

Submit 1 Copy To Appropriate District Office  
District I - (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II - (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV - (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised July 18, 2013

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

WELL API NO.  
**30-045-07658**

5. Indicate Type of Lease  
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

**Gallegos Canyon Unit**

8. Well Number  
**170**

9. OGRID Number  
**000778**

10. Pool name or Wildcat  
**Basin Dakota**

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**

3. Address of Operator  
**737 North Eldridge Pkwy, 12.181A  
Houston, TX 77079**

4. Well Location  
Unit Letter **K** : **1705** feet from the **South** line and **1777** feet from the **West** line  
Section **35** Township **29N** Range **12W** NMPM County **San Juan**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**5381'**

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 ☐  
DOWNHOLE COMMINGLE ☐  
CLOSED-LOOP SYSTEM ☒  
OTHER: ☐

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 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

**BP America Production Company respectfully requests to P&A the subject well**

**OIL CONS. DIV DIST. 3**

Please see the attached procedure.

*\* See Attached emails and approvals*

**AUG 22 2016**

Spud Date: **09/08/1964**

Rig Release Date:

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 08/17/2016

Type or print name Toya Colvin E-mail address: Toya.Colvin@bp.com PHONE: 281-892-5369  
**For State Use Only**

APPROVED BY: *Bob Redd* TITLE *AV* DATE 9/07/16

Conditions of Approval (if any):

*\* Attached emails have the changes and approvals needed*

## **GCU 170-DK Plug & Abandon Regulatory Procedure**

API # 30-045-07658-00

Location: Unit K - Sec 35 - T29N - R12W

San Juan County, New Mexico

### **Basic job procedure**

1. ND Wellhead, NU BOPE/rig-assist snubbing unit
2. Snub 2-3/8" tubing out of hole
3. RU E-line, RIH w/ 4-1/2" CIBP & set @ +/- 5800'
4. Run CBL from 5800' to Surface
5. Snub in hole w/ workstring to CIBP @ 5800'
6. Spot cmt plug @ +/- 4850'-5800' (Gallup Top @ 4952', Dakota Top @ 5816')
  - a. WOC, Tag plug if required
7. PU to 4110'
8. Spot cmt plug @ +/- 4010'-4110' (Mancos Top @ 4060')
  - a. Contingency – set cmt retainer @ +/- 4110' prior to spotting cmt if unable to balance plug
  - b. WOC, Tag plug if required
9. Snub out of hole
10. Snub in hole w/ 4-1/2" CIBP
11. Set CIBP @ +/- 3950' (Point Lookout Base @ 3900')
12. Hunt for Leak w/ packer
13. Snub out of hole w/ pkr
14. Squeeze casing leaks as necessary
15. Additional perforations & squeezes will be dictated by CBL
16. PU tbg to 2930'
17. Spot cmt plug @ +/- 2830'-2930' (Mesaverde Top @ 2880')
  - a. Contingency – set cmt retainer @ +/- 2930' prior to spotting cmt if unable to balance plug
  - b. WOC, Tag plug if required
18. PU tbg to 2344'
19. Spot cmt plug @ +/- ~~2244'-2344'~~ **2372'-2472'** (Chacra Top @ ~~2294'~~ **2422'**)
  - a. WOC, Tag plug if required
20. PU tbg to 1380'
21. Spot cmt plug @ +/- 1000'-1380' (Fruitland Top @ ~~1053'~~ **1092'**, PC Top @ 1330')
  - a. WOC, Tag plug if required
22. PU tbg to 400'
23. Spot cmt plug @ +/- 400'-surface (Ojo Alamo Top @ 87', Kirtland Top @ 184')
24. Cut off wellhead, weld P&A marker

## Current WBD



**GCU 170-DK**  
 Dakota  
 API #: 300450765800  
 Unit K - Sec 35 - T29N - R12W  
 San Juan County, NM

Max BHT: 148 deg F  
 128 deg F @ 3200' [1964]

Ojo Alamo Top: 87'  
 Kirtland Top: 184'

Fruitland Coal Top: 1053'  
 Pictured Cliffs Top: 1330'

Chacra Top: 2294'

Mesaverde Top: 2880'

Mancos Top: 4060'

Gallup Top: 4952'

Dakota Top: 5816'

End of Tubing  
 5838'

GL: 5369'  
 KB: 12'

TOC: Surface (circ. 20sxs cmt)

### Surface Casing Data

12-1/4" Hole  
 8-5/8", 24#, J-55 ST&C @ 336'  
 250 sxs type A cmt

TOC: Surface (circ. 11bbbls cmt)

Sqz holes @ 850'-851'  
 240 sxs cls B cmt, tested to 1000#

TOC: 1000' (CBL 2/27/92)

Suspected casing leak around 3000' +/-

DV tool @ 4174'

