

Well Name: MKL	Well Location: T26N / R7W / SEC 5 / NENE / 36.519287 / -107.592545	County or Parish/State: RIO ARRIBA / NM
Well Number: 15	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF079162	Unit or CA Name:	Unit or CA Number:
US Well Number: 300390674700S1	Well Status: Gas Well Shut In	Operator: CROSS TIMBERS ENERGY LLC

Notice of Intent

Sundry ID: 2757294

Type of Submission: Notice of Intent	Type of Action: Plug and Abandonment
Date Sundry Submitted: 10/19/2023	Time Sundry Submitted: 03:09
Date proposed operation will begin: 11/20/2023	

Procedure Description: Cross Timbers Energy, LLC requests approval to plug and abandon the MKL #15. Attached is the Proposed Procedure and WBDs.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- MKL__15_WBD_Current_and_Proposed_PA_20231019150816.pdf
- MKL_15_Proposed_PA_procedure_20231019150805.pdf

Received by OCD: 10/20/2023 12:30:43 PM

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Conditions of Approval

Specialist Review

General_Requirement_PxA_20231020105849.pdf
2757294_NOIA_15_3003906747_KR_10202023_20231020105823.pdf
26N07W05_MKL_15_Geo_KR_20231020105823.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: OCT 19, 2023 03:08 PM
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: 10/20/2023
Signature: Kenneth Rennick	

Proposed P&A Procedure

MKL 15

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

1. MIRU. Bring work string for P&A work.
2. POOH and LD tbg.
3. PU WS, run a bit and csg scraper to ~2780'.
4. Set CIBP @ 2754'.
5. Circulate hole with BLM/OCD approved P&A fluid.
6. Plug 1 (PC/Fruitland Coal)
 - a. Spot **8sx** Class G cement on top of CIBP.
 - b. Plug from 2754'-2484'
7. No CBL necessary.
 - a. Cement to surface during cement job for 2 7/8" slimhole casing
8. Plug 2 (Ojo/Kirtland)
 - a. Pump balanced plug **8sx** Class G cement.
 - b. From 2215'-1942'
9. Plug 3 (Nacimiento)
 - a. Perforate through 2 7/8", cement, and 5 1/2" casing strings @ 747'.
 - b. Attempt to establish circulation...
 - i. if none, spot plug to 597' in 2 7/8" estimated **5sx** needed.
 - ii. If established, estimated **36sx** required to fill 5 1/2" annulus 747' to 597' (including 100% excess in pipe/formation section) and inside 2 7/8" casing.
 - iii. Perf squeeze and plug from 747'-597'.
10. Plug 4 (surface shoe circulation attempt)
 - a. Perforate through 2 7/8", cement, and 5 1/2" casing strings @ 145'.
 - b. Attempt to establish circulation...
 - i. if none, spot plug to surface in 2 7/8" estimated **5sx** needed.
 - ii. If established, estimated **74sx** required to fill 5 1/2" annulus (including 100% excess in pipe/formation section) and inside 2 7/8".
 - c. Ensure cement at surface on all strings of casing, top off as needed.
11. Cut off wellhead below surface casing flange.

