

Well Name: BREECH C	Well Location: T26N / R6W / SEC 12 / SESE / 36.4968 / -107.41327	County or Parish/State: RIO ARRIBA / NM
Well Number: 689M	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM03554	Unit or CA Name:	Unit or CA Number:
US Well Number: 300392266900S1	Operator: CROSS TIMBERS ENERGY LLC	

Notice of Intent

Sundry ID: 2835947

Type of Submission: Notice of Intent Type of Action: Plug and Abandonment

Date Sundry Submitted: 02/07/2025 Time Sundry Submitted: 10:33

Date proposed operation will begin: 10/01/2025

Procedure Description: Cross Timbers Energy requests approval of the attached Procedure to P&A the Breech C 689M. WBDs also attached.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- Breech_C_689M_WBD_Proposed_PA_02.06.2025_20250207103216.pdf
- Breech_C_689M_WBD_Current_02.06.2025_20250207103200.pdf
- Breech_C_689M_Proposed_PA_Procedure_02.06.2025_20250207103146.pdf

Well Name: BREECH C	Well Location: T26N / R6W / SEC 12 / SESE / 36.4968 / -107.41327	County or Parish/State: RIO ARRIBA / NM
Well Number: 689M	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM03554	Unit or CA Name:	Unit or CA Number:
US Well Number: 300392266900S1	Operator: CROSS TIMBERS ENERGY LLC	

Conditions of Approval

Additional

Breech_C_689M_Geo_Rpt_20250228111110.pdf

Authorized

2835947_689M_3003922669_NOI_ABD_KR_03032025_20250303082659.pdf

General_Requirement_PxA_20250303082646.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: CONNIE BLAYLOCK

Signed on: FEB 07, 2025 10:32 AM

Name: CROSS TIMBERS ENERGY LLC

Title: Regulatory Technician

Street Address: 400 W 7th St.

City: Forth Worth **State:** TX

Phone: (817) 334-7882

Email address: CBLAYLOCK@MSPARTNERS.COM

Field

Representative Name: Amy Byars

Street Address:

City: **State:** **Zip:**

Phone:

Email address: abyars@txopartners.com

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647742

BLM POC Email Address: krennick@blm.gov

Disposition: Approved

Disposition Date: 03/03/2025

Signature: Kenneth Rennick



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Farmington District Office
6251 College Boulevard, Suite A
Farmington, New Mexico 87402
<http://www.blm.gov/nm>



CONDITIONS OF APPROVAL

March 3, 2025

Notice of Intent – Plug and Abandonment

Operator: Cross Timbers Energy LLC
Lease: NMNM03554
Well(s): Beech C 689M, US Well 30-039-22669
Location: SESE Sec 12 T26N R6W (Rio Arriba County, NM)
Sundry Notice ID #: 2835947

The Notice of Intent to Plug and Abandon is accepted with the following Conditions of Approval (COA):

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
2. The following modification to your plugging program is to be made:
 - a. Modify Plug 2: Move TOC to 6246' and BOC to 6396' to cover the BLM geologist's pick for the Gallup at 6346'.
 - b. Modify Plug 3: Move the TOC to 5391' to cover the BLM geologist's pick for the Mancos at 5491'.
 - c. Modify Plug 4: Move TOC to 4661' and BOC to 4811' to cover the BLM geologist's pick for the Cliff House at 4761'.
 - d. Modify Plug 5: Move TOC to 3521' and BOC to 4041" to cover the BLM geologist's pick for the Chacra at 3991'.
 - e. Modify Plug 6: Move TOC to 2741' and BOC to 3131' to cover the BLM geologist's pick for the Pictured Cliffs at 3081' and Fruitland at 2841'.
 - f. Modify Plug 7: Move TOC to 2421' and BOC to 2671' to cover the BLM geologist's pick for the Ojo Alamo at 2521' and Kirtland at 2621'.
 - g. Modify Plug 8: Move TOC to 1531' and BOC to 1681' to cover the BLM geologist's pick for the Nacimiento at 1631'.
3. **Notification:** Farmington Office is to be notified at least 24 hours before the plugging operations commence at (505) 564 7750.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.

