

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-045-07943
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Hughes B
8. Well Number 4
9. OGRID Number 000778
10. Pool name or Wildcat Blanco Mesaverde & Pictured Cliffs

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐

2. Name of Operator

BP America Production Company - Attn: Mary Corley

3. Address of Operator

P.O. Box 3092 Houston, TX 77253

4. Well Location

Unit Letter **M** : **990** feet from the **South** line and **990** feet from the **West** line
Section **25** Township **32N** Range **11W** NMPM **San Juan** County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6475' GR

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type **Workover** Depth to Groundwater **>100'** Distance from nearest fresh water well **>1000'** Distance from nearest surface water **>1000'**

Pit Liner Thickness: **12** mil Below-Grade Tank: Volume _____ bbls; Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: **Complete into PC & DHC w/Mesaverde**

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

BP America Production Company request permission to complete the subject well into the Blanco Pictured Cliffs Pool and commingle production Downhole with the existing Blanco Mesaverde as per the attached procedure. The Blanco Mesaverde (72319) and Blanco Pictured Cliffs (72359) Pools are Pre-Approved Pools for Downhole Commingling per NMOCD order R-11363. The working and overriding royalty interest owners in the proposed commingled pools are identical, therefore no additional notification is required. BLM has been notified via FORM 3160-5.

Production is proposed to be allocated based on the subtraction method using the projected future decline for production from the Mesaverde. That 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 is the future production decline estimates for the Mesaverde.

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

Construct a lined workover pit per BP America - San Juan Basin Drilling/ Workover Pit Construction Plan issued date of 11/17/2004. Pit will be closed according to closure plan on file.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Mary Corley TITLE Sr. Regulatory Analyst DATE 03/30/2005
Type or print name Mary Corley E-mail address: corleyml@bp.com Telephone No. 281-366-4491

For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 88 DATE APR - 4 2005
Conditions of Approval (if any):

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-07943	² Pool Code 72359	³ Pool Name Blanco Pictured Cliffs
⁴ Property Code 000702	⁵ Property Name Hughes B	⁶ Well Number 4
⁷ OGRID No. 000778	⁸ Operator Name BP America Production Company	⁹ Elevation 6475' GR

¹⁰ Surface Location

UL or lot no. M	Section 20	Township 29N	Range 08W	Lot Idn	Feet from 990	North/South South	Feet from 990	East/West West	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. Signature Mary Corley Printed Name Sr. Regulatory Analyst Title 3/31/2005 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. 1/16/1953 Date of Survey
				C O Walker Certificate Number

Hughes B 4
Procedure to Complete into the Pictured Cliffs and DHC with Mesaverde
March 7, 2005

1. Perform pre-rig site inspection. Check for: size of location, Gas Taps, other wells, other operators, running equipment, wetlands, wash (dikes req.), H₂S, barriers needed for equipment, Landowner issues, location of pits (buried lines in pits), Raptor nesting, critical location, check anchors. Check ID wellhead, if earth pit is required have One Call made 48 hours prior to digging.
2. Perform second site visit after lines are marked to ensure all lines clear marked pit locations. Planning and Scheduling to ready location for rig.
3. RU slickline unit or wireline unit. Pressure test lubricator and equipment. RIH and set **two** barriers (CIBP, tbg collar stop w/plug, or plug set in nipple) for isolation in tubing string.
4. Check and record tubing, casing, and bradenhead pressures. Ensure production casing has double casing valves installed. Double valve all casing strings.
5. MIRU workover rig. LO/TO all necessary equipment including but not limited to: meter run, Automation, Separators and water lines.
6. Blow down well. Kill with 2% KCL water ONLY if necessary.
7. Check all casing strings to ensure no pressure exist on any annulus. **The operations of removal of wellhead and installation of BOP's will be performed under a dispensation for one (1) barrier on the backside.**
8. Nipple down Wellhead. NU BOPs and diversion spool with 3" outlets and 3" pipe to the blow tank. Pressure test BOPs to 200 psi above BHP. Monitor flowing casing pressure with gauge (with casing flowing to blow tank) throughout workover.
9. Install stripping rubber, pull tubing hanger up above pipe rams, and shut pipe rams. Remove stripping rubber. Strip tubing hanger out of hole. Re-install stripping rubber.
10. TOH and LD 2-3/8" production tubing currently set at 5281'. Using approved "Under Balance Well Control Tripping Procedure".
11. TIH w/ scraper for 4-1/2". Check the distance between the top of the blind rams and the length of the bottom hole assembly that is being run. If the BHA is too long then the well has to be top killed and monitored prior to opening blind rams. RIH to PBTD at 5,334'. POOH.
12. Set bridge plug at 4,500'. Fill casing w/ 2%KCl and test to 2,500 psi w/ rig pumps.
13. Prepare for explosive operations. Follow Schlumberger Explosive SOP including radio silence, suspension of welding operations, and isolation of electrical devices from the work area. Perform Pre-job Safety Meeting to review JSA and procedures.
14. RU E-line equipment. Pressure test lubricator and equipment. Log well w/ CBL from PBTD to 4000'.
15. Perforate squeeze holes 100' above TOC. (previous temp survey indicated TOC at 4,690').

