



# Volumetric, Valuation and Infrastructure Reporting in Petrinex

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Directive PNG032

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January 2018

Version 3.0

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Governing Legislation:

Act: *The Oil and Gas Conservation Act*

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

Order: 5/18

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### Record of Change

Version	Date	Author	Description
3.0	April 2016	PNG	Combined the 10 sections of the Directive into one document. Added Helium requirements. Added new INVADJ requirements. Added new crude oil type classification table and requirements to have crude oi type changed. Added Ministry Suspended and Gas Testing well statuses to well status description table. Added new production accounting requirements for disposition = production methodology.
3.0	April 2016	PNG	Revision to the Waste Plant reporting section. Added product grouping facility balance grid.
3.0	June 2016	PNG	Revision to the Oil Valuation section.
	August 2017	PNG	Addition of OGCR components and general review and re-write of key sections. Addition of the Deliveries to Refineries requirements.
3.0	January 2018	PNG	Directive R01 is renamed as Directive PNG032

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## 1. Introduction

Every report, submission, statement, application, document, record, notification, or other information required by the minister or this Directive:

- 1) must be complete and accurate;
- 2) unless otherwise requested by the minister, must be submitted to the minister through Petrinex; and
- 3) unless otherwise approved by the minister, must be submitted by the reporting deadlines outlined in this Directive.

Every licensee, operator, Royalty/Tax Payer, or purchaser must continue to submit information required by this Directive until:

- 1) the operator notifies the minister that the well is suspended, as outlined in this Directive;
- 2) the operator notifies the minister of a change in the status or operation of the facility, as outlined in this Directive;
- 3) the unit is terminated pursuant to the terms of the unit agreement;
- 4) the well is abandoned, as outlined in this Directive;
- 5) the facility is decommissioned, as defined in section 56 of *The Oil and Gas Conservation Regulations, 2012*; or
- 6) the minister notifies the licensee, operator, Royalty/Tax Payer, or purchaser that the requirement to submit information is no longer needed for any other reason.

Be aware that the licensee, operator, Royalty/Tax Payer or purchaser is not relieved of the obligation to submit information required by this Directive for periods preceding the date on which one of the above circumstances becomes applicable.

### 1.1 Definitions

**Assigned Heating Value** means the assigned heating value determined by the minister for gas produced from oil wells in a month. The minister may determine an assigned heating value for a month after consideration of heating values entered on Petrinex, and any event or other information that, in the opinion of the minister, may have affected the level of heating values in Saskatchewan.

**Crude Oil Recovery Facility** means a crude oil recovery facility as defined in *The Freehold Oil and Gas Production Tax Act, 2010*.

**ER** means the Saskatchewan Ministry of Energy and Resources.

**Facility** means any building, structure, installation, equipment or appurtenance that is connected to or associated with the recovery, development, production, storage, handling, processing, treatment or disposal of oil, gas, water, products or other substances, that are produced from or injected into a well, and, for the purposes of the Directive, includes a reporting pipeline as defined in this Directive.

**Financial Operator** means:

- 1) an operator as defined in:
  - a) clause 2(ff) of *The Crown Oil and Gas Royalty Regulations, 2012*;
  - b) clause 2(dd) of *The Freehold Oil and Gas Production Tax Regulations, 2012*; and
  - c) clause 2(b) of *The Recovered Crude Oil Tax Regulations, 2012*; and
- 2) a special operator as defined in:
  - a) clause 2(pp) of *The Crown Oil and Gas Royalty Regulations, 2012*;
  - b) clause 2(II) of *The Freehold Oil and Gas Production Tax Regulations, 2012*; and
  - c) clause 2(e) of *The Recovered Crude Oil Tax Regulations, 2012*.

**Heating Value** means the total joules obtained by the complete combustion of one cubic metre of natural gas or residue gas and air under the following conditions:

- 1) the combination reaction is at constant standard pressure;
- 2) the gas, including acid gas components, is free of all water vapour;
- 3) the temperature of the gas, air and products of combustion are at standard temperature;
- 4) all water formed by the combustion reaction is condensed to a liquid state.

**Pipeline Split Reporting Deadline** means the date during the month, following the month of production, set for the submission of pipeline split information as posted in the Petrinex Saskatchewan reporting calendar (occurs on the same date as the Volumetric Reporting Deadline, approximately the 20<sup>th</sup> day of the month).

**Purchaser** means, for the purposes of this Directive, a person who purchases volumes of oil, condensate, gas or any other product that is wholly or in part produced in Saskatchewan.

**Recovered Crude Oil** means recovered crude oil as defined in *The Freehold Oil and Gas Production Tax Act, 2010*.

**Reporting Pipeline** means any pipeline, unless otherwise approved by the minister:

- 1) where:
  - a) the operator identifies as being in the pipeline transportation sector in accordance with the North American Industry Classification System (NAICS) code 486;
  - b) the operator posts or uses standard specifications for commodities that flow in the pipeline; or
  - c) the minister has designated the pipeline as a reporting pipeline;
- 2) other than:
  - a) flowlines;
  - b) a pipeline for the distribution of gas that is being constructed, altered, operated or abandoned pursuant to *The SaskEnergy Act* or the operation of which is being discontinued pursuant to that Act; or
  - c) any pipeline connecting upstream oil and gas facilities such as batteries, custom treaters, injection facilities, terminals, and waste plants.

**Royalty/Tax Payer** means, for the purposes of this Directive, a person who owns a working interest in a well or facility and is responsible for remitting royalties or taxes to the minister pursuant to *The Crown Oil and Gas Royalty Regulations, 2012*, or *The Freehold Oil and Gas Production Tax Regulations, 2012*.

**Royalty/Tax Payer Reporting Deadline** means the date during the month, following the month of production, set for the submission of Royalty/Tax Payer information as posted in the Petrinex Saskatchewan reporting calendar (approximately the last business day of the month).

**Valuation Reporting Deadline** means the date during the month, following the month of production, set for the submission of oil valuation and gas valuation information as posted in the Petrinex Saskatchewan reporting calendar (approximately the last business day of the month).

**Volumetric Reporting Deadline** means the date during the month, following the month of production, set for the submission of volumetric information as posted in the Petrinex Saskatchewan reporting calendar (approximately the 20<sup>th</sup> day of the month).

## **2. Submission through Petrinex**

As of the March 2012 production month, all operators are required to submit specific well and facility infrastructure information as well as monthly pipeline split, volumetric and valuation information electronically to ER via Petrinex. This is required by Section 66 of *The Oil and Gas Conservation Act, (the Act)* and Section 3 of *The Petroleum Registry and Electronics Documents Regulations*, and any further amendments to these documents published by ER. ER will have the ability to view data, query data and access reports related to the information submitted electronically to ER via Petrinex. ER must preserve the confidentiality of the information submitted to Petrinex in accordance with the provisions of the Act.

### **2.1 Security**

#### **2.1.1 Business Associate Identifier and User Security Administrator**

To access Petrinex, a user must obtain a valid Business Associate Identifier (BA ID), a User ID and a password. Once a BA ID is obtained from ER, security for that BA ID and associated users is assigned and maintained by the user's Business Associate User Security Administrator (BA USA).

#### **2.1.2 Well Completion Status Changes**

Only the licensee of a well may update or make changes to certain well completion status information.

#### **2.1.3 Facility Identifier Requests**

For a facility ID request that requires a licence number, the BA requesting the new facility ID must be the licensee, and that BA will automatically be assigned the role of operator for that facility.

For a facility ID request that does not require a facility licence, the BA requesting the facility ID will be assigned the role of operator for the facility.

#### **2.1.4 Facility Information Changes**

Only the operator of a facility may update facility information. This includes a request for an operator change.

### 2.1.5 Well Completion-to-Facility Links

Only the licensee of a well may change a well completion status, and link a well completion to a facility for the first time. The well licensee does not have to be the operator of the facility that the well completion is to be linked to.

In cases where a well completion to facility link needs to be updated and there is no change in the well completion status, only the operator of the facility (that the well completion is currently linked to) may request the change.

### 2.1.6 Volumetric Data

Only the operator of a facility, for the applicable production month, can submit volumetric data for the facility. It is the responsibility of an operator's associated BA USA to ensure that the access required for the submission of data, for specific facilities, is assigned appropriately.

When a facility operator change is submitted with a prior period effective date, the outgoing operator can elect to give the new operator authority to submit amendments on their behalf. Although the outgoing operator of the facility may elect to have the new operator submit amendments on their behalf, the outgoing operator remains ultimately responsible for all submissions for the period during which it was the facility operator.

### 2.1.7 Valuation Data

Oil Valuation and Gas Valuation data can be viewed by the submitting BA.

- Gas Valuation:

For a particular gas plant facility and production month, there may be multiple submissions made by various BAs, one may be the operator and the others may have retained possession of, and marketed, their share of products processed by the gas plant. A submission made by a particular BA is only available for editing by the submitting BA.

- Oil Valuation:

Royalty/Tax Payer: Reporting BAs can update auto-created oil sales records for a particular unit/facility and production month where they are the allocated BA (i.e. the BA cannot add or delete rows).

Purchaser: Reporting BAs can create a submission under their BA ID, update submissions previously submitted under their BA ID, and update auto-created oil purchase records for a particular production month under their BA ID.

Subsequent Purchaser: Subsequent Purchaser functionality was removed August 2013, but access to prior month submissions is available. Any industry BA can create a new subsequent oil purchaser submission for a production month prior to August 2013. Reporting BAs can create a submission under their BA ID and update submissions previously submitted under their BA ID.

Allocations : An owner BA identified in a submission, through Petrinex's SAF/OAF (Stream Allocation Factors /Owner Allocation Factors) functionality, will have access to view their net share of the volume allocated to them, as well as the gross volume.

Pipeline Splits: The pipeline split volumes for a particular facility can be submitted, viewed and edited by the BA that operates the facility that the Pipeline Split pertains to.

### **2.1.8 Reports and Query**

Any operator, or person, that has access to Petrinex has authority to query or to run a report on most well, facility, and volumetric data. If a well is confidential, the information deemed confidential will be displayed to only the operator of record or the licensee.

For valuation data, the BA that submitted valuation information can access that data online or through reports or queries.

### **2.1.9 Petrinex Security Blanket**

Petrinex access to certain volumetric and waste plant data has been restricted to the operator or licensee of the facility.

Facility types with restricted access include:

- Custom Treaters (CT);
- Meter Stations (MS) – includes Common Stream Operators (CSO);
- Terminals (TM);
- Pipelines (PL);
- Refineries (RF);
- Waste Plants (WP); and,
- Storage and Enhanced Oil Recovery related Injection Facilities (IF)

In addition to limiting the ability to view the monthly data for these facilities the disposition details for these facilities are also masked as part of the Petrinex Security Blanket.

## **2.2 Methods of Submission**

There are two methods for electronically submitting data to ER through Petrinex:

- directly submitting data online using defined screens and processes, and
- batch uploading data using defined electronic formats.

Online submission is typically used by BAs that have only a few well completions or who have a unique facility that is not handled by their production accounting (PA) system.

The batch uploading of data allows a BA to send data electronically through the Internet to Petrinex. This method is typically used by BAs that have PA systems or that manage their production accounting by spreadsheet.

BAs are not restricted to using only one method; BAs may submit data using the batch uploading method and then later amend the data using the on-line method, or vice versa.

To interface with Petrinex itself, computers must meet certain minimum specifications. Similarly, there are minimum specifications required to access Petrinex's online training modules. For details on minimum specifications, follow the link below: [http://www.petrinex.ca/PDFs/Tips/Tip70\\_Retrieve\\_Reports.pdf](http://www.petrinex.ca/PDFs/Tips/Tip70_Retrieve_Reports.pdf).

Upon receipt of each submission, Petrinex runs computerized edit checks to ensure data quality and completeness. These edits check the following:

- that the BA submitting the data is authorized to submit the well or facility data;
- that the well identifier, well completion status, and well-to-facility links are correct according to ER and Petrinex records; and,
- that the activities and products reported are valid.

If the submitted data does not pass all of the checks, the data is not accepted, and the BA must correct and re-submit the data.

## **2.3 Submitting On-Line through the Work-in-Progress (WIP) Feature**

The online submission of data is done using Petrinex Work-in-Progress (WIP) area (a feature not available for batch submissions or for submissions by Waste Plants).

The WIP area allows the BA to enter and edit data online prior to submitting the data to Petrinex. Once the BA has saved data to WIP, Petrinex will hold (temporarily save) the data until the BA is ready to submit it. Data saved to WIP is accessible by the BA that saved it. The data will only become available for other users of Petrinex (where applicable) once it has been submitted to Petrinex.

*IMPORTANT: Data held in the WIP area is not considered a submission to Petrinex and will not be recognized at the appropriate reporting deadline as the current submission. Failure to submit data held in the WIP area may result in non-compliance errors.*

### **2.3.1 Submission of Amendments**

Data submitted to Petrinex may be amended either online or through batch upload as required. Petrinex treats all submissions of amendments as "full form replacement", which means that each new submission, for a particular production month, will completely overwrite the previous submission for that production month. Amendments submitted to Petrinex through batch upload must include all data previously submitted for the production month in question (if that data is still valid). For example, a BA may want to submit their receipt activities at the beginning of the month, as these volumes are required by other BAs to do such things as pipeline splits or to calculate well production volumes. Sometime later in the month, additional activities will have to be reported. The BA's new submission must include the previously submitted receipt data along with the new data. Failure to include the previously submitted receipt data will result in the deletion of the receipt data from the original submission.

Petrinex assigns a sequential amendment number to each new submission of data for a particular production month. The submission with the highest amendment number is considered to be the current version. A record of all submissions (current and previous) is maintained on Petrinex. The current submission is the default submission when viewing the data online through Petrinex and is available for online editing. Previous submissions, for a particular production month, may be viewed on Petrinex, but not edited.

To avoid discrepancies between Petrinex and a BA's PA system, it is recommended that any amendment within the BA's PA system is also amended in Petrinex. This will ensure that the information available to ER is the same as that within the BA's records.

#### **2.4 Petrinex Notification**

If any problems are encountered with either online or batch submissions, Petrinex will notify the BA of record. For online submissions, an error message is sent immediately and appears on-screen.

For batch submissions, Petrinex sends an e-mail notification to the BA of record advising the BA of the results of each batch submission, including any errors detected. Using the notification options, each BA may decide who will receive these notifications and when the notifications will be received. A copy of each notification is kept in the BA's Petrinex inbox for 90 days.

#### **2.5 Petrinex Inbox**

The Petrinex inbox ensures the BA has access to its notifications regardless of how or to whom the notice was sent to within the organization. Each BA must ensure that all notices of errors or missing data are acted upon before the appropriate reporting deadline to avoid non-compliance fees.



### **3. Business Associate (BA) Identifiers**

Before commencing any type of business with ER, a business entity, (including any entity that is not involved in oil and gas related activities) must have a 5-digit Saskatchewan Business Associate Identifier (BA ID), (formerly referred to as an Operator Code). This section details how a business entity or individual obtains a BA ID. This identifier is for Saskatchewan functions only and is distinct from BA IDs in other jurisdictions. Each business entity will have only one BA ID for all business conducted with ER.

Note: All pre-Petrinex Saskatchewan identifiers (Operator Codes) were transferred to Petrinex in 2012. Therefore, if a business entity or individual had a Saskatchewan Operator Code prior to March 2012, there is no need to obtain a new BA ID. The existing identifier will work in Petrinex.

#### **3.1 Applying for a BA Identifier**

If a business entity or individual needs to obtain a Saskatchewan BA ID, they may do so by completing and submitting the online application form, see Figures 3.1a and 3.1b.

Once the required information and documentation substantiating the applicant's identity has been submitted, notification regarding ER's approval or rejection of the application will be forwarded from Petrinex to the email address of the contact person (as supplied in the BA ID request), or to the organization's email (if no contact email address is provided).

**PETRIX**  
CANADA'S PETROLEUM INFORMATION NETWORK

Alberta Energy Regulator | Government of Saskatchewan | CAPP | EPAC

**Requesting a BA Identifier for Saskatchewan**

Requesting a Business Associate Identifier will require you to provide information for validation and approval of your request.  
All information marked with \* is mandatory.

**General Information**

If this request is for a Company please provide Legal Name (up to 130 char):  
 Legal Name:\*   
 Legal Name Effective Date:\* 2017-08-29

Or, if this request is for an individual please provide Last, Middle and First Name:  
 Last Name:\*   
 First Name:\*   
 Middle Name:   
 Legal Name Effective Date:\* 2017-08-29

If Applicable, please provide "Care of" (C/O) Identifier, i.e. the BA identifier of the company or person who takes care of your business. Please enter your own mailing address below.  
 Care/Of Identifier:  Care/Of BA Legal Name:

Mailing Address: \*

City:\*

Prov/State:\*  C.A./USA  Other Countries

Postal Code/ZIP:\*  (Maximum characters for Canada - 6; USA - 9; other countries - 12.)

Country: \*

Mailing Address Effective Date: 2017-08-29

Telephone:\*  (Country code-Number-Extension)  
 Fax:  (Country code-Number-Extension)  
 Email:\*

(only needed if this BA Application is for a company)

**Contact Person Information**

Contact Person Last Name: \*   
 Contact Person First Name: \*   
 Contact Person Middle Name:

Telephone:\*  (Country code-Number-Extension)  
 Fax:  (Country code-Number-Extension)  
 Email:

Figure 3.1 a: Online form for requesting a BA Identifier for Saskatchewan

**Alternate Address(es)**

*In addition to the mailing address supplied above, other alternate addresses can be supplied. If you want to specify an alternate address, please provide the following information; otherwise skip this section. For the alternate address click the "Add" button and enter the address information on the popup window. Only one address for each type is allowed.*

Add alternate address: Purpose

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**BA User Security Administrator Information**

*Once you have been assigned a BA Identifier will you need access to Petrinex?*  
 Yes  No  
*If No, please proceed to BA-Role section below. If Yes, please provide User Security Administrator data.*

---

**Primary User Security Administrator Data**

Userid:  
 Last Name: \*   
 First Name: \*   
 Middle Name:   
 Telephone: \*     (Country code-Number-Extension)  
 Fax: \*     (Country code-Number-Extension)  
 Email: \*   
 Mailing Address: (only if different from corporate address)  
 Mailing Address: \*   
  
  
 City: \*   
 CA/USA  Other Countries   
 Prov/State: \*    
 Postal Code/ZIP: \*  (Minimum characters for Canada - 6; USA - 9; other countries - 12.)  
 Country: \*

---

**Back-up Security Administrator**

*Providing Back-up User Security Administrator Information is optional. But if this information is provided, then Last Name, First Name, Telephone Number and Email are mandatory.*

Userid:  
 Last Name: \*   
 First Name: \*   
 Middle Name:   
 Telephone: \*     (Country code-Number-Extension)  
 Fax: \*     (Country code-Number-Extension)  
 Email: \*   
 Please proceed to "BA Role Information"

---

**Business Associate Role**

*Please indicate the additional role(s) you will assume as a Business Associate*

BA Role	Applicable?	Start Date (YYYY-MM)	End Date (YYYY-MM)
Working Interest Owner	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Production Accounting Services	<input type="checkbox"/>		
Administrative Only	<input type="checkbox"/>		
Pending	<input type="checkbox"/>		
Historical Only	<input type="checkbox"/>		

---

**Integrated Resource Information System (IRIS) Access**

IRIS is the Government of Saskatchewan's online business portal for the oil and gas industry.

Do you want access to IRIS?

- No  
Press the "Validate" button to continue with your BA identifier application.
- Yes  
For IRIS access a separate application for an IRIS Security Administrator account must be completed. This procedure can be found at the following web address: <http://www.saskatchewan.ca/IRIS> (Clicking this link will open a new screen, Please make sure that you return to your Petrinex BA Identifier application screen and continue with the application process.)

*You have now completed step 1 of your BA Identifier request. Please validate your request by pressing the "Validate" button. If the information entered above is valid, you will be redirected to step 2 of the process to supply corporate identity documentation.*

Figure 3.1 b: Online form for requesting a BA Identifier for Saskatchewan continued

### 3.2 Business Associate User Security Administrator (BA USA)

To access Petrinex, each BA must appoint a Business Associate User Security Administrator (BA USA). The BA USA is responsible for creating all user accounts for the BA. Any person wishing to access Petrinex, can do so only after their BA USA has created a user account for that person.

To appoint a BA USA, the information in the Primary User Security Administrator Data section of the application form must be completed, and a letter of authorization that indicates the BA USA must be attached. The attached letter must be on corporate letterhead, and signed by the president of the organization or authorized designate. See a sample letter of authorization in Appendix 1.

If a business entity or individual already has a BA ID and needs to create a BA USA, the specific BA USA details are required and must be communicated to ER: Last Name, First Name and Middle Name (optional), Telephone Number, Fax Number (optional), Email and Mailing Address information (if different from that of the BA). A letter of authorization that indicates the BA USA must be provided to ER. The letter must be on corporate letterhead, and signed by the president of the organization or authorized designate.

After receiving an ID and password, the BA USA will be able to create user accounts for the BA. It is the responsibility of the BA USA to ensure that user accounts clearly reflect the work processes that each user is able to perform in Petrinex (see Figure 3.2).

The BA USA information must be kept current. The BA must update the BA USA information within 30 days of a change.

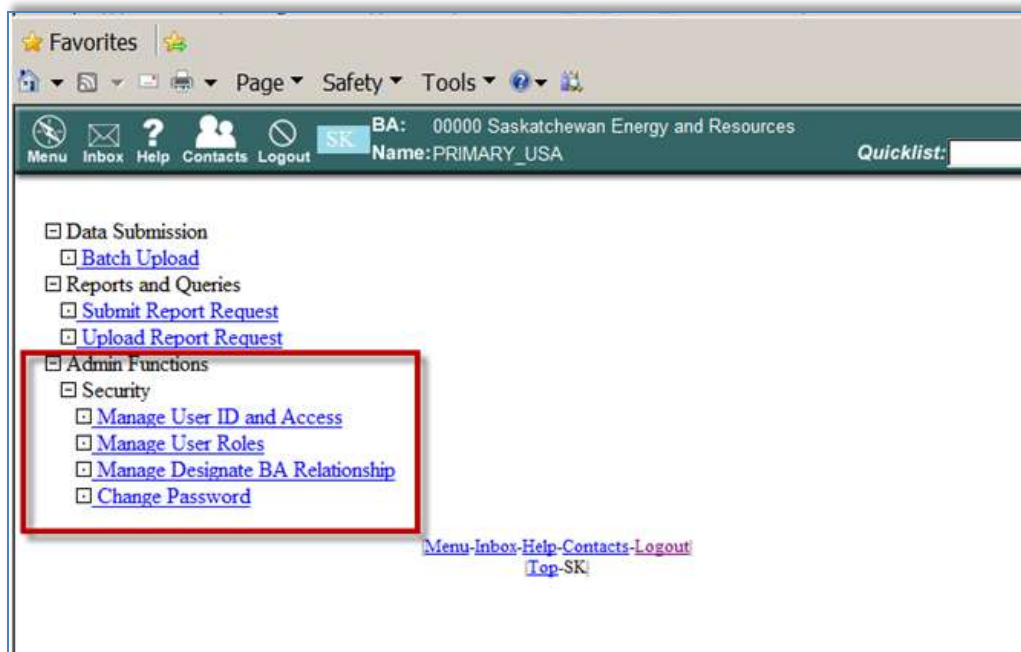


Figure 3.2: Functions used for managing users in Petrinex

### 3.2.1 Backup BA USA

BAs that have a BA USA designator must also appoint a Backup BA USA; and the Backup BA USA information must be kept current. The BA USA must update the Backup BA USA information within 30 days of a change.

To create a Backup BA USA when applying for a BA ID, the information in the Backup Security Administrator section of the application form must be completed. If a business entity or individual already has a BA ID and needs to create a Backup BA USA, the specific Backup BA USA details are required and must be communicated to ER: Last Name, First Name and Middle Name (optional), Telephone Number, Fax Number (optional), Email and Mailing Address information (if different from that of the BA). A letter of authorization on corporate letterhead indicating the Backup BA USA and signed by the president of the organization or authorized designate must also be submitted to ER. The Primary and Backup BA USA may both be authorized in the same letter (see Table 3.1).

Table 3.1: Supporting Documentation Requirements for BA applications

<b>Customer is Applying for:</b>	<b>The attachment is:</b>	<b>Delivery Method(s):</b>
New BA Identifier (BA ID)	A letter on corporate letter head requesting a BA Identifier containing a signature from the organization’s president or senior director and their title.	PDF emailed with PDF (form) application; PDF attached to online application
Company Amalgamation	Copy of the Certificate of Amalgamation and articles of Amalgamation.	PDF emailed with the PDF application; PDF attached to online application
A Business Associate User Security Administrator (BA USA) and Back-Up User Security Administrator (Back-up USA) account	A letter of authorization on corporate letterhead requesting an account for the named BA USA. The letter must be signed by the president of the company or authorized designate and must indicate the title of the signer.	PDF emailed with PDF (form) application; PDF attached to online application
Change to Corporate Identity	Legal documentation of corporate identity change such as a Certificate of Amendment.	PDF attached to online account form; PDF documentation attached to an email

### **3.3 Changes to Business Associate Accounts**

A request for changes to BA account information may be submitted via Petrinex by BA users who have been given the authority to perform this function. Documentation substantiating each change should be attached to the request.

It is the responsibility of each BA to keep their BA account, BA USA and BA user accounts secure and up-to-date.

### **3.4 Ceasing of Operations or Corporate Amalgamations**

Over time, BAs amalgamate, re-organize to form new corporate entities, or cease to exist. Each BA must notify ER of such changes to their corporate structure and supply documentation that supports and confirms the corporate change event. See Table 3.1.

Evidence of a corporate change is typically provided via a certificate of amalgamation or a certificate of dissolution. Once reviewed and confirmed by ER, the BA will be advised of the BA ID for the amalgamated entity, if required.

Should the BA be unable to provide sufficient evidence of the corporate change claim, or the change has no impact on ER records, the BA will be informed that the change will not be treated as an amalgamation and the BA will be instructed to continue using their existing BA ID.

## **4. Well Information and Status Changes**

### **4.1 Unique Well Identifier (UWI)**

Petrinex utilizes a Unique Well Identifier (UWI) to represent an individual well and well completion. The UWI is a unique 16-character string that is assigned by ER. On Petrinex, the UWI for a well and well completion in Saskatchewan includes an SKWI (i.e. Saskatchewan Well Indicator) prefix.

Petrinex UWI Example: SKWI111062705025W300

### **4.2 Well Completion Status**

A well completion status consists of four sequential components and an associated start date. The four components include Fluid, Mode, Status and Structure.

- 1) Fluid: indicates the primary product of the well completion, see Table 4.1.
- 2) Mode: indicates the level of development of the well completion, see Table 4.2.
- 3) Status (Role Type): indicates the type of a well completion, see Table 4.3.
- 4) Structure: indicates the wellbore configuration of a well completion, see Table 4.4.
- 5) Status Start Date: indicates the date in which the well completion status became effective (YYYY-MM-DD)

Each of the four well completion status components can have not applicable (N/A) as a valid entry. N/A entered in a particular component means that component is currently not applicable for that particular well completion. For example, a well completion status of N/A - DRILL - N/A - N/A means that the well is in the process of being drilled (i.e. its Mode = DRILL) and its Fluid, Status and Structure have not yet been determined. Descriptions of specific well completion statuses can be found in Table 4.5.

The responsibility for creating and maintaining a well completion status is shared between ER and the licensee or operator. All well completion statuses are recorded on Petrinex.

Well completion statuses must be submitted to Petrinex based on a pre-determined sequence or protocol. For example, a well completion status mode cannot be changed to active (ACTIVE) by the licensee or operator unless it has an existing well completion status mode of completed (COMP), as determined by ER. ER cannot create a well completion status mode of COMP on Petrinex unless the completion information has been submitted to ER by the licensee or operator and processed by ER.

The licensee or operator of a well who undertakes any operation to change a well completion's status or recomplete the well completion to a different stratigraphic unit must notify the minister on or before the earlier of either the Volumetric Reporting Deadline and 30 days after the date of first production or injection related to the change in the well completion status or recompletion to a different stratigraphic unit. Depending on the change, it will either be recorded by ER and uploaded to Petrinex, or entered directly by the licensee or operator on Petrinex.

The licensee or operator of a well must notify the minister, through Petrinex, of the following dates related to well status changes on or before the earlier of the Volumetric Reporting Deadline and 30 days after the date of the change:

- 1) the dates that substances were produced from or injected into a wellbore, including production or injection from operations which took place before a well completion is placed on production or injection (i.e. production while drilling), and storage recovery and storage injection activities related to storage and enhanced oil recovery operations.
- 2) the date that a well completion’s production, injection or storage operations were suspended;
- 3) the date that a well completion’s production, injection or storage operations resumed after a suspension; and
- 4) the date that commingled production or injection first occurred.

Approvals must be obtained from ER prior to commingling production or injection within a wellbore and prior to changing a well completion status, such as changing a producer to an injector, an oil well to a gas well, a producer to a cyclic producer and injector, etc.

**IMPORTANT** - Industry cannot report monthly production on a well completion unless the well completion has an ACTIVE or TESTING status mode type; therefore, it is critical to Petrinex reporting that required notifications on drilling, completion and work over data are provided to ER in a timely manner.

Table 4.1 Well Completion Status: Fluid

<b>Well Completion Status: Fluid Type</b>	<b><i>Well Completion Status Descriptions</i></b>
OIL	The well completion’s primary product is oil
GAS	The well completion’s primary product is gas.
WATER	The well completion’s primary product is water.
WASTE	The well completion’s primary product is waste.
STEAM	The well completion’s primary product is steam.
AIR	The well completion’s primary product is air.
CARBON DIOXIDE	The well completion’s primary product is carbon dioxide.
POLYMER	The well completion’s primary product is polymer.
CONDENSATE	The well completion’s primary product is condensate.
OXYGEN	The well completion’s primary product is oxygen.
HELIUM	The well completion’s primary product is helium.
POTASH	The well completion’s primary product is potash.



<b>Well Completion Status: Fluid Type</b>	<b>Well Completion Status Descriptions</b>
WAG	The well completion's primary product is water alternating gas.
BRINE	The well completion's primary product is brine.
SOLVENT	The well completion's primary product is solvent.
NITROGEN	The well completion's primary product is nitrogen.

Table 4.2 Well Completion Status: Mode Types

<b>Well Completion Status: Mode Type</b>	<b>Responsibility</b>	<b>Well Completion Status Descriptions</b>
Initial Not Applicable (N/A)	ER	A well licence has been issued for a well completion, but the drilling process has not yet started.
Suspended (SUSP)	Industry	Production or injection operations have ceased for an indefinite period of time. A well completion must be suspended within 12 months after the last production or injection has occurred. Note that if any volumetrics are to be reported for a well completion, then the well completion cannot have a mode type of SUSP.
Abandoned (ABAN)	ER	A well completion that has been drilled, and the downhole and surface abandonment of the wellbore has been completed.
Abandoned Zone (ABZONE)	ER	A well completion that had been completed (COMP) in a stratigraphic unit which had previous well completions permanently abandoned. Abandoned stratigraphic units can only be re-activated when a subsequent completion (COMP) within the same stratigraphic unit (well completion) takes place.
Abandoned – Re-entered (ABRENT)	ER	A well completion that has been abandoned and subsequently re-entered. To re-enter an abandoned well, a new well licence is required.
Junked and Abandoned (J&A)	ER	A well completion that has been abandoned prior to drilling operations being completed, typically due to problems encountered while drilling (e.g. lost circulation, kick, etc.).
Cased (CASED)	ER	A well completion that has a finished drilling date and has production casing set, but has not been completed or abandoned.
Completed (COMP)	ER	A well completion that has production casing perforations or has no production casing set across a stratigraphic unit (i.e. open hole completion).

<b>Well Completion Status: Mode Type</b>	<b>Responsibility</b>	<b>Well Completion Status Descriptions</b>
Active (ACTIVE)	Industry	A well completion that is producing or injecting fluid. This mode type must remain as part of the well completion status, if the well completion is shut-in.
Testing (TESTING)	Industry	A well completion that is expected to produce a mixture primarily of raw or marketable gas, and the fluids are produced after the drilling operations have been completed, but prior to the well being placed on production. A gas well completion can only have a well completion status with a mode type of TESTING for three month period, and during that period all applicable volumetrics must be reported. Note that if a well completion has a status of GAS TESTING PRODUCTION, the well completion must be linked to a facility with a facility subtype of 371-Gas Testing Battery.
Drilling (DRILL)	ER	A well completion that has started the drilling process by reporting a spud date. The well has not had production casing set but may or may not have a finished drilling date.
Unknown (UNKNOWN)	ER	A historical well completion where the status was not known at the time of Saskatchewan data conversion for Petrinex (March 15/12). This status is set by ER only.
Reclassified (RECLASSED)	ER	A well completion that had a gap in activity (i.e. it was not active or suspended but the perforations were still open and it was capable of production or injection.) The status was created for the conversion to Petrinex. No new instances will be created after Petrinex go-live (March 15/12). This status is set by ER only.
Cancelled (CANCELLED)	ER	A well completion where the well licence had been approved, and subsequently the licence was cancelled.
Ministry Suspended (MINSUSPEND)	ER	A well completion that has been shut in by a Ministry suspension order resulting in the company not being able to operate the well. This status is applied on the same date of the enforcement of the suspension. When the discrepancy and suspension is cleared, ER will update the status.

