Form 3160-5 (June 2015) DE B ¹ SUNDRY Do not use the abandoned we SUBMIT IN T 1. Type of Well ☐ Oil Well ⊠ Gas Well ☐ Ott 2. Name of Operator BP AMERICA PRODUCTION 3a. Address 1199 MAIN AVE SUITE 101 DURANGO, CO 81301 4. Location of Well (Footage, Sec., 7 Sec 25 T28N R9W NWNE 09 36.637560 N Lat, 107.736150	OMB Expires 5. Lease Serial No. 1420603779 6. If Indian, Allotte EASTERN NA 7. If Unit or CA/Ag SWI4051 8. Well Name and N NAVAJO ALLO 9. API Well No. 30-045-13252 10. Field and Pool of BLANCO MES 11. County or Paris	1420603779 6. If Indian, Allottee or Tribe Name EASTERN NAVAJO 7. If Unit or CA/Agreement, Name and/or No. SWI4051 8. Well Name and No. NAVAJO ALLOTTED GAS COM A 1			
12. CHECK THE AI	PPROPRIATE BOX(ES) TO INDIC	CATE NATURE OF	F NOTICE, REPORT, OR O	THER DATA	
TYPE OF SUBMISSION		TYPE OF	ACTION		
If the proposal is to deepen direction: Attach the Bond under which the wo following completion of the involved testing has been completed. Final Al determined that the site is ready for f	 Alter Casing H Casing Repair Change Plans Convert to Injection P Convert to Injection P Convert to Injection P Convert to Injection P and abandoned on 10/18/18 per the 	ace locations and measur on file with BLM/BIA tiple completion or reco all requirements, includi	ed and true vertical depths of all per . Required subsequent reports must mpletion in a new interval, a Form 3 ing reclamation, have been complete	tinent markers and zones. be filed within 30 days 160-4 must be filed once d and the operator has	
14. I hereby certify that the foregoing is Co Name (Printed/Typed) PATTI CA	Electronic Submission #440794 veri For BP AMERICA PRODUCT mmitted to AFMSS for processing by	JACK SAVAGE on 1	I Information System Farmington 1/09/2018 (19JWS0076SE) ATORY ANALYST		
Signature (Electronic S	Submission)	Date 10/23/20	Date 10/23/2018		
	THIS SPACE FOR FEDERAL OR STATE OFFICE USE				
certify that the applicant holds legal or equ	d. Approval of this notice does not warrant of uitable title to those rights in the subject lease	or e	UM ENGINEER	Date 11/09/2018	
which would entitle the applicant to condu- Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent	U.S.C. Section 1212, make it a crime for any statements or representations as to any matter	Office Farmingt		or agency of the United	
(Instructions on page 2) ** BLM REVISED **					
NMOCDIN					

