Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB No. 1004-0137 expires: October 31, 2021

E	kpires: C
5. Lease Serial No.	

BURI	EAU OF LAND MANAGEMEN	1			5. Lease Schai ivo.	IIC34		
SUNDRY N	6. If Indian, Allottee or Tribe Name							
Do not use this f abandoned well. U	JICARILLA APACHE							
SUBMIT IN 1	FRIPLICATE - Other instructions on pa	ige 2			7. If Unit of CA/Agre	eement,	Name and/or No.	
1. Type of Well								
Oil Well Gas W					8. Well Name and No	. JICAF	RILLA C/24	
2. Name of Operator ENDURING RES	SOURCES LLC				9. API Well No. 3003	390582	6	
3a. Address 1050 17TH STREET SU	JITE 2500, DENVER, CO 3b. Phone No. (303) 573-1		area code)		10. Field and Pool or Exploratory Area OTERO/OTERO			
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 27/T25N/R5W/NMP					11. Country or Parish, State RIO ARRIBA/NM			
12. CHE	CK THE APPROPRIATE BOX(ES) TO I	NDICATE	NATURE	OF NOTIO	CE, REPORT OR OT	HER D	ATA	
TYPE OF SUBMISSION			TYP	E OF ACT	TION			
Notice of Intent	Acidize Dec	epen		Produ	action (Start/Resume)		Water Shut-Off	
		draulic Fra	_	=	mation		Well Integrity	
Subsequent Report		w Constru		=	mplete	~	Other	
Final Abandonment Notice		g and Aba g Back	indon	_	orarily Abandon Disposal			
completion of the involved operation completed. Final Abandonment Not is ready for final inspection.) REQUEST TO PLUG AND AB	I be perfonned or provide the Bond No. or ns. If the operation results in a multiple or ices must be filed only after all requireme. ANDON WELL PER THE ATTACHED LBORE DIAGRAMS AND RECLAMAT	ompletion nts, includ	or recomple ling reclamand	etion in a r ation, have	new interval, a Form 3 been completed and	3160-4 i the ope	must be filed once testing has been	
14. I hereby certify that the foregoing is HEATHER HUNTINGTON / Ph: (50	, , , ,	Title	Permitting	Technicia	n			
Signature Date			te 07/28/2022					
	THE SPACE FOR FEI	DERAL	OR STA	ATE OF	ICE USE			
Approved by								
KENNETH G RENNICK / Ph: (505)) 564-7742 / Approved	T	Petrol	eum Engi	ineer	Date	08/04/2022	
	ned. Approval of this notice does not warra quitable title to those rights in the subject duct operations thereon.		Office RIO	PUERCO)			
	B U.S.C Section 1212, make it a crime for			y and willf	fully to make to any d	epartme	ent or agency of the United States	

(Instructions on page 2)

ENDURING RESOURCES IV, LLC

PLUG AND ABANDONMENT PROCEDURE

WELL: JICARILLA C24 **API:** 30-039-05826 ER WELL: NM01459.01

LOCATION: 1980' FNL & 1980' FWL, Sec.27, 25N, 05W

COUNTY: RIO ARRIBA

STATE: NM

AFE: W001556

- **NOTES:** 1) All cement volumes assume 100% excess volume outside pipe and 50' excess inside pipe. Cement will be Type III (14.6 ppg and 1.39 cuft/sx), or similar. A stabilizing wellbore fluid with density of 8.3 ppg will be sufficient to balance pressures encountered in the well.
 - 2) Any waste fluids circulated from the well to surface, including excess cement, will be stored in steel tanks and then disposed of at an approved disposal facility.
 - 3) Notify BLM and NMOCD prior to beginning P&A well-work operations. Comply with all BLM and NMOCD regulations. Obtain approval from BLM and NMOCD prior to making any changes or adjustments to the approved procedure.
 - 4) Complete Permission to Perform Work permit with the BIA prior to beginning P&A well-work
 - 5) Plugs will be adjusted as necessary depending on the results of of any RCBLs and pressure tests. All logs and pressure test results will be submitted / reported to Regulatory Agencies.
 - 6) Wait on cement, tag, and spot additional cement plugs as necessary depending on results of casing pressure tests.
 - 7) Ensure all contractors have necessary permits to perform work on the Jicarilla Apache Nation Reservation.
 - 8) Hold safety meetings daily (minimum) with all personnel on location. Record tubing, casing, and bradenhead pressures daily on reports.
 - 9) Test and install rig anchors, if necessary (if rig does not have a base-beam).