2nd stage: 1000 sxs cls C cmt (lost circulation, no cmt returns)

### Tubing Details

2-3/8", 4.7#, J-55 @ 5838'

BHA

SN 1 jt above EOT (1.1')

tbg jt (31.8')

Muleshoe @ EOT (0.4')

### Nipple Data

No stop in well

SN @ 5805'

### Dakota Completion

5820'-5832' (3spf)

frac w/ 12,000# 20/40 snd & 14,196 gals wtr

5892'-5910', 5944'-5950' (2spf)

frac w/ 30,000# 20/40, 10,000# 10/20 snd, 114 gals frac fluid, & 38,724 gals wtr

### Production Casing Data

7-7/8" Hole

4-1/2", 10.5#, J-55 ST&C @ 6009'

1st stage: 400 sxs cls C lead, tail w/ 100 sxs cls C neat cmt (circ. 10 bbbls cmt)

PBTD: 5973'  
 TD: 6009'

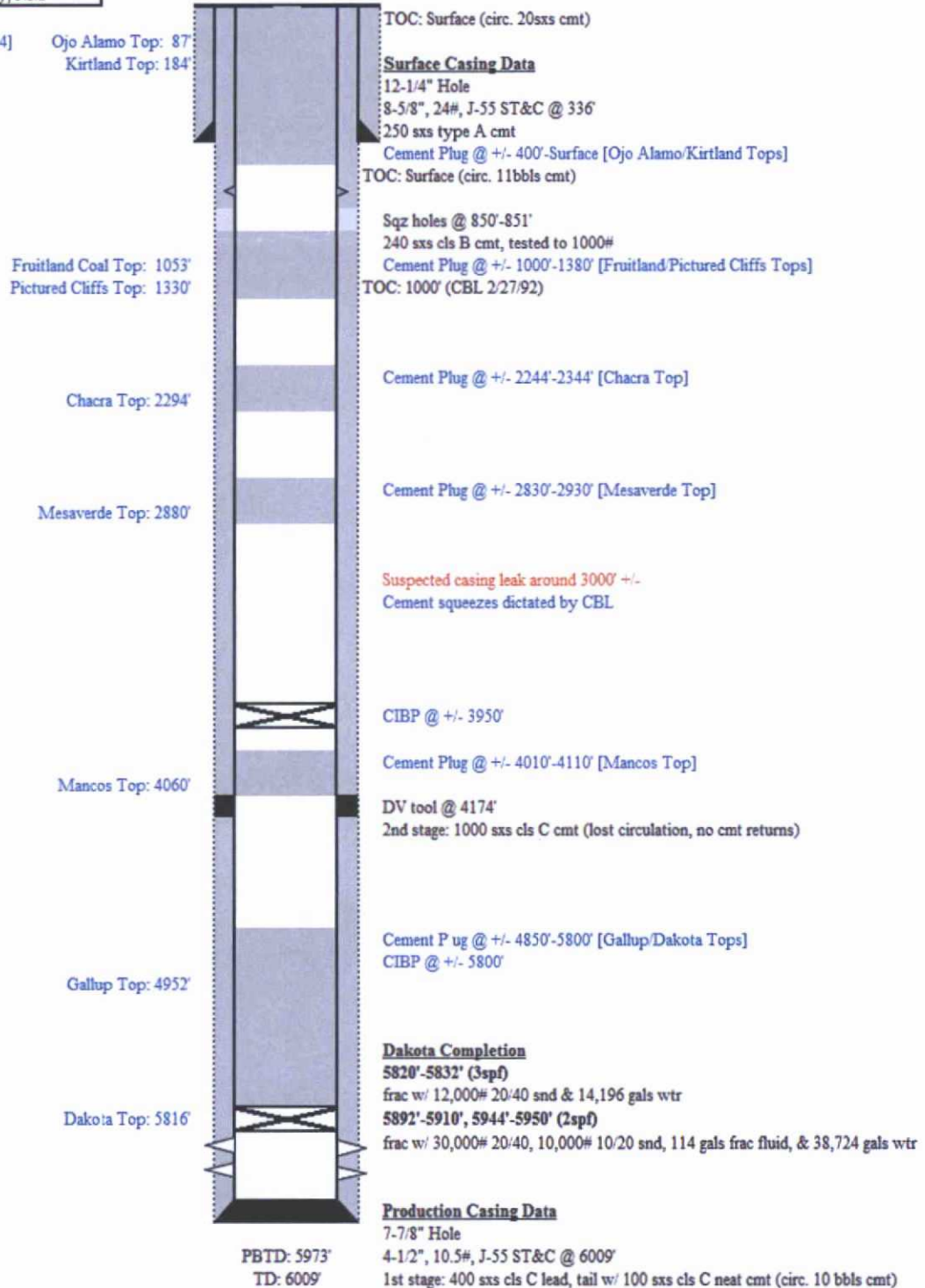


## Proposed WBD

**GCU 170-DK**  
Dakota  
API #: 300450765800  
Unit K - Sec 35 - T29N - R12W  
San Juan County, NM

Max BHT: 148 deg F  
128 deg F @ 3200' [1964]