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Final Abandonment Report

NAVAJO ALLOTTED GC A 001

API # 30-045-13252 Unit B, Sec. 25, T28N, R09W

Plug Summary

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Plug #1	10/5/18	Mesa Verde Perforation – Set cement retainer at 4332', pumped 18 sx class G cement (1.15 cf/sk 15.8 ppg) from CR at 4332' to 4232'.
Plug #2	10/5/18	Mesa Verde top – Pumped 18 sx class G cement (1.15 cf/sk 15.8 ppg) to spot balanced plug from 3827'-3727'
Plug #3	10/5/18	Chacra top – Pumped 18 sx class G cement (1.15 cf/sk 15.8 ppg) to spot balanced plug from 3128'-3028'
Plug #4	10/5/18	Pictured Cliffs top – Pumped 18 sx class G cement (1.15 cf/sk 15.8 ppg) to spot balanced plug from 2161'-2061'
Plug #5	10/10/18	Casing Stub & Fruitland top – Pumped 67 sx class G cement (1.15 cf/sk 15.8 ppg) from csg stub at 1904'-1605'. Unable to enter CSG stub to pump from planned 1950'; deviation approved by regulators.
Plug #6	10/11/18	Kirtland & Ojo Alamo tops – Pumped 122 sx class G cement (1.15 cf/sk 15.8 ppg) from 1606'-1087' to extend Plug #5 upward.
Plug #7	10/15/18	Pumped 12 sx class G cement (1.15 cf/sk 15.8 ppg) from 910'-860' as abandonment plug on top of cement retainer due to insufficient injectivity for circulation.
Plug #8a	10/16/18	Outside plug from 500'-400' to kill water influx. Pumped 20 sx class G cement (1.15 cf/sk 15.8 ppg) through cement retainer at 450' and out holes at 500'.
Plug #8b	10/17/18	Inside plug from 450'-500' on top of cement retainer. Pumped 12 sx class G cement (1.15 cf/sk 15.8 ppg).
Plug #9	10/17/18	Surface plug – Perforated at 279' and circulated 90 sx class G cement (1.15 cf/sk 15.8 ppg) through retainer at 265' to surface outside intermediate casing. Unstung and pumped 89 sx class G cement (1.15 cf/sk 15.8 ppg) until clean returns inside 7-5/8". Topped off to surface after cutting off wellhead (10/18/18).

Work Summary

Date	24-Hour Summary
10/2/2018	MIRUSU NDWH NU BOPE & TEST; POH & TALLY OUT PRODUCTION TBG
10/3/2018	E LINE SET CMT RET; LOAD & TEST CSG TO 500 PSI (PASS); RUN CBL &
	NOISE LOG
10/4/2018	WAIT ON PROCEDURE APPROVAL; RIG PUMP REPAIR; RIH WITH TBG, ID
	WELLHEAD
10/5/2018	SET BALANCED PLUGS 1-4, ND 7-1/16 BOP, NU 11" BOP.
10/8/2018	CHEM CUT 5.5" AT 1900', CIRC HOLE W/ 50 BBLS FRESH WATER
10/9/2018	CIRCULATE KILL FLUID, REMOVE 5-1/2" CASING SLIPS AND BUSHING, WORK
	CASING, MIRU E-LINE, FREE POINT AND CUT CASING, PULL 1 JT CASING AND
	SECURE WELL AND LOC, HAND WELL TO DRY WATCH CREW.
10/10/2018	PULL G-1/2" CASING, RUN CBL AND NOISE LOGS, SET BALANCE PLUG 1904'-
	1605', POH TUBING, SECURE WELL AND EQUIPMENT. SDFD.
10/11/2018	PRESSURE TEST 7 5/8" CASING (FAILED). TAG PLUG #5, RUN PACKER AND
	TEST CASING AGAIN (FAILED). PUMP PLUG #6, WOC, TAG PLUG 6, TEST
	CASING (FAILED), SECURE WELL
10/12/2018	HUNT HOLES, CONFIRMED ABOVE 390' & BELOW 265'. PERFORATE AT 920',
	SET CEMENT RETAINER AT 910', ATTEMPT TO CIRCULATE
10/15/2018	SPOT 12 SX CEMENT ON TOP OF RETAINER AT 910'. SHOOT SQZ HOLES AT



	500'. PUMPED DYE AND CHASED WITH 60 BBLS WATER. NO TRACE OF DYE. PUMPED 30 BBLS GEL. UNSET PKR. POH.
10/16/2018	SET PACKER AT 450', WAIT ON GEL, PUMP GEL, PUMP 2 ND GEL TREATMENT, POOH PACKER, RIH CMENT RETAINER AND SET AT 450', SPOT 100' OUTSIDE PLUG FROM 500'-400'.
10/17/2018	RIH AND PUMP, ATTEMPTING TO CIRCULATE UP BH (NO CIRCULATION). SET CEMENT PLUG FROM 450-400' INSIDE 7-5/8" CSG. RUN CBL FROM 400'- SURFACE. PERF AT 279', SET CEMENT RETAINER AT 265' AND CIRCUALTE OUTSIDE & INSIDE PLUG TO SURFACE. CLEAN UP, SDFD.
10/18/2018	CUT OFF WELLHEAD, WELD MARKER TO CASING, TOP OFF CEMENT INSIDE BOTH STRINGS AND SPOT REMAINDER IN CELLAR. RDMO.
	BOTT STRINGS AND SFOT REMAINDER IN GELLAR. RDMO.

