| DATE | 116104, SUSPENSE                           | ENGINEER DRC LOGGED IN TYPE DHC PLR0402129920  |
|------|--|--|
|      |  |  |
|      | 3 <sup>25</sup>                            | NEW MEXICO OIL CONSERVATION DIVISION<br>- Engineering Bureau -<br>1220 South St. Francis Drive, Santa Fe, NM 87505   |
|      |  | ADMINISTRATIVE APPLICATION CHECKLIST   |
|      | THIS CHECKLIST IS MA                       | NDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS<br>WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE   |
|      | [NSL-Non-Stan<br>[DHC-Down<br>[PC-Poc<br>[ | dard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]<br>hole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]<br>of Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]<br>[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]<br>[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]<br>fied Enhanced Oil Recovery Certification] [PPR-Positive Production Response] |
| [1]  |  | PLICATION - Check Those Which Apply for [A]  |
|      | [A]  | Location - Spacing Unit - Simultaneous Dedication  |
|      | Check                                      | One Only for [B] or [C]  |
|      | [B]  | Commingling - Storage - Measurement<br>X DHC CTB PLC PC OLS OLM  |
|      | [C]  | Injection - Disposal - Pressure Increase - Enhanced Oil Recovery   |
|      | [D]  | Other: Specify   |
| [2]  | NOTIFICATI<br>[A]                          | <b>ON REQUIRED TO:</b> - Check Those Which Apply, or X Does Not Apply Working, Royalty or Overriding Royalty Interest Owners   |
|      | [B]  | Offset Operators, Leaseholders or Surface Owner  |
|      | [C]  | Application is One Which Requires Published Legal Notice   |
|      | [D]  | Notification and/or Concurrent Approval by BLM or SLO<br>U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office  |
|      | [E]  | For all of the above, Proof of Notification or Publication is Attached, and/or,  |
|      | [F]  | Waivers are Attached   |
| [3]  |  | CURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE TION INDICATED ABOVE.   |

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Mary Corley Print or Type Name

<u>Illary arlen</u> Signature

| Sr. Regulatory Analyst | 01/13/2004 |
|------------------------|------------|
| Title                  | Date       |
| corleyml@bp.com        |            |
| e-mail Address         |            |

District I 1625 N. French Drive, Hobbs, NM 88240 2000 District II 811 South First Street, Artesia, NM 88210

District III 1000 Rio Brazos Road, Aztec, NM 87410

Pools

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 TYPE <u>X</u> Single Well Establish Pre-Approved

EXISTING WELLBORE
<u>X</u> Yes No

#### APPLICATION FOR DOWNHOLE COMMINGLING

| BP America Pro   | duction Company      | P. O. Box 3092 Houston, TX 77253                       |               |
|------------------|----------------------|--|---------------|
| Operator         | _                    | Address  |               |
| Florance C LS    | 6                    | Unit L Section 30 T28N, R08W                           | San Juan      |
| Lease            | Well No.             | Unit Letter-Section-Township-Range                     | County        |
| OGRID No. 000778 | Property Code 000527 | API No. <u>30-045-07135</u> Lease Type: <u>X</u> Feder | ral State Fee |

| DATA ELEMENT  | UPPER ZONE                | INTERMEDIATE ZONE | LOWER ZONE       |  |
|---|---------------------------|-------------------|------------------|--|
| Pool Name   | Blanco Pictured Cliffs S. | Otero Chacra      | Blanco Mesaverde |  |
| Pool Code   | 72439                     | 82329             | 72319            |  |
| Top & Bottom of Pay Section<br>(Perforated or Open-Hole Interval) | 2128' – 2182'             | 3082' - 3233'     | 4006' - 4580'    |  |
| Method of Production<br>(Flowing or Artificial Lift)              | Flowing                   | Flowing           | Flowing          |  |
| Bottomhole Pressure   | 290                       | 430               | 480              |  |
| Oil Gravity or Gas BTU<br>(Degree API or Gas BTU)                 | 1192 BTU                  | 1210 BTU          | 1356 BTU         |  |
| Producing, Shut-In or<br>New Zone                                 | Producing                 | New Zone          | Producing        |  |
| Date and Oil/Gas/Water Rates of Last Production.                  | Date:<br>Rates:           | Date:<br>Rates:   | Date:<br>Rates:  |  |
| Fixed Allocation Percentage                                       | Oil Gas<br>% %            | Oil Gas<br>% %    | Oil Gas<br>% %   |  |

### ADDITIONAL DATA

| Are all working, royalty and overriding royalty interests identical in all commingled zones?<br>If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?  | Yes_X_<br>Yes | No<br>No    |
|--|---------------|-------------|
| Are all produced fluids from all commingled zones compatible with each other?  | Yes_X_        | No          |
| Will commingling decrease the value of production?   |               |             |
|  | Yes           | No <u>X</u> |
| 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 Mary Corley          | Sr. Regulatory Analyst DATE 01/13/2004       |
|--------------------------------|--|
| TYPE OR PRINT NAME Mary Corley | TELEPHONE NO. ( <u>281</u> ) <u>366-4491</u> |