Table 4.3 Well Completion Status: Status Role Types

<b>Well Completion Status: Status Role Type</b>	<b>Responsibility</b>	<b>Well Completion Status Descriptions</b>
Injection (INJ)	Industry	The well completion is injecting fluids into a stratigraphic unit, where the well completion is part of a ER approved project or enhanced oil recovery scheme.
Disposal (DISP)	Industry	The well completion is disposing fluids into a stratigraphic unit, where the well completion is not part of an ER approved project or enhanced oil recovery scheme; and the primary purpose is the disposal of fluids rather than pressure support.
Observation (OBS)	ER	The well completion is used to monitor the performance of a particular stratigraphic unit or project.
Source (SOURCE)	Industry	The well completion is used for the purpose of producing water from a water-bearing stratigraphic unit.
Production (PROD)	Industry	The well completion is producing from a stratigraphic unit.
Production and Injection (PROD/INJ)	Industry	The well completion is producing from, and injecting fluid into the same stratigraphic unit to assist in oil recovery. For example, the well completion may be a cyclic or steam assisted gravity drainage producer and injector.
Cavern (CAVERN)	ER	The well completion is associated with the operations of a Waste Plant Cavern Facility.

Table 4.4 Well Completion Status: Structure Types

<b>Well Completion Status: Structure Type</b>	<b>Responsibility</b>	<b>Well Completion Status Descriptions</b>
Commingled Reporting (REPORT)	Industry	A well completion that is representative of the commingling of two or more well completions. A well completion with the well completion status structure type of REPORT must report all commingled production or injection on behalf of all contributing well completions. The other contributing well completions, representing the individual stratigraphic units that are commingled, have the well completion status structure type of commingled (COMMIN) and must not report production or injection.

<b>Well Completion Status: Structure Type</b>	<b>Responsibility</b>	<b>Well Completion Status Descriptions</b>
Commingled (COMMIN)	Industry	A well completion that has been approved by ER to be commingled with one or more other well completions and produce or inject in an un-segregated state. An individual commingled well completion is non-reporting. The associated production or injection must be reported under the assigned well completion with the well completion status structure type of REPORT. Note that a well completion with a well completion status structure type of commingled (COMMIN) cannot report production or injection volumes.
Horizontal Leg (DRAIN)	Industry	A horizontal well completion that has been approved by ER to be commingled with one or more other horizontal well completions and produce or inject in an un-segregated state. An individual commingled horizontal well completion is non-reporting. The associated production or injection must be reported under the assigned horizontal well completion with the well completion status structure type of BOSS. Note that a horizontal well completion with a well completion status structure type of horizontal leg (DRAIN) cannot be report production or injection volumes.
HISTORICALLY COMMINGLED (HCOMMIN)	ER	A well completion that was commingled historically but was no longer commingled at the time of Saskatchewan data conversion for Petrinex (March 15/12). This status is set by ER only.
Not Applicable (N/A)	Industry	The well completion is not commingled.

Table 4.5: Well Completion Status Examples

<b>Well Completion Status</b>	<b>Description</b>
OIL-ACTIVE-PROD-N/A	Produces oil from a stratigraphic unit.
OIL-ACTIVE-PROD/INJ-N/A	Produces oil from a stratigraphic unit and injects a fluid into the same stratigraphic unit to assist oil recovery (i.e. cyclic or SAGD).
OIL-DRILL-PROD-N/A	Produces oil while drilling and prior to completion.
GAS-ACTIVE-PROD-N/A	Produces gas from a stratigraphic unit.
GAS-ACTIVE-INJ-N/A	Injects gas into a stratigraphic unit (may include butane, propane, methane etc.).
GAS-ACTIVE-PROD/INJ-N/A	Produces gas from a stratigraphic unit and injects a fluid into the same stratigraphic unit to assist gas recovery.
GAS-DRILL-PROD-N/A	Produces gas while drilling and prior to completion.
GAS-TESTING-PROD-N/A	Produces gas after the drilling operations have been completed but prior to the well being placed on production. For each gas testing status, products can be reported as well as hours for three consecutive months.

Well Completion Status	Description
WATER-ACTIVE-INJ-N/A	Injects water into a stratigraphic unit.
WATER-ACTIVE-DISP-N/A	Injects water or waste water into a non-hydrocarbon-bearing stratigraphic unit.
WATER-ACTIVE-SOURCE-N/A	Produces fresh or formation water from a stratigraphic unit.
STEAM-ACTIVE-INJ-N/A	Injects steam into a stratigraphic unit.
AIR-ACTIVE-INJ-N/A	Injects air into a stratigraphic unit.
CO2-ACTIVE-INJ-N/A	Injects CO2 into a stratigraphic unit.
PLYMR-ACTIVE-INJ-N/A	Injects polymer into a stratigraphic unit.
WAG-ACTIVE-INJ-N/A	Alternates between water and gas injection into a stratigraphic unit for enhanced oil recovery.
POTASH-COMP-N/A-N/A	A non-reporting well completion that has been completed for the purpose of potash production. This status is set by ER only.
WASTE-ACTIVE-CAVERN-N/A	A non-reporting well completion that is associated with the operations of a Waste Plant Cavern Facility. This status is set by ER only.
N/A-DRILL-PROD-N/A	The DRILL PROD status occurs after a DRILL N/A status and prior to a COMP N/A status. In order to report volumetric activity, well completions with the DRILL PROD status must be linked to a facility with a subtype of 381 (BT - Drilling and Completing). A well completion status of DRILL PROD can only be assigned if oil, gas or condensate is one of the substances produced.
CONDENSATE-ACTIVE-PROD-N/A	Produces condensate as the primary product from a stratigraphic unit.
OXYGEN-ACTIVE-INJ-N/A	Injects only oxygen into a stratigraphic unit.
HELIUM-ACTIVE-PROD-N/A	Produces helium as the primary product from a stratigraphic unit (there may be other products such as nitrogen, CO2, or methane produced in associated with the helium).
BRINE-ACTIVE-DISPOSAL-N/A	Disposing of brine into a stratigraphic unit. This status can only be used for potash well completions.
SOLVENT-ACTIVE-INJ-N/A	Injects Solvents (e.g. Methane, CO2, Nitrogen) into a stratigraphic unit for enhanced oil recovery.
NITROGEN-ACTIVE-PROD-N/A	Produces nitrogen as the primary product from a stratigraphic unit.

#### 4.2.1 Ministry Well Completion Statuses

Ministry well completion statuses are derived from data that licensees submit to ER via forms, reports and notification processes. Once data is received from a licensee and processed by ER, it is then uploaded and appears as a well completion status on Petrinex.

In Petrinex there are well statuses and well completion statuses. The well completion statuses are used to determine the overall status of the well, which is displayed in IRIS under the well CWI. If at least one well completion is active, the well status will be active. If a well is abandoned (ABAN), every well completion associated with that well will have a status mode type of abandoned zone (ABZONE).

ER is responsible for receiving and processing all well completion status changes for a particular well completion from the issuance of a well license up to, and including, the completed (COMP) well completion mode type. ER is also responsible for receiving and processing well completion status changes when a stratigraphic unit is abandoned (ABZONE) up to, and including, when the entire well is abandoned (ABAN).

#### **4.2.2 Non-Ministry Well Completion Statuses**

The licensee or operator of a well must report, through Petrinex, all well completion status changes that occur after a well completions status mode type is changed to completed (COMP) and prior to the status mode type being changed to abandoned (ABZONE) or abandoned (ABAN). This includes the well completion status mode types of active (ACTIVE) and suspended (SUSP).

#### **4.2.3 Historic Well Completion Statuses**

Historic well completion statuses are any statuses that have a start date prior to the Saskatchewan go-live date on Petrinex (March 15, 2012). Historical statuses already exist and cannot be changed by the licensee on Petrinex even if the status is considered a Licensee status. Historical statuses can only be changed by ER. A licensee or operator should contact ER if an historical well completion status requires a change.

#### **4.3 Change Well Completion Status**

Well completion statuses that are historic or belong to ER, can only be changed by ER. A licensee or operator can change a non-ER well completion status; however, certain Petrinex validation rules will be applied before the well completion status change will be permitted. A status change can occur by adding a new well completion status to the existing well completion status history, deleting a well completion status from that history, modifying an existing well completion status, or inserting a new well completion status between two existing statuses. These changes can be made through the ADD, DELETE, MODIFY and INSERT functions respectively.

All non-ER well completion status changes must be made online by using the “Edit Well Status” screen (Figure 4.1) found in the Well Infrastructure section of the Petrinex menu, only the licensee or operator of the well completion can change the well completion status. Any change to a well completion status, regardless of which function is used, must exist on a drop down menu on the “Edit Well Status” screen. Only valid well completion status combinations will be available to choose from. However, there are other data validation checks and requirements that must be met prior to Petrinex accepting the change.

[Infrastructure] > [Well Infrastructure]

### Edit Well Status

Well ID: SK WI 121010100101W200    Licence No: 23H081    Licence Issue Date: 1994-08-04  
 Licensee: Saskatchewan Producer A  
 Licence Status: ISSUED    Licence Status Date: 1994-08-04

Well Status	Well Status Start Date	Facility Link Start Date	Facility Link(s)
OIL ACTIVE PROD N/A	1994-09-09		
N/A COME N/A N/A	1994-09-08		SKBTB7H1088
N/A DRILL N/A N/A	1994-08-14		
N/A N/A N/A N/A	1994-08-04		

INSERT will place a new well status prior to the selected status.

Figure 4.1: Edit Well Status Screen

#### 4.3.1 Add Well Completion Status

To add a well completion status, select the ADD button and choose the appropriate well completion status from the drop down menu (see Figure 4.2). A start date must be entered that corresponds to the day on which that status became effective.

[Infrastructure] > [Well Infrastructure]

### ADD Well Status Details

Well Status:     Status Date:   
 Before Status: OIL ACTIVE PROD N/A    1994-09-09

Figure 4.2: Add Well Status Screen

Note that a user cannot add a well completion status with a start date that is the same as the previous status start date. For example, if the licensee or operator adds a status of OIL- ACTIVE PROD - N/A to follow a status of N/A - COMP - N/A - N/A, and the status start dates were identical, Petrinex would reject the submission. ER should be contacted to adjust the completion date in order to allow the new status to be added with the correct date.

#### **4.3.2 Delete Well Completion Status**

To delete a well completion status, choose the most current licensee well completion status and select DELETE. There cannot be any volumetric information reported at a well completion that is to be deleted.

#### **4.3.3 Modify Well Completion Status**

To modify a well completion status, choose the appropriate well completion status and select MODIFY. If the status date is being modified, the date being entered must be between the status date of the previous well completion status and the status date of the subsequent well completion status.

#### **4.3.4 Insert Well Completion Status**

To insert a licensee well completion status between two existing well completion statuses, choose the existing well completion status that has a status date prior to that of the well completion status being inserted and select INSERT.

Note that INSERT is commonly used to add a well completion status of DRILL PROD between the well completion statuses of DRILL N/A and COMP N/A.



#### 4.4 Other Data Requirements

When a licensee submits a change to a well completion status, additional information may be required depending on the type of status change that is being submitted (see Figure 4.3).

When a well completion’s status mode type is changed to ACTIVE for the first time, in addition to the start date, the following data must be submitted:

- The crude oil type for an OIL PROD well completion status,
- The appropriate facility ID that the well completion is linked to, and
- Identification of commingled completions (if applicable).

The screenshot shows a web-based form titled "ADD Well Status Details". At the top, there are navigation links: "[Infrastructure] > [Well Infrastructure]". The form contains the following information:

- Well ID:** SK WI 121010100101W200
- Licence No.:** 23H081
- Licence Issue Date:** 1994-08-04
- Licence:** Saskatchewan Producer A
- Licence Status:** ISSUED
- Licence Status Date:** 1994-08-04
- Well Status:** OIL SUSP PROD N/A
- Status Date:** 2017-07-01
- Horizon Pool:** 12345 South Saskatchewan Bakken Pool
- Crude Oil Type:** HEAVY
- Facility ID:** SKBTB7H1088
- Facility Name:** South East Battery 20-22

At the bottom of the form, there is a section for "Commingled Events" and two buttons: "Submit" and "Cancel".

Figure 4.3: Add Well Status Details Screen

##### 4.4.1 Crude Oil Type

The crude oil type is represented by heavy (H), medium (M) or light (L) and must be submitted when the well completion’s status mode type and status role type is changed to ACTIVE PROD or ACTIVE PROD/INJ for the first time. Note that if oil is produced while drilling, the crude oil type must be submitted when the DRILL PROD status is selected.

The crude oil type must be determined by using either the density or API gravity of the well completion and referencing Table 4.4 to assign a crude oil type.

The crude oil type can only be entered through Petrinex once for any particular well completion. If the crude oil type is incorrect or needs to be changed, the licensee must contact ER and must provide a recent oil analysis for the applicable well completion before ER will change the crude oil type.

Table 4.4: Classification of Crude Oil Types

Classification	API Gravity	Density (kg/m3)
Light Crude Oil	>31.2° API	< 870 kg/m3
Medium Crude Oil	22.2° to 31.1° API	≥ 870 < 920 kg/m3
Heavy Crude Oil	< 22.3° API	≥920 kg/m3

#### 4.4.2 Facility Link

When a well completion status is changed to ACTIVE mode type, the well completion must be linked to a facility ID. The submission of a valid facility ID will be required prior to the status change being accepted. The facility link start date will default to the same date as the well completion status start date. For data conversion purposes, well completions that had an existing facility link prior to Saskatchewan Petrinex go-live date will have the facility link start date as March 15, 2012.

Note that a well completion that has production of oil, gas or condensate while drilling must also have a facility link even though the well completion does not have an ACTIVE mode.

A well completion with a PROD/INJ status mode type will require two facility links, one link to a battery and one link to an injection facility. For all other well completion status mode types, a well completion can only be linked to one facility at a time.

#### 4.4.3 Unit ID

Any well completion that is within a unit must be linked to the unit. A Unit Well check box and unit ID entry box are only available to the licensee once, when the well completion mode is changed to ACTIVE for the first time, after which they are no longer available or displayed with the well completion.

Once unit information has been entered with the well completion status submission, the unit information is sent to ER, through Petrinex, for review and validation. A notification is also sent to the BA stating that the information has been submitted to ER. After ER’s review, the appropriate information will be available to view within the Royalty/Tax Attribute (RTA) screen.

#### 4.4.4 Commingling

Commingling occurs when the production or injection from two or more well completions are combined. From the comingled well completions, one well completion must report the combined production and injection, and for that well completion, the Structure component of the well completion status must be REPORT (commingled reporting) . Note that a Structure component of REPORT can only be created by ER, is only created when commingling has been approved by ER, and the work over conducted to commingle the well completions has been completed and reported to ER. Contributing comingled well completions that do not have the Structure component of REPORT, must have the Structure component of COMMEN. Volumetric data submissions cannot be made for well completions that have a Structure component of COMMEN. Volumetric data must be submitted by the well completion that has the Structure component of REPORT.

When the Mode component of a well completion status, that also contains a Structure component of REPORT, is changed to ACTIVE for the first time, all the applicable data must still be submitted (e.g. GCI, crude oil type, unit ID and facility link). In addition, the individual contributing well completions (i.e. the well completions with the Structure component of COMMEN) must be identified by selecting the Commingled check box for each of the comingled well completions. All well completions that share a wellbore will be listed within the 'Commingled Events' field (see Figure 4.4), and those available to be shown as comingled will have a check box available.

**ADD Well Status Details**

Well ID: SK WI 121010100101W200 Licence No: 234981 Licence Issue Date: 1995-03-10  
 Licence Status: ISSUED Licence Status Date: 1995-02-10  
 Well Status: OIL ACTIVE PROD REPORT Status Date: 2016-01-01  
 Horizon Pool: 12345 South Saskatchewan Bakken Pool  
 Crude Oil Type: [Dropdown]  
 Facility ID: SKBT07H1000 Facility Name: South East Battery 20-22

**Commingled Events**

Please ensure that all commingling is in accordance with Ministry Regulations.

Commingled	Well Event	Current Status	Start Date
<input checked="" type="checkbox"/>	SK WI 1212345113W200	N/A N/A N/A COMMEN	1996-10-31
<input checked="" type="checkbox"/>	SK WI 1212345113W202	OIL COMP N/A COMMEN	1996-10-31
<input type="checkbox"/>	SK WI 1212345113W203	N/A ABZONE N/A N/A	2007-11-12
<input type="checkbox"/>	SK WI 1212345113W204	N/A N/A N/A COMMEN	2011-03-31

Submit Cancel

Figure 4.4: Add Well Status Details Screen

Well completions that have been identified as commingled will have their well completion status Structure type automatically changed to commingled (COMMIN) with a well completion status start date equal to the start date that the commingled reporting well completion's Mode type became ACTIVE.

If an additional contributing well completion is commingled at a later date, a new well completion status must be added with the new well completion status start date. The new well completion status will also have the Structure component of REPORT.

If the wellbore is no longer commingled and the individual stratigraphic units are segregated, the Structure component of REPORT will be changed to ABZONE by ER. For any of the previously commingled well completions, the licensee can change the well completion status Mode type from COMP to ACTIVE if applicable.

## 5. Facility Information

The licensee or operator of a single-well facility must, through Petrinex, obtain an appropriate facility ID on or before the earlier of:

- 1) the Volumetric Reporting Deadline;
- 2) 30 days after the day of any initial load or completion activity at the single-well;
- 3) 30 days after the date of first production and injection.

The licensee or operator of a facility that is not a single-well must, through Petrinex, obtain an appropriate facility ID on or before the earlier of:

- 1) the Volumetric Reporting Deadline; and
- 2) 30 days after the date on which the facility commences operations.

### 5.1 Facility ID

Requesting a Facility ID is an online process only. The information that the BA must submit to successfully obtain a facility ID, is dependent upon the type of facility for which an identifier is being sought, as detailed in Table 5.1. A BA requesting a facility ID must access the "Request Facility ID" screen (see Figure 5.1). The BA must select the appropriate facility subtype for the facility that they are obtaining a facility ID for (see Table 5.2). When the required information has been submitted and then validated by Petrinex, a facility ID is issued.

When a BA creates a new facility ID, and enters a facility licence number, Petrinex will check whether or not the facility licence type (also known as the energy development code) is acceptable for the facility subtype selected. If the facility licence type is not appropriate for the facility subtype, Petrinex will not allow the BA to proceed with creating the facility ID. The error message will read: FAC134: The facility sub-type [facilitiesubtypeID] is not valid for the licence development category [energy development code].

Please be aware that Unit IDs are created by ER.

### 5.1.1 Compressor Station and Oil Satellite Facility IDs

All licensed compressor stations and oil satellites must have a facility ID, which is created automatically by Petrinex upon receipt of the appropriate facility license from ER. These facility IDs are used to report fuel, flare, and vent volumes at the nearest reporting facility.

### 5.2 Obtaining the Facility ID

Using the Request Facility ID screen (see Figure 5.1), enter/select the facility subtype, jurisdiction (default is SK) location and, if required, the licence type and licence number. The licence type can be either a facility (i.e. type F) or, for a single-well battery, a well (i.e. type W) See Table 5.1 and Table 5.2 for descriptions of facilities and facility subtypes.

Figure 5.1: Request Facility ID Screen

### 5.2.1 Water Source (WS) ID Request

Operators of facilities that utilize surface water sources (i.e. river, lake or municipal) must obtain a water source ID (subtype 905) through Petrinex. The operator accesses the “Request Water Source ID” screen and enters the required data (see Figure 5.2). Once Petrinex validates the data, a water source ID is issued. The facility operational status assigned to a new water source ID is ACTIVE. At the receiving facility, use the water source ID to report the receipt of water. When a water source ID is no longer in use, the operator must change the status to “Suspended.” The following information must be submitted to obtain a water source ID:

**Location:** Enter the surface location of the pump for a river, lake, municipality or other body of water. If more than one water source exists at the same surface location, the LE of the first water source will be 00, the LE of the next water source will be 02.

**Name:** Enter your BA name, description, and location. If water is received from a municipal water source, enter the name of the city, town or village.

**Code:** Using the drop down list provided, select the appropriate code that identifies the specific river or lake. There is one code available for all municipal water.

The screenshot shows a web browser window with the following content:

- Navigation path: [Infrastructure](#) > [Facility Infrastructure](#) > [Setup/Maintenance](#)
- Title: **Request Water Source ID**
- Water Source ID: [ ]
- Start Date: 2017-06 [ < > ]
- End Date: [ ]
- Location: LSD [ ] SEC [ ] TWP [ ] RGE [ ] M [ ]
- Alternate Location: Section:  Township:  Range:
- Name: [ ]
- Code: [ ] Description: [ ]
- Status: Active
- Submit button

**Figure 5.2: Request Water Source ID**

### 5.2.2 Meter Station ID Request

Gas pipeline operators must obtain meter station facility IDs, through Petrinex, to enable the reporting of pipeline receipts and dispositions. A meter station ID must be obtained by a gas pipeline operator for every location where a gas pipeline on-loads or off-loads. The pipeline operator will be responsible for the required reporting at the applicable meter stations, as well as the pipeline.

To determine the appropriate meter station subtype for each applicable location, see Figure 5.4. Where gas is delivered between two gas pipelines, only one meter station ID is needed; the pipeline operators may determine which operator will be responsible for the applicable meter station’s reporting.

Using the Request Facility ID screen, the operator must enter the required information (see Figure 5.3). Once the system validates the data, a meter station ID is issued. The status assigned to a meter station ID is ACTIVE.

[\[Infrastructure\]](#) > [\[Facility Infrastructure\]](#) > [\[Setup/Maintenance\]](#)

### Request Facility ID

Facility Sub-Type: 631 FIELD RECEIPT METER STATION

Facility Location

LE	LSD	SEC	TWP	RGE	W	M	Licence
	11	11	11	11	W	3	

Alternate Location: Section  Township  Range

---

Facility Name:

Operational Status: ACTIVE

Participation Level:  Non  Lite  Full

Pipeline Split  
Deadline:  First Deadline  Second Deadline

---

Common Stream Operator:

Auto Populate Flow Through:  Yes  No

Meter Station - Pipeline Link:

Meter Station - Auto Populate Facility Link:

[Menu](#) [Inbox](#) [Help](#) [Contacts](#) [Logout](#)  
[Log-SK](#)

Figure 5.3: Request Meter Station Facility ID

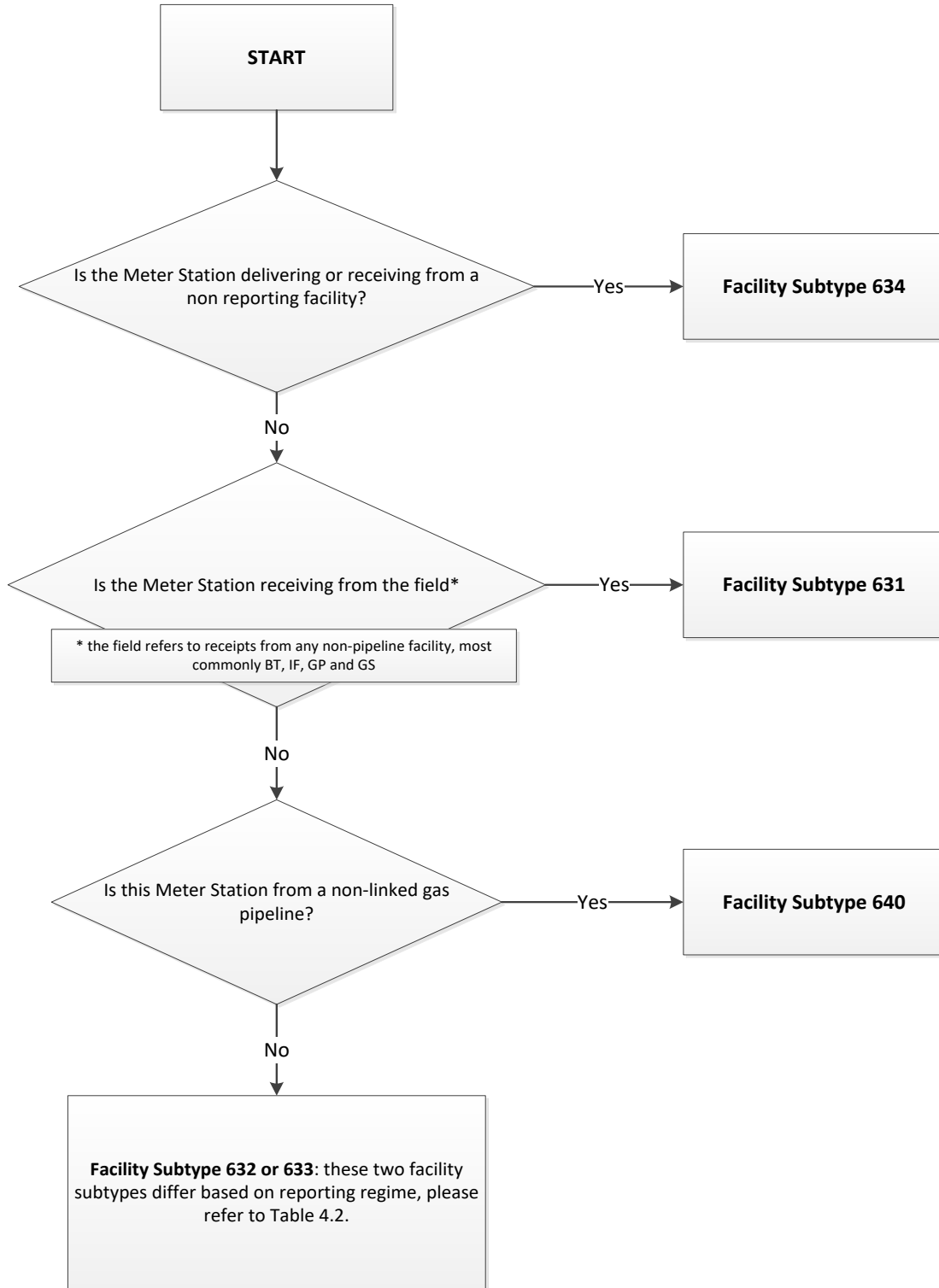


Figure 5.4: How to determine meter station facility subtypes



### **5.2.3 Out of Province Facility Identifiers**

ER will issue the following facility type IDs for facilities located outside of the province: CT, GP, WP, TM, PL and RF (except those in Alberta). Contact the ER Service Desk at [er.servicedesk@gov.sk.ca](mailto:er.servicedesk@gov.sk.ca) to request a non SK or AB facility ID.

Table 5.1: Request Facility Identifier (ID) - Required Information

Facility Type	Facility ID	Start Date	End Date	Operator ID	Subtype	Location	Alternate Location	Licence Number	Licencee	Licence Status	Licence Start Date	Facility Licence Type	Facility Name	Tied to Storage/EOR Facility	Storage/EOR Facility	Steam Quality %	Common Stream Operator	Meter Station Pipeline Link	Auto-Populate Flow Through	Meter Station – Auto Populate Facility Link	Physically Connected to a Pipeline	Terminal-Pipeline Link	Operational Status	
BT-Battery	R	R	R	R	M	M	O	M	R	R	R	R	M	O	O	N	N	N	N	N	N	N	N	M
IF-Injection Facility	R	R	R	R	M	M	O	M	R	R	R	R	M	N	N	M	N	N	N	N	N	N	N	M
GP-Gas Plant	R	R	R	R	M	M	O	M	R	R	R	R	M	N	N	N	N	N	N	N	N	N	N	M
GS-Gathering System	R	R	R	R	M	M	O	N	R	R	R	R	M	N	N	N	N	N	N	N	N	N	N	M
CT-Custom Treater	R	R	R	R	M	M	O	M	R	R	R	R	M	N	N	N	N	N	N	N	N	N	N	M
MS-Meter Station	R	R	R	R	M	M	O	N	N	N	N	N	M	N	N	N	M	M	M	M	N	N	N	M
PL-Pipeline	R	R	R	R	M	M	O	N	N	N	N	N	M	N	N	N	N	N	N	N	N	N	N	M
TM-Terminal	R	R	R	R	M	M	O	N	N	N	N	N	M	N	N	N	N	N	M	N	M	M	M	M
WP-Waste Plant	R	R	R	R	M	M	O	M	R	R	R	R	M	N	N	N	N	N	N	N	N	N	N	M
WT-Water Treatment	R	R	R	R	M	M	O	R	R	R	R	M	N	N	N	N	N	N	N	N	N	N	N	M

R – Petrinex-generated information  
M – Mandatory; must be entered  
O – Optional  
N – Not applicable for facility type

Table 5.2: Facilities and Facility Subtypes

General Name	Subtype Code	Facility Subtype Name	Description	Type of Licence Required
Battery (BT)		General Definition  Paper Battery Rules	<p>Common storage facilities receiving production from a well or wells and includes equipment for separating the fluid into oil, gas, water and any other substances and for measurement.</p> <p>Since paper batteries are for administrative ease, they must comply with the following criteria before being created:</p> <ul style="list-style-type: none"> <li>• All wells linked to a Heavy Crude Oil Paper Battery (facility subtype 313) must:</li> <li>• Have an oil density greater than or equal to 920 kg/m<sup>3</sup> and be located north of Township 21 and west of the Third Meridian, in Saskatchewan</li> <li>• Not be connected to a flowlined battery and not be part of an approved Enhanced Oil Recovery project, waterflood project, or any other Ministry approved project</li> <li>• Have a common operator</li> <li>• Receive the same well-head price from sales of crude oil during the month (i.e. averaging of reported sales prices or allowable transportation expenses from multiple sales transactions associated with different wells in a paper battery will not be permitted) – <i>(This means that the oil produced from the wells, when sold, must be sold together, to a common purchaser, and therefore receive the same price for each transaction).</i></li> <li>• Be within a geographic area no larger than six contiguous townships</li> <li>• Have approval from ER for situations where any of the requirements listed in points a) through e) are not met</li> </ul> <p>VENT, FLARE, FUEL or EMIS must not be reported at the paper battery level. Any VENT, FLARE, FUEL and EMIS activity must be reported at the location where it physically occurred (i.e. at the well) The operator of the paper battery must use the surface location of one of the individual wells within the paper battery as the paper battery location for reporting purposes.</p>	
	311	Crude Oil Single-Well Battery	A production facility for a single crude oil well. The density of the crude oil must be less than 920 kg/m <sup>3</sup> . Production is trucked to another location for disposition.	<b>W</b> – Well Licence
	313	Heavy Crude Oil Paper Battery	A production reporting entity for more than one single heavy crude oil wells where all wells are grouped for reporting purposes. All the wells within this battery must have a density equal to or greater than 920 kg/m <sup>3</sup> and must follow the paper battery rules listed above. Each heavy crude oil well has measurement, separation and production equipment and the production is trucked to a common location for disposition.	No license
	314	Crude Oil Multi-well Swab Group Battery	A production reporting facility for more than one swab oil well where all wells are grouped for reporting purposes. Production is trucked to a common tank prior to being trucked to a common facility for disposition.	<b>BW</b> – Multi Well Swabbing Oil Battery

