

BP America Production Co Lower 48 Onshore

> Craig T Ferguson craig ferguson@bp com 281 892 5743(direct)

Eldridge 3 12 173B 737 N Eldridge Parkway Houston Texas 77079

March 27 2017

Bureau of Land Management Farmington District Office 6251 College Blvd Suite A Farmington New Mexico 87402 Attn Ms Virginia Barber State of New Mexico Commissioner of Public Lands P O Box 1148 Santa Fe New Mexico 87504 1148

State of New Mexico Energy Minerals and Natural Resources Depart Oil Conservation Division 1200 South St Francis Drive Santa Fe New Mexico 87505

RE 2016 Review of Operations 2017 Plan of Development Gallegos Canyon Unit San Juan County NM

Ladies and Gentlemen

BP America Production Company as Unit Operator for the Gallegos Canyon Unit (GCU) has received the required Working Interest approval from partners for the attached 2017 Plan of Development BP now submits for your approval the attached 2017 Plan of Development

- - o

1

Please signify your approval of the 2017 Plan of Development by signing in the space provided on the attached sheets and returning same to the attention of

Craig Ferguson BP America Production Company 737 N Eldridge Parkway E3 12 173B Houston TX 77079

If you have any questions please do not hesitate to contact me at 281 892 5743

Sincerely

Grant Faz usa - -

Craig T Ferguson Sr Land Negotiator

1

BP America Production Co Lower 48 Onshore

> Craig T Ferguson craig ferguson@bp com 281 892 5743 (direct)

Eldridge 3 12 173B 737 N Eldridge Parkway Houston Texas 77079

## Gallegos Canyon Unit Area

2017 Plan of Development

| Approved   | Dated   |
|--|---|
| Bureau of Land I<br>(Subject of like ap<br>Conservation Dist | oproval by the Commissioner of Public Lands and the Oil |
|  |   |

**Commissioner of Public Lands** (Subject of like approval by the Bureau of Land Management and the Oil Conservation District)

Approved

Approved

4-7-17 Dated

**Oil Conservation District** (Subject of like approval by the Bureau of Land Management and the Commissioner of Public Lands)

The foregoing approvals are for the 2017 Plan and Development of the Gallegos Canyon Unit



Dated

### **Review of 2016 Operations**

-

Shown in Table I are the cumulative volumes of gas and condensate produced from each reservoir in the Gallegos Canyon Unit Table II summarizes the well status in each horizon. Because Gallegos Canyon Unit has many downhole commingled wells (i.e. producing from more than one formation). Table II reflects completions rather than wellbores. Historical production graphs for each horizon are attached at the end of this document.

#### TABLE I

#### Cumulative Production as 12/31/2016

| FORMATION        | GAS     | CONDENSATE |
|------------------|---------|------------|
|                  | (MMCF)  | (MBLS)     |
| Farmington Sands | 821     | 0          |
| Fruitland Sands  | 17 206  | 0          |
| Fruitland Coal   | 62 795  | 1 07       |
| Pictured Cliffs  | 220 391 | 5          |
| Chacra           | 298     | 0 45       |
| Mesaverde        | 5       | 0          |
| Gallup           | 10 087  | 2134       |
| Mancos           | 3 217   | 145        |
| Dakota           | 444 036 | 3205       |

#### TABLE II

#### Production Status by Formation as of 12/31/2016

| FORMATION        | ACTIVE | INAÇTIVE                              |  |
|------------------|--------|---------------------------------------|--|
| Farmington Sands | 3      |                                       |  |
| Fruitland Sands  | 30     | 1                                     |  |
| Fruitland Coal   | 69     | 4                                     |  |
| Pictured Cliffs  | 110    | т 1C                                  |  |
| Chacra           | 2      |                                       |  |
| Mesaverde        | 3      | · · · · · · · · · · · · · · · · · · · |  |
| Gallup           | 8      | 3                                     |  |
| Mancos           | 17     |                                       |  |
| Dakota           | 146    | 8                                     |  |

