GRADE	Top	Bottom	Sx Cmt	Circ/TOC	TOC Method
A	17 1/2	13 3/8	48	J-55	0	300	300	Circ	
B	11	8 5/8	24	J-55	0	1,445	925	Circ	
C	7 7/8	4 1/2	10.5,11.6	J-55,K-55	0	8,060	950	4900-Weak 5290-Definite	Temp Survey

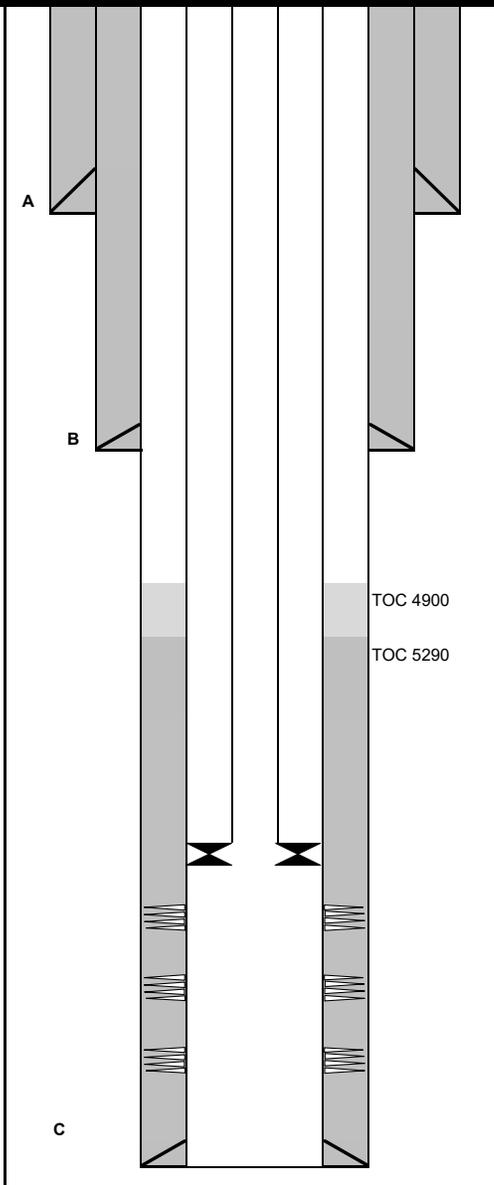
FORMATION TOPS

	Formation	Top		Formation	Top
	San Andres	1351			
	Abo	4892			
	Wolfcamp	5872			
	Cisco	6736			
	L Canyon	7166			
	Strawn	7320			
	Morrow	7619			
	Chester	7767			
	Mississippian	7850			