General Name	Subtype Code	Facility Subtype Name	Description	Type of Licence Required
	315	Crude Oil Multi-well Battery (Temporary)	A temporary production facility (at a site for less than one-year period) consisting of two or more flowlined crude oil wells. Production from the wells may include both measured and prorated volumes. This subtype is no longer available effective August 2, 2013.	No license
	316	Crude Oil Multi-well Swab Paper Battery	A production reporting entity for more than one swab crude oil well where all wells are grouped for reporting purposes. Production is trucked to a common facility for disposition.	No license
	321	Crude Oil Multi-well Group Battery	A production facility consisting of two or more flowlined crude oil wells having individual separation and measuring equipment sharing a common surface location. All wells must have a density less than 920 kg/m <sup>3</sup> . See Saskatchewan <i>Directive PNG017: Measurement Requirements for Oil and Gas Operations</i> , section 6.	B-Multi Well Oil Battery
	322	Crude Oil Multi-well Proration Battery	A production facility consisting of two or more flowlined crude oil wells having common separation and measuring equipment. Total production is prorated to each well based on individual well tests. Proration factors must be entered at each facility. All wells must have a density less than 920 kg/m <sup>3</sup> . See Saskatchewan <i>Directive PNG017</i> , section 6.	B-Multi Well Oil Battery
	325	Heavy Crude Oil Single-Well Battery	A production facility for a single heavy crude oil well. The density of the crude oil must be equal to or greater than 920 kg/m <sup>3</sup> . Production is trucked to another location for disposition.	W – Well Licence
	326	Heavy Crude Oil Multi-well Group Battery	A production facility consisting of two or more flowlined heavy crude oil wells having individual separation and measuring equipment with all equipment sharing a common surface location. All wells must have a density equal to or greater than 920 kg/m <sup>3</sup> . See Saskatchewan <i>Directive PNG017</i> , section 12.	B-Multi Well Oil Battery
	327	Heavy Crude Oil Multi-well Proration Battery	A production facility consisting of two or more flowlined heavy crude oil wells having common separation and measuring equipment. Total production is prorated to each well based on individual well tests. Proration factors must be entered at each facility. All wells must have a density equal to or greater than 920 kg/m <sup>3</sup> . See Saskatchewan <i>Directive PNG017</i> , section 12.	B-Multi Well Oil Battery
	344	Thermal In-Situ Battery	A production facility consisting of two or more flowlined crude oil wells that have common separation, measurement, and storage equipment. Total production is prorated to each well based on individual well tests. These wells apply thermal enhanced recovery techniques such as SAGD, cyclical steam stimulation, etc. See Saskatchewan <i>Directive PNG017</i> , section 12.	B-Multi Well Oil Battery
	351	Gas Single-Well Battery	A production facility for a single gas well where production is measured at the wellhead. Production is delivered directly to a gas gathering system or other facility and is not combined with production from other wells prior to delivery.	W – Well Licence
	361	Gas Multi-well Group Battery	A production facility consisting of two or more gas wells where production components are separated and measured at each wellhead. Production from all wells in the group is combined after measurement and delivered to a gas gathering system or other facility. See Saskatchewan <i>Directive PNG017</i> , section 4.	H – Multi Well Gas Battery
	362	Gas Multi-well Effluent Measurement Battery	A production facility consisting of two or more gas wells where estimated production from gas wells in the battery is determined by the continuous measurement of multiphase fluid from each well (effluent measurement). Commingled production is separated and measured and total production is prorated to each well based on the estimated production. See Saskatchewan <i>Directive PNG017</i> , section 7.	H – Multi Well Gas Battery

General Name	Subtype Code	Facility Subtype Name	Description	Type of Licence Required
	363	Gas Multi-well Proration SW Saskatchewan Battery	A production facility consisting of two or more gas wells that have completions within the base of the Glacial Drift to the base of the Upper Cretaceous stratigraphic units and the facility is located south of Township 28 and West of the Third Meridian in Saskatchewan. Production is commingled before being measured. Total production is prorated to each well based on individual well tests. Proration factors must be entered at each facility. Condensate production is not allowed at wells linked to these facilities. See Saskatchewan <i>Directive PNG017</i> , section 7.	H – Multi Well Gas Battery
	364	Gas Multi-well Proration Outside SW Saskatchewan Battery	A production facility consisting of two or more gas wells where production from the wells in the battery is commingled before being measured. Total production is prorated to each well based on individual well tests. Proration factors must be entered at each facility. This subtype also applies to a proration facility that does not meet the criteria for a Gas Multi-well Proration SW Saskatchewan Battery. See Saskatchewan <i>Directive PNG017</i> , section 7.	H – Multi Well Gas Battery
	371	Gas Test Battery	A production reporting entity for one or more gas wells conducting production tests prior to commencement of regular production. A well with a 'GAS TESTING PROD' status can only report for a maximum of three (3) months. Multiple wells can be linked to a facility ID under this facility subtype as long as each well's status is 'GAS TESTING PROD'.	H – Multi Well Gas Battery
	381	Drilling and Completing	A production reporting entity to accommodate the reporting of production from a well during deliverability testing and before commencement of regular production. This subtype only applies to wells with the well status of 'DRILL PROD'. 'DRILL PROD' means the well is still drilling and has not been completed or reached its total depth. The facility subtype can only be used by a well for a maximum of one month and requires a new facility ID for each well.	No license
Compressor Station (CS)	601	Compressor Station (Non-Reporting)	A compression facility that contains equipment to maintain or increase the flowing pressure of gas. Compressor station codes are created automatically by Petrinex when ER issues a new compressor licence. This subtype is not required to report on Petrinex. However, some activities, such as FUEL and VENT are reported as part of the battery or gas gathering system with which they are associated. The compressor station ID is used to report such volumes attributed to the compressor station.	GC – Gas Compression Facility
	603	Compressor Station (Temporary)	A temporary compression facility (at a site for less than one-year period) that contains equipment to maintain or increase the flowing pressure of gas.	No license
Custom Treater (CT)	611	Custom Treating Facility	A treating facility that contains equipment to treat and separate emulsion that has been received by truck. Custom treating facilities may also receive production via flowline where they share the surface location of other facilities. Oil and water receipts are prorated using proration factors and facility measurements. See Saskatchewan <i>Directive PNG017</i> , section 3.	R-Custom Cleaning Plant/Reclaimer or B-Multi Well Oil Battery
	612	Custom Treating Facility (Issued by ER only)	A treating facility that contains equipment to treat and separate emulsion that has been received by truck. This subtype only applies to custom treaters that are not required to report on Petrinex and are located out of province. This facility subtype is issued by ER only.	No license

General Name	Subtype Code	Facility Subtype Name	Description	Type of Licence Required
Gas Gathering System (GS)	621	Gas Gathering System	A gathering facility that consists of a system of pipelines to move gas from multiple facilities to a common facility. See Saskatchewan <i>Directive PNG017</i> , sections 4 and 15.	No license
Gas Plant (GP)	401	Gas Plant Sweet	A processing facility that receives gas that is less than 0.01 mol/kmol of H <sub>2</sub> S.	Y-Gas Processing Plant
	402	Gas Plant Acid Gas Flaring <1 T/D Sulphur	A processing facility that receives gas with a concentration greater than 0.01 mol/kmol of H <sub>2</sub> S and less than 1 tonne/day of sulphur and that flares or incinerates acid gas. See Saskatchewan <i>Directive PNG017</i> , section 11.	Y-Gas Processing Plant
	403	Gas Plant Acid Gas Flaring ≥ 1 T/D Sulphur	A processing facility that receives gas with a concentration equal to or greater than 1 tonne/day of sulphur and that flares or incinerates acid gas. See Saskatchewan <i>Directive PNG017</i> , section 11.	Y-Gas Processing Plant
	404	Gas Plant Acid Gas Injection	A processing facility that receives gas with a concentration equal to or greater than 1 tonne/day of sulphur and that injects acid gas. See Saskatchewan <i>Directive PNG017</i> , section 11.	Y-Gas Processing Plant
	405	Gas Plant Sulphur Recovery	A processing facility that receives gas and that recovers sulphur. See Saskatchewan <i>Directive PNG017</i> , section 11.	Y-Gas Processing Plant
	406	Gas Plant Mainline Straddle	A processing facility that receives residue gas from gas plants or pipelines for additional processing (a second extraction of liquids such as ethane).	Y-Gas Processing Plant
	407	Gas Plant Fractionation	A processing facility that receives off-spec hydrocarbon liquids recovered from gas plants that are processed into one or more spec natural gas liquid in-stream components. Gas plants that receive and process raw gas should not use the subtype 407.	Y-Gas Processing Plant
	411	Gas Plant (Issued by ER only)	A processing facility that processes raw gas to recover natural gas and natural gas liquids. This subtype only applies to gas plants that are not required to report on Petrinex and are located out of province. This facility subtype is issued by ER only.	No license
Injection Facility (IF)	501	Enhanced Recovery Scheme	An injection facility for the injection of any substance through one or more wells for the purpose of improving hydrocarbon recovery. Thermal in-situ injection projects are to be reported using subtype 506.	IE-Disposal/Injection Facility – EOR
	503	Disposal	An injection facility for the disposal of fluids for purposes other than enhanced recovery or storage. This subtype includes the disposal of water produced in conjunction with oil and gas and the disposal of other substances associated with the oil and gas industry into an underground zone.	IW-Disposal/Injection Facility - Water
	504	Acid Gas Disposal	An injection facility for the disposal of acid gas, such as hydrogen sulphide and carbon dioxide, into an underground zone.	IE-Disposal/Injection Facility – EOR or GC– Gas Compression Facility

General Name	Subtype Code	Facility Subtype Name	Description	Type of Licence Required
	505	Underground Gas Storage	An injection facility for the storage of natural gas into an underground zone or cavern.	<b>IE</b> -Disposal/Injection Facility – EOR or <b>GC</b> – Gas Compression Facility
	506	Thermal In-Situ Injection	An injection facility for the injection of steam or any other substance through one or more wells for the purpose of improving hydrocarbon recovery through thermal means. This subtype requires the submission of a steam quality as a percentage. Steam quality is the measure of the amount of saturated steam in the vapour phase. The steam quality percentage can be submitted under Facility Infrastructure and Setup/Maintenance. This subtype is used in association with battery subtype 344.	<b>IE</b> -Disposal/Injection Facility – EOR
	507	Disposal (Approved as Part of Waste Plant)	An injection facility for the disposal of fluids for purposes other than enhanced recovery or storage. This subtype includes the disposal of water produced in conjunction with oil and gas and the disposal of other substances into an underground zone. This subtype is approved as part of a waste plant approval and does not require a separate facility licence.	<b>V</b> - Waste Plant or <b>IW</b> -Disposal/Injection Facility - Water
	510	Pressure Maintenance Water Injection	An injection facility for the injection of water into a crude oil bearing zone to increase reservoir pressure.	<b>IW</b> -Disposal/Injection Facility - Water
	511	Enhanced Recovery Scheme (Temporary)	A temporary injection facility (at a site for less than a one-year period) for the injection of any substance through one or more wells for the purpose of improving hydrocarbon recovery. This subtype is not valid effective August 2, 2013.	No licence
	512	Disposal (Temporary)	A temporary injection facility (at a site for less than a one-year period) for the disposal of fluids for purposes other than enhanced recovery or storage. This subtype includes the disposal of water produced in conjunction with oil and gas and the disposal of other substances associated with the oil and gas industry into an underground zone. This subtype is not valid effective August 2, 2013.	No licence
	514	Pressure Maintenance (Temporary)	A temporary injection facility (at a site for less than one-year period) for the injection of water into a crude oil bearing zone to increase reservoir pressure. This subtype is not valid effective August 2, 2013.	No license
	516	Underground Oil Storage	An injection facility for the storage of crude oil in an underground zone or cavern.	*no specific logic created, IW would be the closest, recommend leaving this tab open
	517	Underground NGL Storage	An injection facility for the storage of natural gas liquids in an underground zone or cavern.	<b>IE</b> -Disposal/Injection Facility – EOR or <b>IW</b> -Disposal/Injection Facility - Water
	518	Disposal (approved for non oil and gas related activities)	An injection facility for the disposal of fluids associated with non oil and gas related activities, such as potash mining, in an underground zone.	<b>V</b> – Waste Plant or <b>IW</b> -Disposal/Injection Facility - Water

General Name	Subtype Code	Facility Subtype Name	Description	Type of Licence Required
	519	Underground CO <sub>2</sub> Storage	An injection facility for the storage of carbon dioxide in an underground zone or cavern.	GC – Gas Compression Facility or IE-Disposal/Injection Facility – EOR
Meter Station (MS) See Figure 5.4	631	Field Receipt Meter Station	A meter station facility that receives gas from any non-linked upstream facility (excluding gas pipelines, see MS subtype 640) and delivers to a linked downstream gas pipeline. For reporting purposes, When the auto-populate flow through flag is set to ‘Y’ the linked downstream pipeline operator must enter a DISP at the MS. Petrinex will auto populate the REC at the MS, the DISP at the non-linked upstream facility and the REC at the linked downstream pipeline. When the auto-populate flow through flag is set to ‘N’ the linked downstream pipeline operator must enter a DISP at the MS. Petrinex will not auto populate the REC at the MS but it must be entered by either the CSO or the linked downstream pipeline operator. Once the DISP and REC have been entered at the MS, Petrinex will auto populate the DISP at the non-linked upstream facility and REC at the linked downstream pipeline.	No license
	632	Interconnect Receipt Meter Station	A meter station facility that receives gas from a linked upstream gas pipeline and delivers to any non-linked downstream facility (including gas pipelines). For reporting purposes, When the auto-populate flow through flag is set to ‘Y’ the linked upstream pipeline must enter the REC at the MS. Petrinex will auto populate the DISP at the MS, DISP at the linked upstream pipeline and the REC at the non-linked downstream facility. When the auto-populate flow through flag is set to ‘N’ the linked upstream pipeline must enter the REC at the MS. Petrinex will not auto populate the DISP at the MS but it must be entered by either the CSO or the linked upstream pipeline operator. Once the DISP and REC have been entered at the MS, Petrinex will auto populate the DISP at the linked upstream pipeline and the REC at the non-linked downstream facility.	No license
	633	Interconnect Disposition Meter Station	A meter station facility that receives gas from the linked upstream gas pipeline and delivers to any non-linked downstream facility (including gas pipelines). For reporting purposes, When the auto-populate flow through flag is set to ‘Y’ either the CSO or the linked upstream pipeline operator must report the DISP at the MS. Petrinex will auto populate the REC at the MS, the DISP at the linked upstream pipeline and the REC at the non-linked downstream facility. When the auto-populate flow through flag is set to ‘N’ the CSO or the linked upstream pipeline operator must report the DISP at the MS. Petrinex will not auto populate at the REC at the MS but it must be entered by the linked upstream pipeline operator. Once the DISP and REC have been entered at the MS, Petrinex will auto populate the DISP at the linked upstream pipeline and the REC at the non-linked downstream facility.	No license



General Name	Subtype Code	Facility Subtype Name	Description	Type of Licence Required
	634	Interconnect Non Reconciled Meter Station	A meter station facility that receives gas from or delivers gas to any non-reporting facility.	No license
	640	Interconnect PL to PL Disposition Meter Station	A meter station facility that receives gas from a non-linked upstream gas pipeline and delivers to a linked downstream gas pipeline.	No license
Pipeline (PL)	204	Gas Transporter	A network of interconnected pipelines that move gas within and out of the province of Saskatchewan.	No license
	207	Oil Pipeline	A network of interconnected pipelines that move oil within and out of the province of Saskatchewan.	No license
	208	NGL Pipeline	A network of interconnected pipelines that move Natural Gas Liquids (NGL) within and out of the province of Saskatchewan.	No license
	210	Oil Pipeline (Non-Reporting)	A network of interconnected pipelines that move oil within and out of the province of Saskatchewan. This subtype only applies to pipelines that are not required to report on Petrinex such as National Energy Board (NEB) regulated pipelines.	No license
	211	Gas Pipeline (Non-Reporting)	A network of interconnected pipelines that move gas within and out of the province of Saskatchewan. This subtype only applies to pipelines that are not required to report on Petrinex such as NEB regulated pipelines.	No license
	212	NGL Pipeline (Non-Reporting)	A network of interconnected pipelines that move natural gas Liquids (NGL) within and out of the province of Saskatchewan. This subtype only applies to pipelines that are not required to report on Petrinex such as NEB regulated pipelines.	No license
	213	CO <sub>2</sub> Pipeline	A network of interconnected pipelines that move CO <sub>2</sub> within and out of the province of Saskatchewan.	No license
	214	CO <sub>2</sub> Pipeline (Non-Reporting)	A network of interconnected pipelines that move CO <sub>2</sub> within and out of the province of Saskatchewan. This subtype only applies to pipelines that are not required to report on Petrinex such as NEB regulated pipelines.	No license
Refinery (RF)	651	Oil Refinery/Upgrader (Non-Reporting)	A processing facility that refines or upgrades crude oil. This subtype is not required to report on Petrinex. This facility subtype is issued by ER only.	No license
Oil Satellite (SA)	347	Oil Satellite (Non-Reporting)	An arrangement of surface equipment (not including oil storage tanks) located some distance between a number of wells and the main battery that will receive the emulsion, which separates and measured the production from each well, after which the fluids are recombined and pipelined to the associated battery for further treatment. This subtype is not required to report on Petrinex. However, some activities, such as FUEL and VENT are reported as part of the battery with which they are associated. The oil satellite ID is used to report such volumes attributed to the oil satellite.	Z – Oil Satellite
Terminal (TM)	671	Tank Farm Terminal	A terminal facility that consists of storage tanks and equipment associated with the operation of a pipeline.	No license
	673	Third Party Terminal	A terminal facility that consists of storage tanks and equipment associated with the operation of a pipeline operated by another party.	No license

General Name	Subtype Code	Facility Subtype Name	Description	Type of Licence Required
	674	Tank Farm Terminal (Issued by ER only)	A terminal facility that consists of storage tanks and equipment associated with the operation of a pipeline. This subtype applies to terminals that are not required to report on Petrinex and are located out of province. This subtype is issued by ER only.	No license
	675	Railcar Terminal	A terminal facility that consists of storage tanks or equipment associated with the operation of a rail line.	No license
	676	Railcar Terminal (Issued by ER only)	A terminal facility that consists of storage tanks or equipment associated with the operation of a rail line. This subtype applies to terminals that are not required to report on Petrinex and are located out of province. This facility subtype is issued by ER only.	No license
Waste Location (WL)	904	Waste Location (Non-Reporting)	A reporting entity used in waste plant reporting related to waste generated or waste received from non ER regulated locations. This subtype is not required to report on Petrinex.	No license
Waste Plant (WP)	701	Surface Waste Facility	A processing facility that collects and treats waste from crude oil, gas and other operations.	<b>V</b> - Waste Plant
	702	Cavern Waste Facility	A facility that collects and stores waste from crude oil, gas or other operations in an underground cavern.	<b>V</b> - Waste Plant
	703	Oily By-product Storage Structure	A facility that temporarily stores contaminated solid materials.	<b>OB</b> – Oily By-Product Storage Structure
	704	Waste Facility (Issued by ER only)	A processing facility that collects and treats waste from crude oil, gas and other operations. This subtype applies to waste facilities that are not required to report on Petrinex and are located out of province. This facility subtype is issued by ER only.	No license
Water Source (WS)	905	Surface Water Source (Non-Reporting)	A source of fresh (non-saline) water, such as a river, lake or municipal water supply.	No license
Water Source Well (WT)	906	Formation Water Source	A production facility for licensed formation water source wells. Formation water is water with a total dissolved solids concentration equal to or greater than 4000 milligrams per litre.	<b>W</b> – Waste Plant or <b>IE</b> -Disposal/Injection Facility – EOR or <b>IW</b> -Disposal/Injection Facility - Water
	907	Fresh Water Source	A production facility for licensed formation water source wells. Formation water is water with a total dissolved solids concentration of less than 4000 milligrams per litre.	<b>W</b> – Waste Plant or <b>IE</b> -Disposal/Injection Facility – EOR or <b>IW</b> -Disposal/Injection Facility - Water

Table 5.3: Miscellaneous Nodes

Province Type Code	Name	Description	Reporting Facility Types Allowed to Enter the Activity	Products Allowed	Activity Allowed
SK CO	Commercial	The operator of the facility will submit SK CO (Saskatchewan commercial customer) only when GAS is delivered out and the receiving facility does not have a Petrinex facility code and SK IN is not sufficient.	Battery, Gas plant, Gas Gathering System, Pipeline	GAS	DISP only
SK EG	Electrical Generation	The operator of the facility will submit SK EG only when gas is used to generate electricity and sold to SaskPower.	Gas Gathering System, Pipeline	AIR, ALKWTR, ALL, ASP, BRINE, C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, C6-MX, C6-SP, CO2, CO2-MX, CO2-SP, COND, DIESEL, FSHWTR, FLUEGAS, GAS, HELIUM, IC4-MX, IC4-SP, IC5-MX, IC5-SP, N2, NAPHTHA, NC4-MX, NC4-SP, NC5-MX, NC5-SP, O2, OIL, POLYMER, SAND, SOLV, STEAM, SURF, SYNCRD, WASTE, WATER,	DISP only
SK GE	Gas Equivalent	The operator of the facility will submit SK GE whenever liquids are removed from a gas stream.	Battery, Gas Plant, Gas Gathering System	C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2-MX, CO2-SP, GAS, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP	REC only

SK IN	Industrial	The operator of the facility will submit SK IN (Saskatchewan industrial customer) when GAS is delivered to an industrial customer that is engaged in creating a product or changing raw or unfinished materials into another form or product such as factories, mills, machine shops, and does not have a Petrinex reporting code.	Battery, Gas Plant, Gas Gathering System, Pipeline	GAS, HELIUM	DISP only
SK LF	Line Fill	The operator of a facility will enter a receipt (REC) or a disposition (DISP) From/To SK LF when products have been produced or processed and used as line fill for any production month. This should only be reported at the beginning and decommissioning of a facility.	Battery, Gas Gathering System, Gas Plant, Pipeline	GAS	REC, DISP
SK MC	Miscellaneous	The operator of a facility will submit SK MC when a product is received or delivered to a source not identifiable by any other facility code or miscellaneous node. This miscellaneous node is not to be used for balancing a facility.	Battery, Injection Facility, Gas Plant, Gas Gathering System, Custom Treater, Pipeline, Terminal	ASP, BRINE, C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2, CO2-MX, CO2-SP, COND, FSHWTR, GAS, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, N2, NC4-SP, NC5-MX, NC5-SP, OIL, POLYMER	REC, DISP
SK RE	Residential	The operator of the facility will submit SK RE (Saskatchewan residential customer) only when GAS is delivered using distribution lines and used for residential purposes.	Battery, Gas Plant, Gas Gathering System, Pipeline	GAS	DISP only
SK RM	Road Maintenance	The operator of the facility will submit SK RM when products have been delivered locally for use on road maintenance.	Battery, Custom Treater, Pipeline, Terminal	OIL	DISP only

SK RO	Run Off	The operator of a facility will submit SK RO for the receipt of freshwater from rain or melted snow from a pond, puddle, grated surface or a dug out location.	Battery, Custom Treater, Gas Plant, Gas Gathering System, Injection Facility, Pipeline, Terminal, Water Source	FSHWTR	REC only
SK WC	Water Condensation	An operator will submit SK WC when reporting water recovered from the gas stream at an inlet or compressor and the water volume cannot be allocated back to the source facility.	Gas plant, Gas Gathering System	WATER	REC only
SK WM	Waste Materials	The operator of a facility will submit a REC from SK WM for receipts of waste materials that are associated with sources other than the normal production of hydrocarbons. For example, contaminated soil scraped off the ground. This identifier is used when non produced solids have been included in water dispositions to waste plants. It will be included in the balancing of water to prevent over-allocating water production to wells.	Battery, Gas Gathering System, Custom Treater, Gas Plant, Injection Facility, Pipeline, Terminal	WATER	REC only



### 5.3 Facility Change Request

The facility operator must update the facility details, as needed, through Petrinex, using the online process. This process is used to change the facility name, location, steam quality percentage, meter station-to-pipeline link, and terminal-to-pipeline link.

If the facility subtype must be changed or if a facility licensed as a single-well battery is being changed to a multi-well battery, a new facility ID must be requested and the operational status of the old facility ID must be changed to "Suspended".

#### 5.3.1 Edit Facility Information

When the Edit Facility Information screen is selected (see Figure 5.4), the start date is pre-populated with the production month that is associated with the last change made to the facility information.

[Infrastructure] > [Facility Infrastructure] > [Setup/Maintenance]

### Edit Facility Information

Facility ID: SK MS 0078525      Start Date: 2011-10  
 End Date:     

---

Facility Sub-Type: 631 - FIELD RECEIPT METER STATION

Facility Location  
 LE LSD SEC TWP RGE M Licence

Alternate Location:  
 Section  Township  Range

Facility Name:       Meter Station Start Date: 2011-10

Participation Level:  Non  Lite  Full

Pipeline Split  
 Deadline:  First Deadline  Second Deadline

Common Stream Operator:       Meter Station - Pipeline Link:

Auto Populate Flow Through:  Yes  No      Meter Station - Auto Populate Facility Link:

[Menu](#) [Inbox](#) [Help](#) [Contacts](#) [Logout](#)

Figure 5.4: Edit Facility Information Screen



Any changes made will be effective for the defaulted production month unless a different start date is selected. The facility start date cannot be changed to a date earlier than the initial start date available, with the exception of the meter station facility type. The initial start date of a meter station can be changed without the approval of ER. Petrinex will assign the end date based on the next start date entered.

If the start date is changed or modified on the screen, Petrinex will display the facility information. If the actual start date for the facility is earlier than the modified start date, Petrinex will automatically change the start date to the actual start date. This will occur when the modified date that had been entered is within a record that has a broader start and end date range. For example, if a start date of 2011-08 is entered but the database contains a facility record with a Start Date = 2011-01 and an End Date = 2011-12, then those are the dates that will be displayed on the screen, rather than a start date of 2011-08. If the facility changes do not apply to the entire date range that is displayed, the start date must be changed to the correct start date (i.e. change the start date to 2011-08). This will result in the previous status ending 2011-07, but keep in mind that the change will have an end date of 2011-12. If the changes are to cover a period later than 2011-12, then enter them again for the period starting 2012-01.

#### **5.4 Facility Operational Status**

All licensees or operators of a facility must ensure that their facilities have the correct operational status. The licensee or operator of a facility must notify the minister, through Petrinex, of any change in the status or operation of the facility on or before the earlier of the Volumetric Reporting Deadline and 30 days after the date of the change.

Facility operational status indicates the status of the facility for a specific period of time. See Table 5.3 for a list of facility operational statuses. To help maintain the facility operational status, Petrinex will change the status automatically in specific situations. For example, when a new facility ID is issued, the facility operational status will be set to NEW. When a facility with an operational status of NEW is linked to a well completion, Petrinex changes the facility operational status to ACTIVE. Also, when a volumetric submission is made for a facility for the first time, Petrinex will change the facility operational status to ACTIVE. If a facility operational status is ACTIVE, a monthly volumetric submission for that facility must be submitted. When the facility operational status is ABANDONED or SUSPENDED, a volumetric submission for the facility cannot be made. Each time the facility operational status is changed, a history of the previous statuses is kept in Petrinex.

When a facility reports receipts or dispositions, Petrinex checks the facility operational status of the reported From/To facilities. For example, if a receipt activity is submitted and the From/To facility ID does not have an ACTIVE facility operational status; Petrinex will not accept the submission of that receipt. The facility operational status belonging to the From/To facility ID must be changed to ACTIVE before the receipt activity will be accepted.

The facility operational status is changed in various ways:

- 1) When the operator changes a facility operational status to “Suspended”, all the wells within the facility must also have a well completion status mode type of SUSP and the facility must not have any reported volumetrics (including a closing inventory). To change a facility’s operational status to SUSPENDED the operator must use the “Change Facility Operational Status” screen.
- 2) ER will change a facility’s operational status to “Abandoned”. Once the facility’s operational status has been changed, the facility licence will be updated with ER. The operator must submit abandonment information to ER.
- 3) ER may change a facility operational status to MINSUSPEND when the operator is regulatory non-compliant. The operator must contact ER to remove the facility operational status of MINSUSPEND before the operator is allowed to report volumetrics.

Only the current operator can complete retroactive facility operational status changes. Note that if a facility is set to ACTIVE retroactively, a volumetric submission must be made for each applicable month, or noncompliance errors will be generated.

#### **5.4.1 Changing Facility Operational Status: Online**

When the Change Facility Operational Status screen is selected, the operational statuses for the facility are displayed. This includes all statuses, historical and current, but may not be an entire picture of the facility status prior to Petrinex implementation.

Table 5.3: Facility Operational Statuses

<b>Facility Operational Status</b>	<b>Description</b>	<b>Volumetrics must be reported</b>	<b>Industry allowed to assign this status</b>
Abandoned	The facility has been decommissioned.	N	N
Active	Petrinex will assign a status of ACTIVE after a new facility has been created and the first month's volumetrics have been reported. The operator can also assign a status of ACTIVE after a facility has been suspended.	Y	Y
Cancelled	The facility has been cancelled.	N	N
Ministry Suspended	For the purposes of reporting, the facility has been suspended by ER.	N	N
New	Petrinex will assign a status of NEW when a facility identifier is issued.	Y	N
Suspended	The operator has set the facility operational status to SUSPENDED.	N	Y

## 5.5 Facility Operator Changes

When the operator of a facility changes, the current operator of the facility must request a facility operator change on Petrinex prior to the Volumetric Reporting Deadline for which the production month of the change was effective or if the designated submission deadline is not a business day then the next business day, or as otherwise directed by ER. Retroactive operator changes are not allowed. The facility operator of record at the filing deadline is responsible for the volumetric submission.

The new operator will not be able to submit volumetric data to Petrinex until the change in operator has been updated in Petrinex via the concurrence process. Concurrence is a process that requires the current operator to obtain approval from the new operator prior to the facility operator change being accepted in Petrinex. This online process is triggered automatically, as explained in the next section. Petrinex sends an e-mail notification to the new operator requesting that it either accept or decline the request. The current operator will receive a notification back as to the outcome of the request.

If the new operator declines the operator change or does not respond within seven days or before the Volumetric Reporting Deadline whichever comes first, the facility operator will not change and the current operator will continue to be responsible for any volumetric submissions. The operator of record will remain responsible for any volumetric submissions until the new operator accepts the change notification.

### 5.5.1 Requesting Facility Operator Change: Online

The current operator must enter the new operator’s BA ID and the production month of the operator change. The start date will default to the current production month. If the operator change is for the current production month, do not change the start date.

An operator change for a future reporting production month may be requested by changing the start date to that production month. A date prior than the current production month cannot be entered.

The screenshot shows a web form titled "Request Operator Change". At the top, there are navigation links: "[Infrastructure]" and "[Operator Changes]". The form has the following sections:

- Request Operator Change** (Section Header)
- Form fields:
  - Old Operator:
  - Old Operator Name:
  - New Operator:
  - New Operator Name:
  - Start Date: 2017-06
- Authorization questions:
  - "For Facility Operator Changes, authorize the new operator to make prior period amendments for volumetrics." with radio buttons for  No and  Yes.
  - "For RTP Operator Changes, authorize the new operator to make prior period amendments for royalty tax payer information." with radio buttons for  No and  Yes.
- "Selected Identifiers" section with an empty list box and an "Add" button below it.
- "Comments" section with a text area and scroll arrows.
- Bottom buttons: "Submit" and "Cancel".

**Figure 5.5: Request Operator Change Screen**

Clicking the Add Button will display the facility list builder and it will list all facilities that are allowed to request an operator change, including suspended and abandoned facilities. If a facility is not listed, it means that you have not been given access by your company to do operator changes for that facility, an operator change request already exists for the facility, or your company is not the operator of the facility.

Once the facilities have been selected click OK and the user will be taken to the Request Operator Change screen (see Figure 5.5) with the selected facility identifiers being listed.

Before submitting, indicate whether the new operator is to have the authority to make prior period amendments to volumetric data or Royalty/Tax Payer operator changes by selecting Yes or No.

After submitting the request, the concurrence process begins. Ensure the request is accepted by the new operator prior to the volumetric submission deadline by checking your notifications. The change is updated as soon as the new operator accepts the change.

Note: that the operator of a facility can no longer be changed retroactively.

## 5.6 Well-to-Facility Links

All well completions that are producing or injecting must be linked to a facility ID. Three different processes are used to manage well-to-facility links:

- 1) well status change,
- 2) well-to-facility link change, and
- 3) retro-active well-to-facility link change.

When a well completion is first placed on production or on injection or the well completion status is changed to one that indicates volumetric data must be submitted, the well completion must be linked to a facility ID. See Section 3: Well Information and Status Changes for details on this process.

Licensed Water source wells can only be linked to a water source facility (SK WT with a Facility Subtype 906 or 907). Water volumes must be reported from these wells as the activity PROD, along with the product, hours, and volume.

If changes to the well-to-facility link is required and the well completion is already linked to a facility, use either the Request Well to Facility Link Change screen for current production month changes or the Request Retroactive Well to Facility Link Change screen for prior-period well-to-facility link changes.

### 5.6.1 Corporate Amalgamations

BAs that have amalgamated have 90 days which will allow the surviving BAs to make the necessary changes and submit volumetrics up to that deadline date. When the “Amalgamation Established Date” is reached, the surviving BAs will no longer have access to make current month submissions to Petrinex.

During this period, the surviving BAs must submit a “Request Operator Change” to move all facilities (regardless of status) that are currently listed to the new active BA operator and select prior period amendments for the subject facilities identifying the new operator.

## 5.6.2 Concurrency

Concurrency is the process that requires the current operator to obtain approval from the new operator prior to a change being accepted in Petrinex. This on-line process is triggered automatically. Petrinex sends an e-mail notification to the new operator requesting that it either accept or decline the request. The current operator receives a notification back as to the outcome of the request. When linking a well completion to a facility, concurrency is only required for current-month changes.

If the operator of the facility that your well completion is being linked to declines the change or does not respond within 7 days or before the volumetric filing deadline, the well completion will remain linked to your facility and it will be your responsibility for any volumetric submissions. Also see Section 4.6.3.2: Retroactive Well-to-Facility Link changes.