5ł -1

~

\$

## 2016 GCU Development Update

Table III A below shows the status of each of the proposed 2016 recompletion activities from the 2016 GCU Plan of Development These recompletion candidates were identified when BP performed eight recompletions in the Gallup in 2014 Note that all of the 2016 planned recompletions were not performed due to low product prices they have been deferred until market conditions improve See Table III A for details

| WELL     | DEDICATION                | ТҮРЕ                              | TARGET           | STATUS   |
|----------|---------------------------|-----------------------------------|------------------|----------|
| GCU 226E | W/2 Sec 18 T28N R12W      | TxA Dakota +<br>Recomplete Gallup | Gallup<br>Totah  | Deferred |
| GCU 176  | É/2 NW/4 Sec 25 T28N R12W | TxA Dakota +<br>Recomplete Gallup | Gallὑp<br>ChaCha | T&A d    |
| GCU 232E | S/2 Sec 26 T28N R12W      | PxA Dakota +<br>Recomplete Gallup | Gallup<br>Kutz   | Deferred |
| GCU,191E | Unit C Sec 25 T28N R13W   | TxA Dakota +<br>Recomplete Gallup | Gallup<br>ChaCha | Deferred |

 TABLE III A

 2016 Recompletion Candidates (as per 2016 POD)

Plugging and abandonment (P&A) of wells has been traditionally one of the main operational activities in GCU during recent years. In 2016 ten GCU wells were P&A Reasons to P&A included low productivity of wells in highly depleted zones or high cost for repairing mechanical problems with limited remaining production and reserves potential. Table IIIB was the 2016 Plug and Abandon candidate list from the 2016 POD. The table has been updated with current status and is included below for reference.

| WELL NAME       | API Number       | DEDICATION              | HORIZON         | STATUS                   |
|-----------------|------------------|-------------------------|-----------------|--------------------------|
| GCU 240         | 30045117390000   | Unit K Sec 24 T28N R13W | Dakota          | P&A d January 2017       |
| GCU 262E        | 30045261590000   | Unit P Sec 24 T28N R13W | Dakota          | P&A d June 2016          |
| GCU 367         | 130045268800000  | Unit F Sec 31 T29N R12W | Pictured Cliffs | P&A d June 2016          |
| GCU Com G 179 🖉 | 30045078050000   | Unit K Sec 26 T29N R12W | Dakota          | Returned to Production   |
| GCU 247         | 30045116780000   | Unit A Sec 5 T27N R12W  | Dakota          | P&A d December 2016      |
| GCU 569         | - 30045303300000 | Unit H Sec 33 T29N R12W | Fruitland Coal  | P&A d December 2016      |
| GCU 343         | 30045261050000   | Unit A Sec 26 T28N R12W | Pictured Cliffs | Production July 2016     |
| GCU 073         | 30045080020000   | Unit K Sec 20 T29N R12W | Pictured Cliffs | P&A d November 2016      |
| GCU 009         | 30045070060000   | Unit K Sec 32 T28N R12W | Fruitland Coal  | P&A d December 2016      |
| GCU 214         | 30045116230000   | Unit B Sec 16 T28N R12W | Dakota          | Production November 2016 |
| GCU 383         | 30045275920000   | Unit B Sec 18 T29N R12W | Fruitland Coal  | Returned to Production   |
| GCU 381         | 30045275880000   | Unit H Sec 20 T29N R12W | Fruitland Coal  | Returned to Production   |
| GCU 378         | 30045275540000   | Unit K Sec 34 T28N R12W | Fruitland Coal  | Returned to Production   |
| GCU 188E        | 30045241710000   | Unit B Sec 30 T29N R12W | Dakota          | Production July 2016     |
| GCU 157         | 30045070670000   | Unit B Sec 35 T28N R13W | Dakota          | Production January 2017  |
| GCU 163         | 30045077950000   | Unit O Sec 26 T29N R13W | Fruitland Coal  | P&A d January 2016       |
| GCU 176         | 30045072280000   | Unit C Sec 25 T28N R13W | Dakota          | T&A d February 2016      |

TABLE III B2016 Plug and Abandon Candidates (as per 2016 POD)

The following table (Table IIIC) is a list of wells that were not identified in the 2016 POD as 2016 P&A candidates but were P&A d in 2016

| WELL NAME | <u>API Number</u>         | DEDICATION              | HORIZON         | STATUS              |
|-----------|---------------------------|-------------------------|-----------------|---------------------|
| GCU 337   | <sup>A</sup> 300452613600 | Unit P Sec 26 T28N R12W | Pictured Cliffs | P&A d December 2016 |
| GCU 170   | <sup>s</sup> 300450765800 | Unit K Sec 35 T29N R12W | Dakota          | P&A d August 2016   |

