

Submit 3 Copies To Appropriate District Office

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

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

State of New Mexico  
Energy, Minerals and Natural Resources

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

Form C-103

Revised March 25, 1999

WELL API NO.

30-045-30625

5. Indicate Type of Lease

STATE FEE

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name:

Mudge LS

8. Well No.

24M

9. Pool name or Wildcat

Basin Dakota & Blanco Mesaverde

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 I 2370 feet from the South line and 780 feet from the East line

Section 33 Township 32N Range 11W NMPM San Juan County

10. Elevation (Show whether DR, RKB, RT, GR, etc.)

6092' GR

11. 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 COMPLETION ☐

OTHER: Downhole Commingle ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

12. 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.

On 04/09/2001, BP America Production Company submitted an application for permit to drill and complete the subject well into the Basin Dakota, produce the well for approximately 30 days to establish a production rate, add the Blanco Mesaverde and commingle production Downhole. The completion into the Dakota is expected to be completed on 09/27/2002. We anticipate completion of the Mesaverde (per the attached procedure) 30 days after the completion of the Dakota.

The Basin Dakota (71599) & the Blanco Mesaverde (72319) Pools are Pre-Approved for Downhole Commingling per NMOCDC Order R - 11363. The working and overriding royalty interest owners in the proposed commingled pools are not identical. All interest owners were notified of our intent to Downhole commingle and the proposed allocation method on April 11, 2001.

Production is proposed to be allocated based on a fixed percentage. We will perform a deliverability test on the Dakota, isolate the zone and complete into the Mesaverde. The deliverability test will be performed on the combined zones and Dakota rate will be subtracted from the total well stream to establish the Mesaverde rate.

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

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 09/23/2002

Type or print name Mary Corley Telephone No. 281-366-4491

(This space for State use)

APPROVED BY DEPUTY CHIEF OF BUREAU TITLE DEPUTY CHIEF OF BUREAU DATE SEP 24 2002

Conditions of approval, if any:

# Mesa Verde/Dakota Infill Drilling Well Completion Procedure

**Well Name** Mudge LS 24M  
**Version** 1.0  
**Date**

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## Summary of Objectives

1. Perforate and frac (N2 foam) the Point Lookout Formation
2. Perforate and frac (N2 foam) the Menefee Formation
3. Perforate and frac (N2 Foam) the CliffHouse Formation
4. Clean out frac and test
5. Run completion
6. Put the well on line

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## Pertinent Information

<b>Location</b>	33-32N-11W	<b>Horizon</b>	Mesa Verde
<b>County</b>	San Juan	<b>API Number</b>	30-045-30610
<b>State</b>	New Mexico	<b>Engineer</b>	Marney Pietrobon
<b>Well Flac</b>		<b>Phone #</b>	281-366-7609
<b>SAP Number</b>	X3- 003ZD	<b>Mobile #</b>	713-444-0017

## Safety Observations and Issues

1. Equipment taking to site will be handled with *extreme care* to reduce any potential hazard for the environment.
2. A safety meeting will be held at the beginning of the job. The site and surrounding area will be kept clean and tidy throughout all operations with appropriate warning signs will be placed around work area.
3. Risk Assessment to be performed.

## Completion Procedure

1. Prepare the location and fence off the pits. Meet with Schlumberger to determine number of frac tanks required and the layout of the site.  
*Location and final spotting of equipment should not cause any hazards on site.*
2. Hold morning meeting, perform and discuss the Risk Assessment (JHA) with FMC (Wellhead Company) and rig crews.
3. Check and record tubing and casing pressures
4. Notify FMC (Wellhead Company) of frac date and conduct Risk Assessment (JHA) identifying major uncertainties i.e. dropped objects potentials
5. Blowdown well, if necessary kill well with 2% KCL
6. Nipple down wellhead, nipple up and pressure test BOP's.
7. Tag for fill. Tally out of hole and lay-down tubing. 2 3/8" production tubing is currently set at 7391'
8. RIH with bit and scraper, clean out to TD
9. RIH with tubing-set CIBP. Set CIBP at **5500'**. Load hole with 2% KCL and pressure test casing to 1500 psi.