GL: 5369'  
KB: 12'



## Powell, Brandon, EMNRD

---

**From:** Powell, Brandon, EMNRD  
**Sent:** Tuesday, August 16, 2016 2:57 PM  
**To:** 'Van Wageningen, Jeffrey'  
**Cc:** Acosta Vasquez, Getulio R; Sandoz, Christopher; Colvin, Toya; Cadena, Javier; Morton, Zachary  
**Subject:** RE: GCU 170-DK: Request to P&A Wellbore  
**Attachments:** GCU 170-DK\_P&A\_RegulatoryProcedure\_8-16-16.docx

Good afternoon Jeffrey,

I made a few minor changes in the written procedure in red. Other than the changes everything looked good.

Thank You

Brandon Powell

Office: (505) 334-6178 ext. 116

*"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"*

---

**From:** Van Wageningen, Jeffrey [mailto:Jeffrey.VanWageningen@bp.com]  
**Sent:** Tuesday, August 16, 2016 2:50 PM  
**To:** Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>  
**Cc:** Acosta Vasquez, Getulio R <Getulio.AcostaVasquez@bp.com>; Sandoz, Christopher <Christopher.Sandoz@bp.com>; Colvin, Toya <Toya.Colvin@bp.com>; Cadena, Javier <Javier.Cadena@bp.com>; Morton, Zachary <Zachary.Morton@bp.com>  
**Subject:** RE: GCU 170-DK: Request to P&A Wellbore

Hi Brandon,

Attached is an updated P&A procedure for the GCU 170-DK updated with your comments from this morning. I haven't received confirmation of tops from your geologist yet but I wanted to get this over to you as well as get the sundry process started. The tops in the procedure match prior regulatory tops except for the Ojo Alamo & Kirtland, which I was unable to find on the NMOCD website. I used our own picks for these two zones.

Thanks,  
Jeff

**Jeffrey van Wageningen, P.E.**

Production Engineer – Farmington South  
BP America - L48 West BU  
832-619-6378 (work)  
713-705-6533 (cell)  
[vanwj6@bp.com](mailto:vanwj6@bp.com)

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---

**From:** Van Wageningen, Jeffrey  
**Sent:** Monday, August 15, 2016 2:00 PM  
**To:** Powell, Brandon, EMNRD

**Cc:** Acosta Vasquez, Getulio R; Sandoz, Christopher; Colvin, Toya; Cadena, Javier; Morton, Zachary

**Subject:** GCU 170-DK: Request to P&A Wellbore

Hi Brandon,

Due to compromised casing integrity and pressure at surface in the GCU 170-DK, we would like to proceed with a plan to plug & abandon the wellbore. Attached are a basic job procedure and current & proposed wellbore diagrams for the proposed P&A.

Do you have time this afternoon or tomorrow morning for a phone call to discuss this procedure?

We are currently planning to bring a snubbing unit out to location tomorrow (Tuesday) afternoon, and, with your approval, begin work to P&A this wellbore as early as Wednesday morning.

Thanks,

Jeff

**Jeffrey van Wageningen, P.E.**

Production Engineer – Farmington South

BP America - L48 West BU

832-619-6378 (work)

713-705-6533 (cell)

[vanwi6@bp.com](mailto:vanwi6@bp.com)

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## **GCU 170-DK Plug & Abandon Regulatory Procedure**