Final Wellbore Diagram



Formation Tops Nacimiento Ojo Alamo

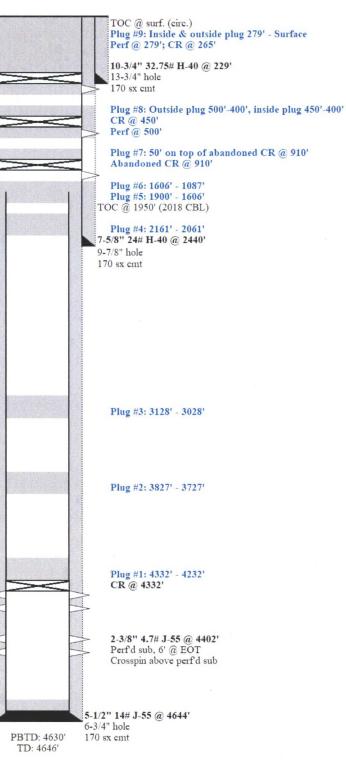
Kirtland Fruitland Pictured Cliffs

Lewis Chacra Cliff House

Menefee Point Lookout

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AAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA		12' KB GL: 5855'
Navajo Allotted G MV API #: 3004513 Unit B - Sec. 25 - T28 San Juan, NN	252 N - R09W	
San Juan, NN ion Tops nto no l Cliffs use bokout	4 Surface 1150 1330 2111 2280 3078 3778 3813 4355	
<u>erde Perforations</u> 4563' 2 spf 1/ 65k# 20/40 & water		



<u>Mesa Verde Perfo</u> 4382' - 4563' Frac'd w/ 65k# 20/

Powell, Brandon, EMNRD

From:	Andrew Carlson <andrew.carlson@bpx.com></andrew.carlson@bpx.com>
Sent:	Thursday, October 4, 2018 10:37 AM
То:	Powell, Brandon, EMNRD; Savage, Jack
Cc:	Eric Zoesch; Christopher Sandoz; Getulio Acosta Vasquez
Subject:	RE: [EXTERNAL] RE: [EXT] RE: BP America - Navajo Allotted Gas Com A 1 - 30-045-13252
	- B-25-28N-09W - San Juan County - Update

Brandon, Jack,

۴.

Thanks for your quick response this morning. We will definitely confer with you all if the Ojo plug fails to shut off the water source. Is it acceptable to both of you if we combine the plug for the 5-1/2" casing stub and the Fruitland top? It would be a single balanced plug from 1950' - 1750'.

I'll make the necessary modifications to the procedure and we'll get started today. We'll keep you both informed.

Thanks again,

Andrew Carlson Production Engineer BP America | West BU | SJS Areas 1 & 4 Office: +1 281.810.1535 Mobile: +1 678.982.7101

From: Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Sent: Thursday, October 4, 2018 10:31 AM
To: Savage, Jack <jwsavage@blm.gov>; Andrew Carlson <ANDREW.CARLSON@BPX.COM>
Cc: Eric Zoesch <Eric.Zoesch@BPX.COM>; Christopher Sandoz <CHRISTOPHER.SANDOZ@BPX.COM>; Getulio Acosta
Vasquez <GETULIO.A@BPX.COM>
Subject: RE: [EXTERNAL] RE: [EXT] RE: BP America - Navajo Allotted Gas Com A 1 - 30-045-13252 - B-25-28N-09W - San
Juan County - Update

Andrew,

We concur with the BLM's approval and conditions. The only additional condition we have is if the Ojo plug fails to stop the water flow you will need to get with the agencies prior to proceeding as this plug could end up being water cut due to the water flow.