TABLE IIIC Plug and Abandon Wells in 2016 not identified in 2016 POD

#### 2016 New Well Drilling

As of 12/31/2016 there were no new production wells drilled in 2016 Primary reason for this inactivity was the weak economic environment. See Table VI for a recap of the 2016 POD New Drill Candidates and their updated status

#### **2017 Plan of Development**

e

Following the production results of the 2014 Gallup recompletions BP will continue to develop the liquid rich Gallup for a normalized within the Gallegos Canyon Unit through uphole recompletions of existing Dakota wells. The 2015 plan included 4 recompletions in Gallup reservoirs. This program was deferred in 2016 and is still listed as a deferred option for 2017. BP is also evaluating the possibility of recompleting the GCU 247E to the Fruitland Coal is 2017.

Depending on the specific candidate well the existing Dakota completion will be plugged and abandoned (PxA) temporarily abandoned (TxA) or downhole commingled with the new Gallup completion Summary of BP 2017 Gallup program is provided in table IV

| WELL     | DEDICATION                        | <u>TYPE</u>              | TARGET         | STATUS      |
|----------|-----------------------------------|--------------------------|----------------|-------------|
|          |                                   |                          |                |             |
|          |                                   | TxA Dakota +             |                |             |
| GCU 226E | W/2 Sec 18 T28N R12W              | <b>Recomplete Gallup</b> | Gallup Totah   | Deferred    |
|          |                                   |                          |                | -ud         |
|          |                                   | TxA Dakota +             |                | جـ          |
| GCU'176  | E/2 NW/4 Sec 25 T28N R12W         | Recomplete Gallup        | Gallup ChaCha  | T&A d       |
|          | ŧ                                 |                          |                |             |
|          |                                   | PxA Dakota +             | -4)            | نہ س        |
| GCU 232E | <sup>£</sup> S/2 Sec 26 T28N R12W | <b>Recomplete Gallup</b> | Gallup Kutz    | Deferred    |
|          |                                   |                          |                |             |
| ,        |                                   | TxA Dakota +             |                | A           |
| GCU 191E | Unit C Sec 25 T28N R13W           | Recomplete Gallup        | Gallup ChaCha  | _Deferred ~ |
| 3        |                                   | PxA Dakota +             | л.             | T - 11-4    |
|          |                                   | Recomplete               |                | Under       |
| GCU 247E | Unit P Sec 27 T27N R12W           | Fruitland Coal           | Fruitland Coal | Evaluation  |

# TABLE IV Wells Being Evaluated for Recompletion in 2017

As a prudent operator BP is always reviewing its well stock and is evaluating the wells in Table V as potential plug and abandonment candidates in 2017