### FIRST MESAVERDE STAGE

10. Rig- up Schlumberger equipment & and prepare for perforating operation. Pick up and RIH with gun assembly. Perforate the Mesa Verde (*reservoir sections are known as the Point Lookout*) with 2 SPF, 120° phasing as follows:

**5379', 5357', 5342', 5332', 5320', 5308', 5296', 5288', 5281', 5262', 5234', 5224', 5205', 5199', 5187', 5179', 5172'**

**1 SPF**

**5152', 5144', 5133', 5126', 5120', 5101', 5090'**

**2SPF**

**5079', 5072', 5064', 5057'.**

11. POOH with wireline and guns, check for 100% firing rate. Report to Houston on the percentage fire rate of the guns used.
12. On day prior to frac rig-up EZ Drill plug/perf guns for 2<sup>nd</sup> stage piggyback. Lay plug/gun assembly down.
13. Hold Risk Assessment (JHA) meeting prior to frac job.

14. Rig-up Dowell-Schlumberger equipment and pressure test all lines. Frac the Mesa Verde (*reservoir sections are known as the Point Look out*) per Dowell procedure, lead frac with 500 gal of 15% HCL.

## **SECOND STAGE MESA VERDE**

15. Hold Morning meeting and discuss Risk Assessment (JHA) with crews
16. Rig-up Schlumberger (wireline) equipment and prepare for perforating operations. Pick up and RIH with plug/gun assembly & set EZ Drill plug at **5014** ft. Perforate the Mesa Verde (*second reservoir section is known as the Menefee formation*) the with 2 SPF, 120° phasing as follows:  
**4974', 4968', 4952', 4942', 4931', 4924', 4920', 4907', 4886', 4881', 4871', 4867', 4852', 4833', 4825', 4795', 4776', 4753', 4746', 4741', 4736'**
17. POOH with plug/gun assembly and check firing rate of guns.
18. Frac the second Mesa Verde section (*known as the Menefee Formation*) as per Dowell procedure, lead frac with 500 gal. 15% HCL.
  - Dowell Schlumberger - Electronic (ASCII file) frac file to be sent next day to Houston & paper copy sent by the following Friday. Paper copies should include priceout sheet.

## **THIRD STAGE MESA VERDE**

19. Hold Morning meeting and discuss Risk Assessment (JHA) with crews
20. Rig-up Schlumberger (wireline) equipment and prepare for perforating operations. Pick up and RIH with plug/gun assembly & set EZ Drill plug at **4731**ft. Perforate the Mesa Verde (*third reservoir section is known as the Cliff House formation*) the with **1 SPF**, 120° phasing as follows:  
**4695', 4686', 4666', 4658', 4641', 4630', 4612', 4607', 4590', 4572', 4560', 4549', 4546', 4542'**  
**2 SPF**  
**4532', 4528', 4505', 4483', 4477', 4472', 4464', 4453', 4447', 4418', 4414', 4404', 4391', 4378', 4368', 4360', 4354', 4344', 4331', 4318'.**
21. POOH with plug/gun assembly and check firing rate of guns.
22. Frac the third Mesa Verde section (*known as the Cliff House Formation*) as per Dowell procedure, lead frac with 500 gal. 15% HCL.
  - Dowell Schlumberger - Electronic (ASCII file) frac file to be sent next day to Houston & paper copy sent by the following Friday. Paper copies should include priceout sheet.
23. Rig-down Dowell & Schlumberger equipment.