Thank You

Brandon Powell Office: (505) 334-6178 ext. 116 "He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Savage, Jack <jwsavage@blm.gov>
Sent: Thursday, October 4, 2018 9:12 AM
To: Andrew Carlson <<u>ANDREW.CARLSON@bpx.com</u>>
Cc: Eric.Zoesch@bpx.com; Powell, Brandon, EMNRD <<u>Brandon.Powell@state.nm.us</u>>; Christopher Sandoz<<<u>CHRISTOPHER.SANDOZ@bpx.com</u>>; Getulio.A@bpx.com
Subject: Re: [EXTERNAL] RE: [EXT] RE: BP America - Navajo Allotted Gas Com A 1 - 30-045-13252 - B-25-28N-09W - San Juan County - Update

Andrew,

Thanks for the update. There are a few changes that have been made to your plug depths based on our tops, and I have added a Chacra plug as well. I have attached the COA and the geo report as you requested. Please let me know if you have any questions or concerns regarding the changes to your procedure.

Thanks,

On Thu, Oct 4, 2018 at 8:09 AM Andrew Carlson <<u>ANDREW.CARLSON@bpx.com</u>> wrote:

Brandon, Jack,

Based on the logs and Eric's comments below, we would like to propose the following changes to the procedure (attached). The estimated TOC is ~1950' from the CBL, and flow suggested from the noise log was present from 1250' to surface with restrictions/channeling at approximately 800', 700', 550', and 100'. We do not believe flow is present between the production and intermediate casings. A cement retainer was set at 4332' yesterday.

- 1. Set MV perforation plug as planned in original procedure (attached).
- Plug #2: Spot balanced plug to isolate the Mesa Verde top. Mix and pump 18 sx class G cement (1.15 cf/sk, 15.8 ppg) from 3827' 3727'.
- 3. Plug #3: Spot balanced plug to isolate the Pictured Cliffs top. Mix and pump 18 sx class G cement (1.15 cf/sk, 15.8 ppg) from 2232' 2132'.
- 4. Cut 5-1/2" production casing at ~1900'. Pull production casing from 1900' to surface.
- 5. **Plug #4:** Spot balanced plug to isolate the production casing stub. Mix and pump 18 sx class G cement (1.15 cf/sk, 15.8 ppg) from 1950' 1850'.
- 6. Run CBL, temperature, and noise logs inside 7-5/8" intermediate casing from 1850' to surface. Continue with originally outlined procedure.

Please let me know if you all approve these changes (as well as the original procedure) – I'll give you a call shortly to discuss.

Thanks,

Andrew Carlson

Production Engineer

BP America | West BU | SJS Areas 1 & 4

Office: +1 281.810.1535

Mobile: +1 678.982.7101

From: Eric Zoesch
Sent: Wednesday, October 3, 2018 4:59 PM
To: Savage, Jack <<u>jwsavage@blm.gov</u>>; Brandon Powell (<u>Brandon.Powell@state.nm.us</u>)<<<u>Brandon.Powell@state.nm.us</u>>
Cc: Christopher Sandoz <<u>CHRISTOPHER.SANDOZ@BPX.COM</u>>; Andrew Carlson <<u>ANDREW.CARLSON@BPX.COM</u>>
Subject: RE: [EXTERNAL] RE: [EXT] RE: BP America - Navajo Allotted Gas Com A 1 - 30-045-13252 - B-25-28N-09W - San Juan County - Update

Here are the logs. Inflow was interpreted to be 1250', around Ojo Alamo depth. Pressure test also passed 30 minutes; starting pressure was 525 psi and ending was 580 psi. Increase due to thermal effects.

Please contact Andrew with any questions or feedback. Will wait to begin P&A until the procedure is finalized by you.

