

Well Name: NAVAJO TRIBE AR	Well Location: T26N / R18W / SEC 27 / NESE / 36.45732 / -108.73898	County or Parish/State: SAN JUAN / NM
Well Number: 4	Type of Well: OIL WELL	Allottee or Tribe Name: SHIPROCK
Lease Number: 142006038103	Unit or CA Name:	Unit or CA Number:
US Well Number: 300452137800S1	Well Status: Oil Well Shut In	Operator: NAVAJO NATION OIL & GAS COMPANY

**Notice of Intent**

Sundry ID: 2669411

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 05/02/2022

Time Sundry Submitted: 09:43

Date proposed operation will begin: 05/02/2022

**Procedure Description:** Please find attached the P&A plan for the subject well. NO Reclamation plan is attached as onsite is coordinated with BIA.

**Surface Disturbance**

Is any additional surface disturbance proposed?: No

**NOI Attachments****Procedure Description**

Navajo\_\_Tribe\_\_AR\_\_004\_P\_A\_20220502094247.pdf

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JUAN / NM

Well Number: 4

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SHIPROCK

Lease Number: 142006038103

Unit or CA Name:

Unit or CA Number:

US Well Number: 300452137800S1

Well Status: Oil Well Shut In

Operator: NAVAJO NATION OIL  
& GAS COMPANY**Conditions of Approval****Additional**

General\_Requirement\_PxA\_20220510084048.pdf

2669411\_NOIA\_4\_3004521378\_KR\_05102022\_20220510084034.pdf

26N18W27IPbc\_Navajo\_Tribe\_AR\_4\_20220510080121.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: ARLEEN SMITH

Signed on: MAY 02, 2022 09:43 AM

Name: NAVAJO NATION OIL &amp; GAS COMPANY

Title: Regulatory Specialist

Street Address: 332 RD 3100

City: AZTEC

State: NM

Phone: (505) 327-4892

Email address: ARLEEN@WALSHENG.NET

**Field**

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

**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: 05/10/2022

Signature: Kenneth Rennick

**P&A Procedure****Navajo Nation Oil & Gas Company – Navajo Tribe AR #004****Tocito Dome**

1880' FSL &amp; 660' FEL, Section 27, T26N, R18W

San Juan County, NM, API #30-045-21378

**Plug & Abandonment Procedure:**

Note: All cement volumes use 100% excess outside casing and 50' excess inside pipe. Stabilizing wellbore fluid will be 8.33 ppg, sufficient to balance all exposed formation pressures. All cement will be ASTM Class G neat 1.15 ft<sup>3</sup>/sk or equivalent. Note: Circulated cement on surface casing. Procedure based on calculated production TOC @ 4022'. No record of CBL on file.

**Prior to Mobilization**

1. Notify BLM & NN Minerals Dept
2. Verify all cement volumes based on actual slurry to be pumped. Calculations based on 1.15 ft<sup>3</sup>/sk.
3. Comply with all COA's from BLM & NN Minerals Dept