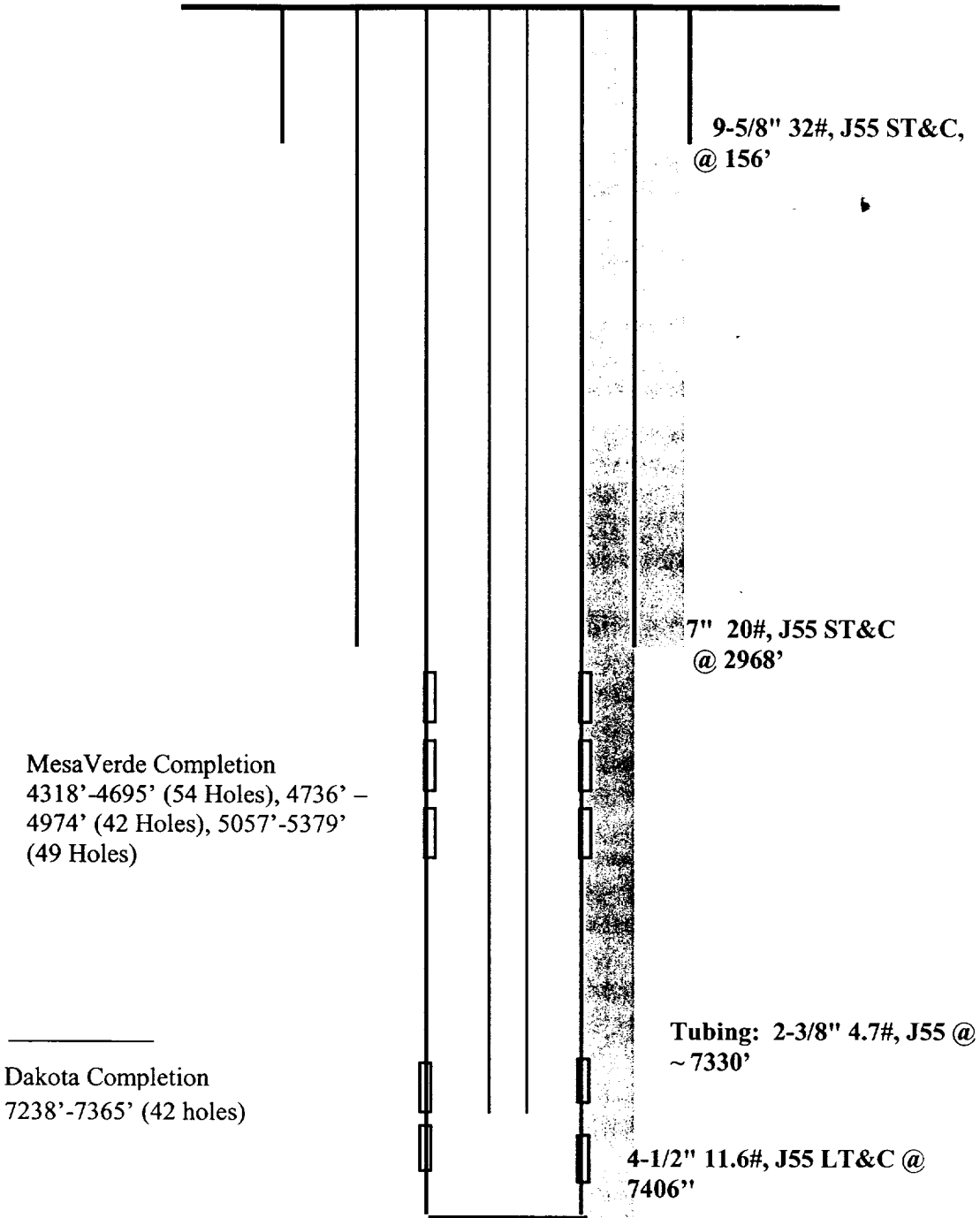
24. Flowback well overnight.
25. Hold Morning Meeting and discuss Risk Assessment (JHA) with crews
26. Rig-Up Service Rig and RIH 2 3/8" production tubing with bit. Clean out fill and drill through BP set at 5014', 4731' and 5500'.
27. If fill exists, POOH with tubing and bit, rig-up air unit to bail, continue to bail until fill is 30 ft below bottom perforations (~ xxxx'). If no fill is evident POOH with tubing and bit. Stand tubing in Derrick. Retrieve bit
28. Pick up and run 2 3/8" production tubing with 'F' landing nipple. Land tubing at 7391'.
29. Run in slowly with tubing, noting the up and down weight of the string. Land tubing in Hanger. Send appropriate information to Mary Corley (281-366-4491) to file the C-104
30. Rig-Up wireline unit and set plug in the 'F' nipple. Nipple down BOP's, install Xmas tree and test to 3000 psi. If wellhead tests ok, retrieve plug, if not check seals on wellhead and re-test.
31. RDMO Service rig
32. Install flowline and test
33. Turn well to commingled MV/DK production.

# Mudge LS #24M

Sec33, T321N R11W

API: 30-045-30625

GL: 6092'



Notes

Updated: 16<sup>th</sup> September 2002,  
MNP