### Florance C LS 6 Recomplete to Chacra formation, downhole commingle Pictured Cliffs, Chacra and Mesaverde

#### **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 plug (CIBP, tbg collar stop, or plug set in nipple) for isolation.
- 6. POOH w/ production tubing set at 4511'.
- 7. TIH with bit and scraper for 5-1/2" casing to PBTD at 4589'. Work casing scraper across Mesaverde perforations (4006' 4580') and new Chacra interval (3082' 3233').
- 8. RU WL unit. RIH with 5-1/2" CIBP. Set CIBP at 3400'.
- 9. Run CBL from 3400' to top of liner to confirm that top of cement is above 3,000'. If cement is not above 3,000' block squeeze at 3,000'.
- RIH with 3-1/8" casing guns. Perforate Chacra formation (correlate to GR log) w/ 2 SPF (27 shots, 54 holes) at: 3233, 3231, 3229, 3227, 3225, 3223, 3221, 3219, 3217, 3211, 3209, 3207, 3203, 3201, 3199, 3197, 3195, 3193, 3191, 3096, 3094, 3092, 3090, 3088, 3086, 3084, 3082'.
- 11. RIH with 2-7/8" X 3-1/2" tapered frac string and 5-1/2" packer. Set packer at 2400'.
- Spearhead 500 gal 15% HCL, establish injection rate, and proceed with fracture stimulation according to Schlumberger schedule. Maintain surface pressures ≤ 3500 psi during frac job to stay within 80% of 5-1/2" casing burst rating. Flush frac with foam. Fill out GWSI scorecard.
- 13. Flowback frac immediately.
- 14. TIH with tubing and bit. Cleanout fill and drill bridge plug set at 3400'. Cleanout fill to PBTD. Blow well dry at PBTD.
- 15. 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.

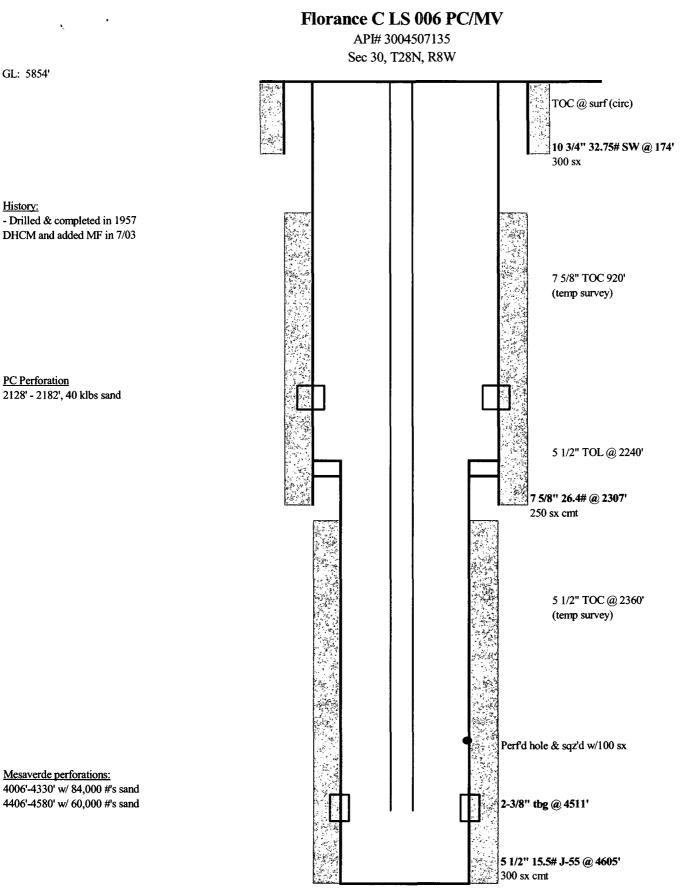
- 16. Land 2-3/8" production tubing at 4511'.
- 17. Pressure test tubing to 500 psi with rig pumps.
- 18. Swab down tubing with sandline.

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•.

- 19. RU SL unit. Run gauge ring for 2-3/8" tubing. Pull plug and set tubing stop for plunger. RD slickline unit.
- 20. ND BOP's. NU WH. Test well for air. Return well to production and downhole commingle Chacra and Mesaverde production.

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PBTD: 4589' TD: 4610'

1

updated: 10/17/03 CFR

|         | ۹.       |         |
|---------|----------|---------|
| Distric | 1        |         |
|         | <b>D</b> | <br>B.U |

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

Form C-102 Revised August 15, 2000

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

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

AMENDED REPORT

| <sup>1</sup> API Number    | <sup>2</sup> Pool Code        | <sup>3</sup> Pool Na |                          |
|----------------------------|-------------------------------|----------------------|--------------------------|
| 30-045-07135               | 82329                         | Otero Ch             |                          |
| <sup>4</sup> Property Code | <sup>5</sup> Property Name    |                      | <sup>6</sup> Well Number |
| 000326                     | Florance C LS                 |                      | 6                        |
| <sup>7</sup> OGRID No.     | <sup>*</sup> Operator Name    |                      | <sup>2</sup> Elevation   |
| 000778                     | BP America Production Company |                      | 5854' GR                 |

