Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

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.

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMSF078194

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
LUDWICK LS 17

2. Name of Operator
BP AMERICA PRODUCTION COMPANY
Contact: PATTI CAMPBELL
E-Mail: patti.campbell@bpx.com

9. API Well No.
30-045-09246-00-S1

3a. Address
1199 MAIN AVE. SUITE 101
DURANGO, CO 81301

3b. Phone No. (include area code)
Ph: 970-712-5997

10. Field and Pool or Exploratory Area
BASIN DAKOTA

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 29 T30N R10W NWNE 0790FNL 1650FEL
36.788467 N Lat, 107.904144 W Lon

11. County or Parish, State
SAN JUAN COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☒ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

The subject well was plugged and abandoned on 1/29/2019 per the attached Final P&A report and Plugged Well Diagram. A CBL is attached.

NMOCD
FEB 21 2019
DISTRICT III

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #452789 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington
Committed to AFMSS for processing by SHANNON FACHAN on 02/15/2019 (19JWS0050SE)

Name *(Printed/Typed)* PATTI CAMPBELL — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 01/31/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ACCEPTED — Title VIRGIL LUCERO BRANCH CHIEF, I&E — Date 02/15/2019

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 Farmington

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)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

AV 4

Revisions to Operator-Submitted EC Data for Sundry Notice #452789

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	ABD SR	ABD SR
Lease:	NMSF078194	NMSF078194
Agreement:		
Operator:	BP AMERICA PRODUCTION COMPANY 1199 MAIN AVE, SUITE 101 DURANGO, CO 81301 Ph: 970-712-5997	BP AMERICA PRODUCTION COMPANY 1199 MAIN AVE. SUITE 101 DURANGO, CO 81301
Admin Contact:	PATTI CAMPBELL REGULATORY ANALYST E-Mail: patti.campbell@bpx.com Ph: 970-712-5997	PATTI CAMPBELL REGULATORY ANALYST E-Mail: patti.campbell@bpx.com Ph: 970-712-5997
Tech Contact:	PATTI CAMPBELL REGULATORY ANALYST E-Mail: patti.campbell@bpx.com Ph: 970-712-5997	PATTI CAMPBELL REGULATORY ANALYST E-Mail: patti.campbell@bpx.com Ph: 970-712-5997
Location: State: County:	 NM SAN JUAN COUNTY	 NM SAN JUAN
Field/Pool:	BASIN DAKOTA	BASIN DAKOTA
Well/Facility:	LUDWICK LS 17 Sec 29 T30N R10W Mer NMP NWNE 790FNL 1650FEL	LUDWICK LS 17 Sec 29 T30N R10W NWNE 0790FNL 1650FEL 36.788467 N Lat, 107.904144 W Lon

Wellbore Diagram

Ludwick LS 17
API #: 3004509246
San Juan County, New Mexico

Plug 9
285 feet - Surface
285 feet plug
172 sacks of Class G Cement
20 sacks of cement for top off

Plug 8
1507 feet - 1140 feet
367 feet plug
98 sacks of Class G Cement
61 sacks squeezed

Plug 7
2404 feet - 2254 feet
150 feet plug
18 sacks of Class G Cement

Plug 6
2706 feet - 2556 feet
150 feet plug
18 sacks of Class G Cement

Plug 5
3728 feet - 3468 feet
260 feet plug
54 sacks of Class G Cement
36 sacks squeezed

Plug 4
5002 feet - 4201 feet
801 feet plug
93 sacks of Class G Cement
12 sacks re-pumped

Plug 3
5501 feet - 5280 feet
221 feet plug
48 sacks of Class G Cement
36 sacks squeezed

Plug 2
6245 feet - 6088 feet
157 feet plug
17 sacks of Class G Cement

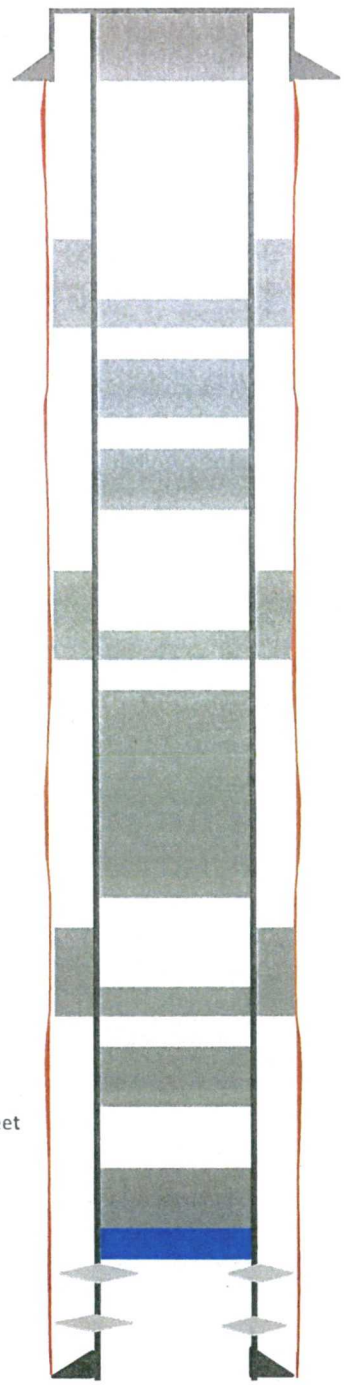
Plug 1
6986 feet - 6833 feet
153 feet plug
17 sacks of Class G Cement

