

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

JUN 06 2016

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

5. Lease Serial No. **I-89-IND-58**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No. **Navajo #10**

9. API Well No. **30-045-08145**

10. Field and Pool, or Exploratory Area **Dakota Hogback**

11. County or Parish, State **San Juan, NM**

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

1. Type of Well  Oil Well  Gas Well  Other

2. Name of Operator **BP America c/o Anderson Engineering**

3a. Address **3901 East Plano Parkway, Plano, TX, 75074**

3b. Phone No. (include area code) **972-509-7022**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**990' FNL and 330' FEL, Sec. 19, T-29-N, R-16-W, NENE**

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

In August 2008 this well was re-entered and replugged because there was a small oil leak at the base of the P&A marker. In September 2015 this small leak re-appeared and herewith BP plans to re-enter this well again and repair the problem per the attached procedure.

A closed loop system will be utilized for waste fluid.

Contact Information - Anderson Engineering, Chuck Roberts, 972-509-7022 (office) and 214-435-0583 (cell)  
A-Plus Well Service, Bill Clark, 505-325-2627 (office) and 505-320-4174 (cell)

Notify NMOCD 24 hrs prior to beginning operations

This well is located on the Navajo Indian Reservation and Mr. Clark will be the representative for the Surface Restoration Plan site visit.

**BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS**

**SEE ATTACHED FOR CONDITIONS OF APPROVAL**

**OIL CONS. DIV DIST. 3**

**JUN 10 2016**

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

**Charles Roberts** Title **Project Manager**

Signature *Charles Roberts* Date **06/02/2016**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by *[Signature]* Title **PE** Date **6/8/16**

Conditions of approval, if any are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office **FFO**

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.

(Instructions on page 2)

# A-PLUS WELL SERVICE, INC.

P.O. BOX 1979  
Farmington, New Mexico 87499  
505-325-2627 \* fax: 505-325-1211

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## PLUG & ABANDONMENT PROCEDURE

May 18, 2016

### Navajo #10

Dakota Hogback Field  
990' FNL & 330' FEL, Section 19, T-29-N, R-16-W  
(Unit A - NE/NE) San Juan Co., New Mexico  
API No. 30-045-08145

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### Well Information:

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Spud: Oct 14, 1924

Completed: Nov 19, 1924

10" Casing set at 27'; pulled.

8-5/8" Casing set at 41'; may have been pulled, not visible at surface.

**6-5/8" Casing** set at 399'; no cementing details; 1999 Sundry reports it set at 339'.

**4-3/4" Casing** set at 652'; no cementing details.

Dec 1999: Amoco re-entered the 4-3/4" casing and drilled out to 605' in 4 days; filled inside of casing with cement; no report of CBL or perforating the 4-3/4" casing.

Aug 2008: BP America re-entered and re-plugged the well as follows:

Hot tapped the 6-5/8" casing and installed a 2" bradenhead valve.

Drilled out to 394' and pressure tested casing to 1000 PSI, held OK.

Ran CBL and BLM approved plugging procedure.

Perforate 3 holes at 230' and establish rate 2 bpm at 700 PSI outside the 4-3/4" casing.

**Plug #1** with CR at 200', squeeze 50 sxs Class B, 46 sxs below CR and 4 above with TOC at 159'. WOC.

Connect pump line onto the bradenhead valve and establish a rate of 1/8 bpm at 300 PSI into the 4-3/4" x 6-5/8" bradenhead annulus.

Perforate 3 holes at 150' and attempt to establish rate; pressured up to 800 PSI, slow bleed down. Then perforate 3 holes at 80'; set CR at 120'; established circulation between perforations at 150' and 80'.

**Plug #2** with CR at 120', squeeze total of 49 sxs Class B cement: 1) block squeeze 25 sxs below CR into perfs at 150' and up to perfs at 80' to fill annulus and the inside of 4-3/4" casing to surface; 2) sting out of CR; 3) continue to mix and pump 12 sxs to fill from top of CR to surface out the casing valve; 4) TOH and LD all tubing; 5) squeeze 12 more sxs down the 4-3/4" casing into the perfs at 80', final pressure 1/2 bpm at 500 PSI. Shut in and WOC.

Found cement at surface inside the 4-3/4" casing; did not cut off. Reinstalled marker.