WELL LOCATION AND ACREAGE DEDICATION PLAT

| <u></u>                       |  |                       |          | 1                                | <sup>•</sup> Surface I | location                |           |           |          |
|-------------------------------|--|-----------------------|----------|----------------------------------|------------------------|-------------------------|-----------|-----------|----------|
| UL or lot no.                 | Section  | Township              | Range    | Lot Idn                          | Feet from              | North/South             | Feet from | East/West | County   |
| Unit L                        | 30   | 28N                   | 08W      |                                  | 1750'                  | South                   | 990'      | West      | San Juan |
|                               | <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 |  | <sup>13</sup> Joint o | r Infill | <sup>14</sup> Consolidation Code |                        | <sup>15</sup> Order No. |           |           |          |
| 160                           |  |                       |          |                                  |                        |                         |           |           |          |

#### 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 hereby certify that the information contained  |
|     | herein is true and complete to the best of my  |
|     | knowledge and beilet.  |
|     | Printed Name   |
|     | Sr. Regulatory Analyst   |
|     | 01/13/2004   |
|     |  |
|     | <sup>18</sup> SURVEYOR CERTIFICATION<br>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.  |
|     | 04/23/1957   |
|     | Date of Survey   |
| 750 | Signature and Seal of Professional Surveyor:   |
|     |  |
|     | E O Walker   |
|     | Certificate Number   |

# Florance C LS 6 Future Production Decline Estimate

# Pictured Cliffs Daily Rates

| Month    | Gas Volume   |  |
|----------|--|--|
| Jan-2002 | 30   |  |
| Feb-2002 |  |  |
| Mar-2002 |  |  |
| Apr-2002 |  |  |
| May-2002 |  |  |
| Jun-2002 |  |  |
| Jul-2002 | and the second |  |
| Aug-2002 |  |  |
| Sep-2002 |  |  |
| Oct-2002 |  |  |
| Nov-2002 |  |  |
| Dec-2002 |  |  |
| Jan-2003 |  |  |
| Feb-2003 |  |  |
| Mar-2003 |  |  |
| Apr-2003 |  |  |
| May-2003 |  |  |
| Jun-2003 | 9  |  |
| Jul-2003 |  |  |
| Aug-2003 |  |  |
| Sep-2003 |  |  |
| Oct-2003 |  |  |
| Nov-2003 |  |  |
| Dec-2003 |  |  |
| Jan-2004 |  |  |
| Feb-2004 |  |  |
| Mar-2004 |  |  |
| Apr-2004 |  |  |
| May-2004 |  |  |
| Jun-2004 |  |  |
| Jul-2004 |  |  |
| Aug-2004 |  |  |
| Sep-2004 | 23   |  |
| Oct-2004 |  |  |
| Nov-2004 | 21   |  |
| Dec-2004 | 20   |  |
|          |  |  |

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| In(Qf/Qi) = -dt |              |  |  |  |
|-----------------|--------------|--|--|--|
| Qf=             | 23           |  |  |  |
| Qi=             | 29           |  |  |  |
| rate=           | 23           |  |  |  |
| time=           | 6            |  |  |  |
| dt=             | -0.231801614 |  |  |  |
| decline=        | -0.888572854 |  |  |  |
|                 |              |  |  |  |

| Month    | Gas Volume                       |
|----------|----------------------------------|
| Jan-2005 | 19                               |
| Feb-2005 | 18                               |
| Mar-2005 | 17                               |
| Apr-2005 | 16                               |
| May-2005 | 16                               |
| Jun-2005 | 15                               |
| Jul-2005 | 15<br>14<br>13<br>12<br>11<br>10 |
| Aug-2005 | 13                               |
| Sep-2005 | 12                               |
| Oct-2005 | 11                               |
| Nov-2005 | 10                               |
| Dec-2005 | 9                                |
| Jan-2006 | 8                                |
| Feb-2006 | 8                                |
| Mar-2006 |                                  |
| Apr-2006 | 6                                |
| May-2006 | 5                                |
| Jun-2006 | 4                                |
| Jul-2006 | 6<br>5<br>4<br>3<br>2<br>1       |
| Aug-2006 | 2                                |
| Sep-2006 |                                  |
| 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                                |

# Florance C LS 6

### Future Production Decline Estimate

### Mesaverde Daily Rates

| Month    | Gas Volúme |
|----------|------------|
| Jan-2002 | 139        |
| Feb-2002 | 107        |
| Mar-2002 | 107        |
| Apr-2002 | 103        |
| May-2002 | 107        |
| Jun-2002 | 91         |
| Jul-2002 | 121        |
| Aug-2002 | 106        |
| Sep-2002 | 101        |
| Oct-2002 | 98         |
| Nov-2002 | 95         |
| Dec-2002 | 93         |
| Jan-2003 | 91         |
| Feb-2003 | 88         |
| Mar-2003 | 89         |
| Apr-2003 |            |
| May-2003 |            |
| Jun-2003 |            |
| Jul-2003 |            |
| Aug-2003 | 120        |
| Sep-2003 |            |
| Oct-2003 |            |
| Nov-2003 | 138        |
| Dec-2003 | 138        |
| Jan-2004 | 138        |
| Feb-2004 | 138        |
| Mar-2004 | 137        |
| Apr-2004 | 137        |
| May-2004 | 137        |
| Jun-2004 | 137        |
| Jul-2004 | 137        |
| Aug-2004 | 136        |
| Sep-2004 | 136        |
| Oct-2004 | 136        |
| Nov-2004 | 136        |
| Dec-2004 | 136        |