**P&A Procedure**

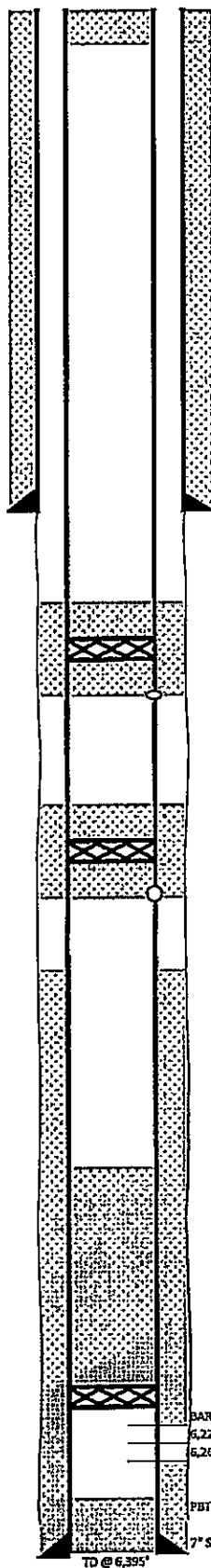
1. MIRU Service Unit and required cement equipment.
2. ND horse head. LD stuffing box and polished rods/pump (hot oil if necessary).
3. ND WH, NU BOP, RU rig floor and 2-7/8" handling tools
4. TOH w/ tubing. Note: No record of TAC. Attempt to release TAC if tubing appears stuck)
5. RT 5 1/2" scrapper to 6200'.
6. RIH & set CICR at 6187'. Pressure test tubing to 500 psi. Role hole with fresh water. PT casing to 500 psi.
7. Plug #1, 6178' - 5857' (Barker Creek Top @ 6201', Desert Creek Top @ 6018', Ismay Top 5907' Perfs: 6228' - 6280'): Sting out of retainer, Mix and pump 70 sks of Class G Neat (80.5 cf) in balanced plug on top of CICR. PU 200' above TOC reverse circulate to clean tubing. PT casing to 500 psi if previous didn't pass. TOOHL setting tool. If required, WOC and tag and re-spot if necessary.
8. MIRU WL and run CBL. CBL to determine uphole inside/outside plugs.
9. Plug #2, 3621' - 3721' (DeChelly Top: 3671'): MIRU WL shoot 4 spf @ 3721'. TIH and set CICR @ 3671'. Sting into CICR Mix & pump 27 sks (31.05 cf) of Class G cement (or equivalent). Sting out of CICR and mix and pump 29 sks (33.35 cf) of Class G Cement in balanced plug. PU 200' above TOC and reverse circulate tubing clean. TIH & tag cement to confirm TOC (not necessary if pressure test OK). Re-spot cement if necessary.
10. Plug #3 1968' - 2068' (Entrada Top at 2018'): MIRU WL shoot 4 spf @ 2068'. TIH and set CICR @ 2018'. Sting into CICR Mix & pump 27 sks (31.05 cf) of Class G cement (or equivalent). Sting out of CICR and mix and pump 29 sks (33.35 cf) of Class G Cement in balanced plug. PU 200' above TOC and reverse circulate tubing clean. TIH & tag cement to confirm TOC (not necessary if pressure test OK). Re-spot cement if necessary.
11. Plug #6, 0' - 100' (Surface Plug). Note: Circulated cement to surface on primary surface casing cement job. Mix and pump 19 sks (21.85 ft<sup>3</sup>) to fill inside of casing. Top off as necessary.

12. ND BOP and cut off wellhead below surface casing flange, top off casing and annulus as necessary. Install P&A marker and cut off and/or remove anchors. RD, MOL - Restore location per BLM stipulations. Take pictures from all cardinal directions. Ensure to notify project management of all remaining equipment on location once plugging is complete.

Kyle Mason

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Operations Engineer



WELL: NAVAJO TRIBE AR 4-27	COUNTY: SAN JUAN	API #: 30-045-21378
FIELD: TOCITO DOME	STATE: NM	SPUD: 12/1/1973
FORMATION: BARKER CREEK	LOCATION: S27-T26N-R18W	
TD: 6,395'	PSTD: 6,312'	ELEVATION: GL= 5,612' KB= 5,624'

**PLUG #4 (Surface)**  
Surface - 100'  
Inside: 19 sxs Class G Neat (21.85 cf)

Set CCR @ 2018'

**PLUG #3 (Entrada)**  
1868' - 2068'  
Outside: 27 sxs Class G Neat (31.05 cf)  
Inside: 29 sxs Class G Neat (33.35 cf)

Set CCR @ 3672'

**PLUG #2 (DeChelly)**  
3621' - 3721'  
Outside: 27 sxs Class G Neat (31.05 cf)  
Inside: 29 sxs Class G Neat (33.35 cf)

Calculated TOC = 4022'

Set CCR @ 6178'