K. Rennick 3/3/2025

BLM - FFO - Geologic Report

Well No.	Breach C # 689M	Surf. Loc.	920	Date Completed	2/28/2025
Lease No.	NMNM03554	Sec	12	FSL	1100
Operator	Cross Timbers Energy LLC	County	Rio Arriba	FEL	R6W
TVD	7575	Formation	Tocito SS	State	New Mexico
Elevation	GL 6601	Est. KB	6613	Lentils, Mesa Verde, Dakota	

Geologic Formations	Est. tops	Subsea Elev.	Remarks
San Jose Fm.	0	Surface	
Nacimiento Fm.	1631	4982	Surface /fresh water sands
Ojo Alamo Ss	2521	4092	Fresh water aquifer
Kirtland Fm.	2621	3992	
Fruitland Fm.	2841	3772	Coal/gas/possible water
Pictured Cliffs	3081	3532	Possible gas/water
DV Tool	3571	3042	Possible gas/water
Lewis Shale (Main)	3211	3402	Source rock
Huerfanito Bentonite	3542	3071	Reference bed
Chacra (upper)	3991	2622	Possible gas/water
Lewis Shale Stringer	4281	2332	Source rock
Chacra (Lower)	4481	2132	Possible gas/water
Lewis Shale Stringer	4551	2062	Source rock
Cliff House Ss	4761	1852	Possible gas/water
Menefee Fm.	4851	1762	Coal/water/possible gas
Point Lookout Fm.	5301	1312	Possible gas/water
Mancos Shale	5491	1122	Source rock
DV Tool	5587	1026	Possible gas/water
Gallup	6346	267	Oil & gas
Mancos Stringer	6681	-68	Source rock
Juana Lopez	6791	-178	
Mancos Stringer	7006	-393	
Brdge Crk/Grnhn	7216	-603	
Graneros Shale	7301	-688	
Dakota Ss	7431	-818	Possible gas/water
Morrison Fm.	7506	-893	Possible water

Remarks:

-Vertical wellbore, all formation depths are TVD from KB at the wellhead.

-Modify Plug 2: Move TOC to 6246' and BOC to 6396' to cover the BLM geologist's pick for the Gallup.

-Modify Plug 3: Move the TOC to 5391' to cover the BLM geologist's pick for the Mancos.

Modify Plug 4: Move TOC to 4661' and BOC to 4811' to cover the BLM geologist's pick for the Cliff House.

-Modify Plug 5: Move TOC to 3521' and BOC to 4041" to cover the BLM geologist's pick for the Chacra.

-Modify Plug 6: Move TOC to 2741' and BOC to 3131' to cover the BLM geologist's pick for the Pictured Cliffs and Fruitland.

-Modify Plug 7: Move TOC to 2421' and BOC to 2671' to cover the BLM geologist's pick for the Ojo Alamo and Kirtland.

-Modify Plug 8: Move TOC to 1531' and BOC to 1681' to cover the BLM geologist's pick for the Nacimiento.

Reference Well:

Cross Timbers Energy LLC.
Breach C 689M
1140' FNL, 900' FEL
13A-26N-6W
GL= 6520', KB= 6532'

Prepared by: Walter Gage

**GENERAL REQUIREMENTS FOR
PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES
FARMINGTON FIELD OFFICE**

1.0 The approved plugging plans may contain variances from the following minimum general requirements.

1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.

1.2 Requirements may be added to address specific well conditions.

2.0 Materials used must be accurately measured. (densometer/scales)

3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.

3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.

4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.

4.1 The cement shall be as specified in the approved plugging plan.

4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.3 Surface plugs may be no less than 50' in length.

4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.

4.6 A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously ran or cement did not circulate to surface during the original casing cementing job or subsequent cementing jobs.

5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.

- 5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.
- 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
- 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.
- 5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. **If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.**

6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.

- 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
- 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.

7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H₂S.

8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), through the Automated Fluid Minerals Support System (AFMSS) with the Field Manager, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM 87402. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show date well was plugged.

9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.

10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

Proposed P&A Procedure

Breech C 689M - 3003922669

Notify Farmington BLM Office at least 24hrs in advance to plugging operations 505 564-7750

All cement Class G 15.8ppg 1.15 cuft/sk yield

1. MIRU P&A services.
2. ND WH NU BOP. Scan tubing OOH, LD. Send all tubing to Caulkins yard and separate YB/BB and GB/RB as per guidance by area foreman.
3. MI 2 3/8" workstring.
4. PU WS and run a bit and csg scraper to ~6800'.
5. Set CIBP/CICR @ ~6781'.
6. Circulate hole with BLM/NMOCD approved P&A fluid.
7. Run CBL from ~6700' to surface. Send CBL to BLM/NMOCD and CTE Engineering.
8. Plug 1 (Tocito Perfs)
 - a. Spot **18sx** cement on top of CIBP.
 - b. From 6781-6631'
9. Plug 2 (Gallup)
 - a. Pump balanced plug **18sx** cement.
 - b. From 6396'-6246'
10. Plug 3 (Mancos and DV Tool)
 - a. Pump balanced plug **29sx** cement.
 - i. From 5637'-5391'
11. Plug 4 (Mesa Verde)
 - a. Pump balanced plug **18sx** cement.
 - i. From 4811'-4661'
12. Plug 5 (Chacra and DV Tool)
 - a. Pump balanced plug **61sx** cement.
 - i. From 4041'-3521'
13. Plug 6 (PC/FC)
 - a. Pump balanced plug **46sx** cement.