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| In(Qf/Qi) : | = -dt        |
|-------------|--------------|
| Qf=         | 90           |
| Qi=         | 91           |
| rate=       | 90           |
| time=       | 5            |
| dt=         | -0.011049836 |
| decline=    | -0.198897051 |
|             |              |

| Month                | Gas Volume |
|----------------------|------------|
| Jan-2005             | 135        |
| Feb-2005             | 135        |
| Mar-2005             | 135        |
| Apr-2005             | 135        |
| May-2005             | 135        |
| Jun-2005             | 134        |
| Jul-2005             | 134        |
| Aug-2005             | 134        |
| Sep-2005             | 134        |
| Oct-2005             | 134        |
| Nov-2005             | 133        |
| Dec-2005             | 133        |
| Jan-2006             | 133        |
| Feb-2006             | 133        |
| Mar-2006             | 133        |
| Apr-2006             | 132        |
| May-2006             | 132        |
| Jun-2006             | 132        |
| Jul-2006             | 132        |
| Aug-2006             | 132        |
| Sep-2006             | 131        |
| Oct-2006             | 131        |
| Nov-2006             | 131        |
| Dec-2006             | 131        |
| Jan-2007             | 131        |
| Feb-2007             | 130<br>130 |
| Mar-2007             | 130        |
| May-2007<br>Jun-2007 | 130        |
| Jun-2007<br>Jul-2007 | 130        |
| Aug-2007             | 130        |
| Aug-2007<br>Sep-2007 | 129        |
| Oct-2007             | 129        |
| Nov-2007             | 129        |
| Dec-2007             | 129        |
| Jan-2008             | 129        |
|                      | 120        |

|          | Gas Volume |
|----------|------------|
| Feb-2008 | 128        |
| Mar-2008 | 128        |
| Apr-2008 |            |
| May-2008 | 128        |
| Jun-2008 | 127        |
| Jul-2008 | 127        |
| Aug-2008 | 127        |
| Sep-2008 | 127        |
| Oct-2008 |            |
| Nov-2008 | 126        |
| Dec-2008 | 126        |
| Jan-2009 | 126        |
| Feb-2009 | 126        |
| Mar-2009 | 126        |
| Apr-2009 | 125        |
| May-2009 | 125        |
| Jun-2009 | 125        |
| Jul-2009 | 125        |
| Aug-2009 | 125        |
| Sep-2009 | 124        |
| Oct-2009 | 124        |
| Nov-2009 | 124        |
| Dec-2009 | 124        |
| Jan-2010 | 124        |
| Feb-2010 | 124        |
| Mar-2010 | 123        |
| Apr-2010 | 123        |
| May-2010 | 123        |
| Jun-2010 | 123        |
| Jul-2010 | 123        |
| Aug-2010 | 122        |
| Sep-2010 | 122        |
| Oct-2010 | 122        |
| Nov-2010 | 122        |
| Dec-2010 | 122        |
| Jan-2011 | 121        |

# Florance C LS 6

### Future Production Decline Estimate

# Mesaverde Daily Rates

| Month    | Gas Volume |
|----------|------------|
| Feb-2011 | 121        |
| Mar-2011 | 121        |
| Apr-2011 | 121        |
| May-2011 | 121        |
| Jun-2011 | 120        |
| Jul-2011 | 120        |
| Aug-2011 | 120        |
| Sep-2011 | 120        |
| Oct-2011 | 120        |
| Nov-2011 | 119        |
| Dec-2011 | 119        |
| Jan-2012 | 119        |
| Feb-2012 | 119        |
| Mar-2012 | 119        |
| Apr-2012 | 118        |
| May-2012 | 118        |
| Jun-2012 | 118        |
| Jul-2012 | 118        |
| Aug-2012 | 118        |
| Sep-2012 | 117        |
| Oct-2012 | 117        |
| Nov-2012 | 117        |
| Dec-2012 | 117        |
| Jan-2013 |            |
| Feb-2013 | 116        |
| Mar-2013 | 116        |
| Apr-2013 | 116        |
| May-2013 | 116        |
| Jun-2013 | 116        |
| Jul-2013 | 115        |
| Aug-2013 | 115        |
| Sep-2013 | 115        |
| Oct-2013 | 115        |
| Nov-2013 |            |
| Dec-2013 |            |
| Jan-2014 | 114        |