- **PROCEDURE:** 1) MIRU daylight pulling unit and associated equipment.
 - 2) Blow down well. Kill well, if necessary.
 - 3) ND WH. NU BOPE.
 - 4) TOOH & LD production tubing.
 - 5) MU 4-3/4" bit & casing scraper on 2-3/8" work-string. TIH to top Gallup perf at 6,111'. TOOH.
 - **6)** Set 5-1/2" CR @ 6,061' for Plug #1.
 - 7) Fill casing with water (note: attempt to fill well with full casing volume. Chacra perfs from 3,622' - 3,644' will likely prevent being able to fully load the hole).
 - 8) MIRU WL. RIH with GR/CCL/RCBL from 6,061' to surface (or to fluid level). RD WL.
 - 9) PLUG #1: GALLUP PERFS & GALLUP TOP

TIH with 2-3/8" work-string. Pump cement. TOOH.

5-1/2" CR: 6,061'

Plug Coverage: 5,961' to 6,061'

Cement Volume: 15 sx

15 sx TOTAL

10) PLUG #2: MANCOS TOP

TIH with 5-1/2" CR on 2-3/8" work-string. Set CR. Pump cement. TOOH.

5-1/2" CR: 5,456'

Plug Coverage: 5,356' to 5,456'

Cement Volume: 15 sx

15 sx TOTAL

11) PLUG #3: CLIFFHOUSE TOP

RIH with WL. Perf squeeze holes. TIH with 5-1/2" CR on 2-3/8" work-string. Set CR. Pump cement. TOOH.

Squeeze holes: 4,079'

5-1/2" CR: 4,029'

Plug Coverage: 3,979' to 4,079'

Cement Volume: 42 sx THRU CICR

10 sx *ABOVE CICR* **52 sx** *TOTAL*

12) PLUG #4: CHACRA PERFS & CHACRA TOP

TIH with 5-1/2" CR on 2-3/8" work-string. Set CR. TOOH. Load and pressure test casing to 550 psig. MIRU WL. Run GR/CCL/RCBL from 3,572' to surface (if unable to complete CBL to surface intitially). RD WL. TIH with 2-3/8" work-string. Pump cement. PUH to spot additional plug.

5-1/2" CR: 3,572'

Plug Coverage: 3,176' to 3,572'

Cement Volume:

43 sx TOTAL

13) PLUG #5: PICTURED CLIFFS, FRUITLAND, KIRTLAND, OJO ALAMO TOP

43 sx

Spot balanced plug down work-string. TOH.

Plug Coverage: 2,182' to 2,796'

Cement Volume: 64 sx

64 sx TOTAL

14) PLUG #6: NACIMIENTO TOP

RIH with WL. Perf squeeze holes. TIH with 5-1/2" CR on 2-3/8" work-string. Pump cement. TOOH.

Squeeze holes: 1,117'

5-1/2" CR: 1,067'

Plug Coverage: 1,017' to 1,117'

Cement Volume: 42 sx THRU CICR

15) PLUG #7: SURFACE CASING SHOE, SURFACE

RIH with WL. Perf squeeze holes. TIH with 5-1/2" CR on 2-3/8" work-string. Pump cement. TOOH.

 Squeeze holes:
 359'

 5-1/2" CR:
 309'

 Plug Coverage:
 0'
 to
 359'