- i. From 3131'-2741'
- 14. Plug 7 (Kirtland/Ojo Alamo)
 - a. Pump balanced plug **30sx** cement.
 - i. From 2671'-2421'
- 15. Plug 8 (Nacimiento)
 - a. Pump balanced plug **18sx** cement.
 - i. From 1681'-1531'
- 16. Plug 9 (Surface shoe)
 - a. Spot **40sx** cement plug.
 - i. From 341' to surface
 - b. Ensure cement at surface on all strings of casing, top off as needed.
- 17. Cut off wellhead below surface casing flange.
- 18. Install P&A Marker.

Estimated 278 sx cement needed in total.

Please make sure all excess volumes are as follows:

4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

Cross Timbers Energy

Breech C #689M
Rio Arriba County, NM

TD – 7,575 ft MD

13-3/4" hole to 291'
Surface Csg: 9-5/8" 32.3# H-40
Setting Depth: 291 ft

Cement:
250sx Class B cmt
Circulated cement to surface

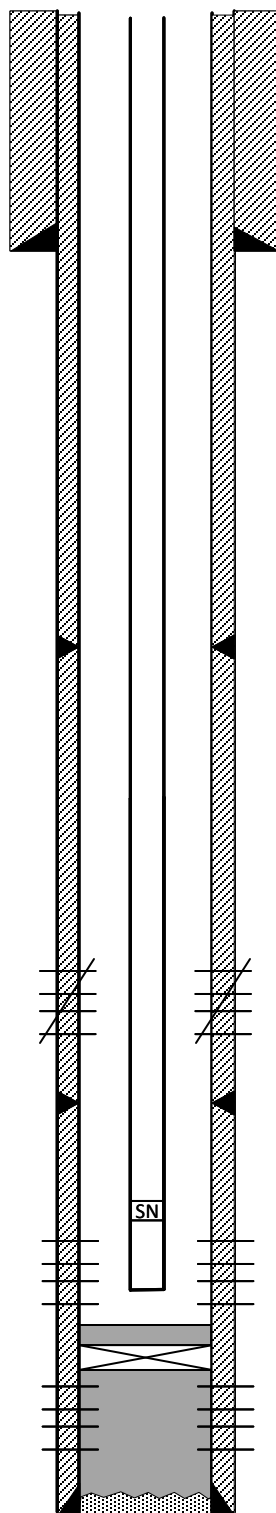
7-7/8" hole to 7,575'
Prod Csg: 5-1/2" 17# & 15.5# J-55
Setting Depth: 7,575 ft
DV tools: 3571', 5587'

Cement:
Stg 1 Lead: 250sx Class B cmt
Stg 1 Tail: 100sx Latex cmt
Stg 2 Lead: 250sx Class B cmt
Stg 2 Tail: 100sx Neat cmt
Stg 3 Lead: 538sx Class B cmt
Stg 3 Tail: 100sx Neat cmt
Circulated cement to surface

Perfs:
Tocito:
6831'-6837', 6940'-6950'

MV (abandoned-sqz'd)
Sqz'd w/ 100 sx cmt 09/2001
4866', 4872', 4878', 4908',
5345', 5350', 5369', 5383', 5396', 5421',
5445', 5459', 5472', 5480', 5488'

Dakota (abandoned-sqz'd)
Sqz'd w/ 150 sx 09/2002
7332', 7334', 7360', 7368', 7390', 7468',
7476', 7508', 7534', 7538'



PBTD: 7,150 ft MD

Prepared by: JRyza
Date: 02/23/2023
Updated with Est Geo Tops:
Bberry 01.02.2025

KB = 13 ft
GL = 6,600 ft
API# 30-039-22669

Spud Date: 07/16/1981
Date Completed: 08/28/1981

*Nacimiento: 877'
*Ojo Alamo: 2231'
*Kirtland: 2485'
*Fruitland: 2730'
*Pictured Cliffs: 2995'
*Chacra: 3845'
*Mesa Verde: 4685'
*Mancos: 5340'
*Gallup: 6340'
*Dakota: 7340'

*Tops Based on BLM Geo Top Picks from offset P&A
Breech A 204

Prod Tbg 09/23/2002:
2-3/8" 4.7# J-55 tbg:
EOT=6,944' KB

MV Perfs (squeezed 2001)
4,866' – 5,488' (overall)

Tocito Perfs:
6,831'–37'
6,940'–50'

CICR @ 7305' w/ 155' cmt on top
(sqz 110 sx thru 09/2002)
Dakota Perfs (abandoned)
7,332' – 7,538' (overall)

Cross Timbers Energy

Breech C #689M
Rio Arriba County, NM

TD – 7,575 ft MD

13-3/4" hole to 291'
Surface Csg: 9-5/8" 32.3# H-40
Setting Depth: 291 ft

Cement:
250sx Class B cmt
Circulated cement to surface

7-7/8" hole to 7,575'
Prod Csg: 5-1/2" 17# & 15.5# J-55
Setting Depth: 7,575 ft
DV tools: 3571', 5587'