12. Install P&A Marker.

Estimated 26 sx to 126 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

Prepared by: JRyza
Date: 03/04/2022

KB = 11 ft
GL = 6,637 ft
API# 30-039-06747

MKL #15 Rio Arriba County, NM

Spud Date: 09/10/1952
Ready to Produce: 11/15/1952
Recomplete PC: 06/01/1990

TD – 2,889 ft MD

Surface Csg: 10-3/4" 32# csg
Setting Depth: 95 ft

Cement
150sx Cement
Circulated cement to surface

Int Csg: 5-1/2" 17#
Setting Depth: 2805 ft

Cement
200sx Cement

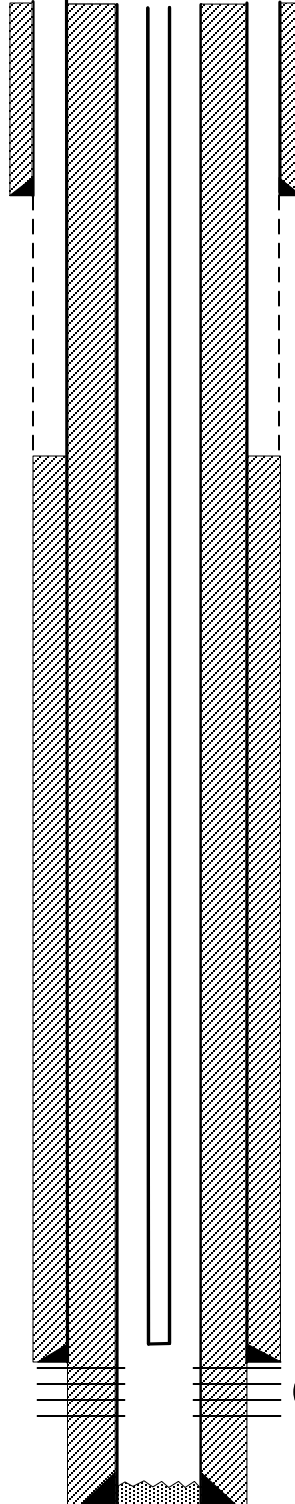
(06/1990) – Run csg into OH
4-3/4" hole to 2889'

Prod Csg: 2-7/8" 6.5# J-55
Setting Depth: 2888'

Cement
Lead: 70sx Lite cmt
Tail: 150sx Class B
Circulated cement to surface

Perfs Pictured Cliffs: 2 spf:
2,804'-2,822'

Frac:
40,000# 20/40 sand
5,000# 12/20 sand
13,738 gal fluid, 461K scf nitrogen



Prod Tbg 06/15/1990:

1" 10-RD NVE tubing:
84 jts tbg, pin collar on bottom

EOT=2,801'

Pictured Cliffs perfs: 2,804' – 2,822'

PBTD: 2,871 ft MD

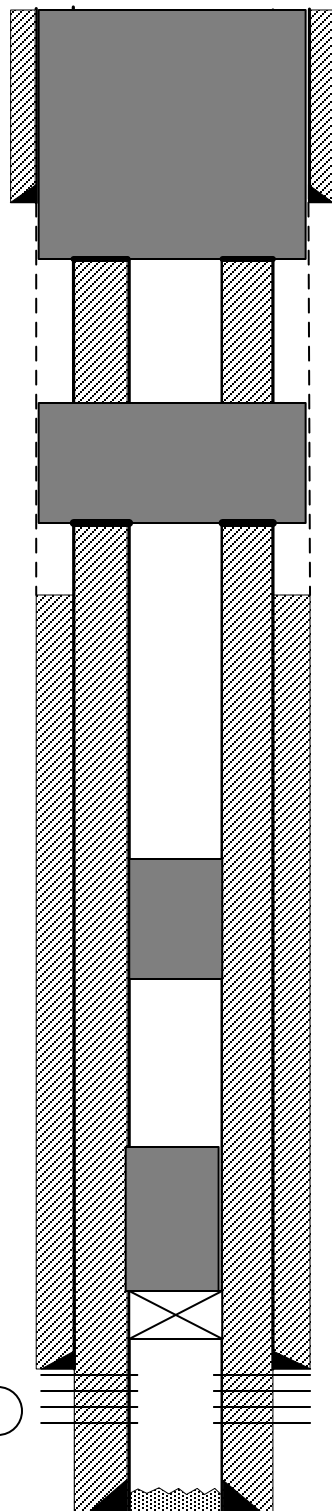
Cross Timbers Energy

Proposed SLIMHOLE P&A

MKL #15

Rio Arriba County, NM

TD – 2,889 ft MD

Surface Csg: 10-3/4" 32# csg
Setting Depth: 95 ftCement
150sx Cement
Circulated cement to surfaceInt Csg: 5-1/2" 17#
Hole Size: 7.875" Est.
(NMOCD Csg Records shows
7.25" Hole)
Setting Depth: 2805 ftCement
200sx Cement Class C
Estimated TOC(06/1990) – Run csg into OH
4-3/4" hole to 2889'
Prod Csg: 2-7/8" 6.5# J-55
Setting Depth: 2888'Cement
Lead: 70sx Lite cmt
Tail: 150sx Class B
Circulated cement to surfacePerfs Pictured Cliffs: 2 spf:
2,804'-2,822'Frac:
40,000# 20/40 sand
5,000# 12/20 sand
13,738 gal fluid, 461K scf
nitrogen