API # 30-045-07658-00

Location: Unit K - Sec 35 - T29N - R12W

San Juan County, New Mexico

### **Basic job procedure**

1. ND Wellhead, NU BOPE/rig-assist snubbing unit
2. Snub 2-3/8" tubing out of hole
3. RU E-line, RIH w/ 4-1/2" CIBP & set @ +/- 5800'
4. Run CBL from 5800' to Surface
5. Snub in hole w/ workstring to CIBP @ 5800'
6. Spot cmt plug @ +/- 4850'-5800' (Gallup Top @ 4952', Dakota Top @ 5816')
  - a. WOC, Tag plug if required
7. PU to 4110'
8. Spot cmt plug @ +/- 4010'-4110' (Mancos Top @ 4060')
  - a. Contingency – set cmt retainer @ +/- 4110' prior to spotting cmt if unable to balance plug
  - b. WOC, Tag plug if required
9. Snub out of hole
10. Snub in hole w/ 4-1/2" CIBP
11. Set CIBP @ +/- 3950' (Point Lookout Base @ 3900')
12. Hunt for Leak w/ packer
13. Snub out of hole w/ pkr
14. Squeeze casing leaks as necessary
15. Additional perforations & squeezes will be dictated by CBL
16. PU tbg to 2930'
17. Spot cmt plug @ +/- 2830'-2930' (Mesaverde Top @ 2880')
  - a. Contingency – set cmt retainer @ +/- 2930' prior to spotting cmt if unable to balance plug
  - b. WOC, Tag plug if required
18. PU tbg to 2344'
19. Spot cmt plug @ +/- 2244'-2344' 2372'-2472' (Chacra Top @ 2294' 2422')
  - a. WOC, Tag plug if required
20. PU tbg to 1380'
21. Spot cmt plug @ +/- 1000'-1380' (Fruitland Top @ 1053' 1092', PC Top @ 1330')
  - a. WOC, Tag plug if required
22. PU tbg to 400'
23. Spot cmt plug @ +/- 400'-surface (Ojo Alamo Top @ 87', Kirtland Top @ 184')
24. Cut off wellhead, weld P&A marker

## Current WBD

GCU 170-DK

Dakota

API #: 300450765800

Unit K - Sec 35 - T29N - R12W

San Juan County, NM

Max BHT: 148 deg F

128 deg F @ 3200' [1964]

GL: 5369'

KB: 12'

bp



Ojo Alamo Top: 87'

Kirtland Top: 184'

Fruitland Coal Top: 1053'

Pictured Cliffs Top: 1330'

Chacra Top: 2294'

Mesaverde Top: 2880'

Mancos Top: 4060'

Gallup Top: 4952'

Dakota Top: 5816'

End of Tubing  
5838'

TOC: Surface (circ. 20sxs cmt)

### Surface Casing Data

12-1/4" Hole

8-5/8", 24#, J-55 ST&C @ 336'

250 sxs type A cmt

TOC: Surface (circ. 11bbls cmt)

Sqz holes @ 850'-851'

240 sxs cls B cmt, tested to 1000#

TOC: 1000' (CBL 2/27/92)

Suspected casing leak around 3000' +/-

DV tool @ 4174'

2nd stage: 1000 sxs cls C cmt (lost circulation, no cmt returns)

### Dakota Completion

5820'-5832' (3spf)

frac w/ 12,000# 20/40 sand & 14,196 gals wtr

5892'-5910', 5944'-5950' (2spf)

frac w/ 30,000# 20/40, 10,000# 10/20 sand, 114 gals frac fluid, & 38,724 gals wtr

### Production Casing Data

7-7/8" Hole

4-1/2", 10.5#, J-55 ST&C @ 6009'

1st stage: 400 sxs cls C lead, tail w/ 100 sxs cls C neat cmt (circ. 10 bbls cmt)

### Tubing Details

2-3/8", 4.7#, J-55 @ 5838'

#### BHA

SN 1 jt above EOT (1.1')

tbg jt (31.8')

Muleshoe @ EOT (0.4')

### Nipple Data

No stop in well

SN @ 5805'

PBTD: 5973'

TD: 6009'

