

**Feck, Nancy J SEPSCO-UAS/E/USON**

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**From:** Andrews - DNR, David [david.andrews@state.co.us]  
**Sent:** Friday, May 24, 2013 10:54 AM  
**To:** Call, Renee R SEPSCO-PTW/U/W  
**Cc:** Feck, Nancy J SEPSCO-UAS/E/USON; Baldridge, Anne C SEPSCO-UAS/E/USON; Newville, Toni E SEPSCO-PTW/U/W; Dash, Gerald A SEPSCO-PTW/U/W; Eymard, Anthony P SEPSCO-PTW/U/C; Kevin King - DNR; Jay Krabacher; Jane Stanczyk - DNR; Barbara Westerdale - DNR; Shaun Kellerby - DNR; Kris Neidel - DNR  
**Subject:** Re: Deal Gulch 6-16 Sidetrack; API 05-081-07766  
**Attachments:** Statewide UNPLANNED Sidetrack Approval Reporting\_09-20-2012.pdf

**Renee:** This email confirms my verbal approval to proceed with the sidetrack. There appears to be one minor error with Shell's summary. I assume that "Tagged plug 4 at 336' MD and drilled out cement 1350' MD" should read "Tagged plug 4 at 1336' MD and drilled out cement 1350' MD." I also corrected the API Number in the subject line of this email.

For Step 3.c. on the attached guidance, please submit an eForm Form 4 and email the eForm Document Number to Barbara and Jay, rather than proceeding with the directions as shown (we are in the process of updating the policy).

**Barbara and Jay:** RemindmE added to the well file, "Dave Andrews provided verbal approval for a request to sidetrack on 5/23/2013 with email follow-up on 5/24/2013. See scanned email correspondence, Document No. 2055788 for details."

Thanks,

**David D. Andrews, P.E., P.G.**  
Engineering Supervisor - Western Colorado

State of Colorado  
Oil and Gas Conservation Commission  
**NEW ADDRESS, EFFECTIVE 1/3/2013:**  
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Website: <http://www.colorado.gov/cogcc>

On Fri, May 24, 2013 at 9:47 AM, <[Renee.Call@shell.com](mailto:Renee.Call@shell.com)> wrote:

## **Feck, Nancy J SEPCCO-UAS/E/USON**

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**From:** Call, Renee R SEPCCO-PTW/U/W  
**Sent:** Friday, May 24, 2013 9:47 AM  
**To:** Call, Renee R SEPCCO-PTW/U/W; Andrews - DNR, David  
**Cc:** Feck, Nancy J SEPCCO-UAS/E/USON; Baldrige, Anne C SEPCCO-UAS/E/USON; Newville, Toni E SEPCCO-PTW/U/W; Dash, Gerald A SEPCCO-PTW/U/W; Eymard, Anthony P SEPCCO-PTW/U/C  
**Subject:** RE: Deal Gulch 6-16 Sidetrack, API 05-081-07767

I have made a slight correction to the depths. Please disregard the previous email.

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**From:** Call, Renee R SEPCCO-PTW/U/W  
**Sent:** Friday, May 24, 2013 9:29 AM  
**To:** 'Andrews - DNR, David'  
**Cc:** Feck, Nancy J SEPCCO-UAS/E/USON; Baldrige, Anne C SEPCCO-UAS/E/USON; Newville, Toni E SEPCCO-PTW/U/W; Dash, Gerald A SEPCCO-PTW/U/W; Eymard, Anthony P SEPCCO-PTW/U/C  
**Subject:** Deal Gulch 6-16 Sidetrack, API 05-081-07767

Per the discussion between David, Toni and myself last night:

- a. Description of the situation that has resulted in an UNPLANNED sidetrack  
Drilled Deal Gulch 6-16 surface section to planned TD at 1680' MD and were experiencing significant losses. Decided to spot cement plugs and drill out to cure losses prior to running casing. While drilling out cement, unintentionally sidetracked out of original wellbore. Survey at 1087' matched original wellbore, next survey at 1178' MD was off by 3 deg inc. 1087' MD is being considered KOP.
- b. Total measured depth reached in the wellbore being plugged back
  - a. 1680' MD
- c. Casing set – size(s) and measured depth(s)
  - a. 20" Conductor set at ~90'
- d. Description of fish in the hole (if any) – including top and bottom measured depths
  - a. N/A
- e. Measured setting depths of proposed plugs, heights, and cement volumes
  - a. Plug 1 set with dp at 1473' MD. 89 bbl of 15.8 ppg hot cement (380' + 30% excess)
  - b. Tagged plug 1 at 1470' (tagged low due to losses)
  - c. Plug 2 set with dp at 1289' MD. 86 bl 15.8 ppg hot cement (380' + 30% excess)
  - d. Tagged plug 2 at 1445' MD
  - e. Plug 3 set with dp at 1375' MD. 89 bbl 15.8 ppg hot cement (380' + 30% excess)
  - f. Tagged plug 3 at 1334' MD
  - g. Plug 4 set with dp at 1284' MD. 117 bbl 13.5 ppg RFC cement (500' + 30% excess)

- h. Tagged plug 4 at 336' MD and drilled out cement 1350' MD.
- i. Due to losses while drilling out, decided to spot plug 5.
- j. Plug 5 set with dp at 1175' MD. 88 bbl of 15.8 ppg hot cement (380' + 30% excess)
- f. Type of cement to be used for all plugs, including slurry weight (ppg) and yield (cf/sk)
  - a. One 13.5 ppg plug was spotted and drilled out, only 15.8 ppg cement remains in hole.
  - b. Yield of 15.8 ppg hot cement is 1.18 ft<sup>3</sup>/sk. Approx 422 sacks per plug (89 bbl).
- g. Measured depth of proposed sidetrack kick-off point
  - a. Last survey that matched original wellbore was at 1087' MD. Considering 1087' MD as KOP.
- h. Proposed objective formation(s) for sidetrack hole – new or same as the wellbore being abandoned
  - Same target formation.
- i. BHL Target for sidetrack hole – new or same as the wellbore being abandoned (NOTE: a change in the BHL must be reviewed and approved by COGCC Permitting prior to completing the sidetrack. Drilling a sidetrack to an unapproved BHL could result in an NOAV, plugging the well, or both).
  - Same target BHL.
- j. Verbal/email approval to plug back and sidetrack – indicate the name of the COGCC Engineer who granted verbal/email approval, as described in Step 1, and the date approval granted.
  - Received verbal approval from David Andrews 5/23/2013.

**Renee Call**

Drilling Engineer

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