| WELL NAME     | <u>API Number</u>         | DEDICATION              | HORIZON                                     |  |
|---------------|---------------------------|-------------------------|---|--|
| GCU 019       | 300450733300              | Unit H Sec 20 T28N R12W | Fruitland Coal                              |  |
| GCU 034       | 300450714400              | Unit K Sec 28 T28N R12W | Fruitland Coal                              |  |
| GCU 049       | 300450707600              | Unit A Sec 31 T28N R12W | Fruitland Coal                              |  |
| GCU 053       | 300450697900              | Unit M Sec 36 T28N R12W | Fruitland Coal/Pictured <sup>®</sup> Cliffs |  |
| GCU_155       | 300450726900              | Unit N Sec 23 T28N R13W | Dakota                                      |  |
| GCU 157 🔉 💡   | 300450706700              | Unit B Sec 35 T28N R13W | Dakota                                      |  |
| GCU 188E      | 300452417100              | Unit B Sec 30 T29N R12W | Dakota                                      |  |
| GCU 189       | 300450767800              | Unit E Sec 36 T29N R13W | Dakota                                      |  |
| GCU 197       | 300450766700              | Unit J Sec 36 T29N R13W | Dakota                                      |  |
| GCU 197E      | 300452473700              | Unit G Sec 36 T29N R13W | Dakota                                      |  |
| GCU 208E      | 300452389800              | Unit   Sec 15 T28N R12W | Dakota                                      |  |
| GCU 213       | 300451161800              | Unit J Sec 8 T28N R12W  | Dakota' 4                                   |  |
| GCU 214       | 300451162300              | Unit B Sec 16 T28N R12W | Dakota                                      |  |
| GCU 256 * 3 4 | <sup>°</sup> 300451185400 | Unit F Sec 13 T28N R12W | Fruitland Coal <sup>4</sup>                 |  |
| GCU 264 🔥 🔥   | 300452065600              | Unit E Sec 17 T28N R12W | Dakota                                      |  |
| GCU 284       | 300452365400              | Unit O Sec 30 T29N R12W | Pictured Cliffs                             |  |
| GCU 294       | 300452378900              | Unit J Sec 32 T29N R12W | Pictured Cliffs                             |  |
| GCU 298       | 300452399800              | Unit C Sec 24 T28N R12W | Pictured Cliffs                             |  |
| GCU 346       | 300452613500              | Unit E Sec 15 T28N R12W | Fruitland Sand                              |  |
| GCU 355       | 300452644000              | Unit K Sec 4 T27N R12W  | Pictured Cliffs                             |  |
| GCU 361       | 300452643100              | Unit B Sec 15 T28N R12W | Fruitland Sand                              |  |
| GCU 365       | 300452688100              | Unit P Sec 25 T29N R13W | Pictured Cliffs                             |  |
| GCU 377       | 300452753700              | Unit N Sec 24 T29N R13W | Fruitland Coal                              |  |
| GCU 378       | 300452755400              | Unit K Sec 34 T28N R12W | Fruitland Coal                              |  |
| GCU 381       | 300452758800              | Unit H Sec 20 T29N R12W | Fruitland Coal                              |  |
| GCU 383 🛛 🕅   | 300452759200              | Unit B Sec 18 T29N R12W | Fruitland Coal                              |  |
| GCU 385 🗼     | 300452758900              | Unit M Sec 17 T29N R12W | Fruitland Coal 🔄                            |  |
| GCU 386       | 300452830800              | Unit A Sec 13 T29N R13W | Fruitland Cõal                              |  |
| GCU 396       | 300452831000              | Unit M Sec 35 T29N R13W | Fruitland Coal                              |  |
| GCU 512       | 300452822100              | Unit J Sec 26 T29N R12W | Pictured Cliffs                             |  |
| GCU 514       | 300452806900              | Unit O Sec 34 T29N R12W | Pictured Cliffs                             |  |
| GCU 526       | 300452877400              | Unit B Sec 27 T29N R12W | Pictured Cliffs                             |  |
| GCU 532       | 300452903200              | Unit H Sec 26 T29N R12W | Pictured Cliffs                             |  |
| GCU 536 -     | 300452904600              | Unit A Sec 13 T29N R13W | Pictured Cliffs                             |  |
| GCU 540       | 300452932100              | Unit H Sec 21 T29N R12W | Pictured Cliffs                             |  |
| GCU Com 094E  | 300452417900              | Unit A Sec 23 T29N R13W | Gallup                                      |  |
| GCU Com J 082 | 300450776800              | Unit M Sec 28 T29N R12W | Fruitland Coal                              |  |

١

----

TABLE V2017 P&A Candidates

Table VI shows the potential horizontal wells to be drilled in Mancos/ Gallup formations. Current plan calls for four wells three in Mancos Shale and one in Gallup ChaCha SW sand and one well to be drilled in the Dakota.

TABLE VI2017 New Drill Candidates

| WELL            | DEDICATION                          | TYPE                 | TARGET           | <u>STATUS</u>    |
|-----------------|-------------------------------------|----------------------|------------------|------------------|
| GCU 247E Com 1H | All Sec 5&6 T27N R12W               | New Drill Horizontal | Mancos           | Deferred to 2018 |
| GCU 247E Com 2H | All Sec 5&6 T27N R12W               | New Drill Horizontal | Gallup ChaCha SW | Deferred to 2018 |
| GCU 124E Com 1H | S/2 34 & 35 T28N R12W               | New Drill Horizontal | Mancos           | Deferred to 2018 |
| GCU 599 Com 1H  | N/2 19 T28N R11W & N/2 24 T28N R12W | New Drill Horizontal | Mancos           | Deferred to 2018 |
| GCU 599 Com 1H  | S/2 19 T28N R11W & N/2 24 T28N R12W | New Drill Horizontal | Basın Dakota     | Deferred to 2018 |

3.

ą

••

۲

