16. Set cement retainer 100' above squeeze holes.
17. Sting into retainer. Circulate cement down tubing and up 4-1/2" by 7" annulus. Pump 20 bbls cement below retainer.
18. Sting out of retainer and circulate cement off of top of retainer. POOH and WOC.
19. RU e-line and run CBL from retainer to 3,000' to confirm TOC.
20. Back off 4-1/2" casing 100' above TOC.
21. RU E-line equipment. Pressure test lubricator and equipment. Log well w/ CBL from top of 4-1/2" to 2,500'.
22. Perforate squeeze holes 100' above TOC. (previous temp survey indicated TOC at 3,045').
23. Set cement retainer 100' above squeeze holes.
24. Sting into retainer. Circulate cement down tubing and up 7" annulus. Circulate cement to surface if possible.
25. Sting out of retainer and circulate cement off of top of retainer. POOH and WOC.
26. RU e-line and run CBL from retainer to 2,500' to confirm TOC is above Pictured Cliffs.
27. PU bit for 7" casing. Clean out retainer and cement to top of 4-1/2" liner.
28. Fill casing w/ 2%KCl and test to 2,500 psi w/ rig pumps.
29. RIH with 3-1/8" casing guns w/lubricator. Perforate Pictured Cliffs formation w/ 4 SPF at: 3089, 3085, 3081, 3077, 3074, 3069, 3066, 3063, 3059, 3056'.
30. NU Frac isolation equipment. Install and monitor production casing and treating pressure during entire job in frac van via pressure transducers on production casing and treating line. Spearhead 500 gal 15% HCL, establish injection rate, and proceed with fracture stimulation according to Schlumberger schedule. Maintain surface pressures less than 3,000 psi during frac job. Flush frac with foam. Fill out GWSI scorecard.
31. Flowback frac immediately. Flow well through choke manifold on 1/4", 1/2" and 3/4" chokes increasing drawdown until well dies or stabilizes. This is to aid in reducing sand flowback. Recommend 8 hours of flow for each choke size.
32. Rig up air package/unit, pressure test all lines (Testing procedure to be supplied from air company), TIH with tubing and bit for 7" casing. Cleanout fill to top of 4-1/2" casing. **Perform well test on Pictured Cliffs for regulatory and document well test in DIMS.**
33. PU bit for 4-1/2" casing. Cleanout fill, cement retainer, and BP set at 4,500'. Cleanout to PBTD at 5,334'. Blow well dry.
34. Rabbit tubing and RIH with 2-3/8" production tubing (with muleshoe, F-nipple with plug, 4 ft pup, X-nipple with plug).
35. Land 2-3/8" production tubing at +/-5,275'. Lock down hanger.

36. Pressure test tubing to 500 psi with air unit, make sure tubing spool valves are open. Care should be taken during pressure testing of the tubing due to potential problem caused if tubing parts close to surface or above the hanger. Check all casing string for pressure. **The operations of removal of wellhead and installation of BOP's will be performed under a dispensation for one (1) barrier on the backside.**
37. ND BOP's. NU Wellhead. During Master valve placement ensure the top of hanger has spacer nipple in place to bottom of bonnet flange so plunger equipment will not hang up through tree. Pressure test Wellhead.
38. RU WL unit. Run gauge ring for 2-3/8" tubing. Pull plugs and set tubing stop for plunger. Communicate plunger equipment status to IC room personnel.
39. RD slickline unit.
40. Test well for air. Return well to production and downhole co-mingle Pictured Cliffs and Mesaverde.