Eric Zoesch

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Production Engineer

BP America | L48 | West BU | SJS Area 2

Mobile: +1 406.270.9837

From: Eric Zoesch
Sent: Wednesday, October 3, 2018 3:27 PM
To: 'Savage, Jack' <jwsavage@blm.gov>; 'Brandon Powell (Brandon.Powell@state.nm.us)'<<Brandon.Powell@state.nm.us)'
Cc: Christopher Sandoz CC: Christopher Sandoz CC: Christopher Sandoz CC: Christopher Sandoz CHRISTOPHER.SANDOZ@BPX.COM>; Andrew Carlson (andrew.carlson@bpx.com)
andrew.carlson@bpx.com)
Subject: RE: [EXTERNAL] RE: [EXT] RE: BP America - Navajo Allotted Gas Com A 1 - 30-045-13252 - B-25-28N-09W - San Juan County - Update">Subject: RE: [EXTERNAL] RE: [EXT] RE: BP America - Navajo Allotted Gas Com A 1 - 30-045-13252 - B-25-28N-09W - San Juan County - Update

Good Afternoon,

I wanted to let you know that I will be out of the office the rest of the week, so Andrew Carlson (cc'ed) will be handing the engineering side of things for this P&A while I'm gone. Please send your feedback on the procedure to both of us, and he will likely be the one sending you logs etc.

Logging is ongoing this afternoon.

Regards,

Eric Zoesch

Production Engineer

BP America | L48 | West BU | SJS Area 2

Mobile: +1 406.270.9837

From: Eric Zoesch
Sent: Wednesday, October 3, 2018 10:32 AM
To: 'Savage, Jack' <<u>jwsavage@blm.gov</u>>; 'Brandon Powell (<u>Brandon.Powell@state.nm.us</u>)'<<<u>Brandon.Powell@state.nm.us</u>>
Cc: Christopher Sandoz <<u>CHRISTOPHER.SANDOZ@BPX.COM</u>>
Subject: RE: [EXTERNAL] RE: [EXT] RE: BP America - Navajo Allotted Gas Com A 1 - 30-045-13252 - B-25-28N-09W - San Juan County - Update

Here is the P&A procedure with proposed schematic. We will send you logs as they are obtained & change the cementing strategy as needed. Please advise of any differences in plug depths as you see fit based on your interpretation of formation tops in the well.

Currently we are circulating the hole with water and preparing to pressure test the 5-1/2'' casing (step #3 in procedure). After that we will run logs.

Jack just advised me to proceed with the pressure test when ready, regardless of BLM rep presence.

Eric Zoesch

Production Engineer

BP America | L48 | West BU | SJS Area 2

Mobile: +1 406.270.9837

October 03, 2018

NMOCD & BLM

BP would like to permanently abandon the NAVAJO ALLOTTED GC A 001 - MV as per the proposed procedure and wellbore sketches.

PLUG AND ABANDONMENT PROCEDURE

Navajo Allotted GC A 001 990' FNL and 1700' FEL, Section 25, T28N, R09W San Juan County, New Mexico / API 30-045-132-5200 Lat: N 36.6375999 / Long: W -107.7366714