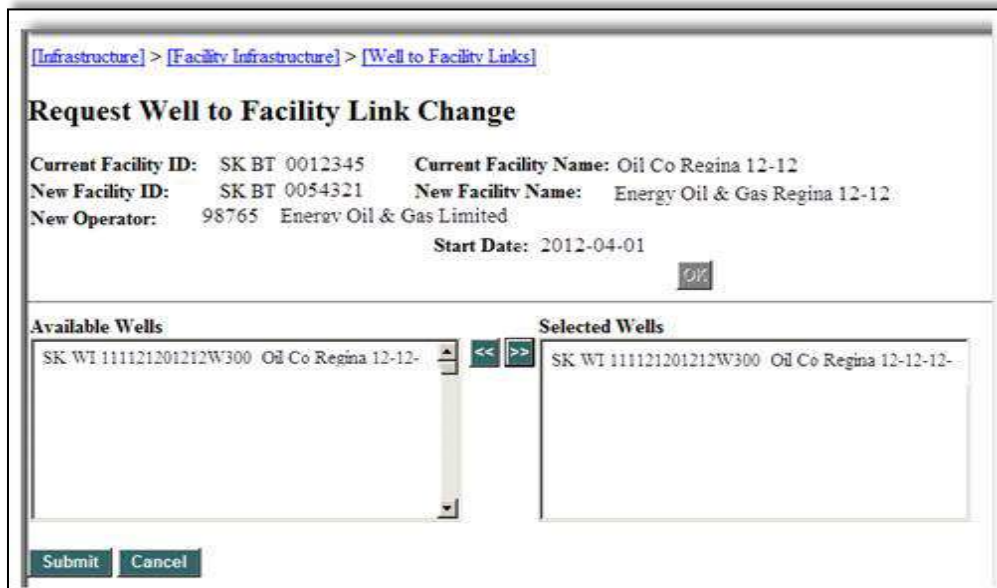
Concurrency is not required when linking a well completion using the well completion status change. For certain types of well completion status changes, the well completion must be linked to a facility. The well completion status change is accepted immediately, including the well-to-facility link.

Additionally, concurrency is not required for a retroactive well-to-facility link. It is expected that this process will primarily be required for situations where production or injection volumes were reported to the wrong well completion. The well completion may historically have been linked to more than one facility with different operators. All operators would have to agree to the change prior to any portion of the change being accepted.

## 5.6.3 Requesting Well-to-Facility Link Changes

### 5.6.3.1 Current Production Month Well-to-Facility Link Changes

Using the “Request Well to Facility Link Change” screen, the current operator of a facility that a well completion is currently linked to enters the current facility ID and the new facility ID that the well completion or well completions are to be linked to. The start date will default to the first day of the current production month. If the well-to-facility link change did not occur on the first day, the date must be changed. If more than one well completion is to be moved, but each well completion has a different start date, each well-to-facility link change must be completed individually. The lower portion of the screen (see Figure 5.6) displays all the wells that are currently linked to the facility and that are available to be moved. The well completion(s) moved from the available column to the selected column are those to be moved to the new facility.



**Figure 5.6: Request Well to Facility Link Change Screen**

If the outgoing facility operator is not also the operator of the new facility, the concurrence process begins. The outgoing operator must ensure that the well-to-facility link change request is accepted by the operator of the new facility, prior to the Volumetric Reporting Deadline. The well-to-facility link change is effective as soon as the new facility’s operator accepts the change.

If the operatorship is the same for both facilities, concurrence is not required and the change is effective immediately upon the request being submitted.

### 5.6.3.2 Mid-Month Well-to-Facility Link Changes

When a well-to-facility link start date does not fall at the beginning of the current production month, volumetric submissions must continue at the current facility for the period up to the day the well-to-facility link is changed. The applicable volumetrics must be reported at each facility for the period they are each responsible for.

### 5.6.3.3 Retroactive Well-to-Facility Link Changes (Prior Production Month)

Using the online screen (see Figure 5.7) a well completion can be linked to a different facility (prior month) or a change to the start date of an existing link can be made. Petrinex will change the end dates based on any new start dates that are submitted. Upon submission of changes, Petrinex will perform edits to check that:

- The earliest well-to-facility link date cannot be changed to an earlier date. Changing the well-to-facility link date to an earlier date can only be done through a well completion status change. Note that if the earliest date is that of Petrinex implementation, the date cannot be changed.
- Volumetric data related to the well completion cannot exist for the applicable production month for that facility where the well-to-facility link is being removed.

- Two well completions cannot be linked to a single-well battery (facility subtypes 311, 325 and 351).
- A gas well completion cannot be linked to an oil battery.
- An oil well completion cannot be linked to a gas battery.

The operator of the facility where the well completion is currently linked enters the well completion ID. This will display a history of the facilities that the well completion has been linked to with the start and end dates. This history only goes back as far as Petrinex implementation; retroactive changes cannot be entered for production periods prior to this implementation (March 2012 production month). If the current BA (i.e. the BA submitting the prior period well-to-facility link changes) is not the reporting BA for the prior period, concurrence is not required. A notice will be sent warning the applicable BA.

[Infrastructure] > [Facility Infrastructure] > [Well to Facility Links]

### Request Retroactive Well to Facility Link Change

Well ID: SK WI 141151501515W302  
 Name: Oil & Gas Energy S Prime 15-15-15

Well to Facility Links			
Facility	Name	Start Date	End Date
SK BT 0000012	South Prime 15-15 Battery	2011-04-01	
SK BT 0000098	Oil Battery 1-17-15-15	2011-03-01	

[Menu-Inbox-Help-Contacts-L](#)  
[Top-SK](#)

**Figure 5.7: Request Retroactive Well to Facility Link Change Screen**

Once a change has been accepted, ensure that the required volumetric amendments are submitted. If a well completion has been linked to another operator’s facility, ensure that information is communicated to the operator of the facility and both parties have come to agreement about any necessary amendments required. The operator of record for the period will receive all error notices that may result from this change.



## 6. Volumetric Submission

Every licensee or operator of a well or facility that produces, stores, processes or handles oil, condensate, gas, water or any other substance during any month must submit to the minister, through Petrinex, the following information on or before the Volumetric Reporting Deadline:

- 1) the oil, condensate, gas, water, and other substances, including sediment, produced from each well in that facility during the month;
- 2) the number of hours during which each well was on production in the month;
- 3) the particulars of any production, load or completion activities, inventories, adjustments, consumption or losses of oil, condensate, gas, water or any other substance associated with the operation of a well or facility;
- 4) the particulars of any receipts from and deliveries to other facilities, including facilities outside Saskatchewan;
- 5) the total amount of oil, water, gas, or any other substance recovered from each well in a storage reservoir or storage cavern during the month;
- 6) in the case of a gas well, the heating value of the gas produced from that well;
- 7) in the case of an oil well from which gas is produced during a month:
  - a) the heating value of the gas produced from that well; or
  - b) opt not to submit the heating value of the gas produced from that well and as a result have the minister use an assigned heating value.
- 8) In the case of a plant engaged in the processing, scrubbing or purification of gas:
  - a) the quantities of raw gas, marketable gas and derived products received, delivered, transported and disposed of, including quantities to or from locations outside of Saskatchewan;
  - b) the supply details, including source operator, pool and field;
  - c) the delivery details, including the final consumer.
- 9) In the case of an injection or disposal well or facility:
  - a) the number of hours during which the well was on injection or recovery during the month;
  - b) the total amount of oil, water, gas or any other substance injected into each well, facility, storage reservoir or storage cavern during the month;
- 10) any other information the minister may require.

Industry must submit monthly volumetric information by the Volumetric Reporting Deadline. Submitting volumetric data is transaction based, which means that each transaction for a well completion or a facility must identify the activity, the product, and the volume. All available activities and products are listed in Table 6.1, and 6.2. Volumetric data may be submitted either manually online through Petrinex or batch uploaded to Petrinex.

Table 6.1: Activity Codes, Names, Descriptions, Reporting Facility and Products Allowed

Activity Code	Activity Name	Description	Reporting Facility Types Allowed to Enter the Activity	Product Allowed
DIFF	Metering difference	Petrinex will calculate and display DIFF the difference in measurement between the facility inputs (production and receipts) and the facility outputs (dispositions and injection) after accounting for inventories and all other activities such as fuel, flare, etc. DIFF is displayed as both a percentage and a volume for each product group using the information reported at a facility.	Battery, Custom Treater, Gas Plant, Gathering System, Injection Facility, Meter Station, Pipeline	GAS, POLYMER, SAND, SOLVENT, WASTE, WATER, NITROGEN,
DISP	Disposition	In most cases, Petrinex will auto-populate a DISP using the corresponding receipt from the downstream receiving facility. When delivering to a non-reporting facility, the reporting facility operator will submit the activity DISP.	Battery, Custom Treater, Gas Plant, Gas Gathering, Injection Facility, Meter Station, Pipeline, Terminal, Waste Plant, Water Source	All
EMIS	Emissions	An operator must submit EMIS to report the calculated sulphur emissions, in tonnes, that may originate from flaring, low-pressure-produced water flash gas, and flaring of glycol dehydrator vent gas.	Battery, Custom Treater, Gas Plant, Gas Gathering System, Injection Facility, Meter Station, Pipeline, Terminal, Water Source	SULPHUR
FIRE	Fire	An operator must submit FIRE when there has been product volumes lost due to a fire at a facility.	Battery, Custom Treater, Gas Plant, Gas Gathering System, Injection Facility, Pipeline, Meter Station, Terminal, Water Source.	OIL

Activity Code	Activity Name	Description	Reporting Facility Types Allowed to Enter the Activity	Product Allowed
FLARE	Flare	An operator must submit FLARE to report the volume of gas flared during well or facility operations. The operator of the facility must identify where the flare occurred by entering the well identifier or facility ID. This includes any flare that occurs at compressor stations or oil satellites not located at the same location as the reporting facility.	Battery, Custom Treater, Gas Plant, Gas Gathering System, Injection Facility, Meter Station, Pipeline, Terminal, Waste Plant, Water Source	C1-MX, C2-MX,C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2, CO2-MX, CO2-SP, .GAS, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP
FRAC	Fractionation yield	An operator must submit FRAC when a facility receives natural gas liquids as a mixed product (C2-MX, C3-MX, etc.) and then fractionates (splits) the mix product into spec component products (C2-SP, C3-SP, C4-SP, etc.) for delivery to market.	Gas Plant	C1-MX, C2-MX,C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2-MX, CO2-SP, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP
FUEL	Fuel	An operator must submit FUEL to report the volume of a product consumed as fuel during well or facility operations. The operator of the facility must identify where the fuel was used by entering the well identifier or facility ID. This includes any fuel used at compressor stations or oil satellites that are not located at the same location as the reporting facility.	Battery, Custom Treater, Gas Plant, Gas Gathering, Injection Facility, Meter Station, Pipeline, Terminal, Water Source, Waste Plant	C1-MX, C2-MX,C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2, CO2-MX, CO2-SP, GAS, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP
IMBAL	Imbalance	Petrinex will calculate and display IMBAL difference in measurement between the facility inputs (production and receipts) and the facility outputs (dispositions and injection), after accounting for all other activities as well as inventories, etc. IMBAL will be displayed as both a percentage and volume Petrinex volume for each product group using the information reported at a facility.	Battery, Custom Treater, Gas Gathering, Injection Facility, Pipeline, Terminal	CO2, C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2, CO2-SP, CO2-MX HELIUM, DIESEL, OIL, O2, SO2, SULPHUR, WASTE

Activity Code	Activity Name	Description	Reporting Facility Types Allowed to Enter the Activity	Product Allowed
INJ	Well Injection	An operator must submit INJ to report the volume of product sent to a well completion for injection or disposal into a reservoir or stratigraphic unit. The well completion must be linked to the facility.	Injection	ACGAS, AIR, ALKWTR, ASP, BRINE, C3 SP, C4 SP, C5 SP, DIESEL, FSHWTR, GAS, N2, NAPHTHA, O2, OIL, POLYMER, SO2, SOLV, STEAM, SURF, WASTE, WATER, FLUE GAS
INVADJ	Inventory Adjustment	An operator must submit INVADJ to report gains and losses that cannot be identified by a specific activity in a production month. This activity is not to be used to falsely balance a facility, correct rounding errors, or account for tank clean out operations.	Battery, Custom Treater, Gas Plant, Gas Gathering, Injection Facility, Pipeline, Terminal, Waste Plant.	C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2-MX, CO2-SP, COND, FSHWTR, GAS, HELIUM, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP, OIL, SUL, SYNCRD, WASTE, WATER
INVCL	Inventory Closing	An operator must submit INVCL to report the volume held in inventory at the end of the production month for each product. It includes only the volumes held in tanks and fresh water storage ponds at the facility at the end of the production month. The INVCL that is reported for a product for a production month will be used by Petrinex to auto-populate the INVOP for the following production month. <i>NOTE: A fresh water storage pond is an enclosure used to store fresh water to be used at a facility that is not a tank.</i>	Battery, Custom Treater, Gas Plant, Gas Gathering, Injection Facility, Pipeline, Terminal, Waste Plant.	C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2-MX, CO2-SP, COND, FSHWTR, HELIUM, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP, OIL, SUL, SYNCRD, WASTE, WATER
INVOP	Inventory Opening	Petrinex will auto-populate INVOP volume for each product using the previous month's closing inventory volume. To correct an opening inventory volume, an amendment for the previous month's closing inventory must be submitted.	Battery, Custom Treater, Gas Plant, Gas Gathering, Injection Facility, Pipeline, Terminal, Waste Plant.	C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2-MX, CO2-SP, COND, FSHWTR, GAS, HELIUM, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP, OIL, SUL, SYNCRD, WASTE, WATER

Activity Code	Activity Name	Description	Reporting Facility Types Allowed to Enter the Activity	Product Allowed
LDINJ	Load Injected	An operator must submit LDINJ to report the volume of product injected into a well completion for the purpose of completing or servicing the well. The well completion must be linked to the facility.	Battery	COND, OIL,WATER
LDINVADJ	Load Inventory Adjustment	An operator must submit LDINVADJ to report the volume of product that was injected into a well and not recovered, in instances when the well completion was not linked to a facility at the time the operation occurred. The well completion must be linked to the facility for the month that the load inventory adjustment is reported.	Battery	COND, OIL,WATER
LDINVCL	Load Inventory Closing	Petrinex will calculate the well completion's LDINVCL for each product using the information reported at a well completion.	Battery	COND, OIL,WATER
LDINVOP	Load Inventory Opening	Petrinex will auto-populate the well completion's LDINVOP volume for each product based on the well completion's previous month's LDINVCL.	Battery	COND, OIL,WATER
LDREC	Load fluid recovered	An operator must submit LDREC to report the recovery of load fluid. The well completions must be linked to the facility.	Battery	COND, OIL,WATER
PROC	Plant process	Petrinex will calculate PROC (processing volume) when a gas gathering facility or gas plant reports a disposition of gas by-products such as C1-MX, IC4-MX, and NC5-SP. Petrinex will display the PROC for each product group using the information reported at a facility.	Gas Gathering System, Gas Plant	C1-MX, C2-MX,C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, COND, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP, OIL, SULPHUR
PROD	Well Production	An operator must submit PROD to report the volume of product produced from a well completion. The well completion must be linked to a facility.	Battery, Water Source	CO2, COND, FSHWTR, GAS, HELIUM, OIL, WATER, FLUE GAS

Activity Code	Activity Name	Description	Reporting Facility Types Allowed to Enter the Activity	Product Allowed
PURDISP	Purchased Disposition	An operator must submit PURDISP to report a sale of load fluid to an unlinked well, miscellaneous facility or out of province facility. This would then trigger a requirement for oil pricing.	Battery	OIL
PURREC	Purchased Receipt	An operator must submit PURREC to report the receipt of purchased load fluid at a battery; the auto-populate PURDISP would trigger a requirement for the delivering facility to report oil pricing.	Battery, Custom Treater, Gas Plant, Gas Gathering System, Injection Facility, Pipeline, Terminal	OIL
REC	Receipt	An operator must submit REC to report the receipt of a product from another facility. Petrinex will auto-generate the DISP at the upstream delivering facility and auto-populate the volume from the submitted REC.	Battery, Custom Treater, Gas Plant, Gas Gathering System, Injection Facility, Meter Station, Pipeline, Terminal, Waste Plant, Water Source	All
SHR	Shrinkage	An operator must submit SHR when reporting the acid gas shrinkage volume. This includes the acid gas converted to sulphur and the associated tail gases incinerated at facilities with sulphur recovery units and sour facilities without sulphur recover units that flare acid gas under normal operating conditions.	Gas Plant	ACGAS
		An operator must submit SHR to report the diluent shrinkage volume when a product is blended with the heavy oil at producing facilities to meet the crude oil pipeline delivery specifications.	Battery, Custom Treater, Pipeline, Terminal	COND, OIL

Activity Code	Activity Name	Description	Reporting Facility Types Allowed to Enter the Activity	Product Allowed
		Petrinex will calculate SHR and the shrinkage volume for each gas by-product processed (other than sulphur) at the gas plant. Petrinex will use a standard gas equivalent factor to calculate the gas equivalent volume for each product.	Gas Plant	C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP
SHUTIN	Shut-in	An operator must submit SHUTIN when a well completion, that is capable of producing or injecting, has had the valves at the wellhead turned off and the well has no activities or inventory to report for the production month (i.e. the well completion is inactive). The operator must report SHUTIN activity until the well or facility is no longer inactive.	Battery, Custom Treater, Gas Plant, Gas Gathering System, Injection Facility, Meter Station, Pipeline, Terminal, Waste Plant Water Source	N/A
SPILL	Spill	An operator must submit SPILL when there has been product volumes lost due to a spill at a facility.	Battery, Custom Treater, Gas Plant, Gas Gathering System, Injection Facility, Pipeline, Terminal, Water Source	OIL, WATER, FSHWTR
STINJ	Storage Injection	An operator must submit STINJ to track products injected for the purpose of storage or enhanced recovery projects.	Injection Facility (subtypes 501, 505, 506, 516, 517, and 519)	C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2-MX, CO2-SP, COND, GAS, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP, N2, OIL
STINVADJ	Storage Inventory Adjustment	An operator must submit STINVADJ to adjust estimates of volumes of products stored in a cavern/reservoir that cannot be attributed to amendments in STREC or STINJ volumes.	Injection Facility (subtypes 501, 505, 506, 516, 517, and 519)	C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2-MX, CO2-SP, COND, GAS, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP, N2, OIL

Activity Code	Activity Name	Description	Reporting Facility Types Allowed to Enter the Activity	Product Allowed
STINVOP	Storage Inventory Opening	The STINVOP represents the amount of injected product that is stored (remains) in a cavern or reservoir at the beginning of the month. Petrinex will calculate the STINVOP volume for each product injected based on the previous month's STINVCL volume.	Injection Facility (subtypes 501, 505, 506, 516, 517, and 519)	C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2-MX, CO2-SP, COND, GAS, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP, N2, OIL
STINVCL	Storage Inventory Closing	The STINVCL represents the amount of injected product that is stored (remains) in a cavern or reservoir at the end of the month. Petrinex will calculate the STINVCL volume for each product injected based on the STINVOP volume, the volume injected at the injection facility (STINJ), the volume recovered at the associated batteries (STREC), and any STINVADJ volume reported in the month.	Injection Facility (subtypes 501, 505, 506, 516, 517, and 519)	C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2-MX, CO2-SP, COND, GAS, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP, N2, OIL
STREC	Storage Recovery	An operator must submit STREC to report the recovery of products that have been injected into a reservoir or cavern for the purpose of storage or enhanced recovery. Products recovered using STREC are not subject to royalties/taxes.	Battery tied to an Injection Facility with subtype 501, 505, 506, 516, 517 or 519	C1-MX, C2-MX, C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2-MX, CO2-SP, COND, GAS, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP, N2, OIL
THEFT	Theft	An operator must submit THEFT to report the volume of product lost through theft.	Battery, Custom Treater, Gas Plant, Gas Gathering System, Injection Facility, Pipeline, Terminal, Water Source	OIL



Activity Code	Activity Name	Description	Reporting Facility Types Allowed to Enter the Activity	Product Allowed
VENT	Vent	An operator must submit VENT to report the volume of gas vented during well or facility operations. The operator of the facility must identify where the vent occurred by entering the well identifier or facility ID. This includes any venting that occurs at a compressor station or oil satellite that is not located at the same location as the reporting facility.	Battery, Custom Treater, Gas Plant, Gas Gathering System, Injection Facility, Meter Station, Pipeline, Terminal, Waste Plant, Water Source	C1-MX, C2-MX,C2-SP, C3-MX, C3-SP, C4-MX, C4-SP, C5-MX, C5-SP, CO2, CO2-MX, CO2-SP, GAS, IC4-MX, IC4-SP, IC5-MX, IC5-SP, NC4-MX, NC4-SP, NC5-MX, NC5-SP, N2, STEAM

Table 6.2: Product Codes, Unit of Measure and Gas Equivalent Factor

Product Code	Product Name	Unit of Measure*	Gas Equivalent Factor (2008-2016)	Gas Equivalent Factor (2017-current)
ACGAS	ACID GAS	10 <sup>3</sup> m <sup>3</sup>	1	1
AIR	AIR	10 <sup>3</sup> m <sup>3</sup>	1	1
ALKWTR	ALKALINE WATER	m <sup>3</sup>	N/A	N/A
ASP	ALKALINE SURFACTANT POLYMER	m <sup>3</sup>	N/A	N/A
BRINE	BRINE	m <sup>3</sup>	N/A	N/A
BRKWTR	BRACKISH WATER	m <sup>3</sup>	N/A	N/A
C1-MX	METHANE MIX	m <sup>3</sup>	0.440295	0.44217
C2-MX	ETHANE MIX	m <sup>3</sup>	0.28151	0.2814
C2-SP	ETHANE SPEC	m <sup>3</sup>	0.28151	0.2814
C3-MX	PROPANE MIX	m <sup>3</sup>	0.27222	0.27213
C3-SP	PROPANE SPEC	m <sup>3</sup>	0.27222	0.27213
C4-MX	BUTANE MIX	m <sup>3</sup>	0.23335	0.23768
C4-SP	BUTANE SPEC	m <sup>3</sup>	0.23335	0.23768
C5-MX	PENTANE MIX	m <sup>3</sup>	0.20575	0.20667
C5-SP	PENTANE SPEC	m <sup>3</sup>	0.20575	0.20667
CO2	CARBON DIOXIDE	10 <sup>3</sup> m <sup>3</sup>	1	1
CO2-MX	CARBON DIOXIDE MIX	m <sup>3</sup>	0.440295	0.44120
CO2-SP	CARBON DIOXIDE SPEC	m <sup>3</sup>	0.440295	0.44120
COND	CONDENSATE	m <sup>3</sup>	N/A	N/A
DIESEL	DIESEL OIL	m <sup>3</sup>	N/A	N/A
FSHWTR	FRESH WATER	m <sup>3</sup>	N/A	N/A
FLUE GAS	FLUE GAS	10 <sup>3</sup> m <sup>3</sup>	1	1
GAS	GAS	10 <sup>3</sup> m <sup>3</sup>	1	1
HELIUM	HELIUM	10 <sup>3</sup> m <sup>3</sup>	1	1
IC4-MX	ISO-BUTANE MIX	m <sup>3</sup>	0.23335	0.22902
IC4-SP	ISO-BUTANE SPEC	m <sup>3</sup>	0.23335	0.22902
IC5-MX	ISO-PENTANE MIX	m <sup>3</sup>	0.20575	0.20485
IC5-SP	ISO-PENTANE SPEC	m <sup>3</sup>	0.20575	0.20485
N2	NITROGEN	10 <sup>3</sup> m <sup>3</sup>	1	1
NAPHTHA	NAPHTHA	m <sup>3</sup>	N/A	N/A
NC4-MX	NORMAL BUTANE MIX	m <sup>3</sup>	0.23335	0.23768
NC4-SP	NORMAL BUTANE SPEC	m <sup>3</sup>	0.23335	0.23768
NC5-MX	NORMAL PENTANE MIX	m <sup>3</sup>	0.20575	0.20667
NC5-SP	NORMAL PENTANE SPEC	m <sup>3</sup>	0.20575	0.20667
O2	OXYGEN	10 <sup>3</sup> m <sup>3</sup>	1	1
OIL	CRUDE OIL	m <sup>3</sup>	N/A	N/A
POLYMER*	POLYMER	m <sup>3</sup>	N/A	N/A
SAND	SAND	m <sup>3</sup>	N/A	N/A
SOLV	SOLVENT	10 <sup>3</sup> m <sup>3</sup>	1	1
SO2	SULPHUR DIOXIDE	10 <sup>3</sup> m <sup>3</sup>	1	1

Product Code	Product Name	Unit of Measure*	Gas Equivalent Factor (2008-2016)	Gas Equivalent Factor (2017-current)
STEAM	STEAM	m <sup>3</sup>	N/A	N/A
SUL	SULPHUR	tonne	N/A	N/A
SURF	SURFACTANT	m <sup>3</sup>	N/A	N/A
SYNCRD	SYNTHETIC CRUDE OIL	m <sup>3</sup>	N/A	N/A
WASTE	WASTE	m <sup>3</sup>	N/A	N/A
WATER	WATER	m <sup>3</sup>	N/A	N/A

\*If polymer is received as a powder, use the total volume when mixed for reporting purposes.

### 6.1 Edit Volumetric Submission: Online

Manual volumetric data entry on Petrinex is performed through the Edit Volumetric Submission screen (see Figure 6.1). When this screen is first displayed, the facility ID must be entered or selected from the Facility ID lookup. The production month will default to the current production month in Petrinex; the production month will need to be changed if a previous month's submission is to be modified.

Figure 6.1: Edit Volumetric Submission Screen

There are up to four possible views available on the Edit Volumetric Submission screen (see Figure 6.2):

- Summary;
- Facility Activity;
- Well Activity (if the facility has wells linked to it); and
- Proration Factors (if the facility is a battery, custom treater or terminal).

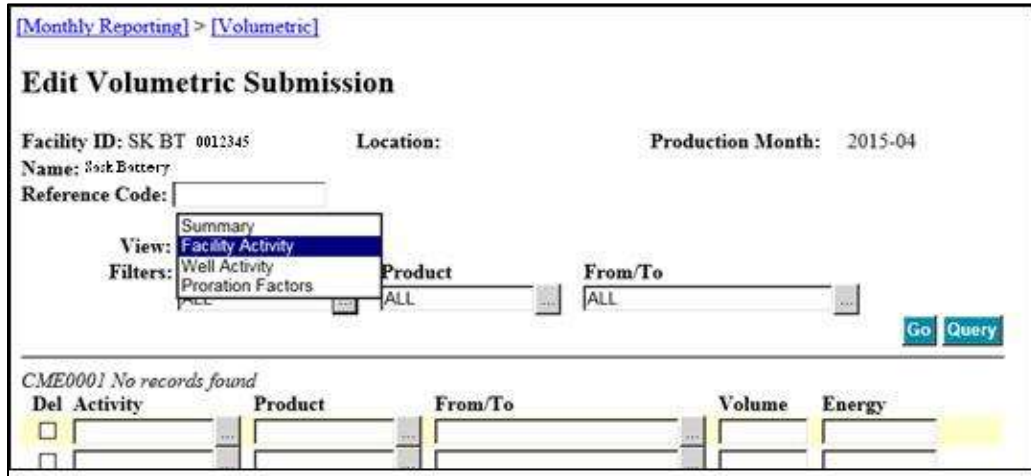


Figure 6.2: Edit Volumetric Screen-Views

### 6.1.1 Summary View

The Summary View displays (see Figure 6.3) the summarized activities and the overall balancing of each product group at a facility for a particular production month. Only one product group displays at a time. To view a different product group, select it from the Product Group drop-down menu. Since the Summary View is a summarized display of submitted and calculated values for each product group, data cannot be entered on this screen. To change any values that appear on the Summary View, a BA must change the submitted volumetrics at the well or facility level.

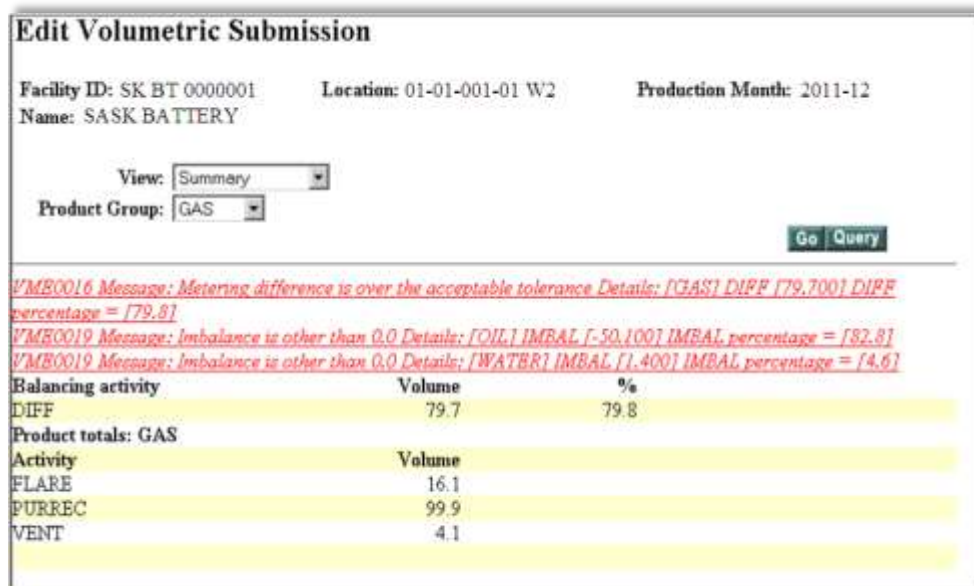


Figure 6.3: Edit Volumetric Screen – Summary View

Details of the imbalance (IMBAL) or metering difference (DIFF) at a facility for a particular production month are displayed by product group, product and activity.

The balancing activities DIFF and IMBAL are calculated by Petrinex and displayed in the Summary View, based on the activities and products reported at a facility. Petrinex also calculates metering difference and imbalance percentages. If the IMBAL or DIFF volume and corresponding percentage for a product group is not within an acceptable tolerance, a non-compliance error message will be displayed on-screen.

### 6.1.2 Facility Activity View

The Facility Activity View (see Figure 6.4) will always be displayed for a facility regardless of the facility operational status. The facility view allows the operator to submit transaction details at the facility level. For each volumetric transaction, the operator must submit the applicable activity, product, from/To facility ID, and volume. Some activities will be auto-populated from other facilities and/or Petrinex.

Activity	Product	From/To	Volume	Energy
REC	OIL	SK BT 1111111	1023.6	
REC	OIL	SK BT 1111112	164.1	
REC	OIL	SK BT 1111113	94.5	
REC	OIL	SK BT 1111114	3702.0	
REC	OIL	SK BT 1111115	6895.0	
REC	OIL	SK BT 1111116	2794.1	
REC	OIL	SK BT 1111117	158.9	

Figure 6.4: Facility Activity View

### 6.1.3 Well Activity View

The Well Activity View (see Figure 6.5) may be selected when the reporting facility has active well completions linked to it. A volumetric submission must be made for a well completion with an active well completion status, this includes any well completion with a well completion status mode type of ACTIVE or TESTING.

The operator of a facility that is linked to well completions with an active well completion status must, for each active well completion:

- submit all activities, products, volumes, and related data (such as hours on production and heat value) and;
- continue to report the well completion until the well completion status is changed to a non-active status (i.e. the well completion is not producing, recovering or injecting).

When the Well Activity View is displayed, the From/To field will contain the well completion identifiers for all linked well completions. For each linked well completion, the activity, hours (Hrs), product, volume and heat (if applicable) must be submitted by the facility operator. Each well completion identifier will be displayed three times to allow the entries for oil, gas, and water. Additional rows may be added using the Add button.

When a well completion link is changed to that of another facility during a month, the operator of each facility must report the well completion at both facilities for that month.

Note: When calculating production volumes for statistical purposes only, ER will assign all production volumes reported from a well completion linked to multiple facilities in a month to the last facility linked to the well completion in the production month.

If a well completion has load fluid opening inventory (LDINVOP) and the well completion does not have any other activity for the month, Petrinex will automatically calculate a closing load fluid inventory (LDINVCL) with the same volume as the opening inventory. A SHUTIN activity can also be submitted for the well completion in combination with load fluid opening and closing inventories. If a well completion was shut-in for the entire month, the operator must submit an activity of SHUTIN or alternatively, the operator may change the well completion status to a non-active status. A non-active well status refers to a well completion status where the mode type is either SUSPENDED or ABANDONDED.

If a well completion status mode type is changed to an active status retroactively, the operator of the facility must make the required monthly volumetric submissions for each missing month from the date the status is changed.

