



Well Name: CBM A POD 10 H

Well Location: T27N / R14W / SEC 10 /  
SENE /

County or Parish/State: SAN  
JUAN / NM

Well Number: 1

Type of Well: CONVENTIONAL GAS  
WELL

Allottee or Tribe Name:  
EASTERN NAVAJO

Lease Number: NOG10081773

Unit or CA Name:

Unit or CA Number:

US Well Number: 300453534200S1

Well Status: Temporarily Abandoned

Operator: NAVAJO NATION OIL  
& GAS COMPANY

### Notice of Intent

Sundry ID: 2154129

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 04/07/2021

Time Sundry Submitted: 11:21

Date proposed operation will begin: 04/30/2021

Procedure Description: Please find attached the P&A Procedure

### Surface Disturbance

Is any additional surface disturbance proposed?: No

### NOI Attachments

Procedure Description

CBM\_POD\_A\_10\_\_20210407111959

<b>Well Name:</b> CBM A POD 10 H	<b>Well Location:</b> T27N / R14W / SEC 10 / SENE /	<b>County or Parish/State:</b> SAN JUAN / NM
<b>Well Number:</b> 1	<b>Type of Well:</b> CONVENTIONAL GAS WELL	<b>Allottee or Tribe Name:</b> EASTERN NAVAJO
<b>Lease Number:</b> NOG10081773	<b>Unit or CA Name:</b>	<b>Unit or CA Number:</b>
<b>US Well Number:</b> 300453534200S1	<b>Well Status:</b> Temporarily Abandoned	<b>Operator:</b> NAVAJO NATION OIL & GAS COMPANY

Conditions of Approval

Additional Reviews

General\_Requirement\_PxA\_20210803133108.pdf  
27N14W10HKd\_CBM\_A\_POD\_10H\_1\_20210803132842.pdf  
PxA\_Procedure\_4\_14\_21\_CBM\_POD\_A\_10\_H\_1\_20210609101100.pdf

Authorized Officer

CBM\_A\_POD\_10H\_1\_COA\_20210803141752.pdf

Operator Certification

*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 submission of Form 3160-5 or a Sundry Notice.*

<b>Operator Electronic Signature:</b> VANESSA FIELDS	<b>Signed on:</b> APR 07, 2021 11:16 AM
<b>Name:</b> NAVAJO NATION OIL & GAS COMPANY	
<b>Title:</b> Regulatory Manager	
<b>Street Address:</b> 7415 EAST MAIN STREET	
<b>City:</b> FARMINGTON	<b>State:</b> NM
<b>Phone:</b> (505) 327-4892	
<b>Email address:</b> VANESSA@WALSHENG.NET	

Field Representative

<b>Representative Name:</b> VANESSA FIELDS		
<b>Street Address:</b> 7415 EAST MAIN STREET		
<b>City:</b> FARMINGTON	<b>State:</b> NM	<b>Zip:</b> 87402
<b>Phone:</b> (150)578-7910		
<b>Email address:</b> vanessa@walsheng.net		

BLM Point of Contact

## P&A Procedure

**Navajo Nation Oil & Gas Company – CBM POD A 10 H#1**

Basin Dakota

1030' FNL & 1227' FEL, Section 10, T27N, R14W

San Juan County, New Mexico, API #30-045-35342

### 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. Cement calculation based on 5.5" 15.5# casing. Cement was circulated to surface during primary cement jobs on both the surface and production strings.

### 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

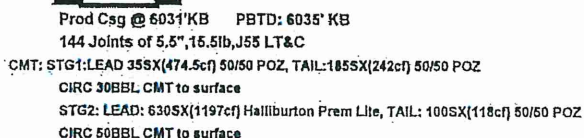
1. MIRU PU and cement equipment
2. ND WH, NU BOP, RU rig floor and 2 3/8" handling tools
3. TOH & Lay down rods/pump
4. TOH w/ tbg & RT scraper through perf interval (5666' – 5787')
5. RIH & set **CICR at 5616'**. Pressure test tubing to 1000 psi,
6. **Plug #1, 5566' – 5787' (Dakota Top at 5728', Greenhorn Top top at 5665', Perfs: 5666' - 5787')**: Mix & pump 35 sxs (40.3 ft<sup>3</sup>) of Class G neat cement (or equivalent). Sting out of retainer, leaving ~ 100' of cement on top of CICR. PU 200' above TOC and reverse circulate to load casing and clean tubing. Close BOP (pipe rams) and attempt to pressure test casing to 500 psi.
7. **Plug #2, 4745' – 4895' (Gallup Top at 4845')**: Mix & pump 18 sxs (20.7 ft<sup>3</sup>) of Class G neat cement (or equivalent) in balanced plug. PUH 100' above TOC and reverse circulate tubing clean. WOC & Tag plug if required.
8. **Plug #3, 3843' – 3993' (Mancos Top at 3943')**: Mix & pump 18 sxs (20.7 ft<sup>3</sup>) of Class G neat cement (or equivalent) in balanced plug. PUH 100' above TOC and reverse circulate tubing clean. WOC & Tag plug if required.
9. **Plug #4, 3650' – 3800' (Mesaverde Top at 3750')**: Mix & pump 18 sxs (20.7 ft<sup>3</sup>) of Class G neat cement (or equivalent) in balanced plug. PUH 100' above TOC and reverse circulate tubing clean. WOC & Tag plug if required.
10. **Plug #5, 753' – 1125' (Pictured Cliffs Top at 1075'; Fruitland Top at 853')**: Mix & pump 44 sxs (50.1 ft<sup>3</sup>) of Class G neat cement (or equivalent) in balanced plug. PUH 100' above TOC and reverse circulate tubing clean. WOC & Tag plug if required.