Hughes B #4

Sec 20, T29N, R8W

API # 30-045-07943

GL: 6485'

History:

Completed openhole in May 1953

May 1962- Case & frac'd wellbore

Mesaverde Perforations (1962)

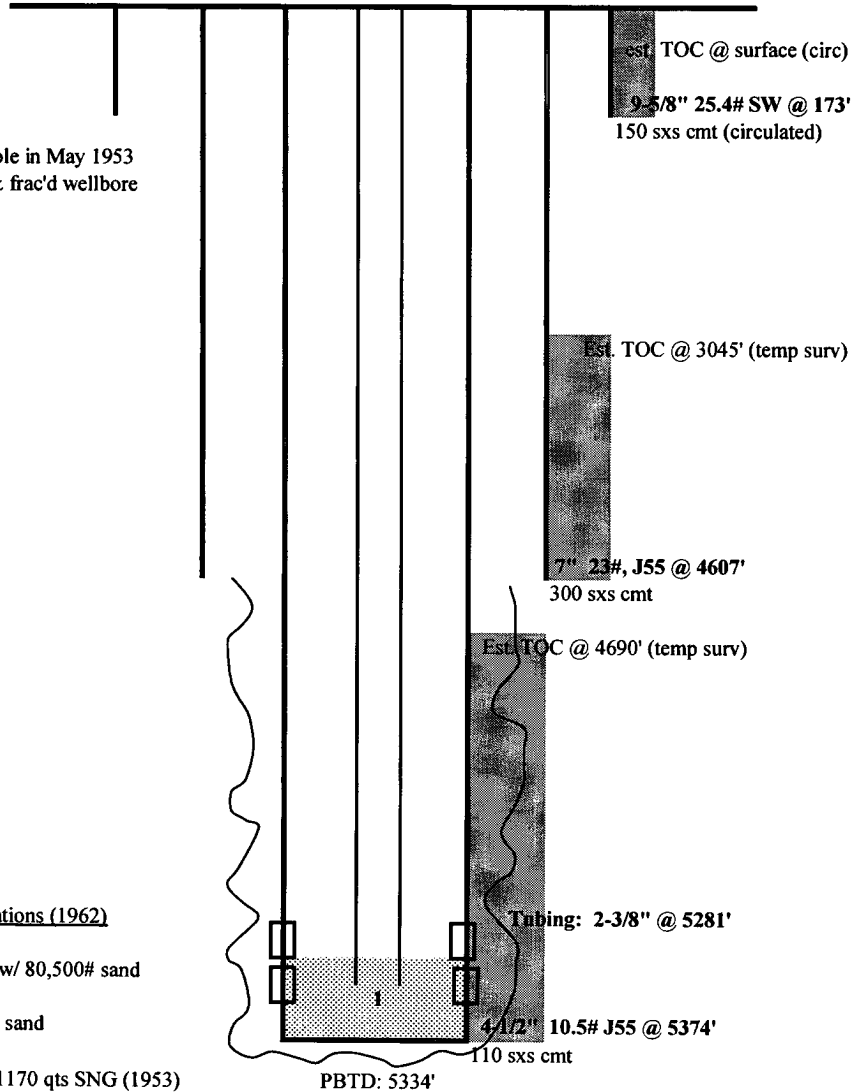
CH: 4664' - 4778'