# A-PLUS WELL SERVICE, INC.

May 18, 2016

Navajo #10

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## RE-ENTRY & PLUGGING PROCEDURE:

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Note: All cement volumes use 100% excess outside the pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.33 ppg, sufficient weight to balance all exposed formation pressures. Cement used will be Class B mixed at 15.6 ppg with a 1.18 cf/sx yield.

1. This project will use a closed loop system for waste fluids.
2. Set a water storage tank on location for fresh water. Set a steel waste pit and mud pit. Set a rig base beam. Have a portable toilet on location.
3. Complete a Hot Work permit, then hot tap the P&A marker for a 1" valve. Record pressure reading if present. Remove the P&A marker from the 4-3/4" casing collar at surface. Flush the casing and the bradenhead annulus with water. Remove the 4-3/4" x 6-5/8" "washer" from the wellhead. Prepare the 6-5/8" casing stub for a slip on collar. Weld a 7" - slip-on collar onto the 6-5/8" casing stub. Install a 7" x 2" swedge with valve onto the well. Shut in well. Weld 4 - 1" pad eyes onto the slip-on collar.
4. Comply with all applicable BLM and NMOCD regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Lay relief line to the steel waste pit. Install a tubing head with outlets, companion flange and a 7-1/16" 3M BOP with stripping head. Pressure Test BOP and wellhead to 1000 PSI.
5. Pick up 4-1/8" drill bit and a 3" drill collar. Drill out the cement inside the 4-3/4" casing down to the CR at 120'. Continue to pick up drill collars while drilling. Note the returns and/ or oil flows, if any, while drilling. Circulate the well clean and then TOH with the bit.
6. Pick up a 5-3/4" pilot mill, bit sub and a 10' - 2-7/8" EUE N-80 pup joint. *Rig up a cable pull down assembly between the wellhead pad eyes and the power swivel stiff arms with 9/16" wire rope and 4 snatch blocks.* Establish circulation and drill / mill out the 4-3/4" casing and annulus cement in the 6-5/8" casing. Drill down two 10' pup joints then replace with a full joint of 2-7/8" tubing. Repeat this procedure until 4-3/4" casing and cement inside the 6-5/8" casing is removed to 120'. Do not drill out the CR at 120'. Circulate the well clean.
7. Pressure test the 6-5/8" casing to 500 PSI. Note: the perforations at 80' may leak; attempt to establish rate. TOH with the tubing and LD the bit.
8. Rig up a wireline unit. Run a CBL from 120' to surface. Note: the perforating depth may be modified after the bond log information is available.
9. Perforate 6 HSC holes in the 6-5/8" casing at 118'. Attempt to establish rate into the squeeze hole up to 800 PSI.

## A-PLUS WELL SERVICE, INC.

May 18, 2016

Navajo #10

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### RE-ENTRY & PLUGGING PROCEDURE

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10. TIH with tubing and spot 150 gallons 7-1/2% HCl acid in the 6-5/8" casing. Pump into the new squeeze holes at 118' and 2008 squeeze holes at 80'. TOH with tubing.
11. Set a wireline 6-5/8" cement retainer at 110'. Then TIH with retainer stinger and tubing. Sting into the CR. Establish rate under the CR into the squeeze holes at 118'. May communicate to the 2008 squeeze holes at 80'.
12. **Plug #1 (118' to Surface):** Mix approximately 50 sxs Class B cement with an expanding agent:
  - 1) squeeze cement under the CR outside the 6-5/8" casing until a pressure of 800 PSI is obtained;
  - 2) sting out of the CR and fill the inside of the 6-5/8" casing up to surface, circulate good cement out the casing valve;
  - 3) TOH and LD the tubing;
  - 4) fill the casing with cement;
  - 5) and then hesitation squeeze cement down the 6-5/8" to get a final squeeze pressure of 800 PSI. WOC.
13. ND the BOP and wellhead. Cut off the casing below ground level. Fill the casing as necessary. Weld a cap plate (with a 1" weep hole in the center) onto the top of the 6-5/8" casing. Then weld the p&a marker on to the cap plate over the weep hole. Install a 1/2" threaded outlet on the maker at 6" above ground level; install a valve with the handle removed. RD and MOL. Clean up the location from the drilling and cementing operations.
14. Reclaim location and access road per the BLM and Navajo Nation approved restoration plan.