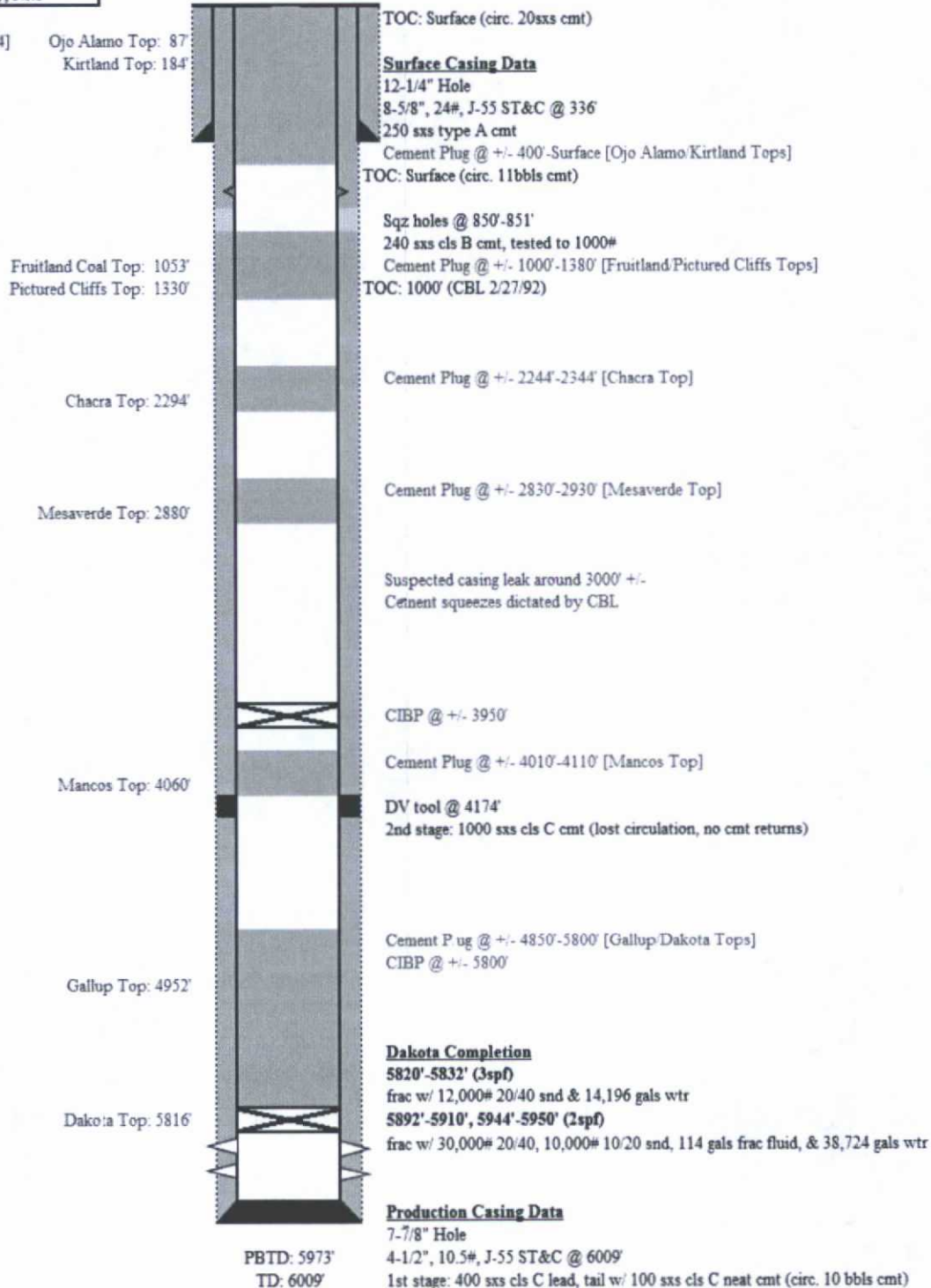


## Proposed WBD

**GCU 170-DK**  
 Dakota  
 API #: 300450765800  
 Unit K - Sec 35 - T29N - R12W  
 San Juan County, NM

Max BHT: 148 deg F  
 128 deg F @ 3200' [1964]

GL: 5369'  
 KB: 12'



## **Powell, Brandon, EMNRD**

---

**From:** Powell, Brandon, EMNRD  
**Sent:** Thursday, August 18, 2016 4:08 PM  
**To:** 'Van Wageningen, Jeffrey'  
**Cc:** Acosta Vasquez, Getulio R; Sandoz, Christopher; Colvin, Toya; Cadena, Javier; Morton, Zachary  
**Subject:** RE: GCU 170-DK: Request to P&A Wellbore

Good afternoon Jeffrey,

You have approval to proceed. Please notify us when you plan to start.

Thank You

Brandon Powell

Office: (505) 334-6178 ext. 116

*"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"*

---

**From:** Van Wageningen, Jeffrey [mailto:Jeffrey.VanWageningen@bp.com]  
**Sent:** Thursday, August 18, 2016 3:18 PM  
**To:** Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>  
**Cc:** Acosta Vasquez, Getulio R <Getulio.AcostaVasquez@bp.com>; Sandoz, Christopher <Christopher.Sandoz@bp.com>; Colvin, Toya <Toya.Colvin@bp.com>; Cadena, Javier <Javier.Cadena@bp.com>; Morton, Zachary <Zachary.Morton@bp.com>  
**Subject:** RE: GCU 170-DK: Request to P&A Wellbore

Hi Brandon,

We have run into an issue with the lockdown pins on the wellhead. Due to the seal configuration of tubing head and condition of the lockdown pins, we believe that if we nipple down the tree or attempt to remove the lockdown pins in order to pull the tubing hanger, we risk losing containment of the casing through the tubing hanger seals and/or lockdown pin ports.

Therefore, we are proposing to modify the procedure (attached) in order to handle this issue. Below is a summary of the addition:

- Use coiled tubing to spot initial Dakota plug with tubing still in place
- Perforate tubing above top of cement plug
- Circulate kill weight fluid into casing in order to kill well long enough to replace the tubing head
- Once tubing head is replaced, continue with originally planned procedure with modified bottom plug

Please review the proposed procedure and send us your approval if everything looks good. Please give me a call if you have any questions.