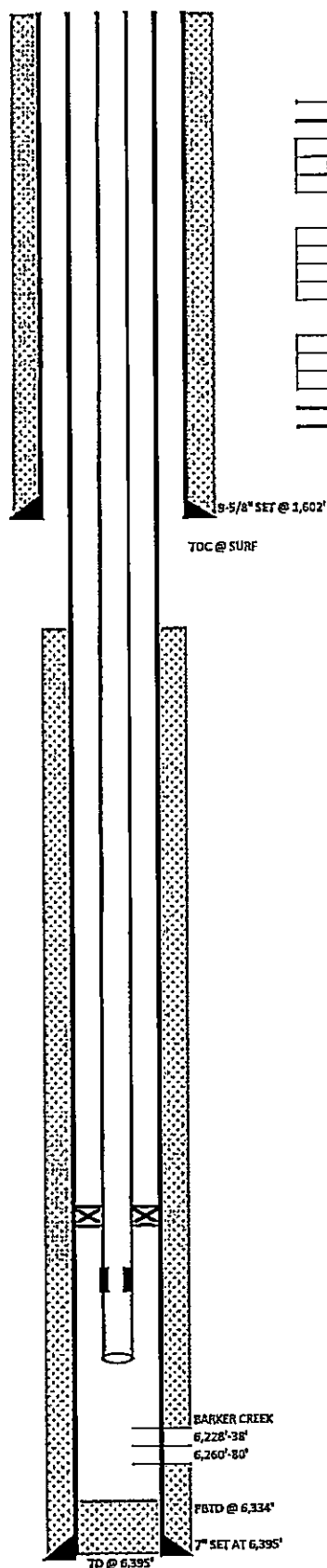
**PLUG #1 (BARKER CREEK / DESERT CREEK / ISMAY Group)**  
6178'-5857' - 70 sxs Class G Neat (80.5 cf)

FORMATION TOPS		CAPACITIES	
DAKOTA	740'	TUBULAR CAPACITY	BBU/FT CU FT/FT
TODILTO	2,000'	TUBING	
ENTRADA	2,018'	CASING	
DECHELLE	3,671'	ANNULAR CAPACITY	
ORGAN ROCK	4,294'		
CUTLER	4,910'	TUB X CSG CSG X OH	
HONAKER TRAIL	5,426'		
ISMAY	5,907'		
DESERT CREEK	6,018'		
AKAH	6,116'		
BARKER CREEK	6,201'		

#### TUBULAR PERFORMANCE

MATERIAL	TENSILE (LBS)	BURST (PSIA)	COLLAPSE (PSIA)	ID (IN)	DRIFT (IN)
9-5/8" 40.0# S-95 LT&C					
7" 29.0/25.0# FLUSH JOINT					
2-7/8" 6.5# J-55 EUE	99,660	7,260	7,680	2.441	2.347

PREPARED BY J. WRIGHT 4/18/2022



WELL:	NAVAJO TRIBE AR 4-27	COUNTY:	SAN JUAN	API#:	30-045-2137B
FIELD:	TOCITO DOME	STATE:	NM	SPUD:	12/1/1973
FORMATION:	BARKER CREEK	LOCATION:	S27-726N-R18W		
TD: 6,395'	PBTD: 6,312'	ELEVATION:	GL= 5,612'	KB=	5,624'

CASING RECORD								
SURFACE CASING								
OD	WT/FT	GRADE	THD	TOP	BTM	NO JTS	BIT SZ	TOP CMT
9-5/8"	40.0#	S-95	LY&C	SURF	1,602'	37	12-1/4"	600
								SURF

PRODUCTION CASING								
OD	WT/FT	GRADE	THD	TOP	BTM	NO JTS	BIT SZ	TOP CMT
7"	29.0#			SURF	6,395'	148	8-3/4"	275
	26.0#							UNK

LINER								
OD	WT/FT	GRADE	THD	TOP	BTM	NO JTS	BIT SZ	TOP CMT

TUBING								
OD	WT/FT	GRADE	THD	TOP	BTM	NO JTS	BIT SZ	TOP CMT
2-7/8"	6.5#	J-55	EUE	SURF	6,299		4-3/4"	

PERFORATION RECORD					
DATE	TOP	BOTTOM	SPF	ZONE	STATUS
01/05/74	6,260'	6,280'	2 ISPF	BARKER CK	
01/05/74	6,228'	6,238'	2 ISPF	BARKER CK	

STIMULATION RECORD					
DEPTH INTERVAL MD	NET-FT	GAL	STIM FLUID	GAL-NET FT	
6,260 - 6,280	30	1500	1500 GAL 28% HCL	50	
6,228 - 6,238	30	750	750 GAL 28% HCL	25	
6,260 - 6,280	30	750	750 GAL 28% HCL	25	
6,228 - 6,238	30	750	750 GAL 28% HCL	25	