[Monthly Reporting] > [Volumetric]

### Edit Volumetric Submission

Facility ID: SK BT 0076675    Location: 01-01-001-01 W3    Production Month: 2011-10  
 Name: SASK TEST BATTERY  
 Reference Code:

View:

Filters: Activity:     Product:     From/To:

*CME0001 No records found*

Del	From/To	Activity	Hrs	Product	Volume	Heat
<input type="checkbox"/>	SK WI 1110101001W300	PROD	744	OIL		
<input type="checkbox"/>	SK WI 1110101001W300	PROD		WATER		
<input type="checkbox"/>	SK WI 1110101001W300	PROD		GAS	100	3660

Figure 6.5: Edit Volumetric Submission – Well Activity View

#### 6.1.3.1 Concurrent/Consecutive Injection (CCI)

The ability to enter a concurrent/consecutive injection CCI code is only available to well completions that are linked to an injection facility (IF). The Well Activity View for an injection facility displays a CCI field which allows for the submission of a CCI code. CCI codes can only be used for reporting related to enhanced recovery projects that have been approved by ER.

In addition to activity, hours, product, volume, and heat (if applicable), a CCI code must be submitted by the injection facility operator when more than one product is injected into a well completion during a month. The CCI code is used to indicate whether the products were injected consecutively (one after the other) or concurrently (at the same time).

For consecutive injection, the facility operator must submit an injection activity (INJ) for each product injected. Each injection activity must have a unique CCI code (See Figure 6.6).

For concurrent injection, the facility operator must submit an injection activity (INJ) for each product injected. Each injection activity must have a common CCI code (i.e. the CCI code is common for all products injected into the well completion) (See Figure 6.7).

CCI codes must be a whole number between 1 through 9.

In some instances, individual products are combined and reported as a single product, such as Solvent. In such situations, only a single injection activity (INJ), of one product, is reported and a CCI code is not required.

**Edit Volumetric Submission**

Facility ID: SK IF1234567      Location: 01-01-001-01W3      Production Month: 2015-04  
 Name: Consecutive Injection Facility  
 Reference Code:

View: Well Activity

Filters: Activity: ALL      Product: ALL      From/To: ALL

---

VMS997 \*\*\* Data From Petrinex \*\*\*

Del	From/To	Activity	Hrs	Product	Volume	CCI
<input type="checkbox"/>	SK WI 111010100101W300	INJ		POLYMER		1
<input type="checkbox"/>	SK WI 111010100101W300	INJ		GAS		2
<input type="checkbox"/>	SK WI 111010100101W300					

Figure 6.6: Edit Volumetric Submission – Consecutive Injection

**Edit Volumetric Submission**

Facility ID: SK IF 123456      Location: 01-01-001-01W3      Production Month: 2015-04  
 Name: Concurrent Injection Facility  
 Reference Code:

View: Well Activity

Filters: Activity: ALL      Product: ALL      From/To: ALL

---

VMS997 \*\*\* Data From Petrinex \*\*\*

Del	From/To	Activity	Hrs	Product	Volume	CCI
<input type="checkbox"/>	SK WI 111010100101W300	INJ		POLYMER		1
<input type="checkbox"/>	SK WI 111010100101W300	INJ		GAS		1
<input type="checkbox"/>	SK WI 111010100101W300					

Figure 6.7: Edit Volumetric Submission – Concurrent Injection

#### 6.1.4 Well Completions Linked to Multiple Facilities

If a well completion’s well completion status has a role type of PROD/INJ, it must be linked to both a battery and an injection facility when the well completion status mode type is made ACTIVE.



If the well completion produces and injects for the entire month, either the battery or the injection facility can report the maximum hours in the month. If the well completion does not either produce or inject during the month, a SHUTIN activity must be submitted for either the battery or the injection facility.

### 6.1.5 Proration Factors View

Proration factors, for applicable products, must be submitted by a facility operator, if the facility type is:

- a multi-well proration battery and well completion production activities for oil, gas, or water are prorated;
- a custom treater (CT), and receipts of oil or water are reported; and
- a terminal (TM) and receipts of oil or water are reported.

**Proration Battery** – the facility operator must submit the proration factor for each of the products oil, gas and water that have been produced and reported from wells linked to the facility. The proration factors must be calculated to 6 decimal places and rounded to 5 decimal places. Petrinex will not accept well production volumes submitted for a battery, if proration factors are required and have not been submitted. Proration factors must be calculated in accordance with the procedures specified in Appendices 2 and 3. See Appendix 2 for crude oil proration battery calculation procedures. See Appendix 3 for gas proration battery calculation procedures.

**Custom Treater** – the facility operator must submit the proration factor for each of the products oil and water that have been received at the facility. The proration factors must be calculated to 6 decimal places and rounded to 5 decimal places. The operator must use the proration factor methodology for oil and water, if the facility is out of balance for either of those products. The operator must not use INVADJ to falsely balance the facility. Petrinex will not accept any receipts reported for a product, if the proration factor for that product has not been submitted. See Appendix 4 for calculation procedures.

**Terminal** – the facility operator must submit the proration factor for each of the products oil and water that has been received at the facility. The proration factor must be calculated to 6 decimal places and rounded to 5 decimal places. The operator should use the proration factor methodology for oil and water, if the facility is out of balance for either of those products. The operator must not use INVADJ to falsely balance the facility. Petrinex will not accept any receipts reported for a product, if the proration factor for that product has not been submitted. See Appendix 5 for calculation procedures.

If the facility does not display the Proration Factors View, as shown in Figure 6.8, then the facility operator cannot report proration factors because the facility is not considered a proration facility, based on the facility subtype it has been assigned. If the facility subtype is incorrect and needs to be modified, please contact ER.

[Monthly Reporting] > [Volumetric]

### Edit Volumetric Submission

Facility ID: SK BT 0000001    Location: 01-01-001-01W2    Production Month: 2011-12  
 Name: SASK BATTERY  
 Reference Code:   
 View:

*CME0001 No records found*

	Delete	Factor
Oil	<input checked="" type="checkbox"/>	1.50000
Gas	<input type="checkbox"/>	
Water	<input type="checkbox"/>	

Figure 6.8: Edit Volumetric Submission – Proration Factors

## 6.2 Production Equals Disposition Accounting Methodology for Oil and Water

This methodology is voluntary and is not a requirement. The production equals disposition accounting methodology may only be used if all of the following criteria are met:

- The facility is a heavy oil single-well battery (facility subtype 325) or a heavy oil multi-well group battery (facility subtype 326); and
- The facility is located north of Township 21 and west of Range 4 West of the 3rd Meridian; and
- The facility does not receive any oil; and
- The facility does not report inventories.

If the facility meets the above criteria, oil and water volumes trucked out (i.e. dispositions [DISP]) from lease production tanks must be the volumes used to report the well production on Petrinex. Where a well is producing as a heavy oil single-well battery (facility subtype 325) to a lease tank, the lease tanks can be considered as part of the reservoir if the tank inventory is not reported. For a heavy oil multi-well group battery (facility subtype 326) each well must have its own separation and measurement equipment similar to a single well battery. All equipment for the wells in the heavy oil multi-well group battery must share a common surface location.

If a well completion is on a restricted gas production order (gas allowable) or has unrecovered load fluids, the disposition equals production method may not be appropriate and the reporting of oil and gas production must be done monthly based on inventory change.

### 6.3 Reported Production from Suspended or Abandoned Heavy Crude Oil Well Completions

For well completions producing heavy crude oil and assigned to batteries with facility subtypes 325 or 326, Petrinex functionality will allow for the reporting of production from a well completion producing heavy crude oil for up to six months after it is suspended or abandoned if the production equals disposition accounting methodology was in use at the assigned battery.

### 6.4 Volumetric Auto-Population

A facility operator cannot modify volumes that have been auto-populated. If an operator disagrees with an auto-populated volume, it must contact the facility operator that triggered the auto-population and request a correction to the volume.

The auto-population rules are generally the following:

- a receipt (REC) auto-populates a disposition (DISP);
- a purchased receipt (PURREC) auto-populates a purchased disposition (PURDISP);
- closing inventory (INVCL) auto-populates next month's opening inventory (INVOP);
- load closing inventory (LDINVCL) auto-populates next month's load opening inventory (LDINVOP); and
- storage closing inventory (STINVCL) auto-populates next month's storage opening inventory (STINVOP).

In most cases, dispositions (DISP) will be auto-populated by Petrinex when the corresponding receipt (REC) is reported by the receiving facility operator. The exceptions are as follows:

- Pipeline (PL), meter station (MS), waste plant (WP), or terminal (TM) facility types have the ability to report a disposition and a corresponding receipt will be auto-populated by Petrinex at the receiving facility.
- When a product is delivered to a non-reporting facility, the operator of the delivering facility must report the disposition.

At Petrinex implementation, the March 2012 opening facility inventories were populated using the February 2012 closing inventories contained in facility statements received by ER on or before March 22, 2012. If a change to a March 2012 opening inventory is required, the operator of the facility must make the adjustment using the volumetric activity of inventory adjustment (INVADJ).

## 6.5 Cross-Border Volumetric Auto-Population with Alberta

Petrinex integration allows cross-border auto-population of volumetric transactions between valid Saskatchewan facilities and valid Alberta facilities. The exception is that volumetrics related to meter station submissions are not yet cross-border.

Saskatchewan facility operators reporting transactions from or to Alberta facilities must use the valid Petrinex facility identifier assigned in Alberta. Alberta facility operators reporting transactions from or to a Saskatchewan facility must use the valid Petrinex facility identifier assigned in Saskatchewan.

### 6.5.1 Cross-Border Products

Due to differences in product code tables between Saskatchewan and Alberta, only products that are recognized in both jurisdictions are available for cross-border auto-population. Products that do not match between jurisdictions must be reported using a reasonable alternative product, see Table 6.7.

Table 6.7: Product Codes allowed in Cross-border Activities

Product Codes		Behaviour	Product Codes		Behaviour
Alberta	Saskatchewan		Alberta	Saskatchewan	
ACGAS	ACGAS		NC4-MX	NC4-MX	
AIR	AIR		NC4-SP	NC4-SP	
	ALKWTR	No Cross-Border	NC5-MX	NC5-MX	
	ASP	Miscellaneous	NC5-SP	NC5-SP	
BRKWTR	BRKWTR		O2	O2	
	BRINE	No Cross-Border	OIL	OIL	
C1-MX	C1-MX			POLYMER	Miscellaneous
C2-MX	C2-MX			SAND	Miscellaneous
C2-SP	C2-SP		SBASE		No Cross-Border
C3-MX	C3-MX		SBLOC		No Cross-Border
C4-SP	C4-SP		SFORM		No Cross-Border
C5-MX	C5-MX		SLATE		No Cross-Border
C5-SP	C5-SP		SMOLT		No Cross-Border
C6-MX		No Cross-Border		SO2	Miscellaneous
COND	COND		SOLV	SOLV	
DIESEL	DIESEL		SPRILL		No Cross-Border
ENTGAS		No Cross-Border	STEAM	STEAM	
FSHWTR	FSHWTR		SUL	SUL	
	FLUE GAS	Miscellaneous		SURF	Miscellaneous
GAS	GAS		WASTE	WASTE	
HELIUM	HELIUM	No Cross-Border	WATER	WATER	
IC4-MX	IC4-MX				
IC4-SP	IC4-SP				

Product Codes		Behaviour	Product Codes		Behaviour
Alberta	Saskatchewan		Alberta	Saskatchewan	
IC5-MX	IC5-MX				
IC5-SP	IC5-SP				
LITEMX		No Cross-Border			
N2	N2				
	NAPHTHA	Miscellaneous			
NC4-MX	NC4-MX				
NC4-SP	NC4-SP				

### 6.5.1.1 Province/Territory/State Identifiers

For receipts and deliveries made from or to an Alberta facility, operators must use valid Alberta facility identifiers on Petrinex.

When product is delivered to or received from an out of province/territory or state (other than Alberta), the operator must report the activity using the applicable province/state identifier and the miscellaneous facility type. Table 6.8 provides the appropriate province/territory/state identifiers.

Table 6.8: Province, Territory and State Identifiers

Province type code	Description	From/To	Province type code	Description	From/To
AB	Alberta	ALL	NC	North Carolina	RF, MC, RC
AK	Alaska	RF, MC, RC	ND	North Dakota	CT, GP, MC, PL, RF, TM, WP, RC
AL	Alabama	RF, MC, RC	NE	Nebraska	RF, MC, RC
AR	Arkansas	RF, MC, RC	NH	New Hampshire	RF, MC, RC
AZ	Arizona	RF, MC, RC	NJ	New Jersey	RD, MC, RC
BC	British Columbia	RF, MC, RC	NL	Newfoundland	RF, MC, RC
CA	California	RF, MC, RC	NM	New Mexico	RF, MC, RC
CO	Colorado	RF, MC, RC	NS	Nova Scotia	RF, MC, RC
CT	Connecticut	RF, MC, RC	NT	North West Territories	CT, GP, MC, PL, RF
DC	District of Columbia	RF, MC, RC	NU	Nunavut	RF, MC, RC
DE	Delaware	RF, MC, RC	NY	New York	RF, MC, RC
FL	Florida	RF, MC, RC	OH	Ohio	RF, MC, RC
GA	Georgia	RF, MC, RC	OK	Oklahoma	RF, MC, RC
HI	Hawaii	RF, MC, RC	ON	Ontario	RF, MC, RC
IA	Iowa	RF, MC, RC	OR	Oregon	RF, MC, RC
ID	Idaho	RF, MC, RC	PA	Pennsylvania	RF, MC, RC

Province type code	Description	From/To	Province type code	Description	From/To
IN	Indiana	RF, MC, RC	PE	Prince Edward Island	RF, MC, RC
KS	Kansas	RF, MC, RC	QC	Quebec	RF, MC, RC
KY	Kentucky	RF, MC, RC	RI	Rhode Island	RF, MC, RC
LA	Louisiana	RF, MC, RC	SC	South Carolina	RF, MC, RC
MA	Massachusetts	RF, MC, RC	SD	South Dakota	RF, MC, RC
MB	Manitoba	CT, GP, MC, PL, RF, TM, WP, RC	TN	Tennessee	RF, MC, RC
MD	Maryland	RF, MC, RC	TX	Texas	RF, MC, RC
ME	Maine	RF, MC, RC	UT	Utah	RF, MC, RC
MI	Michigan	RF, MC, RC	VA	Virginia	RF, MC, RC
MN	Minnesota	RF, MC, RC	VT	Vermont	RF, MC, RC
MO	Missouri	RF, MC, RC	WA	Washington	RF, MC, RC
MS	Mississippi	RF, MC, RC	WI	Wisconsin	RF, MC, RC
MT	Montana	CT, GP, MC, PL, RF, TM, WP, RC	WV	West Virginia	RF, MC, RC
NB	New Brunswick	RF, MC, RC	WY	Wyoming	RF, MC, RC
YT	Yukon	RF, MC, RC			

## 6.5.2 Cross-Border Window

Prior to and including the 2013-11 production month, in order to enable an Alberta facility to balance by the Alberta Volumetric Reporting Deadline, a window of time (i.e. the Alberta cross-border window) was available. The Alberta facility operator was able to enter a cross-border activity that is not normally permitted in Petrinex. For example, an AB BT operator was able to report a DISP to a SK TM rather than waiting for the SK TM operator to report a REC from the AB BT, as is the standard practice in Petrinex. Effective the December 2013-12 production month, the Cross-border Window is no longer available, as the Volumetric Reporting Deadline for Alberta and Saskatchewan is aligned.

## 6.6 Pending Volumetric Transactions

### 6.6.1 Current Month Pending Records

A facility's volumetric submission may already contain auto-populated transactions prior to any volumetric submission being made by the operator. In the Facility Activity View, Petrinex flags these records as "P" for pending approval or "D" for pending deletion (see Figure 6.9). Pending transactions are not part of a facility's volumetric submission until the facility operator submits the volumetrics.

When the volumetric submission is made in the current production month for the facility, Petrinex will remove the pending flag.

[Monthly Reporting] > [Volumetric]

### Query Volumetric Submission

Facility ID: SK BT 0009328    Location:    Production Month: 2012-04  
 Name: XYZ Oil 12-15-47-25W3    Amendment #: 2  
 Reference Code:    Submitted:    Extracted:

View: Facility Activity

Filters: Activity: ALL    Product: ALL    From/To: ALL

Go

Activity	Product	From/To	Volume	Energy
REC	OIL	SK BT 0006948	10.0	
P DISP	OIL	SK CT 0004768	301.4	
P PURDISP	OIL	SK BT 0006598	33.0	

Save to WIP    Report    Cancel

[Menu-Index-Help-Contacts-Logout](#)  
[Top-SK](#)

Figure 6.9: Query Volumetric Submission – Pending Transactions

### 6.6.2 Prior Month Pending Records

A prior period amendment where an activity or related volume is either changed or removed may trigger a pending 'P' or 'D' record at the applicable facility. When this occurs, the previous transaction is flagged for further action. As with the current month submission, the onus is on the facility operator to either accept the pending record or communicate with the facility operator that triggered the auto-population and request a correction.

Note that a prior period amendment may seem to appear as a double entry as shown in (see Figure 6.10). Once submitted, the pending record will over-write the previous entry.

### Query Volumetric Submission

**Facility ID:** SK BT 000001      **Location:** 01-01-001-01 W1      **Production Month:** 2011-12 < >  
**Name:** SASK BATTERY      **Amendment #:** 0 < >  
**Reference Code:**      **Submitted:** 2012-01-20 07:51  
    **Extracted:** 2012-01-20 18:12

**View:** Facility Activity  
**Filters:** Activity: ALL      Product: ALL      From/To: ALL

**Go**

---

Activity	Product	From/To	Volume	Energy
PDISP	OIL	SK BT 0112192	12.0	
DISP	WATER	SK BT 0090884	7.0	
DISP	WATER	SK BT 0105966	15.0	
DISP	WATER	SK BT 0106069	10.0	
DISP	WATER	SK BT 0106757	6.0	
DISP	WATER	SK BT 0107783	10.0	
DISP	WATER	SK BT 0110652	10.0	
DISP	WATER	SK BT 0112165	57.0	
DISP	WATER	SK BT 0112192	38.0	
PDISP	WATER	SK BT 0112192	25.1	
DISP	WATER	SK BT 0112858	34.0	
DISP	WATER	SK IF 0008658	29.9	
DISP	WATER	SK WP 0079937	85.8	

Figure 6.10: Query Volumetric Submission – Pending and Delete Records

**6.7 Pipeline Receipts**

Operators of pipeline facilities must report the volumes of oil and water actually received each month. Actual volumes are not to be adjusted for any sediment and water (S&W) penalties that are charged by pipeline operators.

ER will monitor oil and water volumes reported at pipelines to determine whether excessive water volumes are being reported.

**6.8 Injection Facility Receipts**

Operators of injection facilities, when receiving waste water, must report the receipt of water and oil when the volume of oil is greater than 1.0%. ER will monitor oil and water volumes at injection facilities.



## 6.9 Volumetric Submission Balancing

When a batch or online volumetric submission is made, or an online Volumetric Submission Query is run for a facility, Petrinex determines that each facility is arithmetically balanced volumetrically within itself; that is, that total facility receipts equal total facility dispositions (after considering inventories, fuel, flare, vent, and losses) for a particular product grouping. A notification will be displayed on-screen or a notification will be sent to the user's Petrinex Inbox, if the facility is out of balance. A BA can request a Volumetric Non-Compliance report from Petrinex at any time, to verify that the input volumes balance with the output volumes (considering inventories, consumption, etc.). The Volumetric Non-Compliance Report will also identify any wells and facilities that have not reported volumetric data for the production month (i.e. missing data).

Petrinex automatically runs a Volumetric Non-compliance Error Report on all facilities two days before the Volumetric Reporting Deadline to notify BAs of reporting errors. BAs must correct all errors identified in the report, prior to the deadline. Notifications are also e-mailed to advise BAs of changes at other facilities that will impact volumetric activity at their facilities.

### 6.9.1 Imbalance and Metering Difference

The facility will be balanced for each product group (rather than each individual product) using the formulas below to calculate the metering difference (DIFF) or the imbalance (IMBAL) activity. Petrinex will calculate metering difference and imbalance percentages for each product group; if the percentage is not within the acceptable tolerance, an error message will be issued.

**Imbalance** = opening inventory + total production + total load recovery + total receipts + process for each product group + inventory adjustment + fractionation yield - total dispositions - total injection - shrinkage - total load injection - closing inventory.

**Imbalance %** = imbalance / (opening inventory + total production + process + total receipts + fractionation yield + inventory adjustment + total load recovery) x 100.

**Metering difference** = opening inventory + total production + total load recovery + total receipts + total purchase receipts + inventory adjustment - total fuel - total flare - total vent - total disposition - total purchase disposition - shrinkage - total load injected - closing inventory - total injection - total plant use - total recycle - total utility.

**Metering difference %** = metering difference / (opening inventory + total production + total receipts + total purchase receipts + total load recovery + inventory adjustment) x 100.

## 6.9.2 Facility Totals

The facility operator does not submit facility totals to Petrinex. Instead, Petrinex calculates the total for each activity and product reported at the facility. These calculated totals are used in the algorithm to calculate imbalance and metering difference. Petrinex calculates totals for the following activities:

- Disposition (DISP)
- Flare (FLARE)
- Fuel (FUEL)
- Injection (INJ)
- Load injection (LDINJ)
- Load recovered (LDREC)
- Production (PROD)
- Purchase receipt (PURREC)
- Purchase disposition (PURDISP)
- Receipts (REC)
- Vent (VENT)

The facility operator does not submit process or shrinkage volumes at a gas plant or gas gathering facility. Instead, Petrinex calculates the process volume for each by-product processed at the gas plant or gas gathering facility. The process volume is calculated for each product group rather than for each individual product. Petrinex also calculates the gas equivalent of any hydrocarbon liquids processed from the gas stream. A standard gas equivalent factor for each processed product group is used to calculate the shrinkage volume. The exception to this is the acid gas shrinkage volume that the operator must report.

Tables 6.3, 6.4, and 6.5 identify the product group and the products that if reported at a facility will be included in the calculation of the plant process (PROC) and shrinkage (SHR) activity volumes.

Table 6.3: Product Group for Process Activity

Product Group Name	Products Included	PROC Formula for All Product Groups
METHANE-MX	C1-MX, CO2-MX	Process = closing inventory + total disposition – opening inventory – total receipts – total production – inventory adjustment – fractionation yield + fuel + flare
BUTANE-MX	C4-MX, IC4-MX, NC4-MX	
BUTANE-SP	C4-SP, IC4-SP, NC4-SP	
ETHANE-MX	C2-MX	
ETHANE-SP	C2-SP	
PENTANE-MX	C5-MX, IC5 MX, NC5-MX	
PENTANE-SP	C5-SP, IC5 SP, IC5-SP *exceptions include OIL and COND for GP or GS	
PROPANE-MX	C3-MX	
PROPANE-SP	C3-SP	
SULPHUR	SUL	

Table 6.4: Product Group for Shrinkage Factor

Product Group Name	Gas Equivalent Factor	Formula for All Product Groups
Methane Mix (C1-MX & CO2-MX)	0.44217	Shrinkage = process volume x gas equivalent factor
Normal-Butane Mix (NC4-MX & IC4-MX)	0.23768	
Normal-Butane Spec (NC4-SP & IC4-SP)	0.23768	
Ethane Mix (C2-MX)	0.28140	
Ethane Spec (C2-SP)	0.28140	
Pentane Mix (C5-MX & IC5-MX & NC5-MX)	0.20667	
Pentane Spec (C5-SP & NC5-SP & IC5-SP)	0.20667	
Propane Mix (C3-MX)	0.27213	
Propane Spec (C3-SP)	0.27213	

Table 6.5: Product and Gas Equivalent Factor

Formula for Receipt Product	Gas Equivalent Factor	Product
Butane Mix (C4-MX)	0.23768	<i>Receipts:</i> Gas equivalent volume for each by-product = total receipts for each product x gas equivalent factor for that product. <i>Opening Inventory:</i> Gas equivalent volume for each by-product = opening inventory for each product x gas equivalent factor for that product. <i>Closing Inventory:</i> Gas equivalent volume for each by-product = closing inventory for each product x gas equivalent factor for that product. <i>Dispositions:</i> Gas equivalent volume for each by-product = total disposition for each product x gas equivalent factor for that product.
Butane Spec (C4-SP)	0.23768	
Ethane Mix (C2-MX)	0.28140	
Ethane Spec (C2-SP)	0.28140	
Pentane Mix (C5-MX)	0.20667	
Pentane Spec (C5-SP)	0.20667	
Propane Mix (C3-MX)	0.27213	
Propane Spec (C3-SP)	0.27213	
Iso-Butane Mix (IC4-MX)	0.22902	
Iso-Butane Spec (IC4-SP)	0.22902	
Iso Pentane Mix (IC5-MX)	0.20485	
Iso-Pentane Spec (IC5-SP)	0.20485	
Normal-Butane Mix (NC4-MX)	0.23768	
Normal-Butane Spec (NC4-SP)	0.23768	
Normal-Pentane Mix (NC5-MX)	0.20667	
Normal-Pentane Spec (NC5-SP)	0.20667	
Methane Mix (C1-MX)	0.44217	
Methane Mix (CO2-MX)	0.44120	

### 6.9.3 Product Grouping for Volumetric Balancing

The way in which Petrinex balances volumetric data is dependent on the facility type reporting the products, volumes, and activities. Petrinex will consider certain product type volumes together, as a group, so that their sum reconciles at a product group level. This is necessary for a variety of volumetric scenarios. For example, when a custom treating facility receives condensate and blends that condensate with oil, the downstream facility that receives this aggregate volume will report it as a receipt of oil. The downstream facility's receipt will auto-populate a disposition of oil at the custom treater. Oil and condensate balance at the custom treater; therefore, the operator of the custom treater does not need to report a disposition of condensate in order to balance the facility.

Any difference between the inputs and the outputs for the product group is referred to as a metering difference or imbalance. If any one of the product groups is out of balance, then the whole facility will be considered out of balance.

The Table 6.6 identifies the product groups and products that if reported at a facility will be included in the facility balance at the product group level. Not all products reported at a facility are balanced. The Table 6.6 grid is made up of two sections, the standard product grouping and the exception product grouping. To use Table 6.6 to determine how a product is balanced at a particular facility type, first refer to the exception product grouping. If the facility type-product type combination of interest does not exist within the exception product grouping grid, then refer to the standard product grouping grid. When the appropriate grid section has been decided upon, the grid can be read in one of two ways. To determine which product group a product is balanced with, find the product type of interest from the list of product names and then move right across the grid. To determine which products are balanced within a particular product group, find the product group along the top of the grid, and then move downward along the grid.

Note: \* If Injection Facility (IF) subtype is either 503 (disposal) or 510 (pressure maintenance), then OIL is included in the WATER product group.

\*\* If no Solvent, Spec, or Mix products are reported at an Injection Facility (IF) then the GAS Product Grouping is used.

\*\*\* For Gas Plant (GP) and Gathering System (GS), gas equivalent volumes of Specs and Mix from Shrinkage (SHR) are also included in GAS group (in addition to the GAS and N2)



### 6.10 Volumetric Transaction With Non-Reporting Facilities

Facility operators must report volumetric transactions that occur with non-reporting facilities. In Saskatchewan non-reporting facilities include compressor stations, oil satellites, refineries, waste locations, and surface water sources. For reporting receipts from or deliveries to out of province (excluding Alberta) non-reporting facilities, ER has designated particular facility subtypes as “Issued by ER only” for facilities such as custom treaters, waste plants, gas plants, terminals, pipelines and refineries (See Table 5.2). To request an “Issued by ER only” facility ID, contact ER.

### 6.11 Underground Storage and Enhanced Oil Recovery (EOR) Facilities

Injection Facilities used for underground storage and EOR projects and their associated battery facilities have been provided additional functionality in Petrinex for volumetric reporting to allow ER to distinguish between products that occur naturally in a reservoir and those that have been injected and stored in a reservoir. For example, purchased gas injected and stored in a depleted gas reservoir must be distinguishable from any naturally occurring gas remaining in the reservoir. Similarly, an inventory of carbon dioxide (e.g. CO<sub>2</sub>-MX) injected, recovered and recycled in an oil reservoir to enhance oil recovery must be maintained in order to determine the volume of carbon dioxide stored within the reservoir at a particular point in time.

In addition to normal volumetric reporting on Petrinex, operators of an Injection Facility (IF) with the subtype of either 501, 505, 506, 516, 517, and 519 must submit volumetric information related to storage activities on a monthly basis, for specific products injected, stored, recovered and recycled (if applicable) (see Table 6.9 and Figure 6.11).

Table 6.9: Facility Subtype Name, Code and Facility Description for Storage and EOR Facilities

Facility Subtype Name	Facility Subtype Code	Facility Description
Enhanced Recovery Scheme	501	An injection facility for the injection of any substance through one or more wells for the purpose of improving hydrocarbon recovery. The associated battery with the injection facility must report the recovery of the hydrocarbon. Thermal In-Situ Injection projects are to be reported using subtype 506.
Thermal In-Situ Injection	506	Injection Facilities that receive and inject Steam and other products which may be recovered at an associated battery (facility subtype 344) as part of the Thermal In-Situ Project.
Underground Gas Storage	505	An injection facility for the storage of Gas, Oil, NGLs or CO <sub>2</sub> into a stratigraphic unit or cavern.
Underground Oil Storage	516	
Underground NGL Storage	517	
Underground CO <sub>2</sub> Storage	519	

Before storage activities and the related volumes can be reported at applicable injection facilities, one or more battery facilities must be tied to the injection facility. Once setup in Petrinex, the above injection facility subtypes and associated batteries are able to use additional functionality within Petrinex for the reporting of products injected, stored and eventually recovered from underground storage facilities or enhanced recovery projects. Operators of injection facilities with a subtype of 506 must enter the steam quality % when creating a new facility ID. The steam quality is the measure of the amount of saturated steam in the vapour phase. See *Directive PNG017* to determine how to calculate the steam quality percentage. The additional products and activities available for these facilities provide:

- The ability to maintain a running inventory of product stored within the reservoir or cavern at the end of each production month; and
- ER with the information required to remove these products and activities from the royalty/tax billing process; and
- Industry and ER with better information on purchased versus recycled product in Enhanced Recovery projects.

It is strongly recommended that Industry provide a storage opening inventory (STINVOP) for applicable products as of March 1, 2012; it will aid Industry in the claiming of EOR expenses for royalty/tax purposes and will ensure storage volumes are complete and accurate.

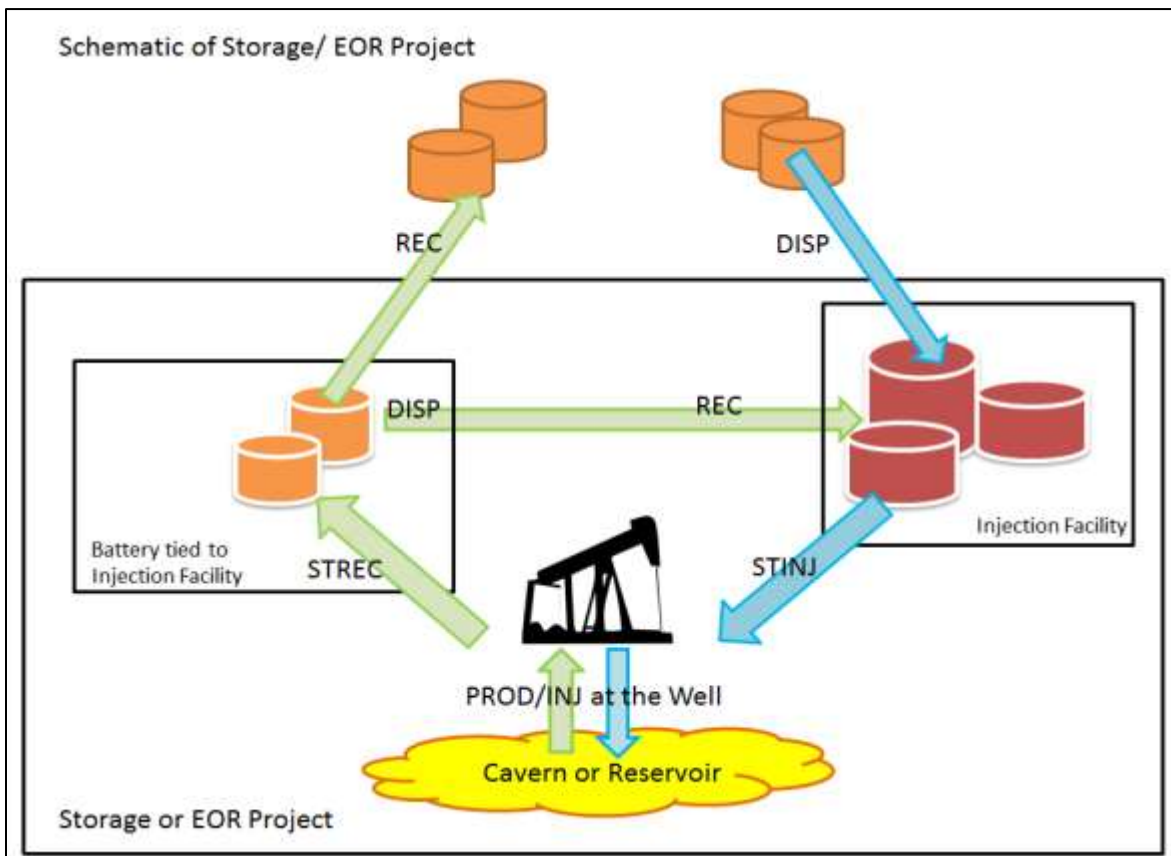


Figure 6.11: Schematic of Storage/EOR Project

### 6.11.1 Tying an Injection Facility to One or More Batteries

One or more batteries can be tied to an injection facility through the Edit Facility Information screen in Petrinex (see Figure 6.12).

