

ABOVE THIS LINE FOR DIVISION USE ONLY

3936

NEW MEXICO OIL CONSERVATION DIVISION

RECEIVED

- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505



2007 AUG 23 AM 9:28

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR
- [D] Other: Specify _____
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
- [A] 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
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] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION 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.

| | | | |
|--------------------|-----------|--------------------|---------|
| Toya Colvin | | Regulatory Analyst | 8/17/07 |
| Print or Type Name | Signature | Title | Date |
| | | Toya.Colvin@bp.com | |
| | | e-mail Address | |

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003

District II
1301 W. Grand Avenue, Artesia, NM 88210

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

APPLICATION TYPE
 Single Well
 Establish Pre-Approved Pools
EXISTING WELLBORE
 Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

DHC-3936

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

GOOCH **2M** **Unit C Section 29 T28N, R08W** **San Juan**
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 000778 Property Code 001212 API No. 30-045-24936 Lease Type: Federal State Fee

| DATA ELEMENT | UPPER ZONE | INTERMEDIATE ZONE | LOWER ZONE |
|--|---------------------------------|--------------------------------|--------------------------------|
| Pool Name | Otero Chacra ✓ | Blanco Mesaverde ✓ | Basin Dakota ✓ |
| Pool Code | 82329 ✓ | 72319 ✓ | 71599 ✓ |
| Top and Bottom of Pay Section (Perforated or Open-Hole Interval) | To Be Determined 3160 - 3290 | 4170' - 4720' | 6570' - 6708' |
| Method of Production (Flowing or Artificial Lift) | Artificial Lift | Artificial Lift | Artificial Lift |
| Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone) | 370 | 375 | 375 |
| Oil Gravity or Gas BTU (Degree API or Gas BTU) | 1280 | 1286 | 1286 |
| Producing, Shut-In or New Zone | New Zone | Producing | Producing |
| Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.) | Date: Rates: | Date: Rates: | Date: Rates: |
| Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.) | 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 Toya Colvin TITLE Regulatory Analyst DATE 08/17/07

TYPE OR PRINT NAME Toya Colvin TELEPHONE NO. (281) 366-7148

E-MAIL ADDRESS Toya.Colvin@bp.com

Gooch #2M Payadd Procedure
Sec 29, T28N, R8W
API #: 30-045-24936

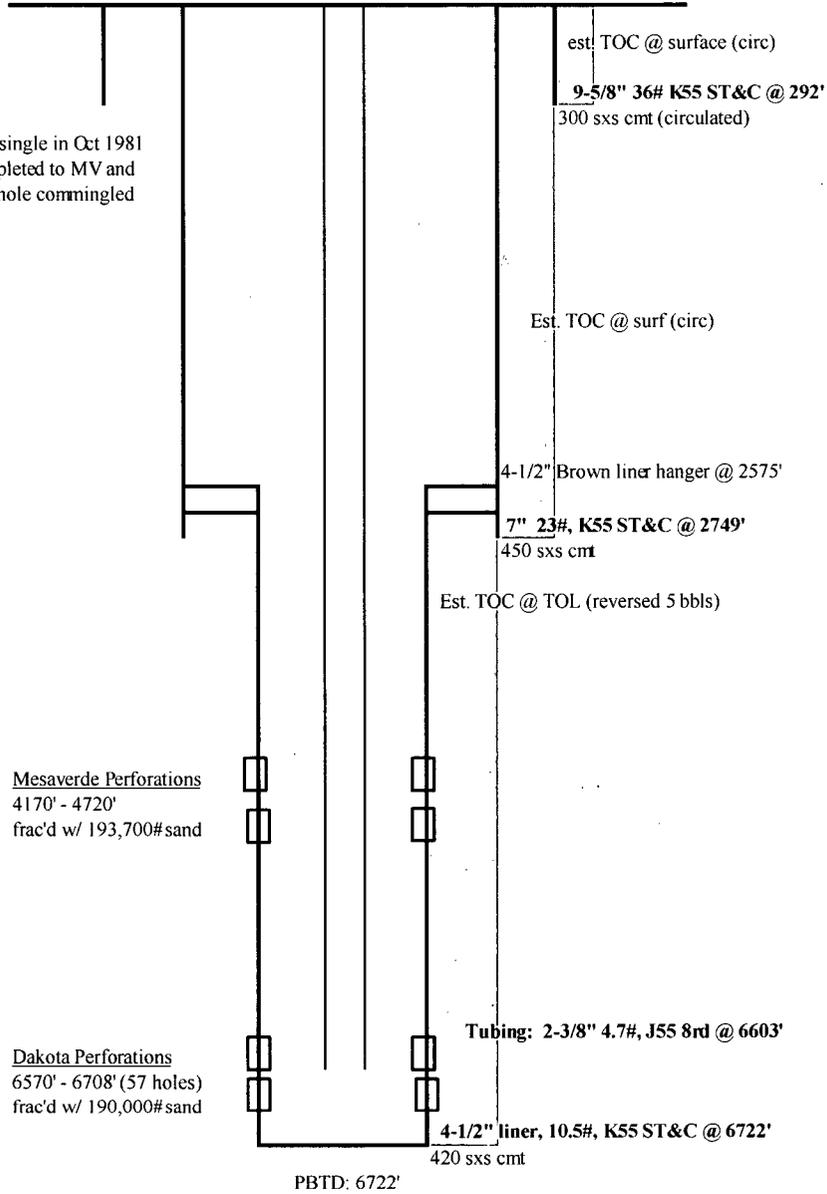
1. Check anchors. MIRU workover rig.
2. If necessary, kill with 2% KCL water. Nipple down WH. NU BOPs.
3. Tag for fill and tally OH with 2-3/8" production tubing currently set at 6603'. Visually inspect tubing while POOH.
4. TIH with bit and scraper for 4 1/2" casing to 6722'.
5. TIH with tubing-set RBP. Set RBP at 3500'. Load hole with 2% KCL.
6. Pressure test casing to 2500 psi. Unset RBP and POH.
7. RIH with CBP and set at 3500'. Run CBL and perforate using 3-1/8" casing guns (2 SPF 120 deg phasing) with Schlumberger's select-fire charge 3160'-3190' and 3270'-3290'.
8. RU frac equipment. Use Slick Water 2% KCL-N2 foam in fracture stimulation.
9. Frac Chacra according to pump schedule.
10. Flowback frac fluid immediately.
11. TIH with tubing and notched collar. Cleanout fill to 3500'. Blow well dry.
12. Test Chacra Zone for 8 hours.
13. POOH with tubing and pick up bit and drill bridge plug at 3500' and cleanout to PBTD of 6722'.
14. ND BOP's. NU WH. Test well for air. Return well to production. as down hole commingle Dakota, Mesa Verde, and Chacra.

