

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM-APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000**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.  
NMNM012200

6. If Indian, Allottee or Tribe Name

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

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

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other8. Well Name and No.  
DRYDEN LS 3

2. Name of Operator

BP AMERICA PRODUCTION CO

Contact: MARY CORLEY

E-Mail: corleyml@bp.com

9. API Well No.

30-045-07244-00-D1

3a. Address

P. O. BOX 3092

HOUSTON, TX 77253

3b. Phone No. (include area code)

Ph: 281.366.4491

Fx: 281.366.0700

10. Field and Pool, or Exploratory

BLANCO MV/ PC

OTERO CHACRA

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 21 T28N R8W SWSW 0990FSL 0990FWL

36.64221 N Lat, 107.69133 W Lon

11. County or Parish, and State

SAN JUAN COUNTY, NM

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

## TYPE OF SUBMISSION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice

## TYPE OF ACTION

☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Fracture Treat☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☒ Other  
Subsurface Commingling

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 recomple 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.)

BP America Production Company request permission to complete the subject well into the Otero Chacra and trimingle production downhole with the existing Blanco South Pictured Cliffs and Blanco Mesaverde Pools as per the attached procedure.

The interest owners are identical between these three Pools, therefore, no additional notification is required prior to downhole commingling approval.

Production is proposed to be allocated based on the subtraction method using the projected future decline for production from the Pictured Cliffs and Mesaverde Pools. This production shall be used as a base for production subtracted from the total production for the commingled well. The balance of the production will be attributed to the Chacra. Attached are the future production decline estimates for the Pictured Cliffs & Mesaverde Pools.

**CONDITIONS OF APPROVAL**  
Adhere to previously issued stipulations.

D/C 3233

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #25255 verified by the BLM Well Information System  
For BP AMERICA PRODUCTION CO, sent to the Farmington  
Committed to AFMSS for processing by MATTHEW HALBERT on 12/16/2003 (04MXH0048SE)

Name (Printed/Typed) MARY CORLEY

Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission)

Date 11/18/2003

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Date

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

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.

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

**Additional data for EC transaction #25255 that would not fit on the form**

**32. Additional remarks, continued**

Commingling Production Downhole in the subject well from the proposed pools with not reduce the value of the total remaining production.

**Dryden LS 3**  
**API #: 30-045-07244**

**Frac Menefee, Add Chacra Completion, and Trimingle Production**

**Procedure:**

1. Check anchors. MIRU workover rig.
2. Check and record tubing, casing, and bradenhead pressures.
3. Blow down well. Kill with 2% KCL water ONLY if necessary.
4. Nipple down WH. NU BOPs and diversion spool with 3" outlets and 3" pipe to the blow tank. Pressure test BOPs to 500 psi. Monitor flowing casing pressure with gauge (with casing flowing to blow tank) throughout workover.
5. RU slickline unit or wireline unit. RIH and set plugs (CIBP, tbg collar stop, or plug set in nipple) for isolation.
6. Tally OH with both strings and packer. Visually inspect tbg while POOH.

Contingency: *If the 2-3/8" tubing is in poor condition, replace entire tubing string.*

7. RIH w/ bit and scraper for 5-1/2" casing to PBSD at 4602'.
8. RIH with 5-1/2" CIBP and set at 4400'.
9. RIH with 3-1/8" casing guns. Perforate Menefee formation (correlate to GR log).

Menefee perforations, 2 spf (15 shots/ 30 holes):

4004, 4023, 4052, 4072, 4112, 4148, 4157, 4216, 4285, 4290, 4324, 4350, 4358, 4377, 4382

10. RIH w/ tapered 3-1/2 X 2-7/8 frac string and 5-1/2" packer. Set packer at 3950'.
11. Spearhead 500 gal 15% HCL, establish injection rate, and proceed with fracture stimulation according to Schlumberger schedule. Maintain surface pressures  $\leq$  5500 psi during frac job. Flush frac with foam. Fill out GWSI scorecard.
12. Release packer and POOH w/ frac string and packer.
13. RIH with 5-1/2" CIBP. Set CIBP at 3400'.
14. RIH with 3-1/8" casing guns. Perforate Chacra formation (correlate to GR log).