Plug 4 (Surf Shoe) –
perf @ 145' attempt
to establish
circulation, Pump/
circ. Cmt to surf w/
~74 sx if no circ., ~5 sx
need to cap inside
casing

Plug 3 (~Nacimiento) – perf @
747' attempt to establish
circulation, Pump/circ. Cmt to
597' w/36 sx if no circ., ~5 sx
need to cap inside casing

TOC Est 1270' @ Class C
(1.33 yield) and 200 sx

Plug 2 (Ojo/Kirtland) – Balance
Plug 8 sx 2215' - 1942'

Plug 1 (PC/Fruitland Coal) –
Set CIBP @ 2754' spot 8 sx
2754' -2484'

Prepared by: JRyza
Date: 03/04/2022
Bberry Proposed P&A 10/18/2023

KB = 11 ft
GL = 6,637 ft
API# 30-039-06747

Spud Date: 09/10/1952
Ready to Produce: 11/15/1952
Recomplete PC: 06/01/1990

Name	Tops	
	MD	TVD
San Jose (est)	Surf	Surf
Nacimiento Fm (est)	697	697
Ojo Alamo Ss (est)	1,992	1,992
Kirtland (NMOCD Well files)	2165	2165
Fruitland Coal (est)	2534	2534
Pictured Cliffs	2,804	2,804

Pictured Cliffs perfs: 2,804' – 2,822'

PBTD: 2,871 ft MD

**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.

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON DISTRICT OFFICE
6251 COLLEGE BLVD.
FARMINGTON, NEW MEXICO 87402**

AFMSS 2 Sundry ID 2757294

Attachment to notice of Intention to Abandon

Well: MKL 15

CONDITIONS OF APPROVAL

1. Plugging operations must be completed by April 30, 2024.
2. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
3. 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 10/20/2023

BLM FLUID MINERALS P&A Geologic Report

Date Completed: 10/20/2023

Well No. MKL 15 (API 30-039-06747)	Location				
Lease No. NMSF079162	Sec. 5	T26N			R07W
Operator Cross Timbers Energy LLC	County	Rio Arriba	State		New Mexico
Total Depth 3300' Plugback	Formation	Pictured Cliffs			
Elevation (GL) 6637'					

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					Surface/freshwater sands
Nacimiento Fm	697				Possible freshwater sands
Ojo Alamo Ss	1992				Aquifer (possible freshwater)
Kirtland Shale	2165				
Fruitland Fm	2534				Coal/Gas/Possible water
Pictured Cliffs Ss	2804				Gas
Lewis Shale					
Chacra					Gas
Cliff House Ss					Water/Possible gas
Menefee Fm					Coal/Ss/Water/Possible O&G
Point Lookout Ss					Probable water/Possible O&G
Mancos Shale					
Gallup					O&G/Water
Greenhorn					
Graneros Shale					
Dakota Ss					O&G/Water

Remarks:

P & A

- No available raster logs for the well. The raster logs for the reference well nearby does support the estimated formation tops by the operator. Comparable due to the proximity. Appropriate for the area.

Reference Well:

Burns Federal 001
US Well Number 30-039-06756
Sec 5, T 26N, R 7W

Prepared by: Kenneth Rennick

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 277745

CONDITIONS

Operator: CROSS TIMBERS ENERGY, LLC 400 West 7th Street Fort Worth, TX 76102	OGRID: 298299
	Action Number: 277745
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	once perforation at 145' is performed wait 30 minutes (checking for gas)before proceeding. - Notify NMOCD 24 hours prior to moving on	10/26/2023