

Submit 1 Copy To Appropriate District Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised July 18, 2013

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-20016
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator CROSS TIMBERS ENERGY, LLC		6. State Oil & Gas Lease No.
3. Address of Operator 400 W 7TH ST, FORT WORTH, TX 76102		7. Lease Name or Unit Agreement Name NEW MEXICO AE STATE
4. Well Location Unit Letter <u>F</u> : <u>2310</u> feet from the <u>N</u> line and <u>2230</u> feet from the <u>W</u> line Section <u>12</u> Township <u>18S</u> Range <u>34E</u> NMPM County <u>LEA</u>		8. Well Number 004
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 4002 GL		9. OGRID Number 298299
		10. Pool name or Wildcat VACUUM; ABO REEF

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☒	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐		OTHER: ☐	
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐			

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

MorningStar Operating requests approval for the following P&A procedure:

1. Bit & scraper run to 8,460'
2. Run CBL
3. PLUG 1: Set CIBP @ 8,450' and cap w/ 100' cmt (3 sx Class H)
4. PLUG 2: Spot 3 sx Class C from 5,850' - 5,950' . WOC and Tag TOC.
5. PLUG 3: Perf Squeeze Holes @ 4,653'. Attempt to squeeze w/ 44 sx Class C. If no squeeze, spot ²⁵ 1X sx Class C from 4,703' - 4,550' . WOC & Tag TOC.
6. PLUG 4: Perf Squeeze Hole @ 3,205'. Attempt to squeeze w/ 28 sx Class C cmt. If no squeeze, spot ²⁵ 1X sx Class C from 3,255' - 3,102'. WOC. Tag TOC.
7. PLUG 5: Perf Squeeze holes @ 2,970'. Pump 39 sx Class C cmt placing 27 sx in annulus and 12 sx inside casing. WOC. Tag TOC @ est'd 2,870'
8. PLUG 6: Perf Squeeze holes @ 1,860'. Pump 39 sx Class C cmt placing 27 sx in annulus and 12 sx inside casing. WOC. Tag TOC @ est'd 1,760'
9. PLUG 7: Perf Squeeze Holes @ 100'. Pump 39 sx Class C to fill annulus and inside casing to surface.
10. Cut off wellhead. Verify cmt to surface on all strings. Install dryhole marker 4" diameter & 4' tall above ground.

Spud Date:

Rig Release Date:

4" Diameter 4' tall above ground marker

See attached conditions of approval

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Connie Blaylock TITLE REGULATORY ANALYST DATE 05/12/2023

Type or print name Connie Blaylock E-mail address: cblaylock@txoenergy.com PHONE: 817-334-7882

For State Use Only

APPROVED BY: Kerry Fortner TITLE Compliance Officer A DATE 5/12/23
 Conditions of Approval (

CONDITIONS FOR PLUGGING AND ABANDONMENT

OCD - Southern District

The following is a guide or checklist in preparation of a plugging program, this is not all inclusive and care must be exercised in establishing special plugging programs in unique and unusual cases, Notify NMOCD District Office II at (575)-263-6633 at least 24 hours before beginning work. After MIRU rig will remain on well until it is plugged to surface. OCD is to be notified before rig down. Company representative will be on location during plugging procedures.