11. **Plug #6, Surface – 418' (9 5/8" surface casing shoe at 393').** Note: Circulated 20bbls of cement to surface on primary surface casing cement job. Mix and pump ~50 sxs (57.5 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 as directed.

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John Thompson  
Engineer



[illegible]

Tubing Detail - 2-3/8", 4.7#, J55, EUE 8rd			
	Length	Top	Bottom
KB Adjustment	12.00	0	12.00
195 lbs tbq	6089.61	12.00	6101.61
7" Weatherford B-2 anchor	3.00	6101.61	6104.61
3 lbs tbq	190.79	6104.61	6295.40
Seat Nipple	1.10	6295.40	6296.50
Perf Sub	3.10	6296.50	6299.60
Mud Anchor	30.00	6299.60	6329.60

Rod Detail - Norris S-87			
	Length	Top	Bottom
x" Polished Rod	4.00	0	4.00
7/8" Pony subs - 8', 6' & 4'	18.00	4.00	22.00
58' - 7/8" plain rods	1450.00	22.00	1472.00
111 - 3/4" plain rods	2775.00	1472.00	4247.00
81 - 3/4" guided rods	2025.00	4247.00	6272.00
2" x 3" stabilizer guide	4.00	6272.00	6276.00
2" x 1-1/4" x 12.3' x 12.6' RHBM	19.00	6276.00	6295.00
1-1/4" x 6' gas anchor	6.00	6295.00	6301.00

Pumping Unit:	320.	Gear Sheave:	42" 4 groove
API Designation:	C-320-G-305-1000?	Stroke Length:	74"
Samson Post SN:	T30F100-4-3027	Gear Ratio:	30.3:1
Gear Box SN:	D 320G-143	SPM:	8
Structural Unbalance:	16,250 LBS	Horse Power:	50
Power:	GE	Volts:	460/796
Power SN:	GK473008	Amps:	36
Sheave Size:	8" 4 groove	Belts:	4-C210

[illegible]

Date Drawn: Oct 2020

Ho 8-3

DV 37

Gravel



9-5/8", 36# at 393' KB  
Cmt w/ 230 (269 cf) sx G, circ 20 bbis to surf  
**Plug #6: Surf - 418' - (Surface - Kirtland formation)**  
**50 sx (57.5 cf) of Class G**

Hole Size  
8-3/4" Plug #5: 753' - 1125' (PC top: 1075'; Fruitland top: 853')  
44 sx (50.1 cf) of Class G

Plug #4: 3650' - 3800' (Mesaverde top: 3750')  
18 sx (20.7 cf) of Class G

DV Tool  
3796'

Plug #3: 3843' - 3993' (Mancos top: 3943')  
18 sx (20.7 cf) of Class G

Plug #2: 4745' - 4895' (Gallup Formation top: 4845')  
18 sx (20.7 cf) of Class G

Plug #1: 5566' - 5787' (Dakota/Greenhorn top: 5728')  
35 sx (40.3 cf) of Class G

CICR: 5616'

**Green Horn Perfs: 5666'-70' & 5700' - 03'**

Upper Dk Perfs: 5756'-62', 5785' - 87'

**CIBP: 5930'**

Lower Dk Perfs: 5940'-50'

Prod Csg @ 6031' KB      PBTD: 6035' KB  
144 Joints of 5.5" 15.5lb J55 LT&C

CMT: STG1: LEAD 35SX(474.5cf) 50/50 POZ, TAIL: 185SX(242cf) 50/50 POZ  
CIRC 30BBL CMT to surface  
STG2: LEAD: 630SX(1197cf) Halliburton Prem Lite, TAIL: 100SX(118cf) 50/50 POZ  
CIRC 50BBL CMT to surface

Tubing Detail - 2-3/8", 4.7#, J55, EUE 8rd			
	Length	Top	Bottom
KB Adjustment	12.00	0	12.00
195 jts tbq	6089.61	12.00	6101.61
7" Weatherford B-2 anchor	3.00	6101.61	6104.61
3 jts tbq	190.79	6104.61	6295.40
Seat Nipple	1.10	6295.40	6296.50
Perf Sub	3.10	6296.50	6299.60
Mud Anchor	30.00	6299.60	6329.60