Thanks,  
Jeff

**Jeffrey van Wageningen, P.E.**  
Production Engineer – Farmington South  
BP America - L48 West BU  
832-619-6378 (work)

---

**From:** Powell, Brandon, EMNRD [mailto:Brandon.Powell@state.nm.us]  
**Sent:** Tuesday, August 16, 2016 3:57 PM  
**To:** Van Wageningen, Jeffrey  
**Cc:** Acosta Vasquez, Getulio R; Sandoz, Christopher; Colvin, Toya; Cadena, Javier; Morton, Zachary  
**Subject:** RE: GCU 170-DK: Request to P&A Wellbore

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**Sent:** Tuesday, August 16, 2016 2:50 PM  
**To:** Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>  
**Cc:** Acosta Vasquez, Getulio R <Getulio.AcostaVasquez@bp.com>; Sandoz, Christopher <Christopher.Sandoz@bp.com>; Colvin, Toya <Toya.Colvin@bp.com>; Cadena, Javier <Javier.Cadena@bp.com>; Morton, Zachary <Zachary.Morton@bp.com>  
**Subject:** RE: GCU 170-DK: Request to P&A Wellbore

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Thanks,  
Jeff

**Jeffrey van Wageningen, P.E.**  
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**Sent:** Monday, August 15, 2016 2:00 PM  
**To:** Powell, Brandon, EMNRD  
**Cc:** Acosta Vasquez, Getulio R; Sandoz, Christopher; Colvin, Toya; Cadena, Javier; Morton, Zachary  
**Subject:** GCU 170-DK: Request to P&A Wellbore

Hi Brandon,



Due to compromised casing integrity and pressure at surface in the GCU 170-DK, we would like to proceed with a plan to plug & abandon the wellbore. Attached are a basic job procedure and current & proposed wellbore diagrams for the proposed P&A.

Do you have time this afternoon or tomorrow morning for a phone call to discuss this procedure?

We are currently planning to bring a snubbing unit out to location tomorrow (Tuesday) afternoon, and, with your approval, begin work to P&A this wellbore as early as Wednesday morning.

Thanks,  
Jeff

**Jeffrey van Wageningen, P.E.**

Production Engineer – Farmington South  
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## **GCU 170-DK Plug & Abandon Regulatory Procedure**

API # 30-045-07658-00

Location: Unit K - Sec 35 - T29N - R12W

San Juan County, New Mexico

### **Basic job procedure**

1. RU E-line & cut tubing at 5792'
2. Spot cement down tubing to plug DK
  - a. Drill out cmt in tbg with 1-1/4" CT to 5743'
  - b. Run CBL E-line (2-3/8"x4-1/2" TOC @ 4590')
3. RU E-line and cut tubing at +/- 4400'
4. RIH and perforate holes in the tubing at +/- 4370'-4380'
5. Circulate kwf from tubing to casing to kill the well
6. Ensure the well is dead
7. ND Wellhead and replace wellhead
8. NU BOPE
9. TOH with 2-3/8" tubing
10. RU E-line, run CBL in 4-1/2" casing from +/- 4400 to Surface
11. Snub in hole w/ workstring and set cement retainer at +/- 4110'
12. Sting out and spot cmt plug @ +/- 4010'-4110' (Mancos Top @ 4060')
  - a. WOC, Tag plug if required
13. Snub out of hole
14. Snub in hole w/ 4-1/2" CIBP
15. Set CIBP @ +/- 3950' (Point Lookout Base @ 3900')
16. Hunt for Leak w/ packer
17. Snub out of hole w/ pkr
18. Squeeze casing leaks as necessary
19. Additional perforations & squeezes will be dictated by CBL
20. PU tbg to 2930'
21. Spot cmt plug @ +/- 2830'-2930' (Mesaverde Top @ 2880')
  - a. Contingency – set cmt retainer @ +/- 2930' prior to spotting cmt if unable to balance plug
  - b. WOC, Tag plug if required
22. PU tbg to 2344'
23. Spot cmt plug @ +/- 2244'-2344' (Chacra Top @ 2294')
  - a. WOC, Tag plug if required
24. PU tbg to 1380'
25. Spot cmt plug @ +/- 1000'-1380' (Fruitland Top @ 1053', PC Top @ 1330')
  - a. WOC, Tag plug if required
26. PU tbg to 400'
27. Spot cmt plug @ +/- 400'-surface (Ojo Alamo Top @ 87', Kirtland Top @ 184')
28. Cut off wellhead, weld P&A marker

# Current WBD

**GCU 170-DK**  
**Dakota**  
**API #: 300450765800**  
**Unit K - Sec 35 - T29N - R12W**  
**San Juan County, NM**

Max BHT: 148 deg F  
 128 deg F @ 3200' [1964]

GL: 5369'  
 KB: 12'



Ojo Alamo Top: 87'  
 Kirtland Top: 184'