Gooch #2M
Sec 29, T28N, R8W,
API # 30-045-24936

GL: 5870'

History:

Completed as DK single in Oct 1981
Dec 1994- Recompleted to MV and
downhole commingled



District I

1625 N. French Dr., Hobbs, NM 88240
 Phone:(505) 393-6161 Fax:(505) 393-0720

District II

1301 W. Grand Ave., Artesia, NM 88210
 Phone:(505) 748-1283 Fax:(505) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102
 Permit 24484

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|--------------------------------------|--|---|
| 1. API Number 30-045-24936 | 2. Pool Code 82329 | 3. Pool Name OTERO CHACRA (GAS) |
| 4. Property Code 608 | 5. Property Name GOOCH | 6. Well No. 002M |
| 7. OGRID No. 778 | 8. Operator Name BP AMERICA PRODUCTION COMPANY | 9. Elevation |

10. Surface Location

| | | | | | | | | | |
|----------------------|----------------------|------------------------|---------------------|---------|--------------------------|----------------------|--------------------------|----------------------|---------------------------|
| UL - Lot C | Section 29 | Township 28N | Range 08W | Lot Idn | Feet From 1100 | N/S Line N | Feet From 1800 | E/W Line W | County SAN JUAN |
|----------------------|----------------------|------------------------|---------------------|---------|--------------------------|----------------------|--------------------------|----------------------|---------------------------|

11. Bottom Hole Location If Different From Surface

| | | | | | | | | | |
|--------------------------------------|---------|---------------------|-------|------------------------|-----------|----------|---------------|----------|--------|
| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
| 12. Dedicated Acres 160.00 | | 13. Joint or Infill | | 14. Consolidation Code | | | 15. 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

| | |
|--|--|
| | <p>OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p>E-Signed By: <i>Joyce Coeli</i></p> <p>Title: <i>Regulatory Analyst</i></p> <p>Date: <i>8/22/07</i></p> |
| | <p>SURVEYOR CERTIFICATION</p> <p><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></p> <p>Surveyed By:</p> <p>Date of Survey: 8/8/1980</p> <p>Certificate Number: 3950</p> |