\*

| Month                | Gas Volume |
|----------------------|------------|
| Feb-2014             | 114        |
| Mar-2014             | 114        |
| Apr-2014             | 114        |
| May-2014             | 113        |
| Jun-2014             | 113        |
| Jul-2014             | 113        |
| Aug-2014             | 113        |
| Sep-2014             | 113        |
| Oct-2014             | 112        |
| Nov-2014             | 112        |
| Dec-2014             | 112        |
| Jan-2015             | 112        |
| Feb-2015             | 112        |
| Mar-2015             | 111        |
| Apr-2015             | 111        |
| May-2015             | 111        |
| Jun-2015             | 111        |
| Jul-2015             | 111        |
| Aug-2015             | 110        |
| Sep-2015             | 110        |
| Oct-2015             | 110        |
| Nov-2015             | 110        |
| Dec-2015             | 110        |
| Jan-2016             | 109        |
| Feb-2016             | 109        |
| Mar-2016             | 109        |
| Apr-2016             | 109        |
| May-2016             | 109        |
| Jun-2016<br>Jul-2016 | 108        |
| Aug-2016             | 108        |
| Sep-2016             | 108        |
| Oct-2016             | 108        |
| Nov-2016             | 100        |
| Dec-2016             | 107        |
| Jan-2017             | 107        |
| 001-2017             | 107        |