1. A notice of intent to plug and abandon a wellbore is required to be approved before plugging operations are conducted. A cement evaluation tool is required in order to ensure isolation of producing formations, protection of water and correlative rights. A cement bond log or other accepted cement evaluation tool is to be provided to the division for evaluation if one has not been previously run or if the well did not have cement circulated to surface during the original casing cementing job or subsequent cementing jobs. Insure all bradenheads have been exposed, identified and valves are operational prior to rig up.
2. Closed loop system is to be used for entire plugging operation. Upon completion, contents of steel pits are to be hauled to a permitted disposal location.
3. Trucking companies being used to haul oilfield waste fluids to a disposal – commercial or private – shall have an approved NMOCD C-133 permit. A copy of this permit shall be available in each truck used to haul waste products. It is the responsibility of the operator as well as the contractor, to verify that this permit is in place prior to performing work. Drivers shall be able to produce a copy upon request of an NMOCD Field inspector.
4. Filing a subsequent C-103 will serve as notification that the well has been plugged.
5. A final C-103 shall be filed (and a site inspection by NMOCD Inspector to determine if the location is satisfactorily cleaned, all equipment, electric poles and trash has been removed to Meet NMOCD standards) before bonding can be released.
6. If work has not begun within 1 Year of the approval of this procedure, an extension request must be file stating the reason the well has not been plugged.
7. Squeeze pressures are not to exceed 500 psi, unless approval is given by NMOCD.
8. Produced water will not be used during any part of the plugging operation.
9. Mud laden fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.
10. All cement plugs will be a minimum of 100' in length or a minimum of 25 sacks of cement, whichever is greater. 50' of calculated cement excess required for inside casing plugs and 100% calculated cement excess required on outside casing plugs.
11. Class 'C' cement will be used above 7500 feet.
12. Class 'H' cement will be used below 7500 feet.
13. A cement plug is required to be set 50' above and 50' below, casing stubs, DV tools, attempted casing cut offs, cement tops outside casing, salt sections and anywhere the casing is perforated, these plugs require a 4 hour WOC and then will be tagged
14. All Casing Shoes Will Be Perforated 50' below shoe depth and Attempted to be Squeezed, cement needs to be 50' above and 50' Below Casing Shoe inside the Production Casing.

16. When setting the top out cement plug in production, intermediate and surface casing, wellbores should remain full at least 30 minutes after plugs are set
17. A CIBP is to be set within 100' of production perforations, capped with 100' of cement, WOC 4 hours and tag.
18. A CIBP with 35' of cement may be used in lieu of the 100' plug if set with a bailer. This plug will be placed within 100' of the top perforation, (WOC 4 hrs and tag).
19. No more than 3000' is allowed between cement plugs in cased hole and 2000' in open hole.
20. Some of the Formations to be isolated with cement plugs are: These plugs to be set to isolate formation tops
 - A) Fusselman
 - B) Devonian
 - C) Morrow
 - D) Wolfcamp
 - E) Bone Springs
 - F) Delaware
 - G) Any salt sections
 - H) Abo
 - I) Glorieta
 - J) Yates.
 - K) Cherry Canyon - Eddy County
 - L) Potash---(In the R-111-P Area (Page 3 & 4), a solid cement plug must be set across the salt section. Fluid used to mix the cement shall be saturated with the salts that are common to the section penetrated and in suitable proportions, not more than 3% calcium chloride (by weight of cement) will be considered the desired mixture whenever possible, WOC 4 hours and tag, this plug will be 50' below the bottom and 50' above the top of the Formation.
21. If cement does not exist behind casing strings at recommended formation depths, the casing can be cut and pulled with plugs set at recommended depths. If casing is not pulled, perforations will be shot and cement squeezed behind casing, WOC and tagged. These plugs will be set 50' below formation bottom to 50' above formation top inside the casing

DRY HOLE MARKER REQUIREMENTS

The operator shall mark the exact location of the plugged and abandoned well with a steel marker not less than four inches in diameter, 3' below ground level with a plate of at least ¼" welded to the top of the casing and the dry hole marker welded on the plate with the following information welded on the dry hole marker:

1. Operator name 2. Lease and Well Number 3.API Number 4. Unit Letter 5. Quarter Section (feet from the North, South, East or West) 6. Section, Township and Range 7. Plugging Date 8. County (SPECIAL CASES)-----AGRICULTURE OR PRARIE CHICKEN BREEDING AREAS

In these areas, a below ground marker is required with all pertinent information mentioned above on a plate, set 3' below ground level, a picture of the plate will be supplied to NMOCD for record, the exact location of the marker (longitude and latitude by GPS) will be provided to NMOCD (We typically require a current survey to verify the GPS)

SITE REMEDIATION DUE WITHIN ONE YEAR OF WELL PLUGGING COMPLETION

R-111-P Area

T 18S – R 30E

Sec 10 Unit P. Sec 11 Unit M,N. Sec 13 Unit L,M,N. Sec 14 Unit C -P. Sec 15 Unit A G,H,I,J,K,N,O,P. Sec 22 Unit All except for M. Sec 23, Sec 24 Unit C,D,E,L, Sec 26 Unit A-G, Sec 27 Unit A,B,C

T 19S – R 29E

Sec 11 Unit P. Sec 12 Unit H-P. Sec 13. Sec 14 Unit A,B,F-P. Sec 15 Unit P. Sec 22 Unit A,B,C,F,G,H,I,J K,N,O,P. Sec 23. Sec 24. Sec 25 Unit D. Sec 26 Unit A- F. Sec 27 Unit A,B,C,F,G,H.