Chacra Perforations, 2 spf (20 shots/ 40 holes):

3121' – 3126' (5')

3150' – 3155' (5')

3235' – 3239' (4')

3262' – 3265' (3')

3297' – 3300' (3')

15. RIH with 2-7/8" X 3-1/2" tapered frac string and 5-1/2" packer. Set packer at 2500'
16. Spearhead 500 gal 15% HCL, establish injection rate, and proceed with fracture stimulation according to Schlumberger schedule. Maintain surface pressures  $\leq 5500$  psi during frac job. Flush frac with foam. Fill out GWSI scorecard.
17. Flowback frac immediately.
18. Release packer and TOH with frac string and packer. LD frac string.
19. TIH with tubing and bit. Cleanout fill and drill bridge plugs set at 3300 and 4400'. C/O to PBTD at 4602'. Blow well dry at PBTD.
20. Rabbit tubing and RIH with 2-3/8" production tubing (with a muleshoe and X-nipple with blanking plug). Fill tubing with KCL water while RIH.
21. Land 2-3/8" production tubing at 4500'.
22. Pressure test tubing to 500 psi with rig pumps.
23. Swab down tubing with sandline.
24. RU SL unit. Run gauge ring for 2-3/8" tubing. Pull plug and set tubing stop for plunger. RD slickline unit.
25. ND BOP's. NU WH. Test well for air. Return well to production.

# Dryden LS 3

Sec 21, T28N, R8W

API # 30-045-07244

GL: 5779'

Bradenhead repair in 3/95  
Squeeze holes at 270' & 271'

1-1/4" tbg @ 2251'

Pictured Cliffs Perforation  
2192' - 2234'

5-1/2" Baker 'EGJ' packer @ 2451'

Mesaverde Perforations  
3818' - 3902'  
4420' - 4600'

est. TOC @ surface (circ)

10 3/4" 33# @ 175'

Est. TOC @ 700' (temp surv)

5-1/2" liner top @ 2348' squeezed w/ 250 sx

7-5/8" 26.4#, J55 @ 2389'

300 cu ft

Est. TOC @ 2348 (temp surv)

Tubing: 2-3/8" @ 4544'

5-1/2" liner, 15.5#, J55 @ 4633'

PBTD: 4602'

updated: 10/3/03 CFR

**District I**  
1625 N. French Dr., Hobbs, NM 88240

**District II**  
811 South First, Artesia, NM 88210

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410

**District IV**  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

**OIL CONSERVATION DIVISION**  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-102  
Revised August 15, 2000

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number <b>30-045-07244</b>	<sup>2</sup> Pool Code <b>82329</b>	<sup>3</sup> Pool Name <b>Otero Chacra</b>
<sup>4</sup> Property Code <b>000432</b>	<sup>5</sup> Property Name <b>Dryden LS</b>	<sup>6</sup> Well Number <b>3</b>
<sup>7</sup> OGRID No. <b>000778</b>	<sup>8</sup> Operator Name <b>BP America Production Company</b>	<sup>9</sup> Elevation <b>5779' GR</b>

<sup>10</sup> Surface Location

UL or lot no. <b>Unit M</b>	Section <b>21</b>	Township <b>28N</b>	Range <b>08W</b>	Lot Idn	Feet from <b>990'</b>	North/South <b>South</b>	Feet from <b>990'</b>	East/West <b>West</b>	County <b>San Juan</b>
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from	North/South	Feet	East/West	County
<sup>12</sup> Dedicated Acres <b>160</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

				<sup>17</sup> OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>  <b>Mary Corley</b>
				Signature <b>Mary Corley</b>
				Printed Name <b>Sr. Regulatory Analyst</b>
				Title <b>11/17/2003</b>
				Date
				<sup>18</sup> SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> <b>00/00/1957</b>
				Date of Survey
				Signature and Seal of Professional Surveyor:  <b>On File</b>
				Certificate Number

District I  
1625 N. French Drive, Hobbs, NM 88240

District II  
811 South First Street, Artesia, NM 88210

District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

**OIL CONSERVATION DIVISION**

2040 South Pacheco  
Santa Fe, New Mexico 87505

**APPLICATION FOR DOWNHOLE COMMINGLING**

Form C-107A  
Revised May 15, 2000

**APPLICATION TYPE**

☒ Single Well  
☐ Establish Pre-Approved Pools  
**EXISTING WELLBORE**  
☒ Yes ☐ No