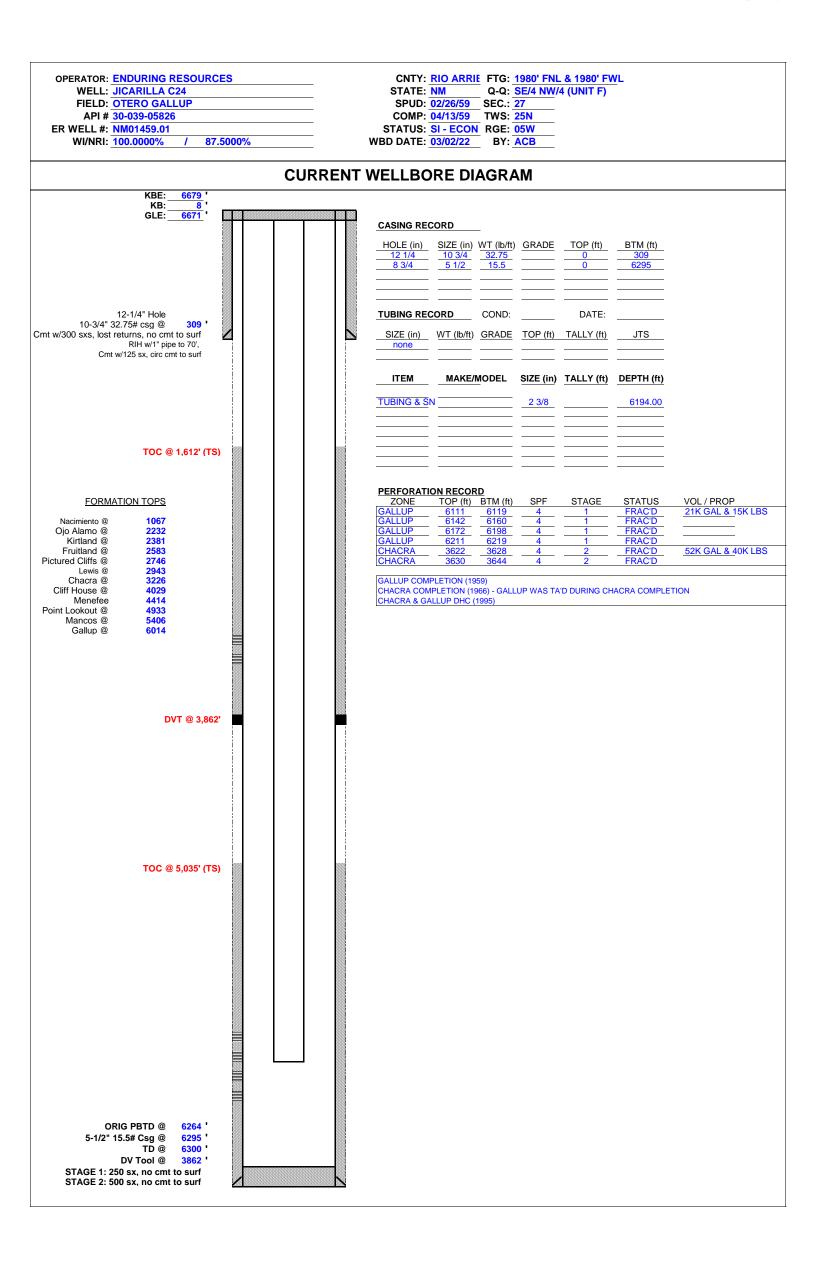
 Cement Volume:
 202 sx
 THRU CICR

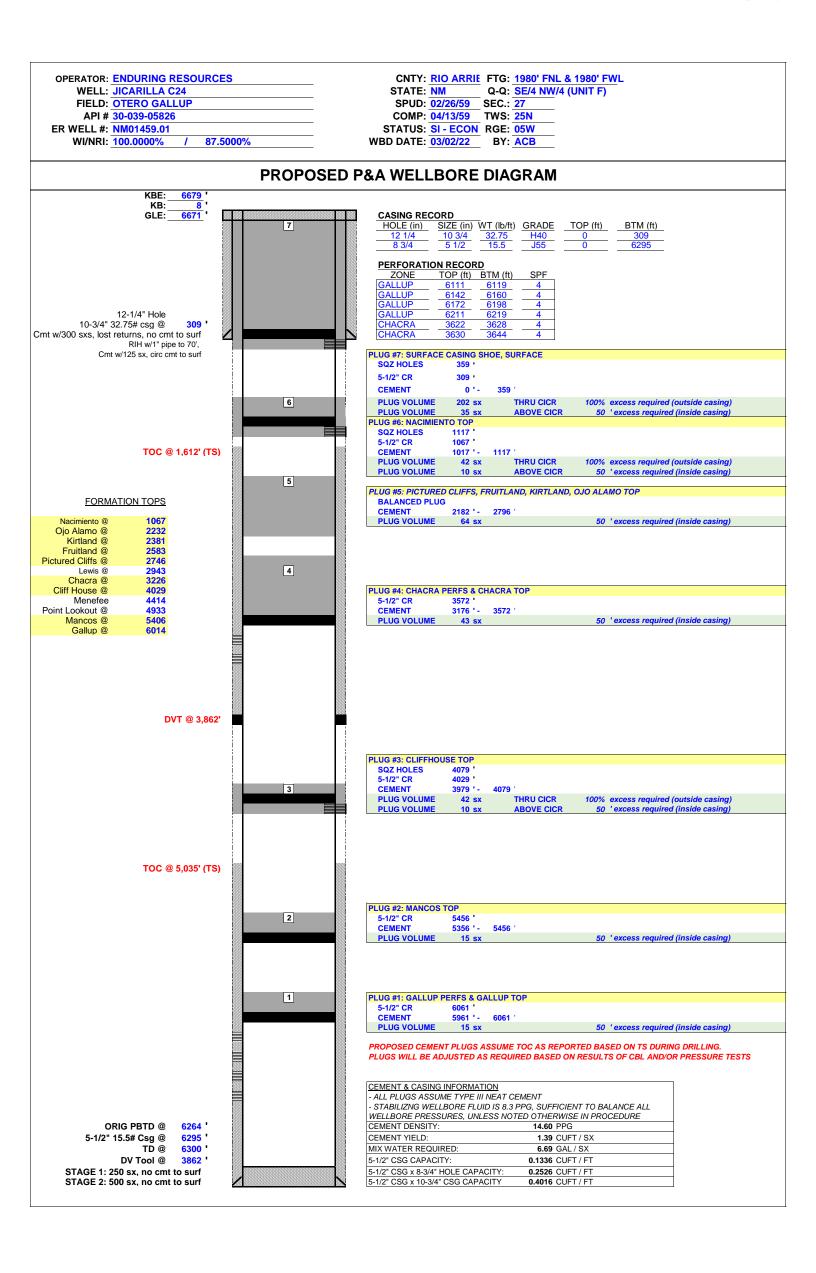
 35 sx
 ABOVE CICR

 237 sx
 TOTAL

- **16)** ND BOPE. Cut off casing and wellhead (minimum of 3' below finished grade). Top off annulus and casing with cement, if required. RDMO cement equipment. Install P&A marker to comply with BLM and NMOCD and Jicarilla Apache Nation regulations. RDMO.
- **17)** Complete surface reclamation as per approved reclamation plan.

Created by: A. Bridge 3/3/2022





BLM FLUID MINERALS P&A Geologic Report

Date Completed: 8/4/2022

Well No. Jicarilla C #24 (API# 30-03	Location	1980	FNL	&	1980	FWL	
Lease No. JIC34		Sec. 27	T25N			R05W	
Operator Enduring Resources, LLC		County	Rio Arriba		State	New Mexico	
Total Depth 6300'	PBTD 6264'	Formation Gallup/Chacra					
Elevation (GL)	Elevation (KE	3) 6679'					

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose			Surface	690	Surface/possible freshwater sands
Nacimiento			690	2232	Possible freshwater sands
Ojo Alamo Ss			2232	2381	Aquifer (possible freshwater)
Kirtland Shale			2381	2583	Possible gas
Fruitland			2583	2746	Coal/Gas/Water
Pictured Cliffs Ss			2746	2943	Probable Gas
Lewis Shale			2943	3226	
Chacra			3226	4353	Gas
Cliff House Ss			4353	4414	Water/probable gas
Menefee			4414	4933	Coal/Ss/Water/probable gas
Point Lookout Ss			4933	5127	Probable water/O&G
Mancos Shale			5127	6014	Probable O&G
Gallup			6014	PBTD	O&G
Greenhorn					
Graneros Shale					
Dakota Ss					
Morrison					

Remarks:

P & A

- BLM picks for the Nacimiento, Cliff House, and Mancos formation tops vary from operator.
- Adjust Plug #2 (Mancos) to cover BLM formation top pick at 5127'.
- Adjust Plug #3 (Cliff House) to cover BLM formation top pick at 4353'.
- Adjust Plug #6 (Nacimiento) to cover BLM formation top pick at 690'.