[Infrastructure] > [Facility Infrastructure] > [Setup/Maintenance]

### Edit Facility Information

Facility ID: SK BT 0000001      Start Date: 2012-01  
 End Date:     

MSG005 Facility Change has been processed successfully.

Facility Sub-Type: 361 - GAS MULTI-WELL BATTERY

Facility Location

LE	LSD	SEC	TWP	RGE	M	Licence
01	01	001	01	W	I	F0001

Alternate Location:  
 Section     Township     Range

Licence: 98765 - SASK PRODUCER LTD      Status: ISSUED      Status Date: 2006-12-01  
 Facility Licence Type: Multi Well Oil Battery

Facility Name: SASK STORAGE RECOVERY BATTERY

Tied to Storage/EOR Facility:  Yes  No      Storage/EOR Facility: SK IF 0000001

[Menu](#) [Inbox](#) [Help](#) [Contacts](#) [Logout](#)  
[Top SK](#)

Figure 6.12: Edit Facility Information – Storage Facility

### 6.11.2 Additional Well Activities for Storage/EOR Projects

Operators of well completions that are linked to a Storage/EOR injection facility must report the additional activity of storage injection (STINJ) for the injection of each stored product.

Operators of well completions that are linked to batteries (that are also tied to a storage injection facility) will have access to the additional activity of storage recovery (STREC), to report the withdrawal of each stored product. Both STREC and PROD of a given product can be reported for the same production month, but only the STREC volumes will be included in the storage inventory calculation.

Hours or CCI codes are not required to be reported for the storage activities STINJ and STREC, however, hours must be reported for other activities, such as PROD and INJ, if these activities are also being reported at the facility.



The movement of stored products between the injection facility and the batteries tied to it are reported as normal receipts (REC) and dispositions (DISP).

### 6.11.3 Inventory of Stored Product

At Petrinex implementation, the March 2012 storage inventory opening (STINVOP) was populated using the February 2012 closing inventories from facility statements received by ER on or before March 22, 2012. If changes to an operator’s March 2012 STINVOP are required, the operator of the facility must make the adjustment by using the storage inventory adjust (STINVADJ) activity.

The storage inventory closing (STINVCL) for a particular product, for a production month, is calculated by Petrinex based on the total reported STINJ volumes at the injection facility, the total reported STREC volumes at the batteries tied to the injection facility, and any STINVADJ for the production month. Petrinex will auto-populate the STINVOP for each product based on the previous month’s STINVCL. All of the storage activity volumes for each product are displayed online in the Summary View of the Query Volumetric Submission screen (Figure 6.13) that are associated with the Storage/EOR injection facility. It should be noted that while all applicable storage activities are displayed, only the STINJ activity is included in the balancing (e.g. DIFF, IMBAL) calculation for the facility.

[Monthly Reporting] > [Volumetric]

### Query Volumetric Submission

Facility ID: SK IF 0000001 Location: 01-01-001-01W3 Production Month: 2012-03  
 Name: SASK GAS STORAGE Amendment #: 2  
 Reference Code: Test Mth #1 Submitted: 2012-04-15 12:35  
 Extracted:

View: Summary  
 Product Group: GAS

**Go**

Balancing activity	Volume	%
DIFF	0.0	0.0
<b>Product totals: GAS</b>		
<b>Activity</b>	<b>Volume</b>	
REC	3050.0	
STINJ	3050.0	
STINVCL	1300.0	
STINVOP	1000.0	
STREC	2750.0	

**Report** **Cancel**

Figure 6.13: Query Volumetric Submission – Storage Activities

#### 6.11.4 Washout Phase of Storage Cavern

Facility IDs for storage caverns must be created when the cavern is in an operational or storage phase. Both facility subtype 517 - Underground NGL Storage Facility (for ethane injection activities) as well as a Battery (for ethane recovery activities) must be created, each with a unique facility identifier and both facilities must be licensed. Operators are not required to report the injection, withdrawal and inventory volumes at the Underground NGL Storage facility until after washing operations have been completed. Once the cavern is in the operational or storage phase, the operator is required to report all volumes injected, recovered, in inventory, delivered from and received at the facility, for all applicable products.

During cavern washing operations, any brine recovered from the cavern well completion that is sent to a disposal/injection facility must be measured and reported by the disposal/injection facility operator as a receipt of brine from the “un-linked” cavern well completion (i.e. using the applicable UWI). The injection of the brine at the disposal/injection facility must also be continuously measured and reported monthly in Petrinex by the operator. Monthly volumes must be reported for each individual well completion linked to the disposal/injection facility. For clarity, the operator of the applicable disposal/injection facility is responsible for reporting the appropriate volumetric information for the facility (i.e. volume of brine or water received from the cavern well completion and the volumes of brine or water injected into each well that are linked to the disposal/injection facility).

If fresh water is used for the washout, and that water is being produced from water source well completions, a Water Source (WT) 907 facility subtype must be created, with each of the individual water source well completions linked to it. In this case, the operator of the WT 907 facility must measure and report the production from each well completion and the report the disposition of the fresh water to the “un-linked” cavern well completion (using the applicable UWI). Note that during washing operations, the cavern well completion is not considered as completed, and therefore it cannot be “linked” to the Underground NGL Storage facility or Underground Gas Storage Facility.

## **7. Waste Plant Reporting**

The licensee or operator of a waste processing facility must submit to the minister, through Petrinex, the following information on or before the Volumetric Reporting Deadline:

- 1) the quantities of waste products and oil, gas, water, products or any other substances received during the month, itemized by place of origin and supplier;
- 2) opening and closing inventories;
- 3) the disposition of all fluids and solids reclaimed, recovered or consumed; and
- 4) any other information that ER considers necessary.

Waste plant operators must meter or estimate the volume of oil contained in any waste receipts and report those volumes to ER, through Petrinex. The submission of a receipt activity by the waste plant operator will auto-populate a disposition at the source (delivering) facility, if that source facility is an ER regulated facility, and has a valid facility ID on Petrinex. The source (delivering) facilities will be responsible for reporting that oil as part of their production volumes or cascading those volumes to the appropriate producing facility; therefore, making the applicable Royalty/Tax Payers responsible for payment of royalty/tax on those volumes. The waste plant operator will not be assessed Recovered Crude Oil (RCO) Tax on the volumes of oil allocated back to the source producer.

ER will monitor volumetric activity at the waste plant and may apply the RCO Tax in situations where it is determined that the volume of produced oil allocated back to source producer does not adequately represent the volume of oil disposed from the Waste Plant.

In order for a Waste Plant Submission to be considered complete, waste plant operators must ensure that the submission contains all oilfield and non-oilfield volumetrics (i.e. receipts and dispositions).

### **7.1 Waste Plant Facility Status**

A waste plant must have an active facility operational status in order to report through Petrinex's Waste Plant Submission. Note that an active status is considered as ACTIVE or SUSPENDED. Operators of waste plants, with an active facility status, must report to Petrinex or will incur non-compliance penalties.

A waste plant with a status of SUSPENDED is only allowed to report a receipt (REC) of waste (FSHWTR) freshwater, to allow for processing of previously received wastes/materials and can continue to deliver (DISP) oil, water, and solids in order to eliminate inventory prior to abandonment, or until such time that the facility commences operations again.

### **7.2 Waste Plant Submission: Online**

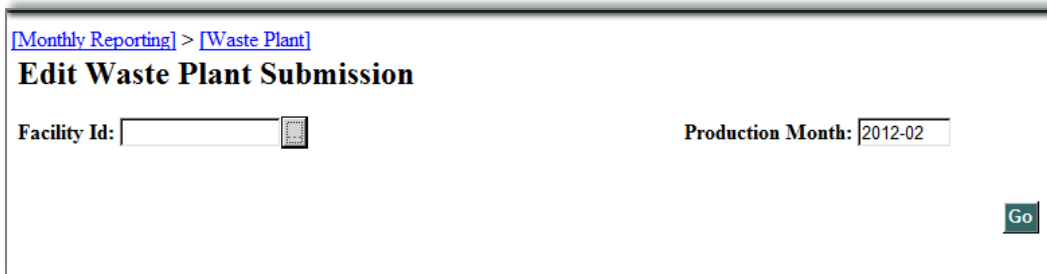
Online Waste Plant Submissions are input through the Waste Plant module, a separate module from the Volumetric module, see Figure 7.1.



**Figure 7.1: Waste Plant Menu**

**7.2.1 Edit Waste Plant Submission**

To submit or edit already submitted waste plant volumetric records online the Edit Waste Plant Submission screen must be used. To begin, the waste plant’s facility ID must be entered (see Figure 7.2). The production month will default to the current production month. The facility ID can either be entered directly or can be found using the lookup button beside the Facility ID field. Only the waste plant submissions for waste plants operated by the reporting BA will be available for editing. To create a new waste plant facility ID on Petrinex, see Section 5: Facility Information.



**Figure 7.2: Initial Edit Waste Plant Submission Screen**

Waste plant operators must report all volumetric movements between the waste plant and other facilities in a given month, certain activities will be auto-populated from the volumetric or waste plant submissions at other facilities or auto-populated when Petrinex processes are run (e.g. opening inventories).

Each record, within a waste plant submission, must identify the following (see also Figure 7.3):

- **From/To:** the waste plant operator must submit the appropriate facility ID or well completion UWI that identifies the location that the volumes were received from or delivered to (see section 7.2.2).
- **Activity:** the waste plant operator must submit the appropriate activity type for the transaction (see Table 7.2).
- **Waste Code:** the waste plant operator must submit the appropriate waste code for the transaction (see Table 7.3)
- **N/D Classification:** the waste plant operator must identify the waste volumes are either dangerous/hazardous or non-dangerous/non-hazardous (see section 7.2.5).
- **Waste Composition Volumes (oil, water, solids):** the waste plant operator must submit the volumes of oil, water, and solids that are contained within any received waste.

The Reference Code is an optional user-entered code for a specific Waste Plant Submission. The reference code may contain up to 16 characters.

For a single waste plant record, the combination of activity, waste code, From/To facility, and N/D flag must be unique. Therefore, in one production month, multiple receipts or multiple dispositions of the same waste/material (i.e., same waste code and classification) From/To the same generating or receiving location, must be summed and entered as an aggregate volume for oil, an aggregate volume for water, and an aggregate volume for solids.

Monthly Reporting > [Waste Plant]  
**Edit Waste Plant Submission**  
 Facility Id: SK WP V900099    Location: 15-01-001-01 W3    Production Month: 2012-02  
 Name: SASE WASTE PLANT #1  
 Reference Code:   
 Filters: From/To:     Activity:     Waste Code:       

Del From/To	Activity	Waste Code	N/D Oil	Water	Solids	Gas
P	INVOP		27.0	230.0	25.0	
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						

Figure 7.3: Edit Waste Plant Submission

### 7.2.2 From/To:

Receipts (REC) at a waste plant must include the facility ID of the site that generated the waste being received. Allowable facility IDs include:

- Valid SK facility IDs (BT, CT, GS, GP, IF, PL, **RF\***, TM, WP, **WS\*** and **WT\***)
- Valid AB facility IDs (BT, CT, GS, GP, IF, OS, PL, **RF\***, TM, WP, **WS\***)
- Valid SK Miscellaneous Nodes (**CO\***, **IN\***, **MC\***, **RO\***)
- Valid unlinked well ID's (SKWI, ABWI)
- Unlinked well ID's from non-reporting jurisdictions (MBWI, NTWI, NDWI, MTWI)
- SK Waste Location (WL) Generator IDs, see Section 6.7: Waste Location IDs.

\*there are reporting restrictions for these receipts at WP, see Table 7.1

Note: WL (generator) IDs, can only be used by the BA that created them.

Dispositions (DISP) from the waste plant must include the facility ID to which the material is being delivered to. Allowable facility IDs include:

- Valid SK facility IDs (**BT\***, CT, TM, PL, IF, WP)
- Valid AB facility IDs (CT, TM, PL, IF, WP)
- SK Waste Location (WL) Receiver IDs (see Section 7.8: Waste Location IDs).

\*there are reporting restrictions for these dispositions at WP, see Table 7.1

Petrinex infrastructure reports (e.g., Well Infrastructure, Facility Infrastructure) may be used to assist in the determination of valid SK (and AB) facility and well IDs. Facility IDs are associated with surface locations and un-linked well completions are associated with the bottom-hole location.

### 7.2.3 Activity:

See Table 7.2 for a list of activities that may be reported at waste plant facilities.

### 7.2.4 Waste Codes:

Petrinex contains an extensive list of waste codes which can be used by Industry to report the receipt of oilfield waste at the waste plant. See Table 7.3 for a complete listing of the waste codes and reporting codes. Note: Some waste codes are only valid for a specific facility activities, see Table 7.2.

### 7.2.5 Non-Dangerous and Dangerous (N/D) Waste

For waste plant receipts, Petrinex requires the entry of either (D) for dangerous oilfield waste/hazardous non-oilfield waste or (N) for non-dangerous oilfield waste/non-hazardous non-oilfield waste.

For waste plant dispositions, the reporting of (D) or (N) is not allowed.

The N/D designation should correspond to Hazardous (Dangerous) and Non-Hazardous (Non-Dangerous) Waste Classifications used in Saskatchewan.

### 7.2.6 Waste Composition Volumes: Oil, Water, Solids

Using the Oil, Water, and Solids fields, the waste composition must be identified for receipts (REC) and dispositions (DISP) as total volumes of oil, water, and solids in cubic metres (m<sup>3</sup>) rounded to one decimal place.

### 7.2.7 Gas

Waste plant operators must account for gas received and consumed for the entire site. To report natural gas which has been flared, vented or consumed as fuel at the waste plant, the volume of gas must be reported in the 'Gas' field in thousands of cubic metres (10<sup>3</sup> m<sup>3</sup>) rounded to one decimal place.

## 7.3 Waste Plant Receipts, Dispositions, and Auto-population

Rules applicable to the Petrinex reporting of receipts, dispositions and auto-population at a Waste Plant may differ from the rules for Volumetric reporting at other facility types, see Table 7.1.

### 7.3.1 Receipts at a Waste Plant

With the exception of gas, when waste plant operator submits a receipt (REC) activity, they must also enter the well completion UWI, facility ID, or waste location ID of the source location. The entry of a REC activity at a waste plant will auto-populate a corresponding disposition (DISP) activity at the source facility (if the source facility is a reporting facility and has valid facility ID on Petrinex).

Note: Any and all receipts from a suspended facility must be reported by the waste plant operator, and if a receipt is reported from an abandoned facility, the product cannot be Gas.

When gas is received at a waste plant from a SK (or AB) BT, GS, GP, or MS facility type, the operators of these facilities must enter the gas dispositions (DISP) at their facility, and this will auto-populate the gas receipts (REC) at a waste plant.

When gas is received at a waste plant from a non-reporting facility such as SKCO, SKMC, and SKIN, the waste plant operator must enter the REC of gas at their facility, as the named facilities are non-reporting and these facilities cannot enter a DISP.

**For receipts of WASTE reported at the Waste Plant:**

- the oil component of the waste stream will be auto-populated as the product OIL at the source facility,
- the water component will be auto-populated as the product WATER at the source facility,
- the solids component will be auto-populated as the product SAND at the source facility.
- Prior to 2013-01, the water and solids components of the waste stream were summed and were auto-populated as the product WATER at the source facility.

Note: If a waste plant operator is reporting a REC activity from another waste plant, the submitting waste plant must report a waste code of WASTE.

**For receipts of produced water at the Waste Plant:**

- If the produced water is received into a dedicated tank, the receipt must be recorded as waste code 'WATER'. The receipt volume is identified in the Water field.
- If the produced water is received at the waste plant, but not received into a dedicated tank (i.e., produced water is commingled with other fluids/waste), the receipt must be recorded as waste code 'WASTE'. The identification of the waste composition volumes (oil, water, and solids) is required

**7.3.1.1 Waste Codes for Waste Plant Receipts:**

For waste plant reporting, some waste reporting codes are only allowable for specific From/To facility types.

**The ADDMAT (Additives used in waste plant processing)** waste reporting code, must only be used for receipts (REC), the reporting waste plant may only be a subtype 701 or 702, and the From/To facility field must be left blank.

**The NONOFD (Non-Oilfield waste)** waste reporting code must be used to report the receipt of non-oilfield waste. Non-oilfield waste is any substance other than oil or gas waste.

- The receipt of non-oilfield wastes must be authorized by the waste plant approval issued by ER, and only the specific types of non-oilfield waste listed in the approval can be received at a waste plant.
- For reporting purposes, waste generated by a refinery is considered as non-oilfield waste.

The waste plant operator must also use appropriate reporting codes for fluids being accepted for waste plant management (e.g., WATER, FSHWTR) and/or accepted for processing of previously received wastes/materials.

The **FSHWTR (fresh water)** waste reporting code is used for receipts from:

- Water Source (WT) facility subtype 907 (fresh water source)
- Water Source (WS) facility subtype 905 (surface water source)
- Surface run-off water (RO) (e.g., rain or snowmelt) on the site of the waste plant and used for processing received wastes/materials.



The **CWATER (waters contaminated)** waste reporting codes can be used to report:

- Contaminated surface run-off water (RO) (e.g., rain or snowmelt) on the site of the waste plant and used for processing received wastes/materials.

The **WATER (water)** waste reporting code is used for receipts from:

- Water Source (WT) facility subtype 906 (formation water source)

The **WSTMIS (waste miscellaneous)** waste code is a recognized reporting code; however, waste plant approval holders must use the most appropriate waste code for the material being accepted. Use of WSTMIS may be subject to audit.

### 7.3.2 Deliveries from a Waste Plant

Typically, disposition (DISP) records for waste plants will be auto-populated by receipts (REC) reported at the facilities receiving materials from the waste plant, with the exception of the following:

A waste plant operator must report dispositions (DISP) to:

- Injection facilities (SK IF and AB IF)
- SK WL Receivers
- SK BT subtypes 313 and 316 (i.e. paper batteries)

#### 7.3.2.1 Waste Codes for Waste Plant Deliveries:

Waste Plant facility operators are restricted to reporting dispositions (DISP) for the following waste codes:

- **WASTE:** The waste code WASTE must be used to report dispositions of either water or solids (with small amounts of oil) delivered out from the waste plant.
- **MNFCTR:** Dispositions (DISP) of the waste plants by-products will be reported using the waste code Manufacture (MNFCTR). A DISP of MNFCTR may only be made to a WL Receiver From/To facility.
- **COEMUL:** the waste code COEMUL is only allowed when the From/To facility is a SK BT (subtype 313 and 316)
- FSHWTR
- WATER

For dispositions of oil (with small amounts of water), the waste code column must be left blank.

**For dispositions of WASTE reported at the Waste Plant:**

- the oil component of the waste stream will be auto-populated as the product OIL at the receiving facility,
- the water component will be auto-populated as the product WATER at the receiving facility,
- the solids component will be auto-populated as the product SAND at the receiving facility.
- Prior to 2013-01, the water and solids components of the waste stream were summed and were auto-populated as the product WATER.

#### **7.4 Waste Plant Inventory**

The monthly closing inventory (INVCL) for oil, water, and solids must be reported on the Waste Plant Submission. Other closing fluid inventories (combined volumes of waste fluid and produced water) must be recorded with the water inventory as a single entry.

If a waste plant has an opening inventory and the waste plant has not reported any activities for the month, the closing inventory volumes will be equal to the opening inventory volumes.

At the Volumetric Reporting Deadline, any INVCL activities reported for the current production month will be rolled forward into an auto-generated opening inventory (INVOP) for the next production month.

The waste plant operator cannot directly enter or edit the opening inventory activity. In order to correct an INVOP, the waste plant operator must make a change to the prior month's INVCL.

Entering an INVCL activity is not valid if:

- the submitting waste plant has a SHUTIN activity reported in the succeeding (i.e. following) production month
- the submitting waste plant has a facility status that is neither ACTIVE or SUSPENDED

##### **7.4.1 SHUTIN Activity**

If a waste plant has an active facility status, and there is no inventory and no other volumetric activities to be reported for the month, the waste plant operator must report a SHUTIN activity.

#### **7.5 Pending Transactions**

Petrinex will flag auto-populated receipt (REC) and disposition (DISP) records as pending (indicated by a red "P"). Records pending deletion will be identified using "D". Pending transactions are not part of a submission until the waste plant operator "accepts" (i.e. submits) the pending records. The waste plant operator must ensure that the auto-populated records are addressed before the Volumetric Reporting Deadline.

A waste plant operator cannot modify volumes that have been auto-populated.

If a waste plant operator disagrees with a record that has been auto-populated, it must contact the BA that created the record and request a correction.

## 7.6 Query Waste Plant Submission

### 7.6.1 Summary View Screen

The Query Waste Plant Submission summary view screen displays the summarized activities and balancing activities for each product group (i.e., oil, water, and, solid). The monthly activity totals are calculated and displayed for each product group. Only one product group displays at a time, see Figure 7.5. The summary screen is display only, and data found on it cannot be edited.

**Query Waste Plant Submission**

Facility Id: SK WP V900099    Location: 15-01-001-01 W3    Production Month: 2012-02

Name: SASK WASTE PLANT #1    Amendment #: 8

Reference Code:    Submitted: 2012-03-27 15:02

Extracted:

View: Summary

Product Group: Oil

Oil  
Water  
Solids  
Gas

Go

*WPE0004 Message: Imbalance is other than 0.0. Detail: [OIL] IMBAL = [-259.0].*

*WPE0006 Message: Imbalance is other than 0.0. Detail: [WATER] IMBAL = [415.0].*

*WPE0007 Message: Imbalance is other than 0.0. Detail: [SOLIDS] IMBAL = [12.0].*

*WPE0010 Message: Imbalance is other than 0.0. Detail: [GAS] IMBAL = [100.0].*

Balancing Activity	Volume
IMBAL	-259.0

**Product Totals: Oil**

Activity	Volume
DISP	350.0
INVOP	26.0
REC	65.0

Cancel

Figure 7.5: Query Waste Plant Submission IMBAL

The waste plant operator will see the balancing activity IMBAL within the summary view screen. These balancing activities are calculated using on the product volumes submitted (i.e., oil, water, and solid) and activities (e.g., receipts and dispositions) reported at the waste plant.

### 7.6.2 Facility Activity View Screen

The Query Waste Plant Submission: Facility Activity view screen is a read-only view that displays the detailed activity for a particular production month, see Figure 7.6.

[Monthly Reporting] > [Waste Plant]

### Query Waste Plant Submission

**Facility Id:** SK WP V900099 ... **Location:** 15-01-001-01 W3 **Production Month:** 2012-02 A V  
**Name:** SASK WASTE PLANT #1 **Amendment #:** 8 A V  
**Reference Code:** **Submitted:** 2012-03-27 15:02  
**Extracted:**

**View:** Facility Activity ▾  
**Filters:** **From/To** ALL ... **Activity** ALL ... **Waste Code** ALL ...

**Go**

From/To	Activity	Waste Code	N/D	Oil	Water	Solids	Gas
SK BT G203960	REC						100.0
SK BT B2H0056	REC	SLGHYD	N	65.0			
SK WP V100005	REC	WASTE	N		200.0	100.0	
SK CT C100008	DISP			200.0			
SK CT C200010	DISP			50.0			
SK CT C200013	DISP			100.0			
SK WL 0001726	DISP	WASTE			10.0	100.0	
	INVOP			26.0	225.0	12.0	

**Cancel**

Figure 7.6: Query Waste Plant Submission – Facility Activity View Screen

## 7.7 Waste Plant Balancing and Non-Compliance

The records within a waste plant submission for a particular waste plant facility and production month will be totaled at the activity and waste product group level. These totals are necessary to the algorithm used to verify the facilities volumetric balance. Any difference between the inputs and outputs for a waste product group is referred to as an imbalance (IMBAL). If an imbalance exists for one of the waste product groups, then the entire facility will be considered as out of balance.

### For Product Groups: Oil, Water, and Solids:

$$\text{IMBAL} = (\text{total REC} + \text{total INVOP}) - (\text{total DISP} + \text{total INVCL}) + \text{total INVADJ}$$

### For Product Group: Gas

$$\text{IMBAL} = \text{total REC} - \text{total FUEL} - \text{total FLARE} - \text{total VENT}$$

The computed IMBAL activity volumes will be compared to the established tolerance and if the IMBAL is outside the established tolerance, then an appropriate balancing message is generated.

In addition to computing the IMBAL, the total inventory adjustment INVADJ for each waste product group is compared to the absolute value of total REC plus total INVOP for a waste product group. If the INVADJ volume is greater than 10 percent of the total REC plus total INVOP volume, an error message is displayed in ER's Waste Non-compliance Report.

$$\text{INVADJ \%} = \text{abs}((\text{total INVADJ}/(\text{total REC} + \text{total INVOP})) * 100)$$

The waste plant operator will receive an on-screen notification if volumetric balancing issues exist. The waste plant operator may run the Petrinex Request Waste Plant Non-Compliance Error report for any facility for which it submits data, prior to the Volumetric Reporting Deadline; this report may be requested as frequently as necessary.

Petrinex will automatically run the Waste Plant Non-Compliance Error report on all facilities two days before and also the day of the Volumetric Reporting Deadline.

#### **7.7.1 Missing Waste Plant Submission**

The operator of a waste plant facility must submit, for each production month, the facility activity data for each active facility. The waste plant operator is also responsible to address any auto-populate pending (“P”) records for the current reporting month as well as prior production months that may have been changed due to amendments.

The operator of record for a waste plant facility for a given production month is the only operator authorized to submit data for the facility. In the case of amendments to prior periods the operator can be given authorization (from the prior operator or ER) to make submission for that facility.

##### **Commonly a facility is considered as missing a submission if:**

- If an active facility is shut-in for an entire month and the operator has failed to submit the activity SHUTIN, the facility will be considered to be missing data.
- If any pending (‘P’) activities exist, most commonly pending REC, DISP, INVOP. The facility will be considered to be missing data until either the WP operator has accepted (i.e. submitted) the pending record or until the auto-populate pending record is reversed.
- If a waste plant facility status is changed from inactive to active and the effective date of the change is backdated, and the waste plant operator fails to submit activity data for each month, beginning with the effective date to the current month.

The operator of the facility will receive appropriate notifications.

Table 7.1: Waste Plant Submission Auto Population Table

WP Activity	Auto-populated or Reported by WP	Products Allowed	From/To	Allowable Waste Code	N/D (Non-Dangerous/Dangerous)	Comment
REC	reported at WP	Oil, Water, Solids	SK (BT, CT, GS, GP, IF, PL, TM, WI)  or  AB (BT, CT, GS, GP, IF, OS, PL, TM, WI)	Any approved waste code (Table 6.3 and 6.4)	Required	The waste plant REC will auto-populate DISP volumes for all valid facilities on Petrinex (SK or AB). As of the 2013-01 production month, the REC OIL component will be auto-populated as DISP of OIL, the REC of WATER component will be auto-populated as DISP of WATER; however, the REC of SOLIDS component will auto-populate as a DISP of SAND . Prior to 2013-01 REC water and solids auto-populated as DISP of WATER. <b>NOTE: Receipts (REC) from a suspended facility are allowed to be reported.</b>
REC	reported at WP	Oil, Water, Solids	WL (generator)	Any approved waste code (Table 6.3 and 6.4)	Required	WL is a non-reporting facility type; therefore WP must enter the REC. Note: The WL generator ID must be created by the reporting WP BA.
REC	reported at WP	Oil, Water, Solids	Wells from non-reporting jurisdictions, MBWI, NDWI, NTWI, MTWI	Any approved waste code (Table 6.3 and 6.4)	Required	
REC	reported at WP	Oil, Water, Solids	SKRF, ABRF	NONOFD	Required	RF is a non-reporting facility type; therefore WP must enter REC.
REC	reported at WP	Oil, Water, Solids	SKWP, SKWP	WASTE	Required	A WP receiving (REC) from another WP may only report a waste code of WASTE.

WP Activity	Auto-populated or Reported by WP	Products Allowed	From/To	Allowable Waste Code	N/D (Non-Dangerous/Dangerous)	Comment
REC	reported at WP	Oil**, Water, Solids,	SKRO	FSHWTR, CWATER	Required	A WP may use SKRO for the receipt of surface run-off water (e.g., from rain or melted snow) generated on-site. RO is a non-reporting facility type; therefore WP must enter REC.
REC	reported at WP	Water, Solids	ABWS, SKWS, SKWT (subtype 907)	FSHWTR	Required	WS and WT are non-reporting facility types; therefore WP must enter REC.
REC	reported at WP	Water	SKWT (subtype 906)	WATER	Required	WT is a non-reporting facility type; therefore WP must enter REC.
REC	reported at WP	Not required	Must be left blank	ADDMAT	Required	If waste code is ADDMAT, the reporting WP must be subtype 701 or 702, the activity must be REC, and the “from” facility field must be left blank.
REC	reported at WP	Gas	SK (MC, CO, IN)	Must be left blank	Must be left blank	MC, CO, IN are non-reporting facility types; therefore WP must enter REC.
REC	Auto-populated for the WP	Gas	AB or SK (BT, GS, GP, MS)	Must be left blank	Required	The disposition (DISP) of Gas reported at Alberta or Saskatchewan BT, GS, GP, and MS will auto-populate to the waste plant gas receipt (REC).

WP Activity	Auto-populated or Reported by WP	Products Allowed	From/To	Allowable Waste Code	N/D (Non-Dangerous/Dangerous)	Comment
DISP	Reported at the WP	Oil, Water, Solids	SKBT	COEMUL	Must be left blank	The waste plant DISP auto-populates the battery REC. As of the 2013-01 production month, the DISP OIL component will be auto-populated as REC OIL, the DISP WATER component will be auto-populated as REC WATER; however, the DISP SOLIDS component will auto-populate as a REC SAND . Prior to 2013-01 DISP water and solids auto-populated as REC WATER.
DISP	reported at WP	Oil, Water, Solids	WL (receiver)	WASTE, WATER, FSHWTR, MNFCTR	Must be left blank	WL is a non-reporting facility type; therefore, the WP must submit the DISP. A DISP of MNFCTR, may only be made to a WL (receiver) From/To facility.
DISP	reported at WP	Water, Solids	SKIF, ABIF	WASTE, WATER, FSHWTR	Must be left blank	WP DISP auto-populates receiving facilities REC. <b><u>The Oil volume column must be left blank for a WP DISP to IF.</u></b> WP DISP of waste code WATER will auto-populate as REC of WATER, (i.e. volume of water component). WP DISP of WASTE will auto-populate as WASTE, (i.e. water volume + solids volume).
DISP	Auto-populated for the WP	Oil, Water	AB or SK (CT, TM, PL)	waste code is not auto-generated and will appear as blank	Must be left blank	The CT, TM, PL REC will auto-populate the waste plant DISP.



WP Activity	Auto-populated or Reported by WP	Products Allowed	From/To	Allowable Waste Code	N/D (Non-Dangerous/Dangerous)	Comment
DISP	Auto-populated for the WP	Oil, Water, Solids	Waste plant #2 (SKWP, ABWP)	WASTE	Must be left blank	The waste plant #2 REC will auto-populate the waste plant #1 DISP. Only waste code WASTE is allowed between WPs.

\*\*An oil volume may be reported when receipt (REC) is reported from SKRO, if the waste code is CWATER.