T 19S – R 30E

Sec 2 Unit K,L,M,N. Sec 3 Unit I,L,M,N,O,P. Sec 4 Unit C,D,E,F,G,I-P. Sec 5 Unit A,B,C,E-P. Sec 6 Unit I,O,P. Sec 7 – Sec 10. Sec 11 Unit D, G—P. Sec 12 Unit A,B,E-P. Sec 13 Unit A-O. Sec 14-Sec 18. Sec 19 Unit A-L, P. Sec 20 – Sec 23. Sec 24 Unit C,D,E,F,L,M,N. Sec 25 Unit D. Sec 26 Unit A-G, I-P. Sec 27, Sec 28, Sec 29 Unit A,B,C,D,F,G,H,I,J,O,P. Sec 32 Unit A,B,G,H,I,J,N,O,P. Sec 33. Sec 34. Sec 35. Sec 36 Unit D,E,F,I-P.

T 19S – R 31E

Sec 7 Unit C,D,E,F,L. Sec 18 Unit C,D,E,F,G,K,L. Sec 31 Unit M. Sec 34 Unit P. Sec 35 Unit M,N,O. Sec 36 Unit O,P.

T 20S – R 29E

Sec 1 Unit H,I,P. Sec 13 Unit E,L,M,N. Sec 14 Unit B-P. Sec 15 Unit A,H,I,J,N,O,P. Sec 22 Unit A,B,C,F,G,H,I,J,O,P. Sec 23. Sec 24 Unit C,D,E,F,G,J-P. Sec 25 Unit A-O. Sec 26. Sec 27 Unit A,B,G,H,I,J,O,P. Sec 34 Unit A,B,G,H. Sec 35 Unit A-H. Sec 36 Unit B-G.

T 20S – R 30E

Sec 1 – Sec 4. Sec 5 Unit A,B,C,E-P. Sec 6 Unit E,G-P. Sec 7 Unit A-H,I,J,O,P. Sec 8 – 17. Sec 18 Unit A,B,G,H,I,J,O,P. Sec 19 Unit A,B,G,H,I,J,O,P. Sec 20 – 29. Sec 30 Unit A-L,N,O,P. Sec 31 Unit A,B,G,H,I,P. Sec 32 – Sec 36.

T 20S – R 31E

Sec 1 Unit A,B,C,E-P. Sec 2. Sec 3 Unit A,B,G,H,I,J,O,P. Sec 6 Unit D,E,F,J-P. Sec 7. Sec 8 Unit E-P. Sec 9 Unit E,F,J-P. Sec 10 Unit A,B,G-P. Sec 11 – Sec 36.

T 21S – R 29E

Sec 1 – Sec 3. Sec 4 Unit L1 – L16,I,J,K,O,P. Sec 5 Unit L1. Sec 10 Unit A,B,H,P. Sec 11 – Sec 14. Sec 15 Unit A,H,I. Sec 23 Unit A,B. Sec 24 Unit A,B,C,D,F,G,H,I,J,O,P. Sec 25 Unit A,O,P. Sec 35 Unit G,H,I,J,K,N,O,P. Sec 36 A,B,C,F – P.

T 21S – R 30E

Sec 1 – Sec 36

T 21S – R 31E

Sec 1 – Sec 36

T 22S – R 28E

Sec 36 Unit A,H,I,P.