| Month         Gas Volume           Feb-2017         107           Mar-2017         106           May-2017         106           Jun-2017         106           Jul-2017         106           Jul-2017         106           Jul-2017         106           Aug-2017         105           Oct-2017         105           Dec-2017         105           Jan-2018         104           Mar-2018         104           Mar-2018         104           Jun-2018         104           Jun-2018         104           Jun-2018         104           Jun-2018         104           Jun-2018         104           Jun-2018         103           Aug-2018         103           Aug-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           Mar-2019         101           Jun-2019         101           Jun-2019         101           Aug-2019         101  |          |                                       |
|---|----------|---------------------------------------|
| Mar-2017         107           Apr-2017         106           May-2017         106           Jun-2017         106           Jul-2017         106           Aug-2017         106           Aug-2017         106           Sep-2017         105           Oct-2017         105           Dec-2017         105           Jan-2018         104           Mar-2018         104           May-2018         104           May-2018         104           Jun-2018         104           Jun-2018         103           Aug-2018         103           Aug-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           Mar-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Aug-2019         101 <td></td> <td></td>                                      |          |                                       |
| Apr-2017         106           May-2017         106           Jun-2017         106           Jul-2017         106           Aug-2017         106           Aug-2017         106           Aug-2017         105           Oct-2017         105           Dec-2017         105           Jan-2018         104           Mar-2018         104           Mar-2018         104           Jun-2018         104           Jun-2018         104           Jun-2018         104           Jun-2018         103           Aug-2018         103           Aug-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           Mar-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101 <td></td> <td></td>                                      |          |                                       |
| May-2017         106           Jun-2017         106           Jul-2017         106           Aug-2017         106           Sep-2017         105           Oct-2017         105           Dec-2017         105           Jan-2018         104           Mar-2018         104           Mar-2018         104           May-2018         104           Jun-2018         104           Jun-2018         104           May-2018         103           Jun-2018         103           Jun-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         103           Dec-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Sep-2019         101 <td></td> <td></td>                                      |          |                                       |
| Jun-2017         106           Jul-2017         106           Aug-2017         105           Oct-2017         105           Dec-2017         105           Jan-2018         105           Feb-2018         104           Mar-2018         104           Mar-2018         104           Jun-2018         104           Mar-2018         104           Jun-2018         104           Jun-2018         103           Oct-2018         103           Aug-2018         103           Oct-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Sep-2019         101           Sep-2019         101           Aug-2019         100 <td></td> <td></td>                                      |          |                                       |
| Jul-2017         106           Aug-2017         106           Sep-2017         105           Oct-2017         105           Dec-2017         105           Jan-2018         104           Mar-2018         104           Mar-2018         104           Jun-2018         104           Mar-2018         104           Jun-2018         104           Jun-2018         104           Jun-2018         103           Aug-2018         103           Aug-2018         103           Oct-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Sep-2019         101           Sep-2019         101           Oct-2019         100 <td>May-2017</td> <td></td>                              | May-2017 |                                       |
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| Oct-2017         105           Nov-2017         105           Dec-2017         105           Jan-2018         105           Feb-2018         104           Mar-2018         104           Mar-2018         104           May-2018         104           Jun-2018         104           Jun-2018         103           Aug-2018         103           Sep-2018         103           Oct-2018         103           Oct-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Sep-2019         101           Oct-2019         100           Nov-2019         100           Nov-2019         100 <td></td> <td></td>                                      |          |                                       |
| Nov-2017         105           Dec-2017         105           Jan-2018         104           Mar-2018         104           Mar-2018         104           May-2018         104           Jun-2018         104           Jun-2018         104           Jun-2018         103           Aug-2018         103           Sep-2018         103           Oct-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Sep-2019         101           Sep-2019         101           Oct-2019         100           Nov-2019         100           Nov-2019         100  | Sep-2017 |                                       |
| Dec-2017         105           Jan-2018         104           Mar-2018         104           Mar-2018         104           Apr-2018         104           Jun-2018         104           Jun-2018         104           Jun-2018         103           Aug-2018         103           Sep-2018         103           Oct-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Jun-2019         101           Sep-2019         101           Sep-2019         101           Oct-2019         100           Nov-2019         100           Dec-2019         100  | Oct-2017 |                                       |
| Jan-2018         105           Feb-2018         104           Mar-2018         104           Apr-2018         104           May-2018         104           Jun-2018         104           Jul-2018         103           Aug-2018         103           Oct-2018         103           Dec-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Sep-2019         101           Sep-2019         101           Oct-2019         100           Nov-2019         100           Dec-2019         100  | Nov-2017 |                                       |
| Feb-2018104Mar-2018104Apr-2018104May-2018104Jun-2018103Aug-2018103Aug-2018103Oct-2018103Oct-2018103Dec-2018102Jan-2019102Feb-2019102Mar-2019102May-2019101Jun-2019101Jun-2019101Sep-2019101Jun-2019101Jun-2019101Jun-2019101Sep-2019101Sep-2019101Oct-2019100Nov-2019100Dec-2019100   | Dec-2017 |                                       |
| Mar-2018         104           Apr-2018         104           May-2018         104           Jun-2018         104           Jul-2018         103           Aug-2018         103           Sep-2018         103           Oct-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Sep-2019         101           Nov-2019         100           Nov-2019         100           Dec-2019         100   |          |                                       |
| Apr-2018         104           May-2018         104           Jun-2018         104           Jul-2018         103           Aug-2018         103           Aug-2018         103           Oct-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Sep-2019         101           Nov-2019         100           Nov-2019         100           Dec-2019         100   |          |                                       |
| May-2018         104           Jun-2018         104           Jul-2018         103           Aug-2018         103           Sep-2018         103           Oct-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Oct-2019         100           Nov-2019         100           Dec-2019         100  | Mar-2018 |                                       |
| Jun-2018         104           Jul-2018         103           Aug-2018         103           Sep-2018         103           Oct-2018         103           Oct-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Oct-2019         100           Nov-2019         100           Dec-2019         100  | Apr-2018 |                                       |
| Jul-2018         103           Aug-2018         103           Sep-2018         103           Oct-2018         103           Oct-2018         103           Dec-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Jul-2019         101           Sep-2019         101           Sep-2019         101           Oct-2019         101           Duc-2019         101           Duc-2019         101           Duc-2019         101           Duc-2019         100           Nov-2019         100           Nov-2019         100           Dec-2019         100  |          |                                       |
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| Sep-2018         103           Oct-2018         103           Nov-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           Apr-2019         102           May-2019         101           Jun-2019         101           Jul-2019         101           Sep-2019         101           Sep-2019         101           Oct-2019         100           Nov-2019         100           Dec-2019         100   |          |                                       |
| Oct-2018         103           Nov-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           Mar-2019         102           May-2019         101           Jun-2019         101           Jul-2019         101           Sep-2019         101           Oct-2019         101           Oct-2019         100           Nov-2019         100           Dec-2019         100  |          | 103                                   |
| Nov-2018         103           Dec-2018         102           Jan-2019         102           Feb-2019         102           Mar-2019         102           Apr-2019         102           May-2019         101           Jun-2019         101           Jun-2019         101           Jul-2019         101           Sep-2019         101           Oct-2019         100           Nov-2019         100           Dec-2019         100   | Sep-2018 | 103                                   |
| Dec-2018102Jan-2019102Feb-2019102Mar-2019102Apr-2019102May-2019101Jun-2019101Jul-2019101Aug-2019101Sep-2019101Oct-2019100Nov-2019100Dec-2019100   | Oct-2018 | 103                                   |
| Jan-2019102Feb-2019102Mar-2019102Apr-2019102May-2019101Jun-2019101Jul-2019101Aug-2019101Sep-2019101Oct-2019100Nov-2019100Dec-2019100  | Nov-2018 | 103                                   |
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| Jul-2019101Aug-2019101Sep-2019101Oct-2019100Nov-2019100Dec-2019100  |          |                                       |
| Aug-2019101Sep-2019101Oct-2019100Nov-2019100Dec-2019100   |          | 101                                   |
| Sep-2019         101           Oct-2019         100           Nov-2019         100           Dec-2019         100   |          | 101                                   |
| Oct-2019         100           Nov-2019         100           Dec-2019         100  |          | 101                                   |
| Nov-2019100Dec-2019100  |          |                                       |
| Dec-2019 100  |          |                                       |
|   |          |                                       |
|   | Jan-2020 |                                       |

### Catanach, David

From: Sent: To: Subject: Corley, Mary L [corleyml@bp.com] Tuesday, January 27, 2004 5:39 AM Catanach, David RE: Florance No. 6



Allocation Method.doc C-103 NOI DHC Procedure.doc DHC.DOC

David,

I do apologize for the additional research I have caused with the subject application. I will endeavor in the future to give all pertinent data applicable to each application. Attached is the additional data you requested. If you prefer I will also submit this information via U.S. mail or UPS.

Additionally, I believe that I submitted at least two applications recently for other Florance C LC wells without including the allocation method - which would also be the subtraction method. I will review my filings and submit the required data as appropriate. Please advise if submitting this information via email would be acceptable or if via mail is more appropriate.