Table 7.2: Waste Plant Activity Type Table

Activity Code	Activity Name	Activity Description	Waste Codes Allowed	Volume Columns Allowed	Manual or auto-populate	From/To Facility Type allowed
DISP	Disposition	A WP will enter DISP to report deliveries out of the WP, for all DISP that are not auto-populated.	WASTE, WATER, FSHWTR, MNFCTR, COEMUL*	Oil, water, and solids	Manual or auto-populated activity	See Table 6.1
FLARE	Flare	The WP operator will enter FLARE to report the volume of gas flared at the WP.	Blank, none allowed	Gas	Manual activity	None allowed
FUEL	Fuel	The WP operator will enter FUEL to report the volume of gas used for fuel at the WP.	Blank, none allowed	Gas	Manual activity	None allowed
IMBAL	Imbalance	Petrinex will calculate the imbalance IMBAL volume for a WP.	Blank, none allowed	Oil, water, and solids	Auto-populate activity	None allowed
INVADJ	Inventory adjustment	The WP will enter INVADJ to report gains and losses that cannot be identified by a specific activity.	Blank, none allowed	Oil, water, and solids	Manual activity	None allowed
INVCL	Closing inventory	The WP will enter INVCL to report the volume held in inventory at the end of the production month, for oil, water, solid.	Blank, none allowed	Oil, water, and solids	Manual activity	None allowed
INVOP	Opening inventory	Petrinex will auto-populate INVOP volume for each product (e.g., oil, water, solid) using the previous month's closing inventory.	Blank, none allowed	Oil, water, and solids	Auto-populate activity	None allowed
REC	Receipt	A WP will enter REC to report waste receipts using the appropriate waste codes/reporting codes, for all REC that are not auto-populated.	Any approved waste code (Table 6.3 and 6.4)	Oil, water, solids, or gas**	Manual or auto-populated activity	See Table 6.1

Activity Code	Activity Name	Activity Description	Waste Codes Allowed	Volume Columns Allowed	Manual or auto-populate	From/To Facility Type allowed
SHUTIN	Shut-in	A WP will enter SHUTIN when a facility has no inventory and no other activity to report in a given production month.	Blank, none allowed	None allowed	Manual activity	None allowed
VENT	Vent	A WP will enter VENT to report the volume of gas vented at the WP.	Blank, none allowed	Gas	Manual activity	None allowed

\*COEMUL is only allowed when From/To is SKBT (subtype 313 and 316)

\*\*only when product= gas, the receipt will be auto-populated for the WP

While ER does not require Industry to report to the level of detail that would be attainable by use of the entire list of the waste codes, Industry must report to a level of detail consistent with the Waste Plant Approval issued by ER.

In the future, ER may deem the reporting of certain waste codes as necessary. If so, updated reporting requirements will be communicated to Industry at that time.

Table 7.3: Waste Codes and Descriptions

CODE	Descriptions
ACID	Acid Solutions (un-neutralized)
ACTCRB	Activated Carbon
ADDMAT	Additives used in WP Processing
ASBEST	Asbestos
BATT	Batteries (wet and dry cell)
BLBDWT	Boiler Blowdown Water
CATNS	Catalyst (non-sulphur)
CATSU	Catalyst (sulphur)
CAUS	Caustic Solutions (un-neutralized, spent)
CEMENT	Cement (returns dry)
COEMUL	Crude Oil/Condensate Emulsions (residuals after treatment)
CONMAT	Construction and Demolition Material
CORINH	Corrosion Inhibitor/Oxygen Scavenger Solutions
CWATER	Waters Contaminated (leachate, collected surface waters)
DESICT	Desiccant
DMDS	Dimethyl Disulphide Solutions
DOMWST	Garbage/Domestic Waste
DRWSHC	Drilling Waste Hydrocarbon
DRWSGC	Drilling Waste Gel Chemical

<b>CODE</b>	<b>Descriptions</b>
DRWSAC	Drilling Waste Advanced Gel Chemical
EMTCON	Aerosol Cans; Barrels, Pails; Crude Oil Sample Bottles; Cutting Oil Tubes; Grease Cartridges; Mud Sacks – Drilling; Paint Cans, Brushes; Pipe Dope Containers, Brushes
FILAPC	Filters - Air Pollution Control
FILFWT	Filters - Raw/Fresh Water
FILGLY	Filters Glycol
FILLUB	Filters - Lube Oil
FILMTH	Filters - Methanol
FILOTH	Filters - Other (raw/fuel gas, NGLs)
FILPWT	Filters - Produced/Process Water
FILSWT	Filters - Gas Sweetening (MEA, DEA, MDEA, sulphinol)
FILWTT	Filters (Media) - Water Treatment
FLBWSW	Filter Backwash Liquids (gas sweetening)
FLBWWT	Filter Backwash Liquids (water treatment)
FRCSND	Frac Sand - Non-Radioactive
FRFLDW	Frac Fluid (water based)
FRFLDH	Frac Fluid (hydrocarbon based)
FRFLDR	Frac Fluid Radioactive
FRMFNS	Residual formation fines after treatment and settlement
FRSDR	Frac Sand - Radioactive (plus other radioactive diagnostic materials)
GLYC	Glycol Solutions (no heavy metals)
GLYCHM	Glycol Solutions (containing lead or other heavy metals)
HSPWTR	High Solids Produced Water
HYDOIL	Hydraulic and Transmission Oil
HYDVCH	Hydrovac Material (chemical/solvents impacted)
HYDVCO	Hydrovac Material (crude oil/condensate impacted)
HYDVHM	Hydrovac Material (mercury/heavy metals impacted)
HYDVPT	Hydrovac Material (pesticide/herbicide impacted)
HYDVPW	Hydrovac Material (produced/salt water impacted)
HYDVRO	Hydrovac Material (refined fuels/oils impacted)
HYDVSU	Hydrovac Material (sulphur impacted)
HYDVEM	Hydrovac Material (emulsion impacted)
IEXLIQ	Ion Exchange Resin Regenerant Liquids
IEXRES	Ion Exchange Resin
INCASH	Incinerator Ash
INOCHM	Chemicals (inorganic)
IRNSPG	Iron Sponge
LDDOPE	Lead Based Products (pipe dope/greases)
LDTAPE	Lead Based Products (H <sub>2</sub> S sensing tape)
LUBOIL	Lubricating Oil (hydrocarbon and synthetic)
METHNL	Hydrotest Fluids - Methanol
NORM	Naturally Occurring Radioactive Materials - NORMs
OILABS	Absorbants
OILRAG	Rags

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<b>CODE</b>	<b>Descriptions</b>
ORGCHM	Chemicals (organic)
PCBBAL	Polychlorinated Biphenyls (PCBs) - Fluorescent Light Ballasts
PCBLIQ	Polychlorinated Biphenyls (PCBs) Askarel Liquids
PCBSLI	Polychlorinated Biphenyls (PCBs) - Contaminated Solids > 50 ppm < 1000 ppm
PCBSGI	Polychlorinated Biphenyls (PCBs) - Contaminated Solids > 1000 ppm
PCBSLF	Polychlorinated Biphenyls (PCBs) - Contaminated Solids < 50 ppm
PIGWST	Pigging Waste (liquid and wax)
PSTCON	Pesticide/Herbicide Containers
PSTHRB	Pesticides/Herbicides
PWTRHM	Water - Process (with heavy metals)
PWTROR	Water Process (with organic chemicals)
SALT	Salt Heat Medium
SAND	Sand - Produced
SLGCTW	Sludge - Cooling Tower
SLGEML	Sludge – Emulsion
SLGGLY	Sludge - Glycol/Gas Drying
SLGHYD	Sludge - Hydrocarbon
SLGLIM	Sludge - Lime
SLGPIT	Sludge - Flare Pit
SLGPRO	Sludge - Process
SLGSUL	Sludge - Sulphur
SLGSWT	Sludge - Gas Sweetening Systems
SMETAL	Metal (scrap)
SOILCH	Contaminated Debris and Soil (chemical/solvent)
SOILCO	Contaminated Debris and Soil (crude oil/condensate)
SOILEM	Contaminated Debris and Soil (emulsion)
SOILHM	Contaminated Debris and Soil (mercury/metals)
SOILPT	Contaminated Debris and Soil (pesticide/herbicide)
SOILPW	Contaminated Debris and Soil (produced/salt water)
SOILRO	Contaminated Debris and Soil (refined fuels/oils)
SOILSU	Contaminated Debris and Soil (sulphur)
SOLALP	Solvents/Residues (non-halogenated aliphatic)
SOLARO	Solvents/Residues (non-halogenated aromatic)
SOLHAL	Solvents/Residues (halogenated)
SWTLIQ	Sweetening Agents (liquids)
SWTSOL	Sweetening Agents (solids)
THPROT	Thread Protectors - Casing/Tubing
TRTHAY	Treater Hay
WATER	Water - Produced (including brine solutions)
WOODCT	Wood (chemically treated/cooling tower)
WPAINT	Paints
WSHORG	Wash Fluids - Organic
WSHWTR	Wash Fluids - Water
WSTCGS	Waste Compressed or Liquefied Gases

<b>CODE</b>	<b>Descriptions</b>
WSTCLQ	Waste Corrosive Liquid
WSTCSO	Waste Corrosive Solid
WSTFLQ	Waste Flammable Liquid
WSTFSD	Waste Flammable Solid
WSTMIS	Waste - Miscellaneous
WSTOLQ	Waste Oxidizing Liquid
WSTOSD	Waste Oxidizing Solid
WSTPLQ	Waste Poisonous Liquid
WSTPSD	Waste Poisonous Solid
WSTRDM	Waste Radioactive Material
WWOFLD	Well Workover Fluids

Table 7.4: Additional Waste Codes and Descriptions

<b>CODE</b>	<b>DESCRIPTION</b>
BUFFOIL	Buffer Oil used in Cavern Operations
BRKWTR	Saline Water/Brackish Water – Brackish water is not recognized in Saskatchewan and should only be used for cross-border transactions
FSHWTR	Non-Saline Water/Fresh water - TDS < 4000 ppm or water received from a fresh water source facility - WS ( subtype 905) or WT (subtypes 907)
MNFCTR	Manufacture
NONOFD	Non-Oilfield Waste
WASTE	Special waste code for a waste plant disposing to/receiving from another waste plant or injection facility.

## 7.8 Waste Location ID

Waste plant operators must report monthly transactions between their waste plant and non-ER regulated (i.e. non-reporting) facilities and locations.

Waste Locations (WL) are created by the waste plant operator to identify non-ER regulated facilities or locations within Saskatchewan, or a neighboring province/territory facility or location, which have either generated waste delivered to the waste plant or received materials from the waste plant.

A waste location ID must not be created for reporting transaction with:

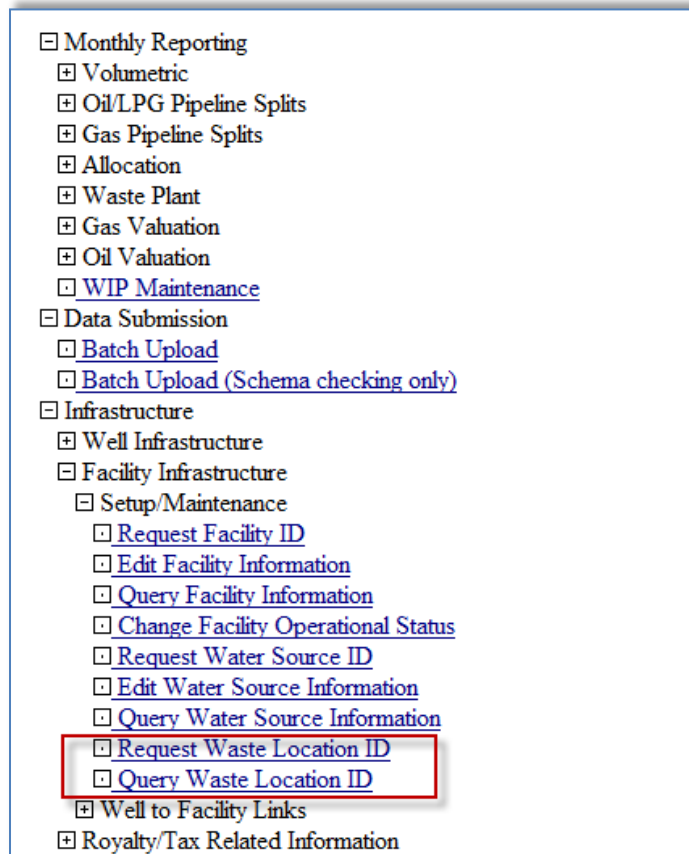
- wells from non-reporting jurisdictions (MBWI, NDWI, NTWI, or MTWI), use of the specific well ID
- a valid unlinked well (SKWI or ABWI); use the well ID
- abandoned unlinked well; use the unlinked well ID
- abandoned well linked to a facility; use of the linked facility ID
- abandoned well linked to a suspended facility; use of the suspended facility ID
- a valid SK or AB reporting facility; use the facility ID
- Suspended SK or AB reporting facility; use of the suspended facility ID
- Abandoned SK or AB reporting facility; use the abandoned facility ID

There are two types of Waste Locations:

- **Waste Location Generator IDs** are created to facilitate the reporting of waste plant receipts (REC) from non-ER regulated facilities or locations. Each Waste Location Generator ID is proprietary to the waste plant operator which set it up and will only be available to that waste plant on the facility lookup. Waste Location Generator IDs are not available to other waste plant operators.
- **Waste Location Receiver IDs** are created to facilitate the reporting of waste plant dispositions DISP to non-ER regulated facilities (such as landfills). A Waste Location Receiver ID is not proprietary to the waste plant operator that created it, and is available to all waste plant operators on the facility lookup.

### 7.8.1 Creation of Waste Location

Waste Location IDs can be created or queried on Petrinex under the Infrastructure > Facility Infrastructure > Setup/Maintenance option, see Figure 7.7.



**Figure 7.7: Request and Query Waste Location ID Screen**

The waste plant operator must enter the following information in order to create a unique Waste Location ID, see Figure 7.8. Please note all locations and address fields, for the waste location, must not be the address of a company's office.



The screenshot shows a web application interface for requesting a waste location ID. At the top, there is a navigation bar with icons for Menu, Inbox, Help, Contacts, and Logout, along with user information: BA: 01234 HOLIDAY OIL COMPANY, Name: testuser, and a Quicklist dropdown. The breadcrumb trail is [Infrastructure] > [Facility Infrastructure] > [Setup/Maintenance]. The main heading is 'Request Waste Location ID'. The form contains the following fields and options:

- Waste Location ID:** A text input field.
- Start Date:** A date picker set to 2010-01.
- End Date:** A date picker.
- Name:** A text input field.
- Description:** A dropdown menu with 'Oilfield Waste Processing Facility Waste Receiver' selected.
- Approval Number:** A text input field.
- Location/Address:** A note stating 'Location/Address is the physical location the waste is generated at or disposed to. It should not be the company head office.'
- SK Location:** A set of input fields for LE, LSD, SEC, TWP, RGE, and M, followed by a 'W' field.
- SK Alternate Location:** Checkboxes for Section, Township, and Range.
- Non SK Location:** A text input field.
- Status:** A dropdown menu set to 'Active'.
- Address:** Three stacked text input fields.
- City:** A text input field.
- Prov/State:** A dropdown menu set to 'SASKATCHEWAN'.
- Postal Code/ZIP:** A text input field with a note: '(Maximum characters for Canada - 6; USA - 9; other countries - 12.)'
- Country:** A dropdown menu set to 'CANADA'.
- Other Countries:** A text input field.
- Submit:** A button at the bottom left.

Figure 7.8: Request Waste Location ID Screen

**Name:** enter the name of the waste generator or waste receiver

**Description:** select the best descriptor of the waste generating location (e.g., gas/service station generator) or approved waste receiving location from the drop-down list. (See Table 7.6)

**Approval Number:** enter the approval number of the waste generating location, if one exists (i.e. Sask. Environment approval or registration number), or the approval number for the approved waste receiving location.

**SK Location:** enter the waste generating location or the waste receiving location. If the location of the site is within Saskatchewan the LE, LSD (legal subdivision), SEC (section), TWP (township), RGE (range) and M (meridian) must be entered.

**SK Alternate Location:** if the SK Location field has been left blank, then SK Alternate Location must also be blank.

**Non SK Location:** For non-Saskatchewan waste generating or waste receiving locations, enter the physical site location into the space provided.

**Address:** if applicable, enter the physical address of the waste generating or waste receiving location.

**City:** if applicable (i.e. if you have entered an address into the “Address” field), enter the name of the city or town in which the waste generator or waste receiver is located.

**Province/State:** enter the Canadian province/territory, or US state, in which the waste generator or waste receiver is located. Provinces/States for countries outside of Canada and the US can be entered into the “Other Countries” field.

**Postal Code/ZIP:** if applicable (i.e. you have entered an address into the “Address” field), enter the postal code of the waste generating or waste receiving location.

**Country:** select the name of the country (from the drop-down list) where the waste generating or waste receiving facility is located.

Note: To successfully obtain a Waste Location ID, the waste plant operator must enter at least one of following: SK Location, Non SK Location, or Address.

Once successfully submitted, a unique Waste Location ID is generated and available for Petrinex reporting. Petrinex will maintain the Waste Location IDs created for use in future month submissions.

Table 7.6: Waste Location Description List

Waste Location (Generator Type)	Waste Location (Receiver Type)
Car Wash Sump Waste Generator	Biodegradable Facility Waste Receiver <sup>1</sup>
Exploration and Production Waste Generator	Cavern Waste Receiver <sup>2</sup>
Gas/Service Station Waste Generator	Disposal Well Waste Receiver <sup>3</sup>
Industrial/Commerical Waste Generator	Landfill Waste Receiver <sup>4</sup>
Landfill Waste Generator	Manufacture Waste Receiver
Manufacture Waste Generator	Oilfield Waste Processing Facility Waste Receiver <sup>5</sup>
Oil/Gas Service Company Waste Generator	Recycling Facility Waste Receiver
Oilfield Waste Processing Facility Generator	Refinery Waste Receiver <sup>6</sup>
Recycling Facility Waste Generator	Storage Facility Waste Receiver
Refinery Waste Generator	Thermal Treatment Waste Receiver
Storage Facility Waste Generator	Transfer Station Waste Receiver
Tank/Truck Wash Waste Generator	Used Oil Recycler Waste Receiver
Transfer Station Waste Generator	
Used Oil Recycler Waste Generator	
Utility Waste Generator	

<sup>1</sup> out of province; or non-ER regulated facilities in SK or AB

<sup>2</sup> out of province caverns only; in SK or AB use Petrinex Codes

<sup>3</sup> out of province only, non SK or AB disposal wells

<sup>4</sup> out of province or non-ER regulated facilities in SK or AB

<sup>5</sup> out of province or non-ER regulated facilities in SK or AB

## 7.9 Oilfield Waste Cavern Reporting Requirements

Oilfield waste caverns have surface infrastructures that are used to receive and prepare or slurry the waste for injection into the cavern, as well as to receive materials coming out of the cavern (e.g., displaced brine or recovered oil). Reporting for surface facilities associated with a cavern must follow the process flow as approved for the waste plant. In addition, transfer of all materials between the surface infrastructures and associated caverns must be reported as receipts or dispositions, as appropriate.

- 1) The surface infrastructure, which is typically approved as a waste processing facility, as well as each cavern receiving waste from the surface infrastructure must have an appropriate reporting waste plant facility ID, and each must submit a monthly Waste Plant Submission.
- 2) All transfers of materials between the surface infrastructure (Surface Waste Facility with associated facility subtype 701) and associated caverns (Cavern Waste Facility with associated facility subtype 702) must be documented as receipts or dispositions (as appropriate) based on the actual operations at the waste processing facility. This includes documenting the transfer of cavern brine between the surface infrastructure and cavern.
- 3) The reporting must reflect that the oil recovered from the cavern was received (REC) at the surface infrastructure and then subsequently delivered (DISP) from the surface infrastructure to a downstream receiving facility.

- 4) The closing inventory for a cavern must cumulatively account for the solids it receives. The lifetime of a cavern, pending operational problems, is often concluded when the volume of accumulated solids approaches the capacity of the cavern.
- 5) For receipts of waste at the surface infrastructure (i.e. waste plant subtype 701) from the cavern (waste plant subtype 702):
  - a) If the received waste contains free liquids, approval holders must verify the oil, water, and solids components, through sampling or an alternative method accepted in writing by ER.
  - b) If the received waste consists of solids and no free liquids, the oil, water, and solids components do not have to be determined, and the receipt volume may be recorded as 100 percent solids.
  - c) If the surface infrastructure (waste plant subtype 701) does not report the receipt of wastes containing oil, the recovery of oil from caverns will be questioned by ER.

The cavern's opening inventory volume of water, solids (if any), and oil (if any) will be auto-populated from the closing inventories reported in the previous month.

Following a cavern measurement event (e.g., sonar survey), the remaining cavern volume must be assessed. Within three months of the measurement event, appropriate adjustments must be made to the Waste Plant Submission to reflect cavern volumes of oil, water, and solids.

## **8. Saskatchewan Pipeline Splits and Oil Valuation**

### **8.1 Introduction**

Industry must submit monthly pipeline split and oil valuation information by the appropriate deadline. The pipeline split deadline is referred to as the Pipeline Split Reporting Deadline and occurs on the same date as the Volumetric Reporting Deadline. The oil valuation deadline is referred to as the Valuation Reporting Deadline.

Note: The Pipeline Split Reporting Deadline for the submission of pipeline split data to Petrinex for use in Saskatchewan's oil valuation process is separate and distinct from the Oil/LPG Pipeline Split Industry Deadline for industry-to-industry reporting to pipeline operators.

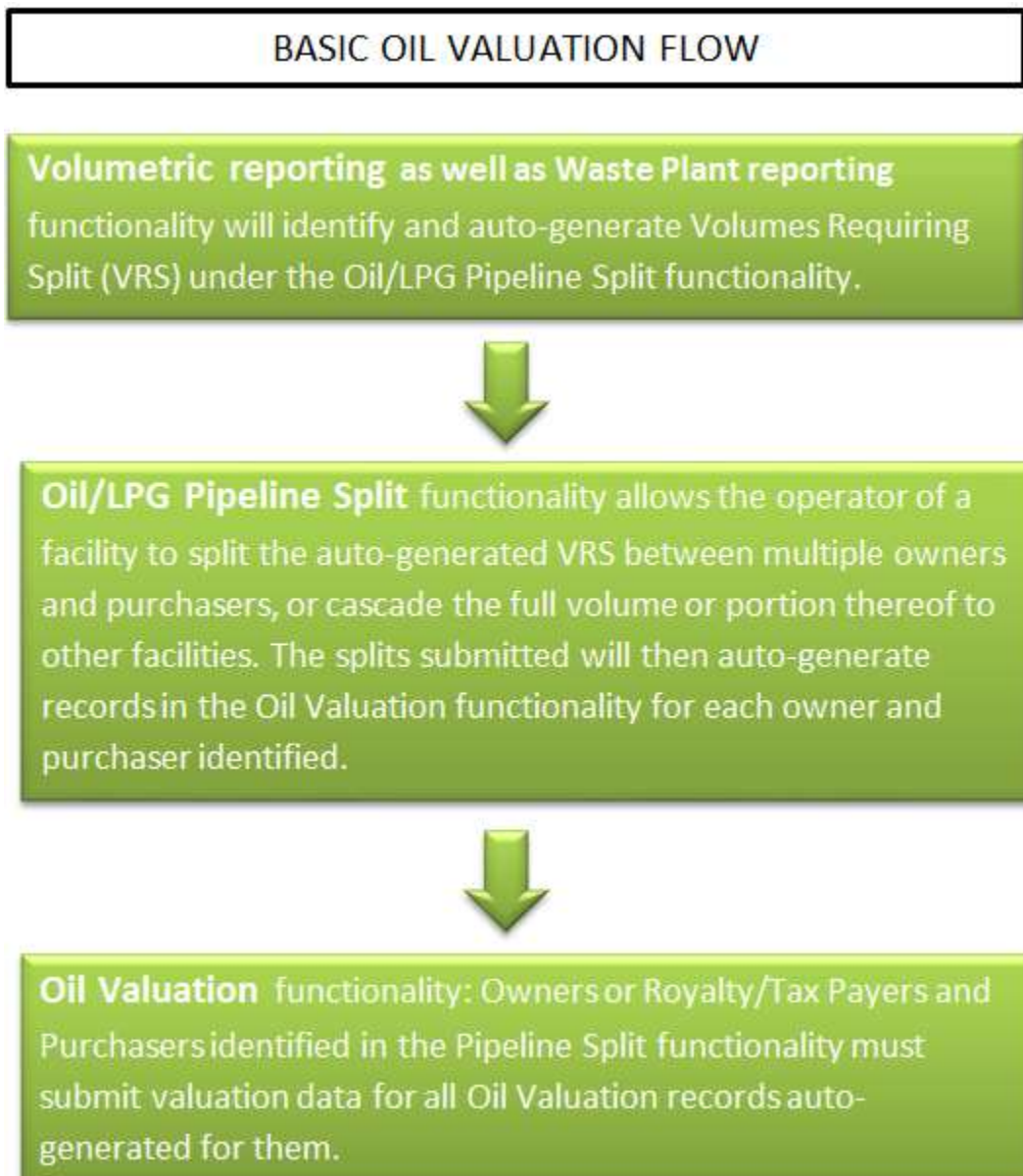
Oil sales details are used to determine the well-head value of the royalty/tax share of oil produced from each well or unit. To facilitate the valuation of crude oil for purposes of calculating Crown Royalty and Freehold Production Tax owing on crude oil or condensate produced from Saskatchewan wells and units, each Royalty/Tax Payer (RTP) must submit to the minister, through Petrinex, the following details of their oil or condensate sales on or before the Valuation Reporting Deadline:

- deliveries and sales, including deliveries and sales occurring outside of Saskatchewan;
- the BA ID of the purchaser;
- the custody transfer point;
- allowable trucking expenses;
- the volume sold; and
- the sales price and value of sales.

Purchaser details are used to validate the sales details submitted by the Royalty/Tax Payer. Every person who purchases oil or condensate produced in Saskatchewan pursuant to an arm's-length agreement for the purchase of that oil or condensate, at or upstream of a custody transfer point specified by ER, must submit the following details of their purchases to the minister, through Petrinex, on or before the Valuation Reporting Deadline:

- the volume, price and value of the purchase;
- the facility that delivered the oil or condensate;
- the facility that received the oil or condensate;
- the BA ID of the owner or Royalty/Tax payer;
- the custody transfer point;
- the density and sulphur content of the oil or condensate; and
- any other information that the minister may require.

The process for the submission of oil valuation data to ER utilizes an integration of Petrinex’s Volumetric reporting functionality with Petrinex’s Pipeline Split and Oil Valuation functionality (see Figure 8.1). Specific receipts or deliveries of oil through Volumetric reporting identifies a Volume Requiring Split (VRS) and triggers a requirement for Pipeline Split submission. Subsequent submission of the required Pipeline Split then triggers a requirement for submission of Oil Valuation data.



**Figure 8.1: Basic Oil Valuation Flow**

## 8.2 Saskatchewan Oil/LPG Pipeline Split Functionality

Since pipeline splits are an integral part of the Saskatchewan Oil Valuation process, facility operators must submit pipeline split information to ER, through Petrinex, on or before the Pipeline Split Reporting Deadline.

For Saskatchewan reporting, only particular activities reported at or to valid Saskatchewan Custody Transfer Points (CTPs) in Volumetric or Waste Plant functionality, will automatically generate a Volume Requiring Split (VRS) (see Table 8.1). A VRS identifies the total volume that must be responded to with respect to oil valuation. The initial VRS is always auto-generated for the facility that has delivered to the CTP. The facility operator must respond to the VRS and submit a pipeline split for oil valuation purposes (see Table 8.2). To fully identify owners or Royalty/Tax Payers and purchasers of specific oil volumes, pipeline split submissions at upstream facilities ('cascaded to' facilities) is typically required.

A VRS is auto-generated only in situations when particular volumetric activities, associated with the product of oil, are reported at or to a valid Saskatchewan CTP.

Table 8.1: Volume Requiring Split Generation

VRS Generated by a reported:	Valid Saskatchewan CTP	Notes & Exceptions
REC at	Terminal (TM)	No VRS is generated for: TM to TM; TM to PL and TM to WP
REC at	Pipeline (PL)	No VRS is generated for: PL to TM; PL to PL and PL to WP
REC at	Waste Plant (WP)	No VRS is generated for: any deliveries between WP (subtype 701) and WP (subtype 702)
PURREC at	Battery (BT)	PURREC and PURDISP should only be used for load oil volumes that have been purchased or sold respectively.
PURDISP to	Well (WI)	
DISP to	SK miscellaneous nodes	SK GE, SK IN, SK CO, SK RE, SK RM, SK RO, SK WC, SK WM, SK MC
DISP to	Any out of province facility	AB, MB, ND, etc.
DISP to	Refinery (RF)	

Table 8.2: VRS, Pipeline Split and Oil Valuation Relationships

Volume Requiring Split Created			Pipeline Splits		Oil Valuation Auto-Generation		
Activity	Receiving Facility	Yes or No	Owner ID Required	Purchaser ID Required	RTP	Purchaser	Comment
OIL REC at	SK TM, SK PL, SKWP	Yes	Yes	Yes	Yes for 1 <sup>st</sup> POS  No for 2 <sup>nd</sup> POS	Yes, but only where the purchaser is not the same as or related to the owner	No VRS is generated for: TM to TM; TM to PL and TM to WP
							No VRS is generated for: PL to TM; PL to PL and PL to WP
							No VRS is generated for: any deliveries between WP (subtype 701) and WP (subtype 702)
OIL DISP to	Non-Petrinex Out of Province	Yes	Yes	Yes	Yes for 1 <sup>st</sup> POS  No for 2 <sup>nd</sup> POS	Yes, but only for 1 <sup>st</sup> POS where the purchaser is not the same as or related to the owner	OOP – out of province facility including those in Alberta
	SK MC, SK RF, SK RM	Yes	Yes	Yes	Yes for 1 <sup>st</sup> POS  No for 2 <sup>nd</sup> POS	Yes, but only for 1 <sup>st</sup> POS where the purchaser is not the same as or related to the owner	
OIL PURDISP	SK WI	Yes	Yes	Yes	Yes for 1 <sup>st</sup> POS  No for 2 <sup>nd</sup> POS	No	LOAD OIL delivered to a well, and the load oil was sold to the operator of the well
OIL PURREC	SK BT	Yes	Yes	Yes	Yes for 1 <sup>st</sup> POS  No for 2 <sup>nd</sup> POS	Yes	LOAD OIL received at a BT, and was purchased by the operator of the BT

### 8.2.1 Editing a Pipeline Split

The operator of a facility is the only BA with the ability to submit a pipeline split for the facility. Selecting the “Edit Oil/LPG Shipper/Owner Pipeline Split” option from the menu will take the user to the “Edit Shipper/Owner Pipeline Split” screen (see Figure 8.2 and Figure 8.3).



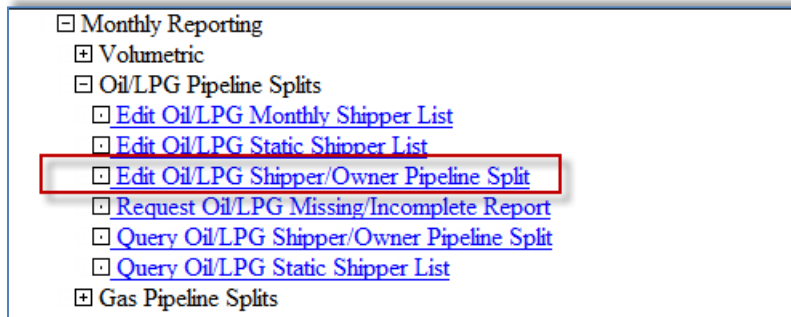


Figure 8.2: Oil/LPG Pipeline Splits Menu

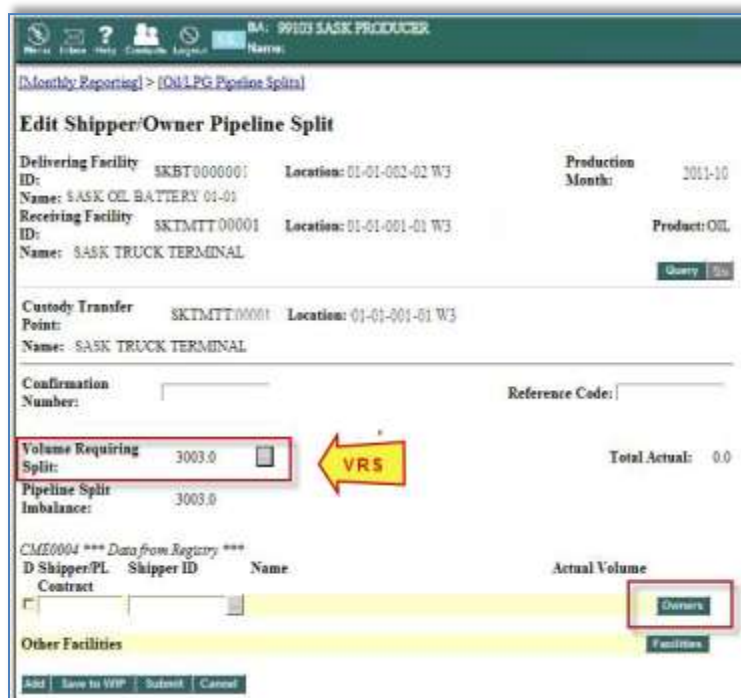


Figure 8.3: Edit Shipper/Owner Pipeline Split Screen

To access the pipeline split for a particular VRS, Petrinex requires that the operator of the facility must enter a Pipeline Split ID, which is three facility IDs, namely:

**Delivering Facility ID:** the facility to which the VRS belongs (i.e. the reporting facility);

**Receiving Facility ID:** the facility that received the oil;

**CTP ID:** the facility where the purchaser takes custody of the product (which may be the same as the Receiving Facility ID). The CTP facility must be a valid Saskatchewan CTP as per Table 8.1.