MF: 4918' - 5197' w/ 80,500# sand

PL: 5296' - 5328'

frac'd w/ 100,000# sand

Openhole shot w/ 1170 qts SNG (1953)



updated: 12/10/04 CFR

Hughes B 4 Future Production Decline Estimate Mesaverde Daily Rates

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

$$Q_f = 105$$

$$Q_i = 110$$

$$\text{rate} = 105$$

$$\text{time} = 8$$

$$dt = -0.046520016$$

$$\text{decline} = -0.005815002$$

Month	Gas Volume
Jan-2004	86
Feb-2004	82
Mar-2004	127
Apr-2004	71
May-2004	95
Jun-2004	73
Jul-2004	110
Aug-2004	105
Sep-2004	91
Oct-2004	112
Nov-2004	108
Dec-2004	109
Jan-2005	106
Feb-2005	105
Mar-2005	82
Apr-2005	82
May-2005	81
Jun-2005	81
Jul-2005	80
Aug-2005	80
Sep-2005	79
Oct-2005	79
Nov-2005	78
Dec-2005	78
Jan-2006	77
Feb-2006	77
Mar-2006	76
Apr-2006	76
May-2006	76
Jun-2006	75
Jul-2006	75
Aug-2006	74
Sep-2006	74
Oct-2006	73
Nov-2006	73
Dec-2006	73

Month	Gas Volume
Jan-2007	72
Feb-2007	72
Mar-2007	71
Apr-2007	71
May-2007	70
Jun-2007	70
Jul-2007	70
Aug-2007	69
Sep-2007	69
Oct-2007	68
Nov-2007	68
Dec-2007	68
Jan-2008	67
Feb-2008	67
Mar-2008	67
Apr-2008	66
May-2008	66
Jun-2008	65
Jul-2008	65
Aug-2008	65
Sep-2008	65
Oct-2008	64
Nov-2008	64
Dec-2008	63
Jan-2009	63
Feb-2009	63
Mar-2009	62
Apr-2009	62
May-2009	62
Jun-2009	61
Jul-2009	61
Aug-2009	61
Sep-2009	60
Oct-2009	60
Nov-2009	60
Dec-2009	59
Jan-2010	59

Month	Gas Volume
Feb-2010	59
Mar-2010	58
Apr-2010	58
May-2010	58
Jun-2010	57
Jul-2010	57
Aug-2010	57
Sep-2010	56
Oct-2010	56
Nov-2010	56
Dec-2010	55
Jan-2011	55
Feb-2011	55
Mar-2011	54
Apr-2011	54
May-2011	54
Jun-2011	53
Jul-2011	53
Aug-2011	53
Sep-2011	52
Oct-2011	52
Nov-2011	52
Dec-2011	51
Jan-2012	51
Feb-2012	51
Mar-2012	51
Apr-2012	50
May-2012	50
Jun-2012	50
Jul-2012	49
Aug-2012	49
Sep-2012	49
Oct-2012	49
Nov-2012	48
Dec-2012	48
Jan-2013	48

Hughes B 4
Future Production Decline Estimate
Mesaverde Daily Rates

Month	Gas Volume
Feb-2013	47
Mar-2013	47
Apr-2013	47
May-2013	47
Jun-2013	46
Jul-2013	46
Aug-2013	46
Sep-2013	46
Oct-2013	45
Nov-2013	45
Dec-2013	45
Jan-2014	45
Feb-2014	44
Mar-2014	44
Apr-2014	44
May-2014	44
Jun-2014	43
Jul-2014	43
Aug-2014	43
Sep-2014	43
Oct-2014	42
Nov-2014	42
Dec-2014	42
Jan-2015	42
Feb-2015	41
Mar-2015	41
Apr-2015	41
May-2015	41
Jun-2015	40
Jul-2015	40
Aug-2015	40
Sep-2015	40
Oct-2015	39
Nov-2015	39
Dec-2015	39
Jan-2016	39

Month	Gas Volume
Feb-2016	39
Mar-2016	38
Apr-2016	38
May-2016	38
Jun-2016	38
Jul-2016	37
Aug-2016	37
Sep-2016	37
Oct-2016	37
Nov-2016	37
Dec-2016	36
Jan-2017	36
Feb-2017	36
Mar-2017	36
Apr-2017	35
May-2017	35
Jun-2017	35
Jul-2017	35
Aug-2017	35
Sep-2017	34
Oct-2017	34
Nov-2017	34
Dec-2017	34
Jan-2018	34
Feb-2018	33
Mar-2018	33
Apr-2018	33
May-2018	33
Jun-2018	33
Jul-2018	33
Aug-2018	32
Sep-2018	32
Oct-2018	32
Nov-2018	32
Dec-2018	32
Jan-2019	31