

**GENERAL ORDER 2019-003**  
Section 49 *Oil and Gas Activities Act*

**Issued to:**

Pengrowth Energy Corporation  
1600, 222 Third Avenue SW  
Calgary, Alberta T2P 0B4

**Attention:** Mr. Shawn Jesse, Manager, Health, Environment & Regulatory Compliance

**Order:**

Pursuant to section 49(1)(e) of the *Oil and Gas Activities Act* (the Act), I, Patrick Smook, order that Pengrowth Energy Corporation (Pengrowth) must:

1. On or before 4:00 PM on June 30, 2019, measure the reservoir pressure in the Beaton River field, Halfway "A" pool by conducting a static gradient test at WA 1413 located d-18-J/94-H-2 and by conducting a static gradient test on either WA 6545 located at d-59-J/94-H-2 or WA 1038 located at b-59-J/94-H-2.
2. Submit the results of the tests identified in item 1 electronically to [C&E@bcogc.ca](mailto:C&E@bcogc.ca) and eSubmission by no later than July 15, 2019.
3. Not abandon WA 1413, WA 6545, WA 1038 or WA 309 on or before September 30, 2019 without prior written approval of the BC Oil and Gas Commission (Commission).

**Conditions:**

- A. This order shall remain in effect until amended or terminated in whole or in part by the Commission.

**Reasons:**

I make this order for the following reasons:

1. Pengrowth is the permit holder of WA 309, WA 1413, WA 1038 and WA 6545 (the wells). All the wells are located in the Beaton River field, Halfway "A" oil pool (the pool).
2. WA 309 was approved as a water injection well in 1998 and began operating as a water injection well in the pool in 1998.
3. WA 1413 was approved for water injection in 1963 and began operating as a water injection well in the pool in 1964.
4. In March 2008 production from the pool ceased.
5. Pengrowth continued water injection into the pool through WA 309 from March 2008 until February 2015.

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6. Pengrowth continued water injection into the pool through WA 1413 from March 2008 until October 2011.
7. In February 2017 Commission staff conducted a review of the pool and, as result, terminated the pressure maintenance waterflood special project approval for the pool on February 15, 2017.
8. On February 17, 2017 Pengrowth performed an acoustic pressure survey in WA 309 and calculated a reservoir pressure of 12,533 kPaa, which equates to 153% of the initial pressure in the pool.
9. On May 3, 2017 WA 309 was designated as an observation well with the requirement to conduct an annual reservoir pressure test using bottom hole recorders.
10. On February 19, 2019 Pengrowth completed a static gradient test in WA 309 which measured a static reservoir pressure of 12,092 kPaa, which equates to 148% of the initial pressure in the pool.
11. On January 31, 2019, Pengrowth communicated to Commission staff that it intends to complete an abandonment program for the pool.
12. The tests conducted of WA 309 in February 2017 and February 2019 indicate the pressure of the pool is significantly elevated from the initial pressure. Commission staff are of the view that further tests of other wells in the pool are required in order to understand the extent of the high pressure.
13. In addition to observation well WA 309, Pengrowth has three other wells in the pool which are not zonally abandoned: WA 6545, WA 1038 and WA 1413. These wells can be used to obtain additional pressure data across the pool.
14. In the absence of information concerning the extent of the high pressure, there is concern that the pool may pose a risk to the environment.
15. In the absence of information concerning the extent of the high pressure, there is concern that abandonment of the pool may pose a risk to the environment.
16. I am of the opinion this order is necessary to protect the environment.

### **Review and Appeal**

Pengrowth may request a review of this order under section 70 of the Act by submitting a request for review to: [ogc.determinationreviews@bcogc.ca](mailto:ogc.determinationreviews@bcogc.ca).

Pengrowth may appeal this order to the Oil and Gas Appeal Tribunal under section 72 of the Act. The process for appeals may be found at [www.ogat.gov.bc.ca](http://www.ogat.gov.bc.ca) and a notice of appeal may be sent to the Oil and Gas Appeal Tribunal at:

Oil and Gas Appeal Tribunal  
PO Box 4925 Stn Prov Govt  
Victoria, BC V8W 9V1



Patrick Smook  
Director, Compliance and Enforcement  
BC Oil and Gas Commission

DATED AT Fort St. John, in the Province of British Columbia, this 11<sup>th</sup> day of April, 2019.