T 22S – R 29E

Sec 1. Sec2. Sec 3 Unit I,J,N,O,P. Sec 9 Unit G – P. Sec 10 – Sec 16. Sec 19 Unit H,I,J. Sec 20 – Sec 28. Sec 29 Unit A,B,C,D,G,H,I,J,O,P. Sec 30 Unit A. Section 31 Unit C – P. Sec 32 – Sec 36

T 22S – R 30E

Sec 1 – Sec 36

T 22S – R 31E

Sec 1 – Sec 11. Sec 12 Unit B,C,D,E,F,L. Sec 13 Unit E,F,K,L,M,N. Sec 14 – Sec 23. Sec 24 Unit C,D,E,F,K,L,M,N. Sec 25 Unit A,B,C,D. Sec 26 Unit A,BC,D,G,H. Sec 27 – Sec 34.

T 23S – R 28E

Sec 1 Unit A

T 23S – R 29E

Sec 1 – Sec 5. Sec 6 Unit A – I, N,O,P. Sec 7 Unit A,B,C,G,H,I,P. Sec 8 Unit A – L, N,O,P. Sec 9 – Sec 16. Sec 17 Unit A,B,G,H,I,P. Sec 21 – Sec 23. Sec 24 Unit A – N. Sec 25 Unit D,E,L. Sec 26. Sec 27. Sec 28 Unit A – J, N,O,P. Sec 33 Unit A,B,C. Sec 34 Unit A,B,C,D,F,G,H. Sec 35. Sec 36 Unit B,C,D,E,F,G,K,L.

T 23S – R 30E

Sec 1 – Sec 18. Sec 19 Unit A – I,N,O,P. Sec 20, Sec 21. Sec 22 Unit A – N, P. Sec 23, Sec 24, Sec 25. Sec 26 Unit A,B,F-P. Sec 27 Unit C,D,E,I,N,O,P. Sec 28 Unit A – H, K,L,M,N. Sec 29 Unit A – J, O,P. Sec 30 Unit A,B. Sec 32 A,B. Sec 33 Unit C,D,H,I,O,P. Sec 34, Sec 35, Sec 36.

T 23S – R 31E

Sec 2 Unit D,E,J,O. Sec 3 – Sec 7. Sec 8 Unit A – G, K – N. Sec 9 Unit A,B,C,D. Sec 10 Unit D,P. Sec 11 Unit G,H,I,J,M,N,O,P. Sec 12 Unit E,L,K,M,N. Sec 13 Unit C,D,E,F,G,J,K,L,M,N,O. Sec 14. Sec 15 Unit A,B,E – P. Sec 16 Unit I, K – P. Sec 17 Unit B,C,D,E, I – P. Sec 18 – Sec 23. Sec 24 Unit B – G, K,L,M,N. Sec 25 Unit B – G, J,K,L. Sec 26 – Sec 34. Sec 35 Unit C,D,E.

T 24S – R 29E

Sec 2 Unit A, B, C, D. Sec 3 Unit A

T 24S – R 30E

Sec 1 Unit A – H, J – N. Sec 2, Sec 3. Sec 4 Unit A,B,F – K, M,N,O,P. Sec 9 Unit A – L. Sec 10 Unit A – L, O,P. Sec 11. Sec 12 Unit D,E,L. Sec 14 Unit B – G. Sec 15 Unit A,B,G,H.

T 24S – R 31E

Sec 3 Unit B – G, J – O. Sec 4. Sec 5 Unit A – L, P. Sec 6 Unit A – L. Sec 9 Unit A – J, O,P. Sec 10 Unit B – G, K – N. Sec 35 Unit E – P. Sec 36 Unit E,K,L,M,N.

T 25S – R 31E

Sec 1 Unit C,D,E,F. Sec 2 Unit A – H.

