Measurement Exemption Application – Example

(Please note this is an example of an measurement exemption not all the sections will apply to every measurement exemption application and there may additional sections needed depending on the type of measurement exemption. All measurement exemption must have all items listed in Section 5.2 of *Directive PNG017: Measurement Requirements for Oil and Gas Operations*.)

Table of Contents

General Measurement Exemption Information

(including Identify the current measurement requirement under *Directive PNG017* requirements that will be deviated from and a detailed description of the proposed Measurement Exemption.)

Full company name and BA ID and address:

Contact Information

Well and Facility List

Facility List

Facility ID	Facility Licence #	Facility Surface Location	Facility Subtype	Facility Operational Status
SK BT 0001010	15-08-046-16W3	15-08-046-16W3	322-Crude Oil Multiwell Proration Battery	Active

Well List

Note: Please included both active and suspended wells linked to facilities. Abandoned wells do not need to be included.

UWI:	CWI:	Well Licence #	Pool Name and ID:	Downhole Location:	Surface Location:	Current Well Status:	Mineral Ownership	Crown royalty status	Ownership and royalty equity issues, if any
SKWI131150804616W300	SK0033856	85E159	234119 – Lloydminster Sand (Misc Area)		15-08-046-16W3	OIL ACTIVE PROD N/A			
SKWI121070804616W300	SK00338555	85E158	234119 - Lloydminster Sand (Misc Area)		07-08-046-16W3	OIL ACTIVE PROD N/A			

Additional Information

These facilities or wells are not within a unit or within unit #.

These facilities and wells are within the Enhanced Oil Project SK PJ 00001 or not associated with a EOR project.

Justifications for measurement exemption

Justifications for deviation from measurement requirements.

Proposed Operating Procedure

(Description of proposed operating procedures including calibration and proving frequencies, gauging, trucking, sediments and water procedures, and testing frequencies and procedures, etc.)

Proposed Production Determination

Include all production accounting calculations and reporting for all the products (i.e. gas, oil, water, etc.) and activities (i.e. production, injection, disposition, receipts and inventory points, etc.)

Proposed Facility Volumetric Determination

(Explain how the facility volumetrics including receipts, dispositions, inventories, fuel, flare and vent, for all the products will be determined at the proposed facility setup, including sample calculations. If the volumes are estimated provide the sample calculations showing all particulars.

Production History

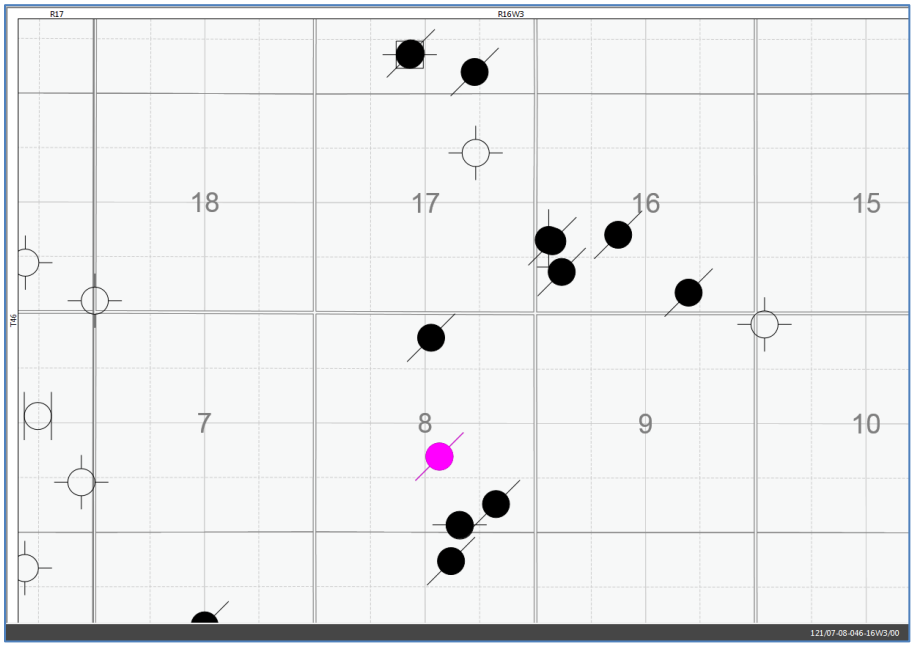
(Include the last six month's gas, oil/condensate, and water flow rates (or expected flow rates for new wells). Include the well test volumes for the last six months)

Facility Volumetrics History

(Provide the facility volumetrics for the last six months, including oil, water and gas rates.)

