

12.28.05 DATE IN	SUSPENSE	ENGINEER <i>James</i>	12.29.05 LOGGED IN	TYPE <i>DHC</i>	PR NO <i>Remo536328080</i>
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



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.

Mary Corley
 Print or Type Name

Mary Corley
 Signature

Sr. Regulatory Analyst 12/14/2005
 Title Date
corleym1@bp.com
 e-mail Address

2005 DEC 28 PM 12 44

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

¹ API Number 30-045-07047	² Pool Code 82329	³ Pool Name Otero Chacra
⁴ Property Code 001133	⁵ Property Name Storey LS	⁶ Well Number 4
⁷ OGRID No. 000778	⁸ Operator Name BP America Production Company	⁹ Elevation 6260' GR

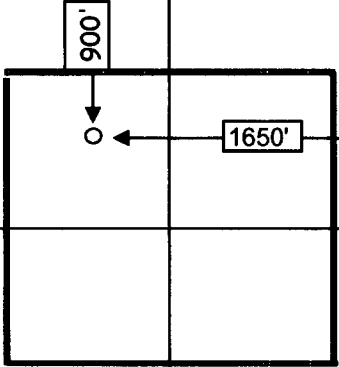
¹⁰ Surface Location

UL or lot no. Unit B	Section 34	Township 28N	Range 08W	Lot Idn	Feet from 900'	North/South North	Feet from 1650'	East/West East	County San Juan
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from	North/South	Feet	East/West	County
¹² Dedicated Acres 160		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

				¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>Mary Corley</i> Signature Mary Corley Printed Name Sr. Regulatory Analyst Title 12/14/2005 Date	
				¹⁸ SURVEYOR CERTIFICATION 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. 3/19/1957 Date of Survey Signature and Seal of Professional Surveyor: On File Certificate Number	

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

Form C-107A
Revised May 15,

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87505

APPLICATION TYPE

☒ Single Well

Establish Pre-Approved

EXISTING WELLBORE

☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

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

Operator Address
Storey LS 4 Unit B Section 34 T28N, R08W San Juan
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 000778 Property Code 001133 API No. 30-045-07047 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Blanco PC South	Otero Chacra	Blanco Mesaverde
Pool Code	72439	82329	72319
Top & Bottom of Pay Section (Perforated or Open-Hole Interval)	2646' – 2678'	To Be Determined	4308' – 5009'
Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift	Artificial Lift
Bottomhole Pressure	425	430	590
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1246	1210	1246
Producing, Shut-In or New Zone	USE EXISTING DECLINE Producing	BALANCE OF New Zone PRODUCTION	USE EXISTING DECLINE Producing
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 Mary Corley TITLE Sr. Regulatory Analyst DATE 12/14/2005
TYPE OR PRINT NAME Mary Corley TELEPHONE NO. (281) 366-4491

Allocation Method
Storey LS 4

BP America Production Company request permission to complete the subject well into the Otero Chacra and tricomingle production downhole with the existing South Blanco 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 – 078566

Pre Approved Pool:

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

Storey LS 4

Future Production Decline Estimate

Pictured Cliffs Daily Rates

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

$$Q_f = 15$$

$$Q_i = 17$$

$$\text{rate} = 15$$

$$\text{time} = 7$$

$$dt = -0.125163143$$

$$\text{decline} = -0.017880449$$

Month	Gas Volume
Jan-2004	19
Feb-2004	19
Mar-2004	19
Apr-2004	18
May-2004	17
Jun-2004	15
Jul-2004	17
Aug-2004	18
Sep-2004	17
Oct-2004	18
Nov-2004	18
Dec-2004	15
Jan-2005	18
Feb-2005	19
Mar-2005	17
Apr-2005	15
May-2005	17
Jun-2005	18
Jul-2005	16
Aug-2005	15
Sep-2005	15
Oct-2005	15
Nov-2005	15
Dec-2005	14
Jan-2006	14
Feb-2006	14
Mar-2006	14
Apr-2006	13
May-2006	13
Jun-2006	13
Jul-2006	13
Aug-2006	13
Sep-2006	12
Oct-2006	12
Nov-2006	12
Dec-2006	12