# Navajo #10

## Proposed Plugged Well

Hogback Dakota

990' FNL & 990' FEL, Section 19, T-29-N, R-16-W,  
 San Juan County, NM / API #30-045-08145  
 Lat: N 36.716810 / Long: W 108.5594500

Today's Date: **5/17/2016**

Spud: 10/14/1924

Elevation: 5003' GL

Completed: 11/19/1924 Open Hole

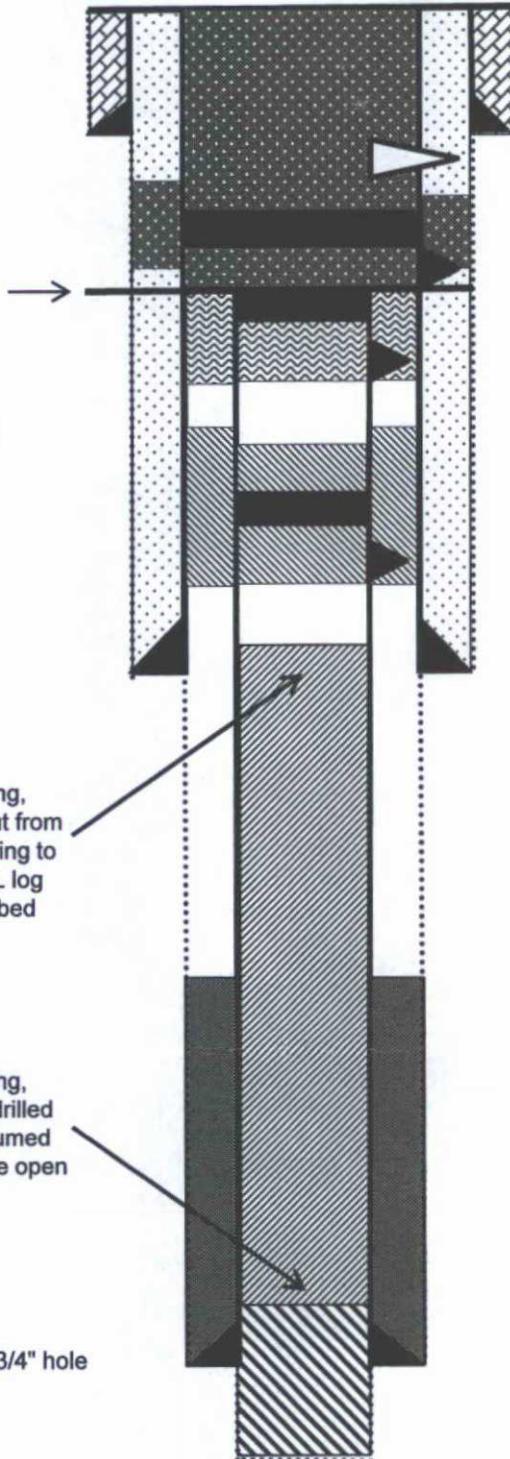
Plugged: 1925

Re-entered: Dec 1999

Re-entered: Aug 2008

**Proposed:**

- 1) Drill out cement inside the 4-3/4" casing down to CR at 120';
- 2) Then mill out the 4-3/4" casing and annulus cement down to 120';
- 3) Pressure test casing, run a CBL and then perforate 6 holes at 118'.
- 4) Fill 6-5/8" casing with expanding cement, squeeze this cement outside the casing into the annulus.



8-5/8" Surface Casing @ 41'  
 Cement with ??

2008 Perforation at 80' may  
 have penetrated 8-5/8" casing

Re-Plug: Perforate at 118';  
 Set a 6-5/8" CR at 110';  
 Mix approx. 50 sxs Class B with  
 expanding agent; squeeze under  
 CR, fill casing and TOH; squeeze  
 down casing into perfs at 80' to fill  
 the annulus.

6-5/8" Surface Casing @ 399'  
 Cement with ??

Can observe cement at the surface in  
 the 6-5/8" x 8-5/8" annulus.

TOC Unknown

(2008) Cement inside 4-3/4" casing,  
 from the 1999 p&a, was drilled out from  
 surface to 394'; pressure test casing to  
 600 PSI, held OK; then ran a CBL log  
 and then set the two plugs described  
 above.

(1999) Cement inside 4-3/4" casing,  
 from the 1925 original p&a, was drilled  
 out from surface to 605'; it is assumed  
 this cement continues down to the open  
 hole interval.

Dakota Top @ 652'

8-3/4" hole

4-3/4" Casing set @ 652'  
 Cement with ??