Your patience with me in this matter is greatly appreciated.

Sincerely,

Mary Corley Senior Regulatory Analyst San Juan Performance Unit 281-366-4491

----Original Message----From: Catanach, David [mailto:DCATANACH@state.nm.us] Sent: Monday, January 26, 2004 3:05 PM To: Corley, Mary L Subject: Florance No. 6

Ms. Corley:

I am currently reviewing your application to downhole commingle Pictured Cliffs, Chacra and Mesaverde pool production within the Florance C LS No. 6. I have some questions.

After a great deal of research, I found that this well was approved for commingling by Order No. DHC-1187AZ. If you would please help me out in future applications and tell me this up-front, it would speed things up. I do not have a copy of this order. Please provide me with a copy.

Your application does not state how production is to be allocated to each zone. Production estimates were provided for the PC and Mesaverde, however, I have no idea how you propose to allocate production. Please provide me with a detailed description of how production is to be allocated. Also, if you plan to use production estimates, tell me how these estimates were determined.

I will process your application upon receipt of the requested data.

Thank You,

### Allocation Method Florance C LS 6

BP America Production Company request permission to complete the subject well into the Otero Chacra and tricommingle 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 serve 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.

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

Application has also been submitted to BLM on Form 3160-5, Federal Lease No. SF - 03549.

Pre Approved Pools: Blanco-Mesaverde (72319) & South Blanco-Pictured Cliffs (72439) Pools Blanco-Mesaverde (72319) & Otero-Chacra (82329) Pools South Blanco-Pictured Cliffs (72439) & Otero-Chacra (82329) Pools

| Submit 3 Copies To Appropriate District<br>Office  | State o<br>Energy, Minera            | of New Me               |                              |                                    | Form C-<br>Revised March 25,          |       |
|--|--------------------------------------|-------------------------|------------------------------|------------------------------------|---------------------------------------|-------|
| District I<br>1625 N. French Dr., Hobbs, NM 88240  | Lifergy, winter                      |                         |                              | WELL API NO.                       |                                       |       |
| District II<br>811 South First, Artesia, NM 88210<br>District III  | OIL CONSE<br>1220 Sou                | RVATION<br>uth St. Fran |                              | 5. Indicate Type<br>STATE          | -045-07135<br>of Lease<br>FEE         |       |
| 1000 Rio Brazos Rd., Aztec, NM 87410<br>District IV<br>1220 S. St. Francis Dr., Santa Fe, NM   | Santa                                | Fe, NM 87               | /505                         |                                    | Gas Lease No.                         |       |
| 87505  | LICES AND REPORTS                    | ON WELLS                |                              | 7. Lease Name o                    | r Unit Agreement Na                   | me:   |
| (DO NOT USE THIS FORM FOR PROP<br>DIFFERENT RESERVOIR. USE "APPL<br>PROPOSALS.)<br>1. Type of Well:  | JCATION FOR PERMIT" (F               |                         |                              | Flo                                | orance C LS<br>Form 3160-5 Federal Le |       |
| Oil Well Gas Well  | X Other                              |                         |                              | ,<br>                              |                                       |       |
| 2. Name of Operator<br>BP America Production Company   | Attn: Mary Co                        | orley                   |                              | 8. Well No.                        | 6                                     |       |
| 3. Address of Operator<br>P.O. Box 3092 Houston, TX 7725   | 3                                    |                         |                              | 9. Pool name or<br>Blanco Mesaverd | Wildcat<br>e/Blanco S. Pictured C     | liffs |
| 4. Well Location   | ·                                    |                         |                              |                                    |                                       |       |
| Unit Letter  | feet from the _                      | <u>South</u> lin        | ne and <u>990</u> feet       | from the <u>West</u>               | line                                  |       |
| Section 30   | Township 28N                         |                         |                              | IPM San Juan                       | County                                |       |
|  | 10. Elevation (Show                  | w whether DI<br>5854'   |                              |                                    |                                       |       |
|  | Appropriate Box to                   | Indicate Na             |                              |                                    |                                       |       |
| NOTICE OF I<br>PERFORM REMEDIAL WORK   | NTENTION TO:                         | ON 🗆                    |                              |                                    | PORT OF:<br>ALTERING CASIN            | G 🗆   |
| TEMPORARILY ABANDON  | CHANGE PLANS                         |                         | COMMENCE DRIL                | LING OPNS. 🗌                       |                                       |       |
| PULL OR ALTER CASING   | MULTIPLE<br>COMPLETION               |                         | CASING TEST AN<br>CEMENT JOB | D 🗆                                | ABANDONMENT                           |       |
| OTHER: Downhole Comming  | jle 🛛                                |                         | OTHER:                       |                                    |                                       |       |
| <ol> <li>Describe proposed or complete<br/>of starting any proposed work<br/>or recompilation.</li> <li>BP America Production Company<br/>completion, add pay in the Mesave<br/>per the attached procedure.</li> </ol> | k). SEE RULE 1103. F                 | or Multiple C           | Completions: Attach          | wellbore diagram                   | of proposed complet                   | ion   |
| The Blanco Pictured Cliffs (72359)<br>order R-11363.   | & the Blanco Mesaverde               | (72319) Pools           | are Pre-Approved P           | ools for Downhole                  | Commingling per NMC                   | DCD   |
| The working, overriding, and royal application need be submitted via   |                                      | proposed cor            | nmingled pools are i         | dentical; therefore,               | no notification of this               |       |
| Production is proposed to be alloc attached allocation chart.  | ated based on actual pro             | duction from            | both the Pictured Cli        | ffs and Mesaverde                  | Pools as reflected on                 | the   |
| Commingling Production Downhol<br>production. DHC  | e in the subject well from<br>1187AZ | n the propose           | d Pools with not redu        | ice the value of the               | total remaining                       |       |
| I hereby certify that the information  | on above is true and con             | nplete to the b         | pest of my knowledg          | e and belief.                      | <u></u>                               |       |
| SIGNATURE  |                                      | TITLE <u>Sr</u>         | . Regulatory Analyst         | DATE _                             | 04/22/2003                            |       |
| Type or print name Mary Corl   | ey                                   |                         | · · ·                        | Telephone No. 2                    | 81-366-4491                           |       |
| (This space for State use)   |                                      |                         |                              |                                    |                                       |       |