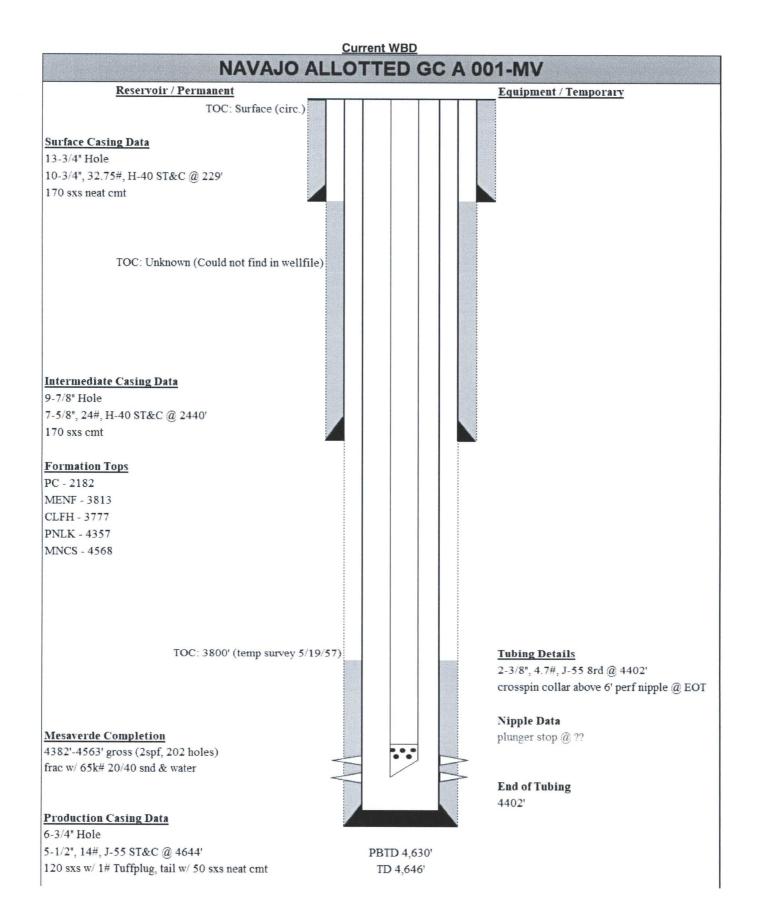
- Note: All cement volumes use 100% excess outside pipe and 50% excess inside. The stabilizing wellbore fluid will be 8.3 ppg water, sufficient to balance all exposed formation pressures. All cement will be Class G, mixed at 15.8 ppg with a 1.15 cf/sx yield.
 - Install and test rig anchors. Comply with all NMOCD, BLM, and Operator safety rules and regulations. Prepare a lined waste fluid pit. Conduct safety meeting for all personnel on location. MOL and RU daylight pulling unit. Record casing, tubing, intermediate, and bradenhead pressures. NU relief line and blow down well; kill well with water as necessary. ND wellhead and NU BOP. Function test BOP.
 - 2. Pull

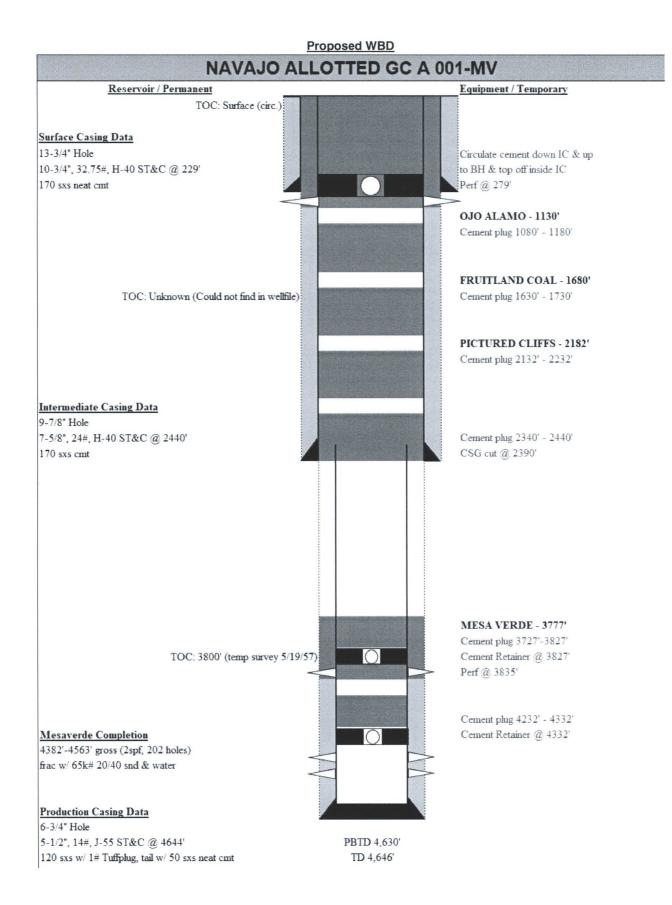
Rods:	□Yes	⊠No	Unknown					
Tubing:	⊠Yes	□No	Unknown	Size, L	ength:	<u>2.375", 440</u>	2'	
Packer:	□Yes	⊠No	□Unknown	Type:	N/A			
If this we	ell has r	ods or a	packer, then mo	odify the	work se	equence in st	tep #2 as ap	propriate.