Open Hole to 664' in 1924

TD 664'

# Navajo #10 Current Plugged Well

Hogback Dakota

990' FNL & 990' FEL, Section 19, T-29-N, R-16-W,

San Juan County, NM / API #30-045-08145

Lat: N 36.7168100 / Long: W 108.5594500

Today's Date: 5/17/2016

Spud: 10/14/1924

Elevation: 5003' GL

Completed: 11/19/1924 Open Hole

Plugged: 1925

Re-entered: Dec 1999

Re-entered: Aug 2008

(2008) Plug #2: with 3 holes at 150' and 80'; set CR at 120'; mix and pump total of 49 sxs: 1) block squeeze 25 sxs into perfs at 150' to circulate cement out at 80' then to surface out casing valve; 2) sting out of CR; 3) fill 4-3/4" casing from CR to surface with 12 sxs; 4) TOH with tubing; 5) pump another 12 sxs down the casing into the 4-3/4" x 6-5/8" annulus.

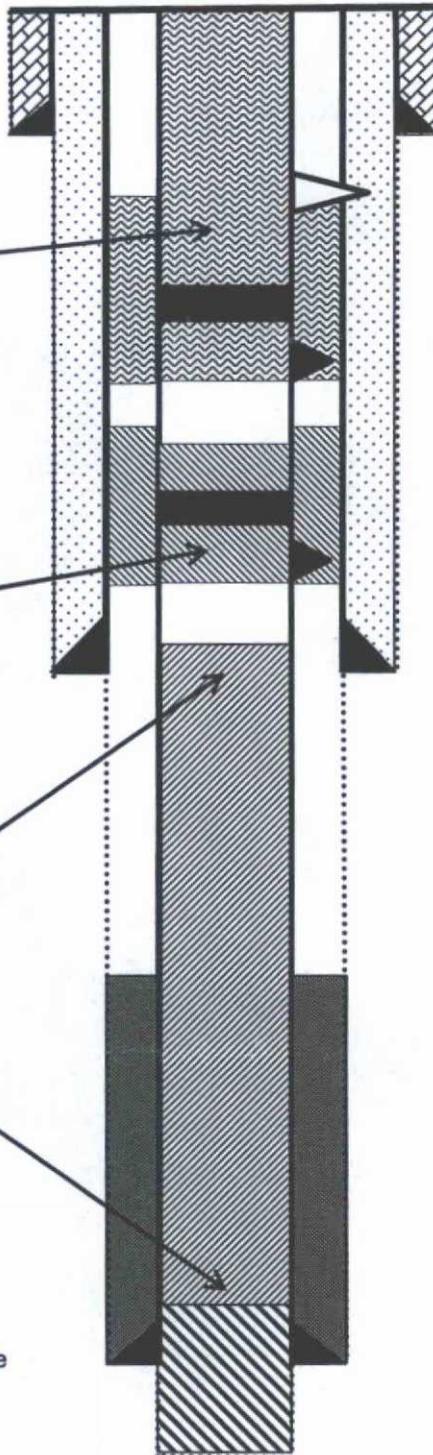
(2008) Plug #1: perforate 3 holes at 230' and set CR at 200'; mix and pump 50 sxs Class B; squeezed 46 sxs below CR and spot 4 sxs above up to 159'.

(2008) Cement inside 4-3/4" casing, from the 1999 p&a, was drilled out from surface to 394'; pressure test casing to 600 PSI, held OK; then ran a CBL log and then set the two plugs described above.

(1999) Cement inside 4-3/4" casing, from the 1925 original p&a, was drilled out from surface to 605'; it is assumed this cement continues down to the open hole interval.

Dakota Top @ 652'

8-3/4" hole



8-5/8" Surface Casing @ 41'  
Cement with ?? (No records)

(2008) After plug #1, casing was pressure tested to 800 PSI, held OK; connect pump line to 4-3/4" x 6-5/8" BH annulus and pressured up to 300 PSI, bled down to zero in 5 seconds. Then perforate 3 holes at 150'; establish rate 1/8 BPM at 300 PSI; then perforate 3 holes at 80'; set CR at 120' and establish circulation between two sets of perforations; then plug #2.

6-5/8" Surface Casing @ 399'  
Cement with ??  
Can observe cement at the surface in the 6-5/8" x 8-5/8" annulus.

TOC Unknown

4-3/4" Casing set @ 652'  
Cement with ?? (No records)

Open Hole to 664' in 1924

TD 664'

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: Navajo #10

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.

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.