| | | | | | | | | | |
|----------------------------|-----------------------|-------------------------|-------------|-----------------------|-------------------------|-------------|-----------------------|-------------------------|--|
| Gooch 2M | | | | | | | | | |
| MesaVerde Formation | | | | | | | | | |
| API # | 3004524936 | | | | | | | | |
| Starting 1/96 thru 11/12 | | | | | | | | | |
| Exponential Decline | | | | | | | | | |
| Qi = | 93.1 | mcf/d | 1-Jan-2007 | | | | | | |
| Qf = | 75.0 | mcf/d | | | | | | | |
| D = | 3.60% | per year | | | | | | | |
| Starting 12/12 thru 08/36 | | | | | | | | | |
| Exponential Decline | | | | | | | | | |
| Qi = | 75.0 | mcf/d | | | | | | | |
| Qf = | 8.0 | mcf/d | | | | | | | |
| D = | 9.00% | per year | | | | | | | |
| Date | Gas Rate mcf/d | Gas Volume MMSCF | Date | Gas Rate mcf/d | Gas Volume MMSCF | Date | Gas Rate mcf/d | Gas Volume MMSCF | |
| Jan-07 | 93.05 | 2.88 | Aug-09 | 84.64 | 2.62 | Mar-12 | 76.78 | 2.38 | |
| Feb-07 | 92.77 | 2.60 | Sep-09 | 84.38 | 2.53 | Apr-12 | 76.55 | 2.30 | |
| Mar-07 | 92.50 | 2.87 | Oct-09 | 84.13 | 2.61 | May-12 | 76.31 | 2.37 | |
| Apr-07 | 92.21 | 2.77 | Nov-09 | 83.87 | 2.52 | Jun-12 | 76.08 | 2.28 | |
| May-07 | 91.93 | 2.85 | Dec-09 | 83.61 | 2.59 | Jul-12 | 75.85 | 2.35 | |
| Jun-07 | 91.65 | 2.75 | Jan-10 | 83.35 | 2.58 | Aug-12 | 75.61 | 2.34 | |
| Jul-07 | 91.37 | 2.83 | Feb-10 | 83.10 | 2.33 | Sep-12 | 75.38 | 2.26 | |
| Aug-07 | 91.09 | 2.82 | Mar-10 | 82.86 | 2.57 | Oct-12 | 75.15 | 2.33 | |
| Sep-07 | 90.81 | 2.72 | Apr-10 | 82.60 | 2.48 | Nov-12 | 74.92 | 2.25 | |
| Oct-07 | 90.53 | 2.81 | May-10 | 82.35 | 2.55 | Dec-12 | 74.45 | 2.31 | |
| Nov-07 | 90.25 | 2.71 | Jun-10 | 82.10 | 2.46 | Jan-13 | 74.06 | 2.30 | |
| Dec-07 | 89.98 | 2.79 | Jul-10 | 81.85 | 2.54 | Feb-13 | 73.50 | 2.06 | |
| Jan-08 | 89.45 | 2.77 | Aug-10 | 81.59 | 2.53 | Mar-13 | 72.94 | 2.26 | |
| Feb-08 | 89.18 | 2.59 | Sep-10 | 81.34 | 2.44 | Apr-13 | 72.37 | 2.17 | |
| Mar-08 | 88.91 | 2.76 | Oct-10 | 81.10 | 2.51 | May-13 | 71.80 | 2.23 | |
| Apr-08 | 88.64 | 2.66 | Nov-10 | 80.85 | 2.43 | Jun-13 | 71.24 | 2.14 | |
| May-08 | 88.37 | 2.74 | Dec-10 | 80.60 | 2.50 | Jul-13 | 70.68 | 2.19 | |
| Jun-08 | 88.10 | 2.64 | Jan-11 | 80.35 | 2.49 | Aug-13 | 70.12 | 2.17 | |
| Jul-08 | 87.83 | 2.72 | Feb-11 | 80.11 | 2.24 | Sep-13 | 69.57 | 2.09 | |
| Aug-08 | 87.56 | 2.71 | Mar-11 | 79.87 | 2.48 | Oct-13 | 69.02 | 2.14 | |
| Sep-08 | 87.29 | 2.62 | Apr-11 | 79.63 | 2.39 | Nov-13 | 68.48 | 2.05 | |
| Oct-08 | 87.03 | 2.70 | May-11 | 79.39 | 2.46 | Dec-13 | 67.94 | 2.11 | |
| Nov-08 | 86.76 | 2.60 | Jun-11 | 79.14 | 2.37 | Jan-14 | 67.40 | 2.09 | |
| Dec-08 | 86.50 | 2.68 | Jul-11 | 78.90 | 2.45 | Feb-14 | 66.89 | 1.87 | |
| Jan-09 | 86.47 | 2.68 | Aug-11 | 78.66 | 2.44 | Mar-14 | 66.38 | 2.06 | |
| Feb-09 | 86.21 | 2.41 | Sep-11 | 78.41 | 2.35 | Apr-14 | 65.86 | 1.98 | |
| Mar-09 | 85.95 | 2.67 | Oct-11 | 78.17 | 2.42 | May-14 | 65.34 | 2.03 | |
| Apr-09 | 85.69 | 2.57 | Nov-11 | 77.94 | 2.34 | Jun-14 | 64.83 | 1.95 | |
| May-09 | 85.43 | 2.65 | Dec-11 | 77.70 | 2.41 | Jul-14 | 64.32 | 1.99 | |
| Jun-09 | 85.17 | 2.56 | Jan-12 | 77.24 | 2.40 | Aug-14 | 63.81 | 1.98 | |
| Jul-09 | 84.91 | 2.63 | Feb-12 | 77.01 | 2.23 | Sep-14 | 63.30 | 1.90 | |