Month	Gas Volume
Jan-2007	11
Feb-2007	11
Mar-2007	11
Apr-2007	11
May-2007	11
Jun-2007	10
Jul-2007	10
Aug-2007	10
Sep-2007	10
Oct-2007	10
Nov-2007	10
Dec-2007	9
Jan-2008	9
Feb-2008	9
Mar-2008	9
Apr-2008	9
May-2008	9
Jun-2008	8
Jul-2008	8
Aug-2008	8
Sep-2008	8
Oct-2008	8
Nov-2008	8
Dec-2008	8
Jan-2009	8
Feb-2009	7
Mar-2009	7
Apr-2009	7
May-2009	7
Jun-2009	7
Jul-2009	7
Aug-2009	7
Sep-2009	7
Oct-2009	6
Nov-2009	6
Dec-2009	6
Jan-2010	6

Month	Gas Volume
Feb-2010	6
Mar-2010	6
Apr-2010	6
May-2010	6
Jun-2010	6
Jul-2010	6
Aug-2010	5
Sep-2010	5
Oct-2010	5
Nov-2010	5
Dec-2010	5
Jan-2011	5
Feb-2011	5
Mar-2011	5
Apr-2011	5
May-2011	5
Jun-2011	5
Jul-2011	4
Aug-2011	4
Sep-2011	4
Oct-2011	4
Nov-2011	4
Dec-2011	4
Jan-2012	4
Feb-2012	4
Mar-2012	4
Apr-2012	4
May-2012	4
Jun-2012	4
Jul-2012	4
Aug-2012	4
Sep-2012	3
Oct-2012	3
Nov-2012	3
Dec-2012	3
Jan-2013	3

Storey LS 4
Future Production Decline Estimate
Pictured Cliffs Daily Rates

Month	Gas Volume
Feb-2013	3
Mar-2013	3
Apr-2013	3
May-2013	3
Jun-2013	3
Jul-2013	3
Aug-2013	3
Sep-2013	3
Oct-2013	3
Nov-2013	3
Dec-2013	3
Jan-2014	3
Feb-2014	3
Mar-2014	3
Apr-2014	2
May-2014	2
Jun-2014	2
Jul-2014	2
Aug-2014	2
Sep-2014	2
Oct-2014	2
Nov-2014	2
Dec-2014	2
Jan-2015	2
Feb-2015	2
Mar-2015	2
Apr-2015	2
May-2015	2
Jun-2015	2
Jul-2015	2
Aug-2015	2
Sep-2015	2
Oct-2015	2
Nov-2015	2
Dec-2015	2
Jan-2016	2

Month	Gas Volume
Feb-2016	2
Mar-2016	2
Apr-2016	2
May-2016	2
Jun-2016	2
Jul-2016	2
Aug-2016	1
Sep-2016	1
Oct-2016	1
Nov-2016	1
Dec-2016	1
Jan-2017	1
Feb-2017	1
Mar-2017	1
Apr-2017	1
May-2017	1
Jun-2017	1
Jul-2017	1
Aug-2017	1
Sep-2017	1
Oct-2017	1
Nov-2017	1
Dec-2017	1
Jan-2018	1
Feb-2018	1
Mar-2018	1
Apr-2018	1
May-2018	1
Jun-2018	1
Jul-2018	1
Aug-2018	1
Sep-2018	1
Oct-2018	1
Nov-2018	1
Dec-2018	1
Jan-2019	1