Area Map

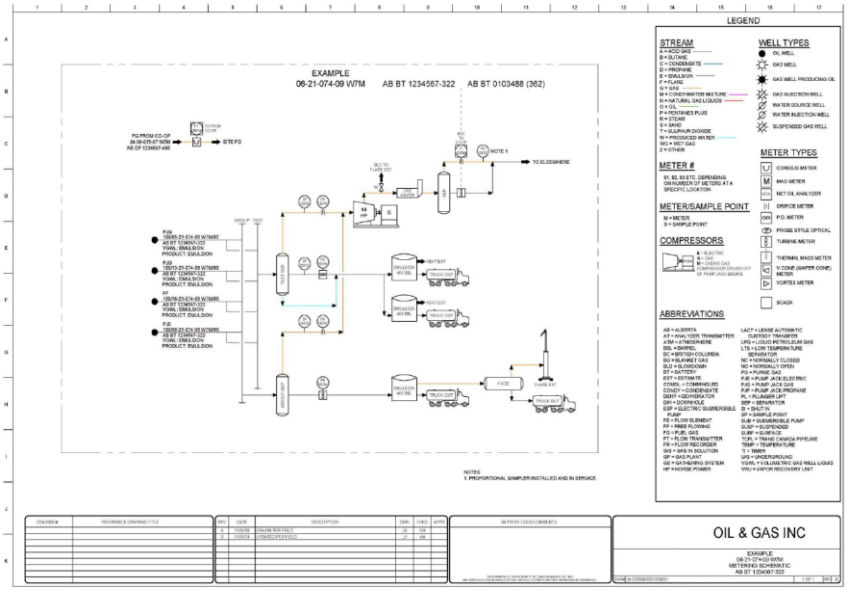
(Include area maps for the requested exemption)



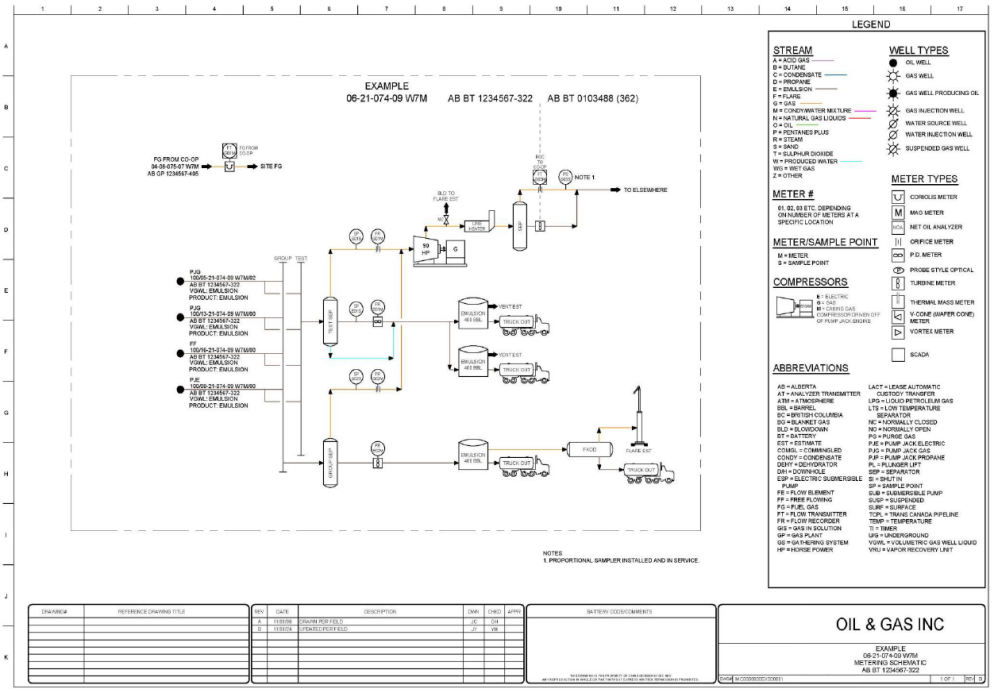
Measurement Schematic

(Include up-to-date measurement schematic(s) for the existing system(s) and the proposed new gas or oil source(s), including all tie-in locations. Please make sure that meter tag numbers etc. can be legible when printed.)

Current Measurement Schematic for Facility



Proposed Measurement Schematic for Facility



Public Notice Correspondence and Consents

Include Public Notice Correspondence and Consents as per *Directive PNG009: Public Notice Requirements*

Site Plot Plan

Include site plot plan for exiting system and the proposed new gas or oil source(s), if applicable

Other Information

When requesting a measurement exemption, depending on the exemption other information will be required to be submitted. See below for additional information that is required.