Fruitland Coal Top: 1092'  
 Pictured Cliffs Top: 1330'

Chacra Top: 2422'

Mesaverde Top: 2880'

Mancos Top: 4060'

## Tubing Details (proposed)

Tbg shots @ 4370'-4380' (10', 4spf, 40 0.33" holes)  
 Jet Cut tbg jt @ 4400'

Gallup Top: 4952'

Dakota Top: 5816'

## Tubing Details

2-3/8", 4.7#, J-55 @ 5792'  
 Jet Cut tbg jt @ EOT

**End of Tubing**  
 5792'

TOC: Surface (circ. 20sxs cmt)

## Surface Casing Data

12-1/4" Hole  
 8-5/8", 24#, J-55 ST&C @ 336'  
 250 sxs type A cmt

TOC: Surface (circ. 11bbls cmt)

Sqz holes @ 850'-851'  
 240 sxs cls B cmt, tested to 1000#

TOC: 1000' (CBL 2/27/92)

Suspected casing leak around 3000' +/-

DV tool @ 4174'

2nd stage: 1000 sxs cls C cmt (lost circulation, no cmt returns)

2-3/8" x 4-1/2" TOC @ 4590'

2-3/8" TOC @ 5743'

## Dakota Completion

5820'-5832' (3spf)  
 5892'-5910', 5944'-5950' (2spf)

Top of tbg fish @ 5893'

## Production Casing Data

7-7/8" Hole  
 4-1/2", 10.5#, J-55 ST&C @ 6009'  
 1st stage: 400 sxs cls C lead, tail w/ 100 sxs cls C neat cmt (circ. 10 bbls cmt)

PBTD: 5973'  
 TD: 6009'



# **Proposed WBD**

**GCU 170-DK**  
Dakota  
API #: 300450765800  
Unit K - Sec 35 - T29N - R12W  
San Juan County, NM

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Gallup Top: 4952'

Dakota Top: 5816'

## **Tubing Fish Details**

2-3/8", 4.7#, J-55 @ +/- 4400'-5792'  
Top of BHA fish @ 5893'

TOC: Surface (circ. 20sxs cmt)

## **Surface Casing Data**

12-1/4" Hole  
8-5/8", 24#, J-55 ST&C @ 336'  
250 sxs type A cmt  
Cement Plug @ +/- 400'-Surface [Ojo Alamo/Kirtland Tops]  
TOC: Surface (circ. 11bbls cmt)

Sqz holes @ 850'-851'  
240 sxs cls B cmt, tested to 1000#  
Cement Plug @ +/- 1000'-1380' [Fruitland/Pictured Cliffs Tops]  
TOC: 1000' (CBL 2/27/92)

Cement Plug @ +/- 2372'-2472' [Chacra Top]

Cement Plug @ +/- 2830'-2930' [Mesaverde Top]

Suspected casing leak around 3000' +/-  
Cement squeezes dictated by CBL

CIBP @ +/- 3950'

Cement Plug @ +/- 4010'-4110' [Mancos Top]

Cement Retainer @ +/- 4110'

DV tool @ 4174'

2nd stage: 1000 sxs cls C cmt (lost circulation, no cmt returns)

Top of fish (jet cut tbg) @ 4400'  
2-3/8" x 4-1/2" TOC @ 4590'

2-3/8" TOC @ 5743'

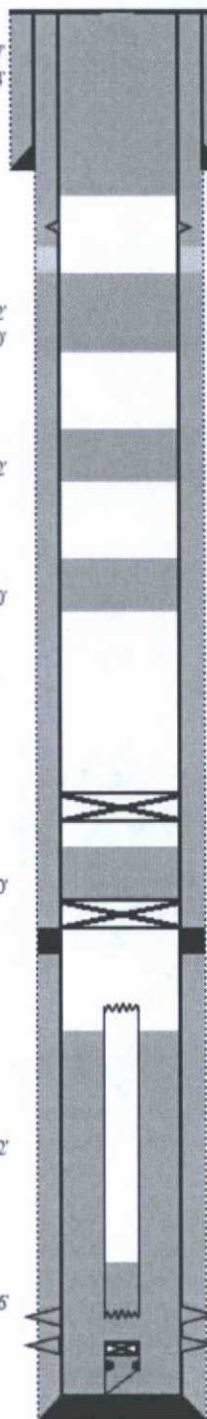
## **Dakota Completion**

5820'-5832' (3spf)  
5892'-5910', 5944'-5950' (2spf)

## **Production Casing Data**

7-7/8" Hole  
4-1/2", 10.5#, J-55 ST&C @ 6009'  
1st stage: 400 sxs cls C lead, tail w/ 100 sxs cls C neat cmt (circ. 10 bbls cmt)

PBTD: 5973'  
TD: 6009'



## **Powell, Brandon, EMNRD**

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**From:** Powell, Brandon, EMNRD  
**Sent:** Friday, September 09, 2016 7:03 AM  
**To:** 'Morton, Zachary'  
**Cc:** Kelly, Jonathan, EMNRD  
**Subject:** RE: GCU 170 CBL

Good morning Zachary,

You do not need to set the CIBP at 3950'. However you will still need to spot a cement plug on top of the CIBP at 2930' to ensure the cement isolates the top of the Mesa Verde formation. This is because if there are holes above the formation top the cement will go out them instead of going down to cover the formation top.