Storey LS 4

Future Production Decline Estimate

Mesaverde Daily Rates

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

$$Q_f = 26$$

$$Q_i = 28$$

$$\text{rate} = 26$$

$$\text{time} = 7$$

$$dt = -0.074107972$$

$$\text{decline} = -0.010586853$$

Month	Gas Volume
Jan-2004	32
Feb-2004	33
Mar-2004	32
Apr-2004	31
May-2004	29
Jun-2004	25
Jul-2004	29
Aug-2004	30
Sep-2004	29
Oct-2004	30
Nov-2004	31
Dec-2004	25
Jan-2005	31
Feb-2005	32
Mar-2005	28
Apr-2005	26
May-2005	28
Jun-2005	30
Jul-2005	27
Aug-2005	25
Sep-2005	24
Oct-2005	26
Nov-2005	26
Dec-2005	25
Jan-2006	25
Feb-2006	25
Mar-2006	25
Apr-2006	24
May-2006	24
Jun-2006	24
Jul-2006	24
Aug-2006	23
Sep-2006	23
Oct-2006	23
Nov-2006	23
Dec-2006	22

Month	Gas Volume
Jan-2007	22
Feb-2007	22
Mar-2007	22
Apr-2007	21
May-2007	21
Jun-2007	21
Jul-2007	21
Aug-2007	21
Sep-2007	20
Oct-2007	20
Nov-2007	20
Dec-2007	20
Jan-2008	20
Feb-2008	19
Mar-2008	19
Apr-2008	19
May-2008	19
Jun-2008	19
Jul-2008	18
Aug-2008	18
Sep-2008	18
Oct-2008	18
Nov-2008	18
Dec-2008	18
Jan-2009	17
Feb-2009	17
Mar-2009	17
Apr-2009	17
May-2009	17
Jun-2009	16
Jul-2009	16
Aug-2009	16
Sep-2009	16
Oct-2009	16
Nov-2009	16
Dec-2009	15
Jan-2010	15

Month	Gas Volume
Feb-2010	15
Mar-2010	15
Apr-2010	15
May-2010	15
Jun-2010	15
Jul-2010	14
Aug-2010	14
Sep-2010	14
Oct-2010	14
Nov-2010	14
Dec-2010	14
Jan-2011	13
Feb-2011	13
Mar-2011	13
Apr-2011	13
May-2011	13
Jun-2011	13
Jul-2011	13
Aug-2011	13
Sep-2011	12
Oct-2011	12
Nov-2011	12
Dec-2011	12
Jan-2012	12
Feb-2012	12
Mar-2012	12
Apr-2012	12
May-2012	11
Jun-2012	11
Jul-2012	11
Aug-2012	11
Sep-2012	11
Oct-2012	11
Nov-2012	11
Dec-2012	11
Jan-2013	10

Storey LS 4
Future Production Decline Estimate
Mesaverde Daily Rates

Month	Gas Volume
Feb-2013	10
Mar-2013	10
Apr-2013	10
May-2013	10
Jun-2013	10
Jul-2013	10
Aug-2013	10
Sep-2013	10
Oct-2013	10
Nov-2013	9
Dec-2013	9
Jan-2014	9
Feb-2014	9
Mar-2014	9
Apr-2014	9
May-2014	9
Jun-2014	9
Jul-2014	9
Aug-2014	9
Sep-2014	8
Oct-2014	8
Nov-2014	8
Dec-2014	8
Jan-2015	8
Feb-2015	8
Mar-2015	8
Apr-2015	8
May-2015	8
Jun-2015	8
Jul-2015	8
Aug-2015	8
Sep-2015	7
Oct-2015	7
Nov-2015	7
Dec-2015	7
Jan-2016	7

Month	Gas Volume
Feb-2016	7
Mar-2016	7
Apr-2016	7
May-2016	7
Jun-2016	7
Jul-2016	7
Aug-2016	7
Sep-2016	7
Oct-2016	6
Nov-2016	6
Dec-2016	6
Jan-2017	6
Feb-2017	6
Mar-2017	6
Apr-2017	6
May-2017	6
Jun-2017	6
Jul-2017	6
Aug-2017	6
Sep-2017	6
Oct-2017	6
Nov-2017	6
Dec-2017	6
Jan-2018	6
Feb-2018	5
Mar-2018	5
Apr-2018	5
May-2018	5
Jun-2018	5
Jul-2018	5
Aug-2018	5
Sep-2018	5
Oct-2018	5
Nov-2018	5
Dec-2018	5
Jan-2019	5