Extend Orifice Meter Gas Chart Cycles

(Section 5.3 of *Directive PNG017: Measurement Requirements for Oil and Gas Operations*)

Please include the following if you are requesting an extension of Orifice Meter Gas Chart Cycles (section 5.3.2)

The following information must be submitted with an application to extend orifice meter gas chart cycles if the criteria in Section 5.3.1.1 are not met:

1. All of the information listed in Section 5.2.
2. If there is no common ownership or no common Crown or Freehold royalty, documentation to address royalty and equity issues demonstrating that written notification was given to all Freehold mineral owners and working interest participants, with no resulting objection received.
3. A discussion of the impact on measurement accuracy of intermingling base chart cycles and extended chart cycles in a common battery and how it may relate to concerns about working interest equity and/or royalty considerations.
4. A minimum of two current, consecutive, representative gas charts. Additionally, the licensee has the option to run the charts on the proposed chart cycle to gather test data for submission and then revert back to the required chart cycle after a maximum test period of 31 days. The original copies of any such charts created must be submitted with the application. The trial run must be clearly identified on the charts.

Gas Proration Outside SW Saskatchewan Shallow Gas Stratigraphic Areas

(Section 5.4 of *Directive PNG017*)

For wells outside the boundary of and/or producing from stratigraphic units or zones other than those approved for the SW Saskatchewan and SE Alberta Shallow Gas Stratigraphic Units or Zones or Area (see Section 7.2), it may be acceptable to use a proration system for gas well production instead of having measurement for every well. If a proration system is implemented, all wells in the battery must be subject to the proration system.

The following information must be submitted with an application to use a proration system, instead of individual gas well measurement, to determine gas well production if the criteria in Section 5.4.1.1 are not met:

1. All of the information listed in Section 5.2;
2. A discussion of the stage of depletion for pools involved and the impact of any reduction in well measurement accuracy that may result from gas proration as it relates to reservoir engineering data needs - discussion of this matter by the licensee with its own reservoir engineering staff or knowledgeable external personnel is required and must be addressed in the application;
3. A clear explanation and flow diagram of proposed well and group measurement devices and locations, the proposed accounting and reporting procedures, and the proposed method and frequency of testing;
4. If there is no common ownership or no common Crown or Freehold royalty, documentation to address royalty and equity issues demonstrating that written notification was given to all Freehold mineral owners and working interest participants, with no resulting objection received.

Considerations for Site-specific Approval 5.4.3

1. All wells must be classified as gas wells.
2. There are minimal equity, royalty, and reservoir engineering concerns.
3. All wells should have similar flow rates.
4. Economic considerations: Would implementation of a proration system reduce costs enough to significantly extend operations? Have other options been considered?
5. Total liquid production at each well in the battery should be ≤ 2 m3/d based on the monthly average flow rates recorded during the six months prior to conversion. If a group of new wells not previously on production are to be constructed as a proration battery, the qualifying flow rates must be based on production tests conducted under the anticipated operating conditions of the proration battery.

Measurement by Difference

(Section 5.5 of Directive PNG017 of *Directive PNG017*)

This section needs to be added to the application when apply for measurement by difference relating to Compliance Assessment Indicators (CAIs) 116, 117, 118.

The following information must be submitted with an application to add measured gas or oil/emulsion sources to a prorated battery if the applicable qualifying criteria and additional qualifying criteria in Section 5.5.3.2.2 are not met:

1. All of the information listed in Section 5.2;
2. A discussion of the stage of depletion for pools involved, and the impact of any reduction in well measurement accuracy that may result from measurement by difference as it relates to reservoir engineering data needs; discussion of this matter by the proponent with its own reservoir engineering staff or knowledgeable external personnel is required and must be addressed in the application;
3. If there is no common ownership or no common Crown or Freehold royalty, documentation to address royalty and equity issues demonstrating that written notification was given to all Freehold mineral owners and working interest participants, with no resulting objection received.

Considerations for Site-specific

1. There are minimal equity, royalty, and reservoir engineering concerns.
2. Economic considerations, including an assessment of whether implementation of a proration system would reduce costs enough to significantly extend operations, and an assessment of the other options that have been considered.
3. The gas and liquids from the tied-in measured source(s) must be separately and continuously measured.
4. If the tied-in measured gas source(s) produces condensate and it is connected by pipeline to an oil battery, the licensee must choose the applicable condensate delivery/reporting options from Table 5.6 in Directive PNG017.

Fuel Gas Measurement by Difference

(Section 5.6 of *Directive PNG017*)

The following information must be submitted with an application to commingle production at surface prior to measurement from multiple stratigraphic units or zones in a gas well or multiple wells on the same surface location if the qualifying criteria in Section 5.6.1.1 are not met:

1. All of the information listed in Section 5.2;
2. Shut-in and proposed operating pressures at the wellhead for all stratigraphic units or zones or wells;
3. Operating pressure for the gathering system at the well's measurement point;
4. Proposed testing procedures to determine the individual stratigraphic unit or zone or well production rates;
5. Proposed accounting procedures for prorating total volumes to the individual stratigraphic units or zones or wells; and
6. All wells flowing to the battery:
    a. have common working interest ownership, and where there is no common ownership, written notification has been provided to all working interest participants and no objections have been received;
    b. have common Crown or Freehold royalty, and where the wells are producing Freehold minerals and the Freehold ownership is not common, written notification has been provided to all Freehold owners and no objections have been received.