- The plugs proposed in the P&A procedure, with recommended changes, will adequately protect any freshwater sands in this well bore.
- Chacra perfs 3622' 3644'.
- Gallup perfs 6111' 6219'.

Reference Well:

1) **Formation Tops** Same

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 <u>minimum general</u> 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.

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- 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 H_2S .
- 8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, 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.

(October 2012 Revision)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FARMINGTON DISTRICT OFFICE

6251 COLLEGE BLVD. FARMINGTON, NEW MEXICO 87402

AFMSS 2 Sundry ID 2684533

Attachment to notice of Intention to Abandon

Well: Jicarilla C 24

CONDITIONS OF APPROVAL

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
- 2. The following modifications to your plugging program are to be made:
 - a) Adjust Plug #2 (Mancos) to cover BLM formation top pick at 5127'.
 - b) Adjust Plug #3 (Cliff House) to cover BLM formation top pick at 4353'.
 - c) Adjust Plug #6 (Nacimiento) to cover BLM formation top pick at 690'.
- 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 8/4/2022

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

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 132187

CONDITIONS

Operator:	OGRID:
ENDURING RESOURCES, LLC	372286
6300 S Syracuse Way, Suite 525	Action Number:
Centennial, CO 80111	132187
	Action Type:
	[C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	CBL required	8/12/2022
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	8/12/2022
kpickford	Adhere to BLM approved plugs and COAs. See GEO Report	8/12/2022