**BP America Production Company P. O. Box 3092 Houston, TX 77253**

Operator **Dryden LS** Address **3 Unit M Section 21 T28N, R08W San Juan**  
Lease Well No. Unit Letter-Section-Township-Range County  
OGRID No. **000778** Property Code **000432** API No. **30-045-07244** Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	<b>Blanco Pictured Cliffs S.</b>	<b>Otero Chacra</b>	<b>Blanco Mesaverde</b>
Pool Code	<b>72439</b>	<b>82329</b>	<b>72319</b>
Top & Bottom of Pay Section (Perforated or Open-Hole Interval)	<b>2192' - 223'</b>	<b>3121' - 3300</b>	<b>3818' - 4600'</b>
Method of Production (Flowing or Artificial Lift)	<b>Flowing</b>	<b>Flowing</b>	<b>Flowing</b>
Bottomhole Pressure	<b>270</b>	<b>425</b>	<b>499</b>
Oil Gravity or Gas BTU (Degree API or Gas BTU)	<b>1294</b>	<b>1202.6</b>	<b>1256</b>
Producing, Shut-In or New Zone	<b>Producing</b>	<b>New Zone</b>	<b>Producing</b>
Date and Oil/Gas/Water Rates of Last Production.	Date: Rates:	Date: Rates:	Date: Rates:
Fixed Allocation Percentage	Oil      Gas %      %	Oil      Gas %      %	Oil      Gas %      %

**ADDITIONAL DATA**

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ No ☐  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☐ No ☐

Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No ☐

Will commingling decrease the value of production? Yes ☐ No ☒

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes ☒ No ☐

NMOCD Reference Case No. applicable to this well: \_\_\_\_\_

**Attachments:**

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

**PRE-APPROVED POOLS**

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE \_\_\_\_\_ TITLE **Sr. Regulatory Analyst** DATE **11/17/2003**

TYPE OR PRINT NAME **Mary Corley** TELEPHONE NO. ( **281** ) **366-4491**

## Future Production Decline Estimate

## Pictured Cliffs Daily Rates

Month	Gas Volume
Jan-2002	5
Feb-2002	3
Mar-2002	4
Apr-2002	4
May-2002	5
Jun-2002	1
Jul-2002	0
Aug-2002	0
Sep-2002	2
Oct-2002	6
Nov-2002	5
Dec-2002	6
Jan-2003	2
Feb-2003	2
Mar-2003	4
Apr-2003	1
May-2003	1
Jun-2003	0
Jul-2003	0
Aug-2003	0
Sep-2003	0
Oct-2003	0
Nov-2003	0
Dec-2003	0
Jan-2004	0
Feb-2004	0
Mar-2004	0
Apr-2004	0
May-2004	0
Jun-2004	0
Jul-2004	0
Aug-2004	0
Sep-2004	0
Oct-2004	0
Nov-2004	0
Dec-2004	0

$\ln(Q_f/Q_i) = -dt$   
 $Q_f = 1$   
 $Q_i = 2$   
 $rate = 1$   
 $time = 4$   
 $dt = -0.693147181$   
 $decline = -0.173286795$

Month	Gas Volume
Jan-2005	0
Feb-2005	0
Mar-2005	0
Apr-2005	0
May-2005	0
Jun-2005	0
Jul-2005	0
Aug-2005	0
Sep-2005	0
Oct-2005	0
Nov-2005	0
Dec-2005	0
Jan-2006	0
Feb-2006	0
Mar-2006	0
Apr-2006	0
May-2006	0
Jun-2006	0
Jul-2006	0
Aug-2006	0
Sep-2006	0
Oct-2006	0
Nov-2006	0
Dec-2006	0
Jan-2007	0
Feb-2007	0
Mar-2007	0
May-2007	0
Jun-2007	0
Jul-2007	0
Aug-2007	0
Sep-2007	0
Oct-2007	0
Nov-2007	0
Dec-2007	0
Jan-2008	0

