

Submission of Drill Cuttings: Oil, Gas and Potash Wells

Guideline PNG023

December 2016

Revision 1.1

Governing Legislation:

Act: *The Oil and Gas Conservation Act*

Regulation: *The Oil and Gas Conservation Regulations, 2012*

Record of Change

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Guidelines for Submission of Drill Cuttings for Oil, Gas and Potash Wells

A licensee is required to submit drill cuttings from wells drilled in Saskatchewan under the *The Oil and Gas Conservation Act (OGCA)* and *The Oil and Gas Conservation Regulations, 2012 (OGCR)* that penetrate specific stratigraphic intervals within certain areas of the province.

This document sets out the requirements of the Saskatchewan Ministry of the Economy (ECON) regarding the submission of these drill cuttings.

Questions concerning submission of drill cuttings, and requests for waivers to the guidelines in this document and the regulations to which they refer, should be directed to the ECON Petroleum and Natural Gas (PNG) Service Desk via email (png.support@gov.sk.ca) or phone (1-855-219-9373).

Governing Legislation

The guidelines below are based on regulations in *The Oil and Gas Conservation Act (OGCA)* and *The Oil and Gas Conservation Regulations, 2012 (OGCR)*. Licensees should consult these documents in conjunction with these guidelines.

It is the responsibility of all operators, as specified in the legislation, to be aware of Ministry requirements and to ensure compliance with all requirements throughout the life cycle of any oil, gas or potash well in Saskatchewan.

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Drill Cuttings Requirements

1. Vertical and Deviated Wells

In all Areas of the province (see Figure 1 for locations of designated 'Areas' in Saskatchewan), drill cuttings shall be collected at 5-10 m intervals from the top of the Second White Speckled Shale Formation to total depth (TD) from:

- a) the first well on each Section;
- b) any subsequent well on that Section for which the true vertical depth (TVD) of the bottom-hole is more than 50 m below the TVD of the bottom-hole of any other well on the Section;
and
- c) all subsequent wells on that Section that are licensed with the following Lahee Classifications:
 - Outpost (03)
 - New Pool Wildcat (04)
 - New Field Wildcat (05)
 - Deeper Pool Test (06)
 - Stratigraphic Test or Other (07)

(See Guideline *Lahee Classification Guideline* for more information on Lahee Classification categories.)

Drill cuttings do not have to be collected from:

- gas wells in the western portion of Areas 2 and 3 (i.e., Townships 1 to 38, Ranges 12W3 to the Alberta border; see Figure 1) that TD above the top of the Viking Formation.

2. Horizontal Wells

In all Areas of the province (see Figure 1), based on the surface-hole location of the horizontal well, drill cuttings shall be collected at: 5-10 m intervals from the top of the Second White Speckled Shale Formation to kickoff point (KOP); 5-10 m intervals from KOP to intermediate casing point (ICP); and 5-20 m intervals from ICP to total depth (TD) from:

- a) the first two horizontal wellbores in that Section, if drill cuttings do not exist from previously drilled vertical wells in the Section;
- b) the first horizontal wellbore in that Section, if drill cuttings from previously drilled vertical wells do exist in the Section; and
- c) any subsequent wellbore on that Section for which the TVD of the bottom-hole is more than 50 m below the TVD of the bottom-hole of any other wellbore on the Section;

If the requirements to submit drill cuttings for horizontal wells as outlined in sections 2.a) through 2.c) have been satisfied, drill cuttings may be submitted at the discretion of the operator.