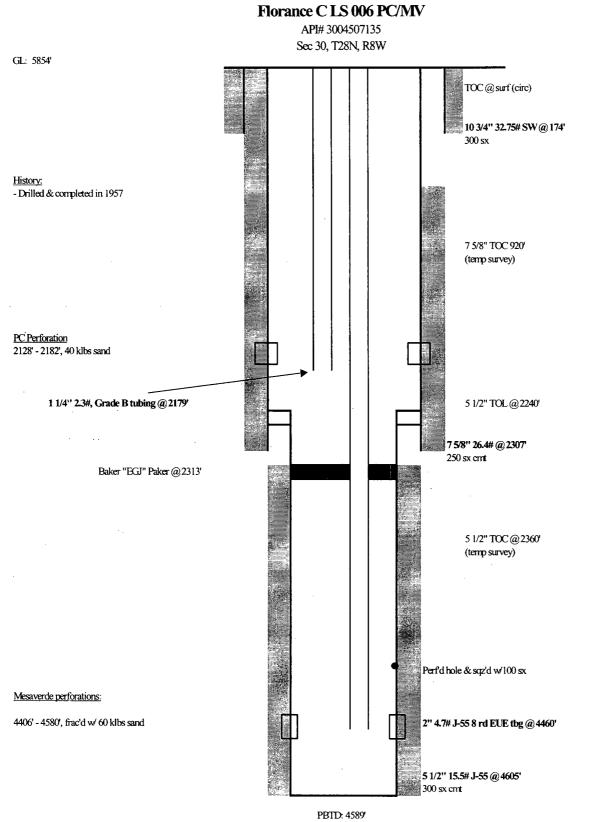
APPPROVED BY Original Signed by Steve Hayden TITLE DEPUTY OIL & GAS INSPECTOR, DIST 3 DATE DEC 16, 2003 Conditions of approval, if any:

### Florance C LS 006-PC/MV Sec 30, T28N, R8W API# 3004507135

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- 1. Check anchors. MIRU workover rig.
- 2. Blow down well. Kill with 2% KCL water ONLY if necessary. ND WH and NU BOP's.
- 3. Tag for fill and TOH with 1-1/4" short string set at 2179'. LD production tbg.
- 4. TOH with 2-3/8" long string set at 4460'.
- 5. Mill 5 1/2" production packer set at 2313'.
- 6. Clean out to PBTD at 4589'.
- 7. RIH and set CIBP at 4350'. Test casing to 2500 psi.
- 8. RIH w/ GR log.
- 9. RIH with 3-1/8" casing guns 1 SPF 120 deg phasing with Schlumberger's Prospector, selectfire charge. Perforate Menefee (correlate to GR log).
- 10. RU frac equipment. Use 2% KCL-N2 foam in fracture stimulation.
- 11. Frac Menefee according to pump schedule.
- 12. Flowback frac fluid immediately.
- 13. POH with frac string.
- 14. RIH with work string and bit. Drill out CIBP set at 4350'. Continue clean out hole to PBTD at 4589'. Blow well dry with air package at PBTD. POH with work string.
- 15. Rabbit tubing and RIH with 2-3/8" production tubing (with X-nipple and plug on bottom). Replace any joints that fail the pressure test.
- 16. Land 2-3/8" production tubing at 4540'.
- 17. Swab water from tubing with the sandline.
- 18. RU slickline unit. Run gauge ring for 2-3/8" tubing. Pull plug. RD slickline unit.
- 19. ND BOP's. NU WH. Test well for air. Return well to production.

| Allocation Based on Year 2002 Production |     |      |       |     |
|--|-----|------|-------|-----|
| Pool                                     | Oil | %    | Gas   | %   |
| Pictured Cliffs                          | 0   | 0%   | 8628  | 19% |
| Mesaverde                                | 98  | 100% | 35852 | 81% |



TD: 4610'

updated: 01/07/03 az