NOTE: The BLM requires a CBL to be run on all wells where the cement did not circulate to surface or a CBL was not previously run. This procedure is prepared with the understanding that it may be modified based on the TOC from the CBLs.

- 3. Set cement retainer at 4332'. Pressure test 5-1/2" production casing to 500 psi for 30 minutes.
- 4. Run CBL, temperature, & noise logs inside 5-1/2" production casing from 4332' to surface while maintaining active bleed from BH to pit. Submit copies of logs to the NMOCD and BLM.
- Plug #1 (Above MV perforations, 4232' 4332'): Mix 18 sx Class G cement and spot on top of cement retainer at 4332'.
- Perforate 5-1/2" production casing at 3835' (assuming TOC at 3800' based on 1957 temperature survey is confirmed with CBL).
- Plug #2 (Mesa Verde top, 3727' 3827'): RIH with cement retainer and set at 3827'. Mix and pump 33 sx Class G cement; squeeze 15 sx Class G Cement into CR and spot remainder as cement plug inside casing from 3727' – 3827'.
- 8. Cut and pull 5-1/2" production casing at ~2390' (as indicated by CCL).

- Plug #3 (5-1/2" production casing stub, 2340' 2440'): Mix and pump 36 sx Class G cement across top of the 5-1/2" production casing from 2340' 2440'.
- Run CBL, temperature, & noise logs inside 7-5/8" intermediate casing from the top of Plug #3 to surface while maintaining an active bleed from BH to pit. Submit copies of logs to the NMOCD and BLM.
- Plug #4 (Pictured Cliffs top, 2132' 2232'): Mix 35 sx Class G cement and spot balanced plug inside 7-5/8" intermediate casing from 2132' – 2232'.
- Plug #5 (Fruitland Coal top, 1630' 1730'): Mix 35 sx Class G cement and spot balanced plug inside 7-5/8" intermediate casing from 1630' – 1730'.
- Plug #6 (Ojo Alamo top, 1080' 1180'): Mix 35 sx Class G cement and spot balanced plug inside casing 7-5/8" intermediate casing from 1080' – 1180'.
- 14. Perforate 7-5/8" intermediate casing at 279'.
- 15. RIH with cement retainer and set at 270'. Mix and pump 200 sx Class G cement and circulate cement to surface. Top off inside 7-5/8" intermediate casing to surface.
- 16. ND cementing valves and cut off wellhead. Fill annuli with cement as necessary. Install P&A marker in compliance with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL, and cut off anchors. Restore location per BLM stipulations.





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:

. A.

Re: Permanent Abandonment Well: Navajo Allotted GC A #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:
 - Add a cement plug (3128 3028) ft. to cover the Chacra top. BLM picks top of Chacra at 3078 ft.
 - b) Set Plug #4 (2161 2061) ft. to cover the Pictured Cliffs top. BLM picks top of Pictured Cliffs at 2111 ft.
 - c) Set Plug #5 (1850 1750) ft. to cover the Fruitland top. BLM picks top of Fruitland at 1800 ft.
 - d) Set Plug #6 (1380 1100) ft. to cover the Kirtland top and the entire Ojo Alamo interval. BLM picks top of Kirtland at 1330 ft. BLM picks top of Ojo Alamo at 1150 ft.

Operator will run CBL to surface to identify TOC. Submit electronic copy of the log for verification to the following addresses: <u>jwsavage@blm.gov</u> <u>brandon.powell@state.nm.us</u>

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.