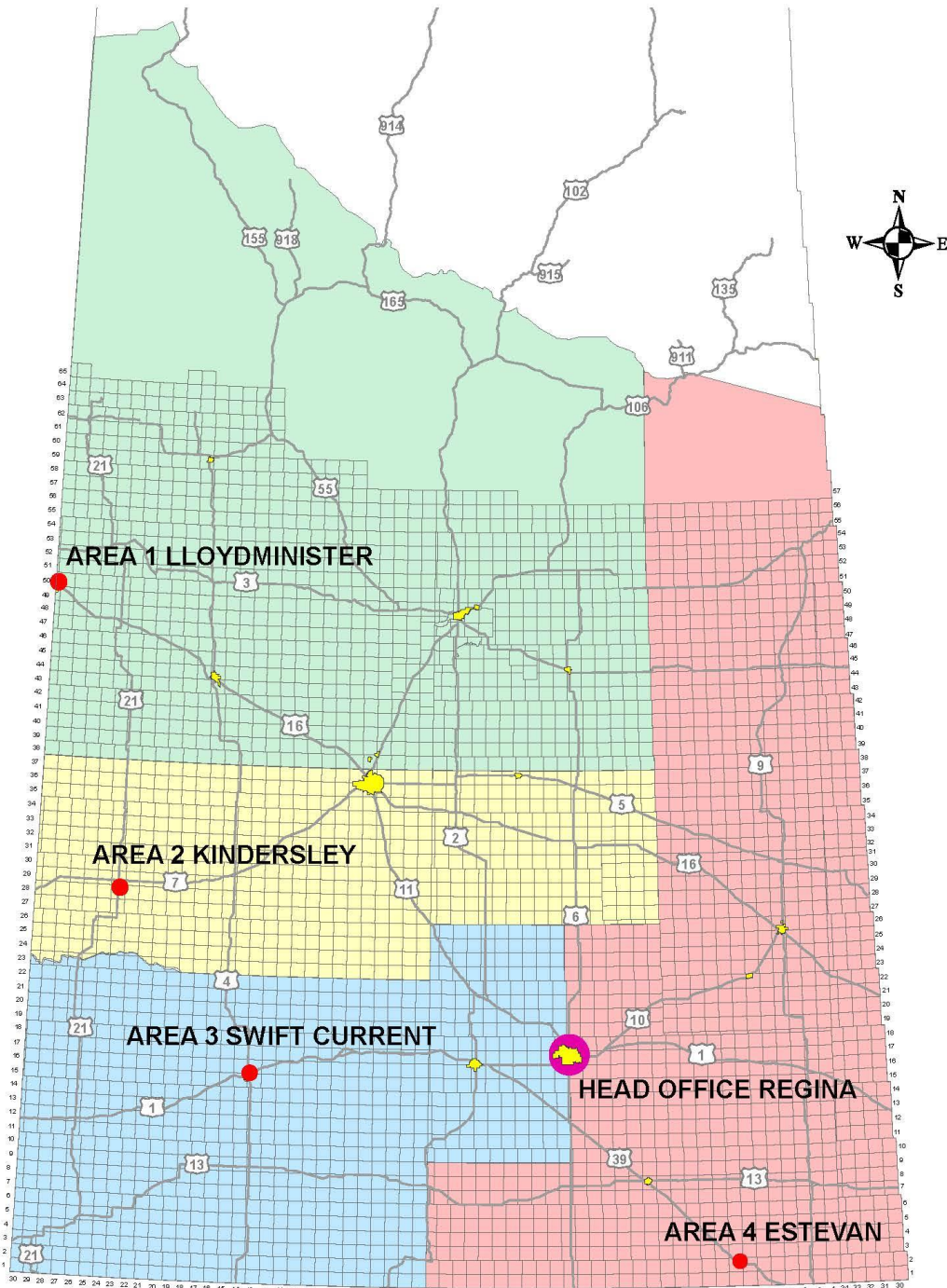


Figure 1. Location of ECON Field Office 'Areas' in Saskatchewan

What to Submit and How to Submit It

The *OGCR* require that a licensee shall submit drill cuttings for all wells that fit into the type and location specifications detailed above.

Two sets of drill cuttings shall be submitted, with the cuttings placed in 11 millilitre (ml; 3 dram) vials. The vials are to be contained in sample trays that are 24 centimetres (cm) by 34 cm in size.

If drill cuttings were taken from a well/wellbore and were not required under these guidelines, but are no longer required by the company, those drill cuttings are to be submitted to the Ministry.

Drill cuttings shall be submitted to the Ministry within 30 days of the end of drilling, sent prepaid to:

The Subsurface Geological Laboratory
201 Dewdney Avenue East
Regina, SK S4N 4G3

Labelling of Drill Cuttings

Sections 88(2)(a) and (2)(b) of *The Oil and Gas Conservation Regulations, 2012*, require that:

- drill cuttings vials be labelled with:
 - licence number (e.g., 15A001)
 - unique well identifier for the well/wellbore (e.g., xxx/xx-xx-xxx-xxWx/xx)
 - leg number (if applicable) (e.g., Leg #)
 - measured depth (in metres) from KB at which each drill cutting was taken

- sample trays in which the vials are contained be labelled with:
 - licence number
 - unique well identifier for the well/wellbore included in the tray
 - leg number (if applicable)
 - measured depth intervals (in metres) from KB over which the drill cuttings were taken for all wellbores and legs/sidetracks (if applicable)

Additional Information Required by the Ministry

- If drill cuttings are missing for a depth or depth interval within a wellbore from which drill cuttings are required by regulation, a written explanation shall be provided (i.e., collapsed hole, re-entry above original TD, etc.) for the missing drill cuttings at each particular depth/depth interval where cuttings are missing.
- Name, phone number and email address of the contact person if there are any questions regarding the drill cuttings submitted.

PLEASE NOTE:

- If labels for submitted drill cuttings do not comply with the labelling guidelines above, the drill cuttings will be shipped back to the operator for corrections to the labels, at that operator's expense.

- A licensee that does not submit drill cuttings, as per *OGCR* section 88(2)(c), including those that have been returned to the operator for non-compliance of *OGCR* sections 88(2)(a) and (2)(b), will be assessed late penalties.