Well Name: AE State #4
 Location: 2310' FNL & 2230' FWL Sec: 12
 County: Lea State: NM

Operator: Cross Timbers Energy, LLC
 Township: 18S Range: 34E
 API: 30-025-20016

Surface Csg

Size: 8-5/8"
 Wt & Thrd: 24#
 Grade: J_55
 Set @: 3,152'
 Sx Cmt: 1,200
 Circ: YES
 TOC: SFC

KB:
 GL: 3,991'
 Spud Date: 12/6/1962

Production Casing

Size: 5-1/2"
 Wt & Grade:
 Top: Surface
 Set @: 4603'
 Sx Cmt: 700 sx
 Circ: no
 TOC: 2600' by TS

PARTIAL SLIMHOLE COMPLETION!!**Production Casing**

Size: 2-7/8"
 Wt & Thrd:
 Grade:
 Set @: 8,900'
 Sx Cmt: 1,250
 Circ: NO
 TOC: 4660' by TS

Backed off 2-7/8" @ 4,603' in
 (1978) and ran the 5-1/2" casing

PBTD: 8,857'
 TD: 8,900'

Perfs (1965):
 8488', 8499', 8537', 8553', 8564', 8609', 8643', 8662'

FISH (1992): Est'd TOF @ 8,760'. 3 jts 2-1/16" tbg, SN, TAC, 3 k-bars, & 28' pump. Possible casing swage on bottom.

Perfs (1963):
 8742', 8756', 8765', 8792', 8826', 8852'. 1 SPF. Acidize w/ 3,000 gals. Re-acidize w/ 9,000 gals. Frac'd (1965) w/ 50k gals gel water + 22.5k # sand.

Well Name: AE State #4
Location: 2310' FNL & 2230' FWL **Sec:** 12
County: Lea **State:** NM

Operator: Cross Timbers Energy, LLC
Township: 18S **Range:** 34E
API: 30-025-20016

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Wt & Thrd: 24#
Grade: J_55
Set @: 3,152'
Sx Cmt: 1,200
Circ: YES
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Production Casing

Size: 5-1/2"
Wt & Grade:
Top: Surface
Set @: 4603'
Sx Cmt: 700 sx
Circ: no
TOC: 2600' by TS

Backed off 2-7/8" @ 4,603' in
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Wt & Thrd:
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Set @: 8,900'
Sx Cmt: 1,250
Circ: NO
TOC: 4660' by TS
TD: 8,900'

PROPOSED P&A

**PROPOSED 7: Perf Squeeze Holes @ 100'.
 Pump 39 sx of Class C to fill annulus and inside casing to surface.**

**PROPOSED 6: Salt Top Plug. Pef @ 1,860'. Pump
 39 sx of Class C cmt placing 27 sx in annulus and
 12 sx inside casing. TOC @ 1,760'**

**PROPOSED 5: Salt Base Plug. Perf @ 2,970'.
 Pump 39 sx of Class C cmt placing 27 sx in
 annulus and 12 sx inside casing. TOC @ 2,870'**

**PROPOSED 4: Perf Squeeze holes @ 3,205'.
 Attempt to squeeze w/ 28 sx cmt -OR- Spot 11
 sx cement from 3,255' to 3,102'. Cement is Class
 C**

**PROPOSED 3: Perf Squeeze holes @ 4,653'.
 Attempt to squeeze w/ 44 sx cmt -OR- Spot 11
 sx cement from 4,703' to 4,550'. Cement is
 Class C**

**PROPOSED PLUG 2: 100' OF CLASS C
 CEMENT (3 SX) FROM 5,850' - 5,950'**

**PROPOSED PLUG 1: CIBP @ 8,450' CAPPED W/
 100' cmt (3 sx Class H)**

Perfs (1965):
 8488', 8499', 8537', 8553', 8564', 8609', 8643', 8662'

FISH (1992): Est'd TOF @ 8,760'. 3 jts 2-1/16" tbg, SN,
 TAC, 3 k-bars, & 28' pump. Possible casing swage on
 bottom.

Perfs (1963):
 8742', 8756', 8765', 8792', 8826', 8852'. 1 SPF.

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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

Action 216569

COMMENTS

Operator: CROSS TIMBERS ENERGY, LLC 400 West 7th Street Fort Worth, TX 76102	OGRID: 298299
	Action Number: 216569
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

COMMENTS

Created By	Comment	Comment Date
plmartinez	DATA ENTRY PM	5/15/2023

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

Action 216569

CONDITIONS

Operator: CROSS TIMBERS ENERGY, LLC 400 West 7th Street Fort Worth, TX 76102	OGRID: 298299
	Action Number: 216569
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kfortner	See attached COA	5/12/2023