#	Joints	Description	Length	OD	ID	Grade	Wt (lb/ft)	Top (ftKB)	Btm (ftKB)
		2 3/8" Tubing and packer						7,451	

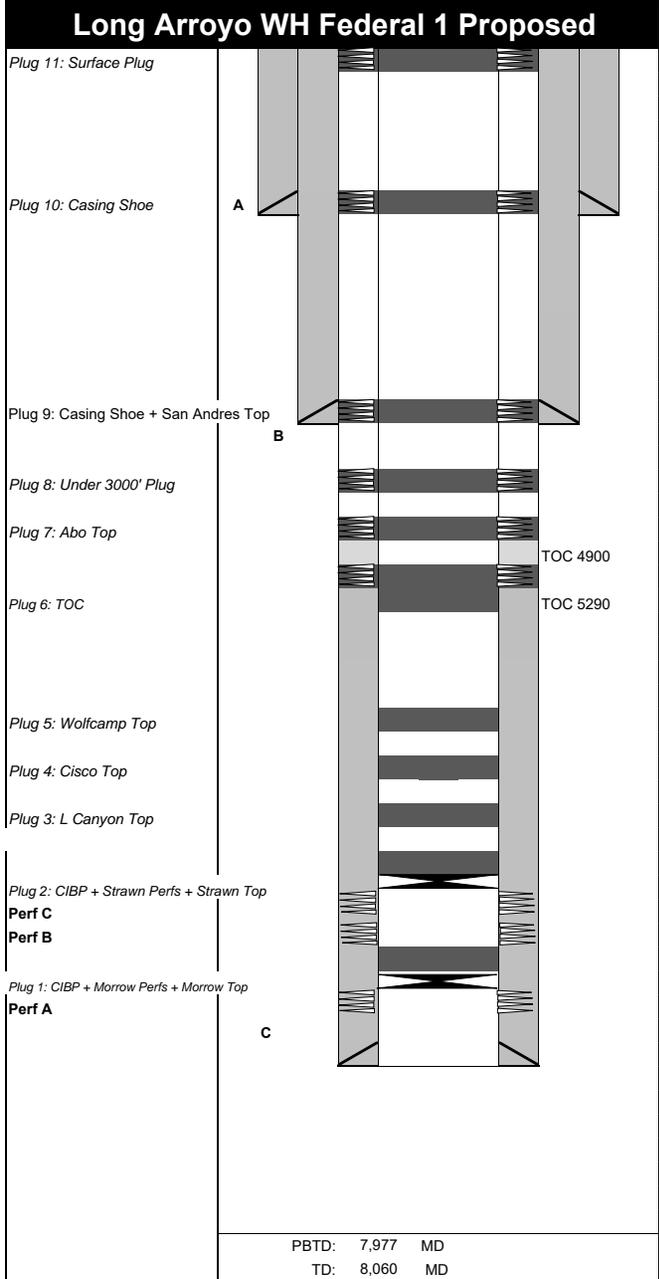
Perforation Detail

	Formation	Top	Bottom	Treatment
A	Morrow	7,651	7,659	Acidize w/2000g 7-1/2% MSA, 1000 SCF N2/bbl and 14 ball sealers
B	Strawn	7,595	7,611	Acidize w/2000g 7-1/2% MSA, 1000 SCF N2/bbl and 6 ball sealers
C	Strawn	7,489	7,495	Acidize w/2000g 7-1/2% MSA, 1000 SCF N2/bbl and 8 ball sealers
				Frac w/20,000g MS frac, 40 tons CO2, 30,000# 20/40 sand and 32 balls



PBTD: 7,977 MD
 TD: 8,060 MD

Prepared by: TH



Sec-TWN-RNG: 11-14S-27E		API: 30-005-61953							
FOOTAGES: 660'FSL & 660'FWL		GL: 3463							
		KB:							
CASING DETAIL									
#	HOLE SIZE	SIZE	WGHT	GRADE	Top	Bottom	Sx Cmt	Circ/TOC	TOC Method
A	17 1/2	13 3/8	48	J-55	0	300	300	Circ	
B	11	8 5/8	24	J-55	0	1,445	925	Circ	
C	7 7/8	4 1/2	10.5,11.6	J-55,K-55	0	8,060	950	4900-Weak 5290-Definite	Temp Survey
FORMATION TOPS									
	Formation	Top		Formation	Top				
	San Andres	1351							
	Abo	4892							
	Wolfcamp	5872							
	Cisco	6736							
	L Canyon	7166							
	Strawn	7320							
	Morrow	7619							
	Chester	7767							
	Mississippian	7850							
Perforation Detail									
	Formation	Top	Bottom	Treatment					
A	Morrow	7,651	7,659	Acidize w/2000g 7-1/2% MSA, 1000 SCF N2/bbl and 14 ball sealers					
B	Strawn	7,595	7,611	Acidize w/2000g 7-1/2% MSA, 1000 SCF N2/bbl and 6 ball sealers					
C	Strawn	7,489	7,495	Acidize w/2000g 7-1/2% MSA, 1000 SCF N2/bbl and 8 ball sealers					
				Frac w/20,000g MS frac, 40 tons CO2, 30,000# 20/40 sand and 32 balls					
Plugs									
#	SX	Class	Top	Bottom	Δ	Notes	Tag		
1	3	H	7611	7646	35	Morrow Perfs + Morrow Top	Y		
2	13	C	7248	7439	191	Strawn Perfs + Strawn Top	Y		
3	25	C	6848	7216	368	L Canyon Top	N		
4	25	C	6418	6786	368	Cisco Top	N		
5	25	C	5554	5922	368	Wolfcamp Top	N		
6	30	C	5182	5340	158	TOC	Y		
7	38	C	4784	4942	158	Abo Top	Y		
8	30	C	1876	2000	124	Less Than 3000' Plug	Y		
9	51	C	1296	1495	199	Casing Shoe + Sand Andres Top	Y		
10	28	C	241	350	109	Casing Shoe	Y		
11	14	C	0	50	50	Surface Plug	Y		
Prepared by: TH									

Long Arroyo WH Federal 1
30-005-61953
EOG Resources Incorporated
July 13, 2021
Conditions of Approval

1. Operator shall place CIBP at 7,646' and places 3 sx of Class H cement on top as proposed to isolate the top of the Morrow. WOC and TAG.
2. Operator shall place CIBP at 7,439' (50'-100' above topmost perf) and places 25 sx of Class C cement on top as proposed. WOC and TAG.
3. Operator shall place a balanced Class C cement plug from 6,786'-6,418' as proposed.
4. Operator shall place a balanced Class C cement plug from 5,922'-5,554'' as proposed to seal the top of the Wolfcamp.
5. Operator shall perf and squeeze at 5,340'. Operator shall place a balanced Class C cement plug from 5,340'-5,182' as proposed. WOC and TAG.
6. Operator shall perf and squeeze at 4,942'. Operator shall place a balanced Class C cement plug from 4,942'-4,784' as proposed to seal the top of the Abo. WOC and TAG.
7. Operator shall perf and squeeze at 2,000'. Operator shall place a balanced Class C cement plug from 2,000'-1,876' as proposed. WOC and TAG.
8. Operator shall perf and squeeze at 1,495'. Operator shall place a balanced Class C cement plug from 1,495'-1,395' to seal the 8-5/8'' casing shoe. WOC and TAG.
9. Operator shall perf and squeeze at 350'. Operator shall place a balanced Class C cement plug from 350'-200' to seal the 13-3/8'' casing shoe and the Yates formation. WOC and TAG.
10. Operator shall perf and squeeze at 100'. Operator shall place a balanced Class C cement plug from 100'- surface as proposed.
11. See Attached for general plugging stipulations.

JAM 07132021

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 40378

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 40378
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
gcordero	None	8/20/2021