Month	Gas Volume
Feb-2008	0
Mar-2008	0
Apr-2008	0
May-2008	0
Jun-2008	0
Jul-2008	0
Aug-2008	0
Sep-2008	0
Oct-2008	0
Nov-2008	0
Dec-2008	0
Jan-2009	0
Feb-2009	0
Mar-2009	0
Apr-2009	0
May-2009	0
Jun-2009	0
Jul-2009	0
Aug-2009	0
Sep-2009	0
Oct-2009	0
Nov-2009	0
Dec-2009	0
Jan-2010	0
Feb-2010	0
Mar-2010	0
Apr-2010	0
May-2010	0
Jun-2010	0
Jul-2010	0
Aug-2010	0
Sep-2010	0
Oct-2010	0
Nov-2010	0
Dec-2010	0
Jan-2011	0

Month	Gas Volume
Feb-2011	0
Mar-2011	0
Apr-2011	0
May-2011	0
Jun-2011	0
Jul-2011	0
Aug-2011	0
Sep-2011	0
Oct-2011	0
Nov-2011	0
Dec-2011	0
Jan-2012	0
Feb-2012	0
Mar-2012	0
Apr-2012	0
May-2012	0
Jun-2012	0
Jul-2012	0
Aug-2012	0
Sep-2012	0
Oct-2012	0
Nov-2012	0
Dec-2012	0
Jan-2013	0
Feb-2013	0
Mar-2013	0
Apr-2013	0
May-2013	0
Jun-2013	0
Jul-2013	0
Aug-2013	0
Sep-2013	0
Oct-2013	0
Nov-2013	0
Dec-2013	0
Jan-2014	0



Month	Gas Volume
Jan-2002	115
Feb-2002	112
Mar-2002	99
Apr-2002	90
May-2002	87
Jun-2002	59
Jul-2002	90
Aug-2002	78
Sep-2002	82
Oct-2002	83
Nov-2002	82
Dec-2002	84
Jan-2003	75
Feb-2003	74
Mar-2003	80
Apr-2003	71
May-2003	81
Jun-2003	58
Jul-2003	66
Aug-2003	72
Sep-2003	65
Oct-2003	65
Nov-2003	64
Dec-2003	64
Jan-2004	63
Feb-2004	62
Mar-2004	62
Apr-2004	61
May-2004	61
Jun-2004	60
Jul-2004	59
Aug-2004	59
Sep-2004	58
Oct-2004	58
Nov-2004	57
Dec-2004	56

$$\ln(Q_f/Q_i) = -dt$$

$$Q_f = 80$$

$$Q_i = 83$$

$$\text{rate} = 80$$

$$\text{time} = 6$$

$$dt = -0.03681397$$

$$\text{decline} = -0.58802357$$

$$-0.0061$$

Month	Gas Volume
Jan-2005	56
Feb-2005	55
Mar-2005	55
Apr-2005	54
May-2005	54
Jun-2005	53
Jul-2005	52
Aug-2005	52
Sep-2005	51
Oct-2005	51
Nov-2005	50
Dec-2005	49
Jan-2006	49
Feb-2006	48
Mar-2006	48
Apr-2006	47
May-2006	46
Jun-2006	46
Jul-2006	45
Aug-2006	45
Sep-2006	44
Oct-2006	44
Nov-2006	43
Dec-2006	42
Jan-2007	42
Feb-2007	41
Mar-2007	41
May-2007	40
Jun-2007	39
Jul-2007	39
Aug-2007	38
Sep-2007	38
Oct-2007	37
Nov-2007	36
Dec-2007	36
Jan-2008	35

Month	Gas Volume
Feb-2008	35
Mar-2008	34
Apr-2008	34
May-2008	33
Jun-2008	32
Jul-2008	32
Aug-2008	31
Sep-2008	31
Oct-2008	30
Nov-2008	29
Dec-2008	29
Jan-2009	28
Feb-2009	28
Mar-2009	27
Apr-2009	26
May-2009	26
Jun-2009	25
Jul-2009	25
Aug-2009	24
Sep-2009	23
Oct-2009	23
Nov-2009	22
Dec-2009	22
Jan-2010	21
Feb-2010	21
Mar-2010	20
Apr-2010	19
May-2010	19
Jun-2010	18
Jul-2010	18
Aug-2010	17
Sep-2010	16
Oct-2010	16
Nov-2010	15
Dec-2010	15
Jan-2011	14