Surface Casing
10.75" @ 235 ft

Formation
Pictured Cliffs - 2656 ft
Cliff House - 4344 ft
Point Lookout - 4952 ft
Mancos - 5057 ft
Gallup - 6195 ft
Greenhorn - 6933 ft
Dakota - 7123 ft
Morrison - 7335 ft

Retainer @ 5865' feet

Production Casing
5.5" 17# @ 7350 ft



BP America

Plug And Abandonment End Of Well Report

Ludwick LS 17

790' FNL & 1650' FEL, Section 29, T30N, R10W

San Juan County, NM / API 30-045-09246

Work Summary:

1/20/19	Made BLM and NMOCD P&A operations notifications at 10:00 AM MST.
1/21/19	MOL and R/U P&A unit. Checked well pressures: Tubing: 0 psi, Casing: 20 psi, Bradenhead: 0 psi. Bled down well. R/U slick line unit to clear tubing. N/D wellhead, N/U BOP and function tested. BP Open Wells shows CIBP set at 7000'. Loaded wellbore with 150 bbls of fresh water and circulated the wellbore clean. Pressure tested casing to 800 psi in which it failed to hold pressure. Shut-in well for the day. Jose Ruybalid was BLM inspector on location.
1/22/19	Checked well pressures: Tubing 0 psi, Casing: 0 psi, Bradenhead: 0 psi. Bled down well. TOOH with production string and tallied on the way out of the hole. R/U wire line services. Ran CBL from CIBP at 7000' to surface. CBL results were sent to BLM/NMOCD offices for review. TIH with cementing sub. Shut-in well for the day. Jose Ruybalid was BLM inspector on location.
1/23/19	Checked well pressures: Tubing: 0 psi, Casing: 0 psi, Bradenhead: 0 psi. Bled down well. P/U two joints of tubing and tagged CIBP at 6986'. R/U cementing services. Pressure tested casing to 800 psi in which it failed to hold pressure. Pumped plug #1 from 6986'-6836' to cover the Dakota perforations and formation top. WOC 4 hours. TIH and tagged plug #1 top at 6833'. PUH. R/U cementing services. Pumped plug #2 from 6245'-6095' to cover the Gallup formation top. WOC overnight. Shut-in well for the day. Jose Ruybalid was BLM inspector on location.

1/24/19 Checked well pressures: Tubing: 0 psi, Casing: 0 psi, Bradenhead: 0 psi. Bled down well. TIH and tagged plug #2 top at 6088'. TOOH. R/U wire line services. RIH and perforated squeeze holes at 5502'. Successfully established injection rate into perforations at 5502'. RIH and perforated squeeze holes at 5002' and 3728'. P/U CR, TIH and set at 5451'. R/U cementing services. Squeezed 22 sx below CR at 5451'. Stung out of CR and spotted 18 sx on top of CR at 5451'. WOC 4 hours. TOOH with stinger nose. P/U cementing sub. TIH and tagged plug #3 top at 5280'. L/D tubing to next CR setting. Shut-in well for the day. Jose Ruybalid was BLM inspector on location.

1/25/19 Checked well pressures: Tubing: 0 psi, Casing: 0 psi, Bradenhead: 0 psi. Bled down well. TOOH. P/U CR, TIH and set at 4951'. R/U cementing services. Successfully established injection rate into perforations at 5002'. Attempted to squeeze cement below CR at 4951' but could not establish injection rate with cement. Spotted a balanced plug on top of CR from 4951'-4244' to cover the Point Lookout, Menefee and Cliffhouse formation tops. WOC 4 hours. TIH and tagged plug #4 top at 4328' which was 84' short of the minimum plug interval. R/U cementing services. Topped-off plug #4 with 12 sx of cement. Shut-in well for the day. Jose Ruybalid was BLM inspector on location.