Cement:
Stg 1 Lead: 250sx Class B cmt
Stg 1 Tail: 100sx Latex cmt
Stg 2 Lead: 250sx Class B cmt
Stg 2 Tail: 100sx Neat cmt
Stg 3 Lead: 538sx Class B cmt
Stg 3 Tail: 100sx Neat cmt
Circulated cement to surface

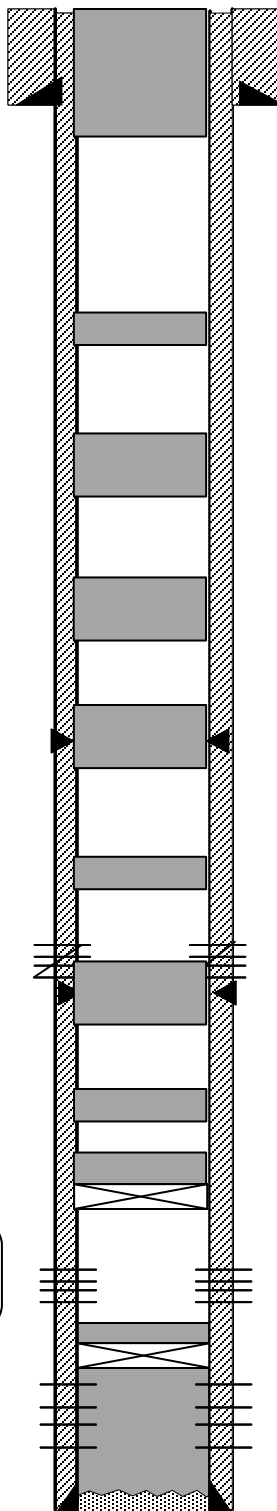
Perfs:
Tocito:
6831'-6837', 6940'-6950'

MV (abandoned-sqz'd)
Sqz'd w/ 100 sx cmt 09/2001
4866', 4872', 4878', 4908',
5345', 5350', 5369', 5383', 5396', 5421',
5445', 5459', 5472', 5480', 5488'

Dakota (abandoned-sqz'd)
Sqz'd w/ 150 sx 09/2002
7332', 7334', 7360', 7368', 7390', 7468',
7476', 7508', 7534', 7538'

Tocito Perfs:
6,831'–37'
6,940'–50'

All Cement Class G 15.8ppf
1.15cuft/sk yield



Plug 9 (Surf Shoe) – Spot Plug 40
sx cmt 341' to surface

Plug 8 (Nacimiento) – Balance Plug
18 sx cmt (1681-1531')

Plug 7 (Kirtland/Ojo) – Balance
Plug 30 sx cm (2671-2421')

Plug 6 (PC/FC) – Balance Plug 46 sx cmt
(3131-2741')

Plug 5 (Chacra and DV Tool) – Balance Plug 61
sx cmt (4041-3521')

Plug 4 (Mesa Verde) – Balance plug 18 sx
cmt (4811-4661')

Plug 3 (Mancos and DV Tool) – Balance
plug 29 sx cmt (5637-5391')

Plug 2 (Gallup) – Balance plug 18 sx cmt
(6396-6246')

Plug 1 (Tocito Perf) – CIBP Set @ ~6781'
with 18 sx cmt on top (TOC ~6,631')

CICR @ 7305' w/ 155' cmt on top
(sqz 110 sx thru 09/2002)
Dakota Perfs (abandoned)
7,332' – 7,538' (overall)

Prepared by: JRyza
Date: 02/23/2023
Updated w/BLM Geo Tops: Bberry
03.06.2025

GL = 6,520 ft
API# 30-039-22669

Spud Date: 07/16/1981
Date Completed: 08/28/1981

*Nacimiento: 1631'
*Ojo Alamo: 2521'
*Kirtland: 2621'
*Fruitland: 2841'
*Pictured Cliffs: 3081'
*Chacra: 3991'
*Mesa Verde: 4761'
*Mancos: 5491'
*Gallup: 6346'
*Dakota: 7431'
*Tops from BLM COAs

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 439876

CONDITIONS

Operator: CROSS TIMBERS ENERGY, LLC 400 West 7th Street Fort Worth, TX 76102	OGRID: 298299
	Action Number: 439876
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	NMOCD agrees with BLM on formation tops except Dakota = 7318 Mancos= 5480 - adjust plugs accordingly - Tubing tag required for Graneros plug - plug 5 should have 100 feet above dv tool -- All plugs determined by CBL - Notify NMOCD 24 hours prior to moving on - monitor string pressures daily report on subsequent - submit all logs prior to subsequent	3/19/2025