REMARKS		
TUBING DETAIL		
GEOLOGIC TOPS		
	DAKOTA	740'
	TOCITO	2,000'
	ENTRADA	2,016'
	DECHELY	3,671'
	ORGAN ROCK	4,294'
	CUTLER	4,910'
	HONAKER TRAIL	5,426'
	ISMAY	5,907'
	DESERT CREEK	6,018'
	AKAH	6,216'
	BARKER CREEK	6,201'
OTHER		
SURF LOCATION: 1,880' FSL & 660' FEL		
LEASE #:		
PUMP: N/A		

MISCELLANEOUS			CAPACITIES	
WIM:	100%		TUBULAR CAPACITY	BBT/FT
NRM:	80%			CU FT/FT
BHT:			TUBING	
BHP:			CASING	
EST SHP:				
LOGS:			ANNULAR CAPACITY	
			TBG X CSG	
			CSG X OIL	

TUBULAR PERFORMANCE					
MATERIAL	TENSILE (LBS)	BURST (PSIA)	COLLAPSE (PSIA)	ID (IN)	DRIFT (IN)
9-5/8" 40.0# S-95 LY&C					
7" 29.0/26.0# FLUSH JOINT					
2-7/8" 6.5# J-55 EUE	99,560	7,260	7,680	2.441	2.347

PREPARED BY J. WRIGHT 4/18/2022  
LAST UPDATE:



**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 H<sub>2</sub>S.

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.



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

AFMSS 2 Sundry ID 2669411

Attachment to notice of Intention to Abandon

Well: Navajo Tribe AR 4

**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) Add an inside/outside plug to cover the surface casing shoe at 1602'.
  - b) Add a plug to cover the Morrison formation top at 965'.
  - c) Add a plug to cover the Dakota formation top at 740'.
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 5/10/2022

# BLM FLUID MINERALS P&A Geologic Report

Date Completed: 05/10/2022

Well No. Navajo Tribe AR #4 (API# 30-045-21378)	Location	1880	FSL	&	660	FEL
Lease No. 142006038103	Sec. 27	T26N			R18W	
Operator Navajo Nation Oil & Gas Company	County	San Juan		State	New Mexico	
Total Depth 6395'	PBTD 6334'	Formation Barker Creek				
Elevation (GL) 5612'		Elevation (KB) 5624'				

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
Mancos Shale			Surface	740	Surface/Probable fresh or useable water sands
Gallup Ss					
Dakota Ss			740	965	Probable fresh or useable water sands
Morrison Fm.			965	2000	Probable fresh or useable water sands
Todilto Ls			2000	2018	
Entrada Ss			2018	2758	Probable fresh or useable water sands
Navajo Ss					
Wingate Ss					
Chinle Fm.			2758	3671	Probable fresh or useable water sands
DeChelly Ss			3671	4294	Probable fresh or useable water sands
Organ Rock			4294	4910	Probable useable or slightly brackish water sands
Cutler			4910	5426	Probable useable or slightly brackish water sands
Hermosa Group (Honaker Trail)			5426	5907	Probable saline water/Potential O&G
Ismay (upper)			5907	6018	Probable saline water/Potential O&G
Desert Creek			6018	6115	Probable saline water/Potential O&G
Akah			6115	6201	Probable saline water/Potential O&G
Barker Creek			6201	PBTD	O&G/Water/N2/Helium/CO2
Molas					
Mississippian					
Ouray					

Remarks:

P &amp; A

- Add an inside/outside plug to cover the surface casing shoe at 1602'.
- Add a plug to cover the Morrison formation top at 965'.
- Add a plug to cover the Dakota formation top at 740'.
- Barker Creek perms 6228' – 6280'.

Reference Well:1) **Formation Tops**

Same

Prepared by: Chris Wenman

**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 105619

CONDITIONS

Operator: NNOGC EXPLORATION AND PRODUCTION, LLC P.O. Box 4439 Window Rock, AZ 86515	OGRID: 292875
	Action Number: 105619
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	CBL required	5/13/2022
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	5/13/2022
kpickford	Adhere to BLM approved plugs and COAs. See GEO Report	5/13/2022