1/28/19 Checked well pressures: Tubing: 0 psi, Casing: 0 psi, Bradenhead: 0 psi. Bled down well. TIH and tagged plug #4 at 4201'. TOOH. P/U CR, TIH and set at 3686'. R/U cementing services. Squeezed 36 sx below CR at 3686'. Stung out of CR and spotted 18 sx of cement on top of CR at 3686' to cover the Chacra formation top. WOC 4 hours. TIH and tagged plug #5 top at 3468'. Pressure tested casing to 800 psi in which it successfully held pressure. R/U cementing services. Pumped plug #6 from 2706'-2556' to cover the Pictured Cliffs formation top. PUH. Pumped plug #7 from 2404'-2254' to cover the Fruitland formation top. Shut-in well for the day. Jose Ruybalid was BLM inspector on location.

1/29/19 Checked well pressures: Tubing: 0 psi, Casing 0 psi, Bradenhead: 0 psi. Bled down well. R/U wireline services. RIH and perforated squeeze holes at 1507'. Successfully established injection rate into perforations at 1507'. P/U CR, TIH and set at 1459'. R/U cementing services. Squeezed 61 sx of cement below CR at 1459'. Stung out of CR and spotted 37 sx of cement on top. of CR at 1459' to cover the Kirtland and Ojo Alamo formation tops. R/U wireline services. RIH and perforated squeeze holes at 285'. R/U cementing services. Successfully established circulation down through perforations at 285' and back around and out Bradenhead valve at surface. Successfully circulated cement down through perforations at 285'

and back around and out Bradenhead valve at surface. N/D BOP and cut-off wellhead. Cement was at surface in both surface and production casings. Installed P&A marker per BLM and NMOCD standards. Topped off well with 20 sx of cement. Photographed the P&A marker in place and recorded its location via GPS coordinates. R/D and MOL. Jose Ruybalid was BLM inspector on location.

Plug Summary:

Plug #1: (Dakota Perforations and Formation Top 6986'-6833', 17 Sacks Class G Cement)

Mixed 17 sx Class G cement and spotted a balanced plug to cover Dakota perforations and formation top.

Plug #2: (Gallup Formation Top 6245'-6088', 17 Sacks Class G Cement)

Mixed 17 sx Class G cement and spotted a balanced plug to cover Gallup formation top.

Plug #3: (Mancos Formation Top 5501'-5280', 48 Sacks(Squeezed 36 sx) Class G Cement)

RIH and perforated squeeze holes at 5501'. P/U CR, TIH and set at 5451'. Mixed 48 sx of Class G cement and squeezed 36 sx below CR at 5451'. Stung out of CR and spotted 12 sx on top of CR at 5451' to cover the Mancos formation top.

Plug #4: (Mesa Verde Formation Top 5002'-4201', 93 Sacks(re-pumped 12 sx) Class G Cement)

RIH and perforated squeeze holes at 5002'. P/U CR, TIH and set at 4951'. Successfully established injection rate into perforations at 5002'. Attempted to squeeze cement below CR at 4951' but could not establish injection rate with cement. Spotted a balanced plug on top of CR from 4951'-4201' to cover the Point Lookout, Menefee and Cliffhouse formation tops.

Plug #5: (Chacra Formation Top 3728'-3468', 54 Sacks(Squeezed 36 sx) Class G Cement)

RIH and perforated squeeze holes at 3728'. P/U CR, TIH and set at 3686'. Mixed 54 sx of Class G cement and squeezed 36 sx below CR at 3686'. Stung out of CR and spotted 18 sx on top of CR at 3686' to cover the Chacra formation top.

Plug #6: (Pictured Cliffs Formation Top 2706'-2556', 18 Sacks Class G Cement)

Mixed 18 sx Class G cement and spotted a balanced plug to cover Pictured Cliffs formation top.

Plug #7: (Fruitland Formation Top 2404'-2254', 18 Sacks Class G Cement)

Mixed 18 sx Class G cement and spotted a balanced plug to cover Fruitland formation top.

Plug #8: (Kirtland and Ojo Alamo Formation Tops 1507'-1140', 98 Sacks(Squeezed 61 sx) Class G Cement)

Successfully established injection rate into perforations at 1507'. P/U CR, TIH and set at 1459'. R/U cementing services. Squeezed 61 sx of cement below CR at 1459'. Stung out of CR and spotted 37 sx of cement on top of CR at 1459' to cover the Kirtland and Ojo Alamo formation tops.

Plug #9: (Surface Shoe 285'-surface, 172 Sacks Class G Cement, 20 Sacks for top-off)

RIH and perforated squeeze holes at 285'. R/U cementing services. Successfully established circulation down through perforations at 285' and back around and out Bradenhead valve at surface. Successfully circulated cement down through perforations at 285' and back around and out Bradenhead valve at surface. N/D BOP and cut-off wellhead. Cement was at surface in both surface and production casings. Installed P&A marker per BLM and NMOCD standards. Topped off well with 20 sx of cement. Photographed the P&A marker in place and recorded its location via GPS coordinates. R/D and MOL.