Rod Detail - Norris S-87			
	Length	Top	Bottom
x" Polished Rod	4.00	0	4.00
7/8" Pony subs - 8', 6' & 4'	18.00	4.00	22.00
58 - 7/8" plain rods	1450.00	22.00	1472.00
111 - 3/4" plain rods	2775.00	1472.00	4247.00
81 - 3/4" guided rods	2025.00	4247.00	6272.00
2" x 3" stabilizer guide	4.00	6272.00	6276.00
1" x 1-1/4" x 12.3' x 12.6' RHBM	19.00	6276.00	6295.00
2-1/4" x 6' gas anchor	6.00	6295.00	6301.00

Pumping Unit:	320	Gear Sheave:	42" 4 groove
API Designation:	C-320-G-305-1000?	Stroke Length:	74"
Samson Post SN:	T30F100-4-3027	Gear Ratio:	30.3:1
Gear Box SN:	D 32G-143	SPM:	8
Structural Unbalance:	15,250 LBS	Horse Power:	50
Power:	GE	Volts:	460/796
Power SN:	GK473008	Amps:	36
Sheave Size:	8" 4 groove	Belts:	4-C210



# BLM FLUID MINERALS Geologic Report

Date Completed: 6/7/2021

Well No. CBM A POD 10H #1 (API# 30-045-35342)	Location	1330	FNL	&	1227	FEL
Lease No. NO-G-1008-1773	Sec. 10	T27N			R14W	
Operator Navajo Nation Oil & Gas Company	County	San Juan		State	New Mexico	
Total Depth 6035'	PBTD 5930'	Formation Dakota (Morrison @ TD)				
Elevation (GL) 5870'	Elevation (KB) 5883'					

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					Surface/Fresh water sands
Nacimiento Fm					Fresh water sands
Ojo Alamo Ss					Aquifer (fresh water)
Kirtland Shale	Surface	817			Possible usable water near surface
Fruitland Fm	817	1140			Coal/Gas/Possible water
Pictured Cliffs Ss	1140	1323			Gas
Lewis Shale	1323	1544			
Chacra	1544	1946			
Cliff House (La Ventana) Ss	1946	2035			Water/Possible gas
Menefee Fm	2035	3690			Coal/Ss/Water/Possible O&G
Point Lookout Ss	3690	3920			Probable water/Possible O&G
Mancos Shale	3920	4689			
Gallup	4689	5227			O&G/probable water
Sanostee	5227	5700			
Graneros Shale	5700	5726			
Dakota Ss	5726	PBTD			Gas/potential oil/water
Morrison					Water/possible gas

## Remarks:

### P & A

- No well log available for the subject well, tops were estimated based of well logs for Reference Wells #1 and #2.
- BLM formation top estimates for all formations vary from Operator estimates.
- Plug #2 (Gallup) should be adjusted to cover BLM formation top estimate @ 4689'.
- Plug #3 (Mancos) should be adjusted to cover BLM formation top estimate @ 3920'.
- BLM estimate for the Mesaverde formation top (Cliff House) is much shallower than Operator's. Recommend adding a plug to cover BLM estimate for Cliff House top @ 1946'.
- Plug #5 (Pictured Cliffs and Fruitland) should be adjusted to cover BLM formation top estimate for Pictured Cliffs @ 1140'.
- Perforations present in various formations from 5666'-5950'. CIBP proposed to be set at 5930'.

## Reference Well:

### 1) Formation Tops

(Surface-Gallup)  
Miami Oil Producers, Inc.  
Ojo Alamo #1  
Sec. 14, T27N, R14W  
GL 5982' KB 5989'

### 2) Formation Tops

(Sanostee-Morrison)  
Dugan Production Co.  
Rex Uranium #3  
990' FNL, 990' FWL  
Sec. 18, T27N, R13W  
GL 6055' KB 6067'

Prepared by: Chris Wenman

**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.

(October 2012 Revision)

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

Attachment to notice of  
Intention to Abandon:

Re: Permanent Abandonment  
Well: CBM A POD 10H #1

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. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.
3. The following modifications to your plugging program are to be made:
  - a) Set Plug #2 (4589 - 4739) ft. to cover Gallup top. BLM picks top of Gallup at 4689 ft.
  - b) Set Plug #3 (3820 - 3970) ft. to cover the Mancos top. BLM picks top of Mancos at 3920 ft.
  - c) Set cement plug (1846 - 1996) ft. to cover the Mesaverde top. BLM picks top of Cliff House at 1946 ft.
  - d) Set Plug #5 (1040 - 1190) ft. to cover the Pictured Cliffs top. BLM Picks top of Pictured Cliffs at 1140 ft.

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.

**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**

COMMENTS

Action 61501

COMMENTS

Operator: NNOGC EXPLORATION AND PRODUCTION, LLC 1625 Broadway Denver, CO 80202	OGRID: 292875
	Action Number: 61501
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 11/12/2021	11/12/2021



**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 61501

**CONDITIONS**

Operator: NNOGC EXPLORATION AND PRODUCTION, LLC 1625 Broadway Denver, CO 80202	OGRID: 292875
	Action Number: 61501
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

**CONDITIONS**

Created By	Condition	Condition Date
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	11/12/2021
kpickford	Adhere to BLM COAs for plugs on GEO report.	11/12/2021