Thank You

Brandon Powell

Office: (505) 334-6178 ext. 116

*"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"*

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**From:** Morton, Zachary [mailto:Zachary.Morton@bp.com]  
**Sent:** Thursday, September 08, 2016 9:29 AM  
**To:** Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>  
**Cc:** Kelly, Jonathan, EMNRD <Jonathan.Kelly@state.nm.us>  
**Subject:** RE: GCU 170 CBL

Brandon,

Thank you for your quick response. One step that I failed to request dispensation from is setting the CIBP at 3950'. Since we will not be hole-hunting with a packer we do not feel setting this plug is necessary. Additionally, I would like to request a slight change on the Mesa Verde cement plug. I think that we run the risk of covering the hole in the casing if we spot cement on top of the CIBP at 2930'. I would like to set the CIBP at 2930' and set the cement retainer at 2765' without spotting cement. We would then squeeze cement behind casing through the retainer and spot cement on top. Below is the step-by-step procedure I propose.

- 1) Set cement retainer and spot Mancos cement plug as previously agreed upon
- 2) Set CIBP at 2930'
- 3) Set cement retainer at 2765'
- 4) Squeeze 100' of cement plus 100% excess below retainer and behind casing
- 5) Spot 100' of cement plus 50% excess on cement retainer
- 6) Continue with P&A as previously agreed upon

I have attached the proposed WBD with these changes. Please contact me with any questions you have.

Thank you,

**Zachary Morton**

**BP L48 – San Juan South  
GCU Production Engineer**

Office: (832) 664-2199

Cell: (713) 818-5239

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**From:** Powell, Brandon, EMNRD [<mailto:Brandon.Powell@state.nm.us>]

**Sent:** Wednesday, September 07, 2016 3:50 PM

**To:** Morton, Zachary

**Cc:** Kelly, Jonathan, EMNRD

**Subject:** RE: GCU 170 CBL

Zach,

You have our approval to continue as proposed.

Thank You

Brandon Powell

Office: (505) 334-6178 ext. 116

*"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"*

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**From:** Morton, Zachary [<mailto:Zachary.Morton@bp.com>]

**Sent:** Wednesday, September 07, 2016 2:24 PM

**To:** Powell, Brandon, EMNRD <[Brandon.Powell@state.nm.us](mailto:Brandon.Powell@state.nm.us)>

**Subject:** GCU 170 CBL

Brandon,

Attached is the CBL run on the GCU 170 this morning. Please see our proposed deviations from the previously approved procedure.

- Based on CBL/CCL we believe the hole in the casing to be located at 2792'. As a result, we find it unnecessary to hunt for the hole with a packer.
- Set CIBP at 2930' to cover the Mesa Verde
- Spot 100' cement on CIBP
- Set cement retainer at 2765'
- Squeeze 100' of cement plus 100% excess behind casing
- Spot 50' cement plug on top of retainer
- Perforate casing at 2472' in the Chacra
- Set cement retainer at 2442'
- Squeeze 100' of cement plus 100% excess behind casing
- Spot cement plug from 2442'-2372'. Note: the depth of the Chacra top on the approved procedure was incorrect. The correct Chacra top is 2422'.
- Perforate casing at 1350' in the Pictured Cliffs
- Set cement retainer at 1330'
- Squeeze 340' of cement plus 100% excess behind casing.
- Spot 340' of cement plus 50% excess on top of cement retainer to cover the Fruitland and Pictured Cliffs
- The remainder of the procedure will proceed as originally approved

Please feel free to contact me with any questions.



Thanks,

Zach Morton  
713-818-5239

Sent from my iPhone

Begin forwarded message:

**From:** "Tom Luther" <[d8@bluejetinc.com](mailto:d8@bluejetinc.com)>

**To:** "Danny Seip" <[dseip@bluejetinc.com](mailto:dseip@bluejetinc.com)>, "Morton, Zachary" <[Zachary.Morton@bp.com](mailto:Zachary.Morton@bp.com)>, "Van Wageningen, Jeffrey" <[Jeffrey.VanWageningen@bp.com](mailto:Jeffrey.VanWageningen@bp.com)>

**Subject:** pdf