Selecting the “Owners” button on the “Edit Shipper/Owner Pipeline Split” screen (see Figure 8.3) will open the “Edit Pipeline Split by Owner” screen (see Figure 8.4) where the operator of the facility must identify split volumes by Owner ID (i.e. BA ID), Purchaser ID (i.e. BA ID), and Actual Volume. If applicable the facility operator must also submit information for Owner Contract, Stream ID, RTIK flag and First POS flag.

**Edit Pipeline Split by Owner**

Delivering Facility ID: SKBTB 0000001 Location: 01-01-002-01 W3 Production Month: 2011-11  
 Name: SASK OIL BATTERY 01-01  
 Receiving Facility ID: SKTMTT00001 Location: 01-01-001-01 W3 Product: OIL  
 Name: SASK TRUCK TERMINAL

Custody Transfer Point: SKTMTT 00001 Location: 01-01-001-01 W3  
 Name: SASK TRUCK TERMINAL

Shipper P/L Contract: Shipper ID: 00086 Shipper Name: HUSKY OIL OPERATIONS LIMITED

CME0005 Saved to WIP Successfully

D Owner Contract	Owner ID	Owner Name	Purchaser ID	Purchaser Name	RTIK	First POS	Stream ID	Actual Volume
<input type="checkbox"/>	99702	SASK OIL CO	00001	SASK TRUCK TERMINAL CO	<input type="checkbox"/>	<input checked="" type="checkbox"/>		2002.0
<input type="checkbox"/>	99703	SASK PRODUCER	00001	SASK TRUCK TERMINAL CO	<input type="checkbox"/>	<input checked="" type="checkbox"/>		1001.0

Total: 3003.0

Buttons: Add, Save to WIP, OK

**Figure 8.4: Edit Pipeline Split by Owner Screen**

**Owner ID:** The operator must identify the owner of the oil, using the owner’s BA ID, which is typically the Royalty/Tax Payer BA ID.

**Purchaser ID:** The operator must identify the purchaser of the oil, using the Purchaser’s BA ID. In cases where the purchaser BA ID is the same as the owner BA ID, or the purchaser BA ID has been identified as a related BA with respect to the owner, it will act as the trigger for an Enhanced Valuation Audit Program (EVAP) declaration (see *Directive PNG075* for further information on EVAP submission requirements).

**Actual Volume (m<sup>3</sup>):** The operator must identify the volume that the owner or Royalty/Tax Payer sold to the Purchaser.

**Owner Contract:** The operator must use this field to make multiple records unique within a pipeline split, if the records would otherwise be identical. The owner and purchaser(s) of the relevant volumes must agree on common identifier.

**IMPORTANT:**

For all pipeline split submissions, BAs must only use the 'Owner Contract' field in cases where separate volumes of oil were sold to a single purchaser at differing prices, and therefore, multiple oil valuation entries are required. BAs must not combine the transactions to report an average price. In cases where the 'Owner Contract' field is needed, it is suggested that, the 'Owner Contract' field for the lowest priced transaction should be left blank, the next highest priced transaction should be assigned a "2", and the next highest priced a "3" etc.

**Stream ID:** If the volumes reported are from a unit, the operator must enter the Unit ID into the Stream ID field. If the volumes are not from a unit, the operator must NOT enter information into this field.

**Royalty Take-in-Kind (RTIK) Flag:** The operator must use the RTIK flag when a royalty payment is made to an entity, typically a freehold mineral owner, and that royalty payment is paid out in oil rather than as a cash payment. The operator must identify the volumes as RTIK by ensuring the RTIK flag is selected (i.e. checked). When the RTIK flag is checked, the associated volumes will not auto-generate a Royalty/Tax Payer Oil Valuation record.

**IMPORTANT:**

The RTIK box is not for identifying working interest owner (WIO) or Royalty/Tax Payer volumes.

**First Point of Sale (POS) Flag:** If the volume sold has been produced from the facility for which the pipeline split is being submitted, the facility operator must ensure that the First POS flag is selected (i.e. checked). If the facility operator has sold an oil volume that is an aggregate of the operator's production (from that facility) and oil purchased from another BA, then the volume must be reported in separate entries to differentiate First POS oil (flag is checked) from previously purchased oil (flag is un-checked).

**If the First POS flag is checked (it is, by default, checked)** an Oil Valuation Royalty/Tax Payer record is automatically created; and an Oil Valuation Purchaser record is also automatically created, unless the submitted purchaser BA ID is the same as the submitted owner BA ID or the submitted purchaser ID has been identified as a related BA with respect to the owner BA ID (please refer to the *Directive PNG075* for a more complete description of EVAP functionality in Petrinex).

**If the First POS flag is un-checked** an Oil Valuation Royalty/Tax Payer record is NOT created. The volume associated with the un-checked portion of the pipeline split will be added (i.e. rolled-up) to the identified purchaser's auto-generated 'Petrinex Volume' found in their Oil Valuation Purchaser record. Un-checking the First POS flag, where appropriate (i.e. sale of aggregate volumes), ensures the related Oil Valuation Purchaser record will contain data that is reflective of the actual volume purchased.

Commencing the May 2014 production month, changes were made to Saskatchewan Pipeline Split functionality, specifically to the First Point of Sale (POS) flag. This change was made to facilitate appropriate reporting in circumstances where a volume of oil is sold at least once (independently or as part of an aggregate volume) prior to being sold again at a valid CTP.

Volumes associated with records for which the First POS flag is un-checked (i.e. previously purchased volumes) will no longer be used in balancing the VRS at the reporting facility. This allows previously purchased volumes to be reported in the “Edit Pipeline Split by Owner” section as well as cascaded in the “Edit Cascade to Other Facilities” section.

The identification of previously purchased volume (i.e. un-checking the First POS flag), in the “Edit Pipeline Split by Owner” section, will ensure that the purchaser’s oil valuation record will be auto-populated with the appropriate total volume purchased.

### 8.2.2 Appropriate Usage of the First Point of Sale (POS) Flag

**Case #1:** In cases where volumes being sold for the first time are aggregated with volumes that have been purchased previously, and the aggregate is sold at or upstream of a valid CTP, the operator of the reporting facility must submit an oil pipeline split that includes:

- an entry for which the First POS flag remains checked for the portion of the volume that is sold for the first time (i.e. the volume produced at the reporting facility).
- an entry for which the First POS flag is un-checked for the portion of the volume that had been purchased from another BA, and included in the aggregate sales volume.
- a cascade(s) in which the volume(s) cascaded is equivalent to the volume for which the First POS box is un-checked.
- See Example #1, Appendix 6.

**Case #2:** In situations where a RTP partner does not market their own portion of oil and the facility operator (who is also a RTP) is doing so on the RTP partner's behalf. For reporting purposes, the facility operator will be considered the purchaser of the RTP partner’s oil. As a consequence, the facility operator must submit an oil pipeline split that includes:

- an entry for which the First POS flag remains checked for the facility operator's portion of the volume that is being sold.
- an entry for which the First POS flag is un-checked for the portion of the volume that was sold on behalf of (i.e. purchased from) the RTP partner.
- an entry for which the First POS flag remains checked for the portion “purchased” by the facility operator from the RTP partner, that identifies the facility operator as the purchaser and the RTP partner as the owner.
- See Example #2, Appendix 6.

For clarification, this type of reporting (as shown in case #2) is required when the facility operator and partner are both Royalty/Tax Payers in the same well or facility.

### 8.2.3 Cascading Volume Requiring Split (VRS) to Other Facilities in Saskatchewan

For Saskatchewan pipeline splits functionality, a VRS volume may be “split” or cascaded. When owners and purchasers have been named for a VRS volume, then this volume can be considered as “split”. When the VRS volume has been transferred to another facility, then this volume has been cascaded. In any pipeline split submission, all or a portion of the VRS volume may be “split” and all or a portion may be cascaded; however, all of the VRS must be addressed.

**When to split and when to cascade:**

- Produced Volumes: Any portion of a VRS that has been produced at a facility must be split at that facility.
- Received Volumes: Any portion of a VRS that has been received from upstream facilities, at the reporting facility, but not purchased by the operator of the reporting facility, must be cascaded.
- Received Volumes that have been Purchased: Any portion of a VRS that has been received from upstream facilities, at the reporting facility, and purchased by the operator for re-sale, must be identified in the “Edit Pipeline Split by Owner” section (i.e. un-check the First POS flag) and also cascaded.

**How to Cascade:**

To cascade a VRS volume (or portion thereof) to upstream facilities, use the ‘Facilities’ button, on the “Edit Shipper/Owner Pipeline Split” screen. This will open the “Edit Cascade to Other Facilities” screen (see Figure 8.5). To cascade a volume, enter the facility ID of the facility that is to be cascaded to and the volume that is to be cascaded, then select the “OK” button.

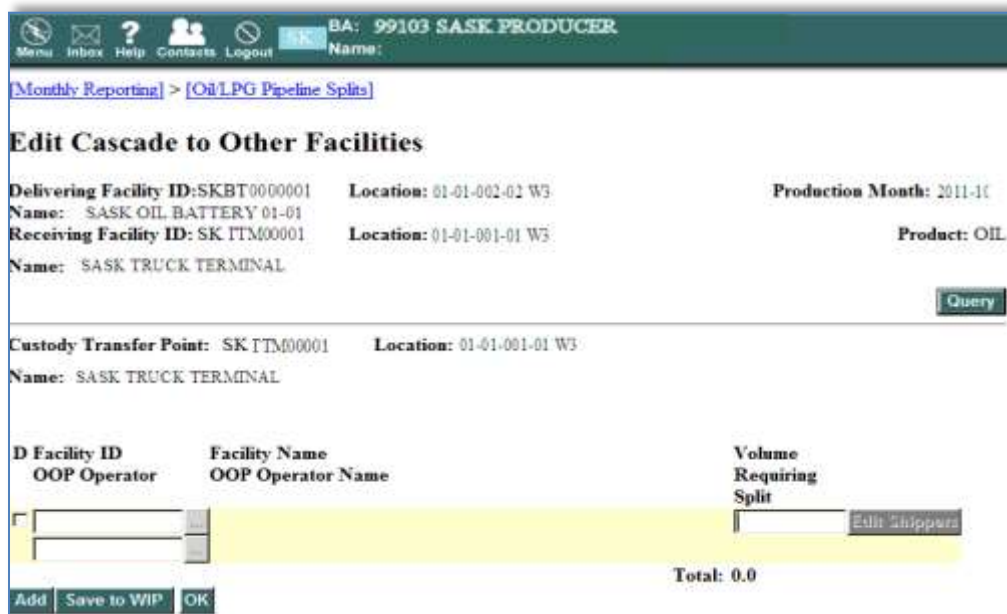


Figure 8.5: Edit Cascade to Other Facilities screen

The Pipeline Split ID for the cascaded VRS record will always have a CTP equal to the original. The CTP facility does not change when the cascade is recorded; only the delivering and receiving facility ID's change.

A notification will be sent to the operator of the 'cascade to' facility, through email and the Petrinex Inbox, identifying that there is a pipeline split cascade that requires a response. An operator may submit a required pipeline split without this notification. Petrinex will accept a pipeline split submission from a facility even if the downstream facility has not yet reported the cascade. When the cascade is recorded, Petrinex will be able to match the records based upon the three facility IDs used to identify the pipeline split submissions.

#### **8.2.4 Cascading Volume Requiring Split (VRS) to Facilities Outside Saskatchewan**

Saskatchewan facility operators which receive oil or condensate volumes from an out-of-province (OOP) facility must submit the OOP facility ID as the 'cascade to' facility and must also specify that OOP operator's Saskatchewan BA ID.

While oil valuation will not result, the operator of the OOP facility identified must respond to the VRS and make a pipeline split submission. If the split is not submitted, in some instances, the volume reported by the purchaser will not match the "Petrinex Volume" that is auto-populated to the Oil Valuation Purchaser record; thus, causing the generation of oil valuation errors.

#### **8.2.5 Special Situations**

- Injection facilities that deliver out recovered crude oil (skim oil) must not cascade those volumes to upstream facilities. Owners and purchasers must be named for the entire VRS in the injection facility's pipeline split submission.

### **8.3 Saskatchewan Oil Valuation**

There are two different oil valuation reporting processes which are dependent upon how the oil has been marketed.

- 1) Standard Oil Valuation (i.e. Non- EVAP) Reporting
  - In situations where the crude oil production has been sold at arm's-length and does not fall within the definition of an EVAP transaction, both the Royalty/Tax Payer and the Purchaser of the oil must submit details of the transaction.
- 2) Enhanced Valuation Audit Program (EVAP) Reporting
  - Effective with the August 2013 production month, only the Royalty/Tax Payer is required to submit transaction details for EVAP applicable transactions (see *Directive PNG075* for the definition of EVAP applicable transactions).

**Note:** arm’s-length agreement means a transaction or agreement between persons that are not related persons. Related persons are determined in accordance with section 256 of *the Income Tax Act* (Canada).

### 8.3.1 Standard Oil Valuation Reporting (i.e. Non-EVAP)

Standard oil valuation reporting refers to the sales information that must be submitted by the Royalty/Tax Payers and Purchasers of Saskatchewan oil. Petrinex has functionality to edit or query oil valuation submissions for the Royalty/Tax Payer and purchaser (see Figure 8.6).



**Figure 8.6: Monthly Reporting – Oil Valuation Menu**

For Saskatchewan reporting purposes, there are two oil valuation functions that enable the reporting of standard (i.e. non-EVAP) crude oil sales data:

- Oil Valuation – Royalty/Tax Payer (submission of oil price data used for purposes of royalty or tax calculation).
- Oil Valuation – Purchaser (submission of oil price data used to validate the Royalty/Tax Payer reported price in situations where the purchaser buys crude oil at arm’s-length and the transaction is not considered part of EVAP).

#### 8.3.1.1 Submission by the Royalty/Tax Payer (Standard Oil Valuation Transactions)

Crude oil Royalty/Tax Payers identified through the Pipeline Split functionality must submit the details of their sales to the minister, through Petrinex, on or before the Valuation Reporting Deadline. These details will be submitted as an Oil Valuation – Royalty/Tax Payer (OVRTP) record.

The OVRTP record is auto-generated immediately from a pipeline split submission. Additionally, some fields are auto-populated immediately with data from the pipeline split submission, and those fields are the following (see Figure 8.7):

- Delivering Unit/Facility ID and Name (i.e. the facility that submitted the pipeline split)
- Receiving Facility ID
- Custody Transfer Point
- Purchaser ID and Name
- Contract Number (only if auto-populated from the related pipeline split submission)
- Sales Volume (m<sup>3</sup>)

The OVRTP record will be viewed, by the Royalty/Tax Payer, as a pending record (identified with a red 'P') until it is submitted by the Royalty/Tax Payer. When an amendment is submitted in Pipeline Split functionality, whether for the current month or a prior production month, the changes will be seen by the Royalty/Tax Payer as a pending record. The Royalty/Tax Payer must address pending records by the Valuation Reporting Deadline.

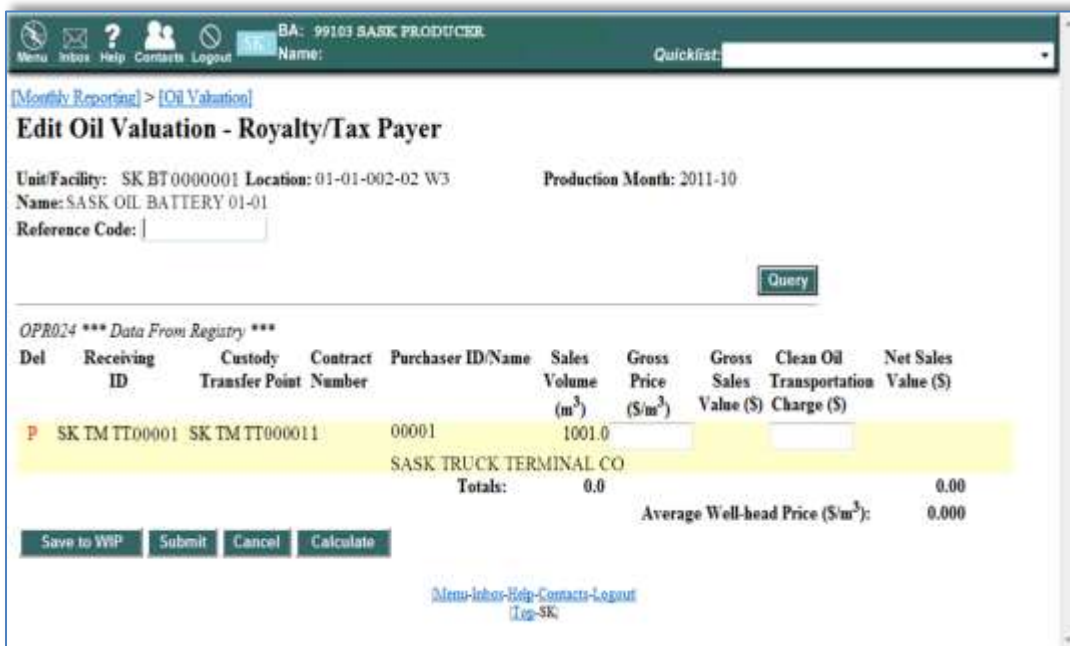


Figure 8.7: Edit Oil Valuation – Royalty/Tax Payer screen



The Royalty/Tax Payer must submit the following information to the minister, through Petrinex:

- **Sales price (\$/m<sup>3</sup>)** (formerly Gross Price): for the purposes of Saskatchewan oil valuation reporting, the sales price is considered as the base price typically found in the first arm's-length purchase agreement, net any of the applicable allowable adjustments, charged at arm's-length directly to the Royalty/Tax Payer by the Purchaser, in accordance with the purchase agreement.
  - **IMPORTANT:** For more information on allowable adjustments, please see the most current version of the *PR-IC09 Well-head Value of Crude Oil for Royalty/Tax Purposes*.
  - To clarify, only the allowable adjustments listed in the *PR-IC09*, that are specified in the arm's-length purchase agreement and charged directly to the Royalty/Tax Payer, in accordance with the purchase agreement, may be used in the determination of sales price that is to be reported in Petrinex.
  - Sediment and water penalties must not be included in the determination of sales price.
  - If multiple sales were made to the same purchaser in a given month and different prices were received by the Royalty/Tax Payer, the sales price reported to ER must not be an average price.
- **Trucking Expenses (\$)** (formerly Clean Oil Transportation Charges): for the purposes of Saskatchewan oil valuation reporting, the allowable trucking expenses are considered as trucking expenses actually incurred by the Royalty/Tax Payer in transporting oil to the delivery point specified in an arm's-length agreement.
  - **IMPORTANT:** For more information on allowable trucking expenses, please see the most current version of the *PR-IC09 Well-head Value of Crude Oil for Royalty/Tax Purposes*.

#### 8.3.1.2 Submission by the Purchaser (Standard Oil Valuation Transactions)

Crude oil purchasers identified through the Pipeline Split functionality must submit the details of their purchases to the minister, through Petrinex, on or before the Valuation Reporting Deadline. Purchasers must submit details of their purchases even in cases where a pipeline split, that would have created the requirement to submit oil valuation details, is missing (i.e. has not been submitted). These details will be submitted as an Oil Valuation – Purchaser (OV Purchaser) record. Purchaser information is used by ER to verify the sales volumes and prices entered by the Royalty/Tax Payer.

The OV Purchaser record is auto-generated immediately from a pipeline split submission. Additionally, some fields are auto-populated immediately with data from the pipeline split submission, and those fields are the following (see Figure 8.8):

- Source Producer ID and Name (i.e. the Royalty/Tax Payer)
- Delivering Facility ID
- Receiving Facility ID
- Custody Transfer Point
- Contract # (only if auto-populated from the related pipeline split submission)
- Petrinex Volume (m<sup>3</sup>) (this is equivalent to the RTP's Sales Volume)

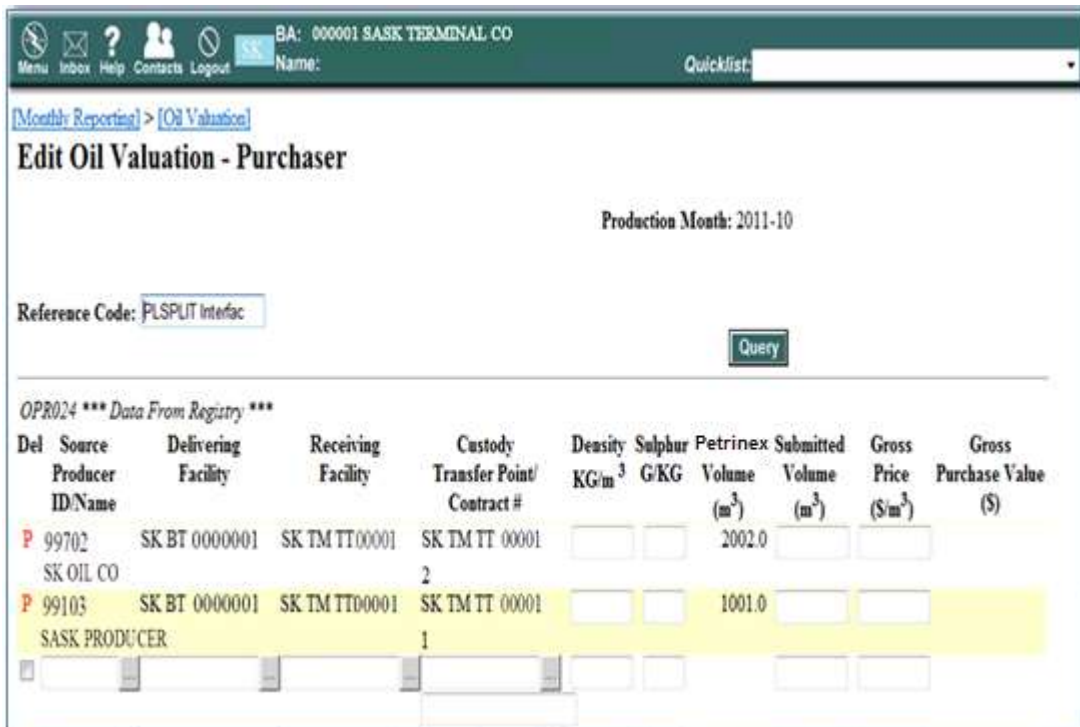


Figure 8.8: Edit Oil Valuation – Purchaser screen

The Purchaser must submit the following information to the minister, through Petrinex:

- **Density (KG/m<sup>3</sup>):** the density of the oil purchased from the owner or Royalty/Tax Payer.
- **Sulphur (G/KG):** the sulphur content of the oil purchased from the owner or Royalty/Tax Payer.
- **Volume (m<sup>3</sup>):** the volume of oil purchased from the owner or Royalty/Tax Payer.

- **Sales price (\$/m3)** (formerly Gross Price): for the purposes of Saskatchewan oil valuation reporting, the sales price is considered as the base price typically found in the first arm's-length purchase agreement, net any of the applicable allowable adjustments, charged at arm's-length directly to the Royalty/Tax Payer by the Purchaser, in accordance with the purchase agreement.
  - **IMPORTANT:** For more information on allowable adjustments, please see the most current version of the *PR-IC09 Well-head Value of Crude Oil for Royalty/Tax Purposes*.
  - To clarify, only the allowable adjustments listed in the *PR-IC09*, that are specified in the arm's-length purchase agreement and charged directly to the Royalty/Tax Payer, in accordance with the purchase agreement, may be used in the determination of sales price that is to be reported in Petrinex.
  - Sediment and water penalties must not be included in the determination of sales price.
  - If multiple sales were made to the same purchaser in a given month and different prices were received by the Royalty/Tax Payer, the sales price reported to ER must not be an average price.

Purchasers can submit oil valuation records to Petrinex prior to the auto-generation of purchaser records from pipeline split submissions. When generated, each auto-generated purchaser record will be aligned and merged with the existing purchaser records, if already submitted. If the records cannot be aligned, they will not merge and will exist as separate purchaser records.

An OV Purchaser record will be viewed, by the purchaser, as a pending record (identified with a red 'P') until it is submitted by the purchaser. When an amendment is submitted in Pipeline Split functionality, whether for the current month or a prior production month, the changes will be seen by the purchaser as a pending record. The purchaser must address pending records by the Valuation Reporting Deadline.

**IMPORTANT:** If a Purchaser is confident that their purchase is for first arm's-length oil (i.e. the oil being purchased does not meet the requirements for EVAP declaration), then the purchaser must submit a corresponding Oil Valuation Purchase record to Petrinex, even if the purchaser record has not been auto-generated from a pipeline split submission.

### 8.3.2 EVAP Oil Valuation Reporting

EVAP oil valuation reporting refers to the sales (pricing, quality and transportation costs) information that must be submitted by the Royalty/Tax Payers of Saskatchewan oil. Petrinex has functionality to edit or query oil valuation submissions for the Royalty/Tax Payer and purchaser (see Figure 8.6).

For Saskatchewan reporting purposes, there is one oil valuation function that enables the reporting of EVAP crude oil sales data:

- Oil Valuation – Royalty/Tax Payer (submission of oil price data used for purposes of royalty or tax calculation).

Note: Oil Valuation Purchaser submissions are not required for EVAP transactions.

### 8.3.2.1 Submission by the Royalty/Tax Payer (EVAP Transactions)

Crude oil owners or Royalty/Tax Payers identified through Pipeline Split functionality, for EVAP transactions, must submit the details of their sales to the minister, through Petrinex, on or before the Valuation Reporting Deadline. These details will be submitted as an Oil Valuation – Royalty/Tax Payer (OVRTP) record.

The OVRTP record is auto-generated immediately from a pipeline split submission. Additionally, some fields are auto-populated immediately with data from pipeline split submission, and those fields are the following (see Figure 8.7):

- Delivering Unit/Facility ID and Name (i.e. the facility that submitted the pipeline split)
- Receiving Facility ID
- Custody Transfer Point
- Purchaser ID and Name
- Contract Number (only if auto-populated by the related pipeline split submission)
- Sales Volume (m<sup>3</sup>)

The OVRTP record will be viewed as a pending record (marked with a red 'P') until it is submitted by the Royalty/Tax Payer. When an amendment is submitted in Pipeline Split functionality, whether for the current month or a prior production month, the changes will be seen by the RTP as a pending record. The Royalty/Tax Payer must address pending records by the Valuation Reporting Deadline.

The Royalty/Tax Payer must submit the following information to the minister, through Petrinex:

- **Sales price (\$/m<sup>3</sup>)** (formerly Gross Price): for the purposes of Saskatchewan oil valuation reporting, the sales price is considered as the base price typically found in the first arm's-length purchase agreement, net any of the applicable allowable adjustments, charged at arm's-length directly to the Royalty/Tax Payer by the Purchaser, in accordance with the purchase agreement.
- **IMPORTANT:** For more information on allowable adjustments, please see the most current version of the *PR-IC09 Well-head Value of Crude Oil for Royalty/Tax Purposes*.

- To clarify, only the allowable adjustments listed in the *PR-IC09*, that are specified in the arm's-length purchase agreement and charged directly to the Royalty/Tax Payer, in accordance with the purchase agreement, may be used in the determination of sales price that is to be reported in Petrinex.
- Sediment and water penalties must not be included in the determination of sales price.
- If multiple sales were made to the same purchaser in a given month and different prices were received by the Royalty/Tax Payer, the sales price reported to ER must not be an average price.
- **Trucking Expenses (\$)** (formerly Clean Oil Transportation Charges): for the purposes of Saskatchewan oil valuation reporting, the allowable trucking expenses are considered as trucking expenses actually incurred by the Royalty/Tax Payer in transporting oil to the delivery point specified in an arm's-length agreement.
- **IMPORTANT:** For more information on allowable trucking expenses, please see the most current version of the PR-IC09 Well-head Value of Crude Oil for Royalty/Tax Purposes.

#### 8.4 Amendments to Pipeline Splits and Oil Valuation

Petrinex allows for unlimited revisions to pipeline split data. When a pipeline split is submitted for the first time, or later amended, the data is auto-populated immediately (i.e. in real time) into an Oil Valuation Royalty/Tax Payer record. Oil Valuation – Purchaser data is also auto-populated from the pipeline split data, unless the owner BA ID and purchaser BA ID are the same or related (i.e. the transaction is an EVAP transaction). Oil Valuation Purchaser records are auto-populated in near real time.

#### 8.5 Deliveries to Refineries

Every person who, during a month, delivers to a refinery, oil produced in Saskatchewan or an oil stream containing oil produced in Saskatchewan, including an oil stream that also contains oil produced outside of Saskatchewan, must submit the following information to the minister, through Petrinex, on or before the Valuation Reporting Deadline:

- The volume of the delivery;
- The identity of the refinery;
- The identity of the oil stream; and
- any other information the minister may require.

The Petrinex Deliveries to Refineries functionality can be found within the Oil Valuation functionality. Deliveries to Refineries submissions must include all deliveries to refineries, including refineries outside of Saskatchewan. For example, if oil is being transported to a rail terminal or pipeline for final delivery to a refinery in Canada or for final delivery to a refinery in the United States, a submission of this information must be made. The submission must be made by the BA that has marketed that oil to the refiner.

## **8.6 Further Oil Valuation Information**

The minister may request that a person who, during a calendar year, purchases oil or condensate produced in Saskatchewan or an oil stream that contains oil produced in Saskatchewan, including an oil stream that also contains oil produced outside of Saskatchewan, downstream of a facility or custody transfer point specified by the minister submit to the minister any reports, statements, documents, records, notifications or other information about the purchases.

## 9. Gas Valuation

### 9.1 Introduction

Every gas plant licensee or operator, and every Business Associate that retains possession of and markets their share of products processed by the gas plant, must submit the following gas valuation information to the minister, through Petrinex, on or before the Valuation Reporting Deadline:

- 1) value of all products received, including raw or marketable gas;
- 2) value of all products delivered, including marketable gas;
- 3) details of purchases of gas, natural gas liquids, liquid petroleum gas and other derived products, including unprocessed or raw gas at or upstream of a Gas Plant inlet, and the subsequent sales of that gas in the form of processed marketable gas, natural gas liquids, or liquid petroleum gas; and
- 4) any other information the minister may require.

Because gas plant operators, and BAs that have retained possession of, and marketed their share of products processed by the gas plant, must report gas valuation, there may be submissions from multiple BAs for a particular gas plant facility and production month, as each BA reports their own purchases and sales. A submission made by a particular BA is only available for editing or viewing by that BA.

### 9.2 Gas Plant Valuation Submission

**Activity:** the reporting BA must select from the drop down menu either 'Purchase' or 'Sale'.

**Product:** the reporting BA must submit a product type code for each individual product purchased or sold. In most cases the product will be raw or unprocessed gas, for which the product code is "Gas".

**Producer/Purchaser (BA ID):** the reporting BA must submit the BA ID that identifies the producer from which the product is being purchased from, or identifies the purchaser for which the product is sold to.

**Point of Purchase/Point of Sale (ID):** the reporting BA must submit the facility ID that identifies the point at which the product was purchased (i.e. the point where the contract price is established).

**Contract #:** (unique contract identifier, only used when required)

**Volume (10<sup>3</sup>m<sup>3</sup>):** the reporting BA must submit the volume of the product purchased or sold.

**Energy (GJ):** the reporting BA must submit the energy content of the product purchased or sold.

**Price (\$/Unit):** the reporting BA must submit the contract price of the product purchased or sold.

**Unit (GJ, m<sup>3</sup>, 10<sup>3</sup>m<sup>3</sup>, Tonnes):** the reporting BA must select the unit of measure appropriate for the product type submitted.

The Edit Gas Plant Valuation screen (see Figure 9.1) allows the entry and edit of the gas plant valuation data

**Edit Gas Plant Valuation**

Facility ID: SK GP 0000001      Location: 01-01-001-01 W3M      Production Month: 2011-10  
 Name: SASK GAS PLANT #1  
 Reference Code:

*GPR998 The data has been successfully saved to WIP.*

Del	Activity	Product	Producer/ Purchaser	Point of Purchase/ Point of Sale	Contract #	Volume	Energy	Price	Unit
<input type="checkbox"/>	Purchase	GAS	30011	SK GP 0000001	1234	10000.0	360000	3.0000	GJ
<input type="checkbox"/>	Purchase	SUL	30011	SK GP 0000001	1	10.0		50.0000	TONNE
<input type="checkbox"/>	Sale	GAS	30011	SK GP 0000001	33	100.0	3600	110.0000	103M3
<input type="checkbox"/>	Purchase	C3-MX	30011	SK GP 0000001	GP#1	1000.0		70.0000	M3

Add   Save to WIP   Submit   Cancel

Figure 9.1: Edit Gas Plant Valuation Screen



## 10. Royalty/Tax Payer (RTP) Records

### 10.1 Introduction

Every licensee or operator of a well completion, unit or injection facility must submit to the minister, through Petrinex, the following information on or before the Royalty/Tax Payer Reporting Deadline:

- the BA ID of each Royalty/Tax Payer;
- the BA ID of each Working Interest Owner (WIO) that is not also a Royalty/Tax Payer; and
- the mineral ownership type and portion (i.e. percentage) for which each BA is responsible as either a Royalty/Tax Payer or Working Interest Owner that is not also a Royalty/Tax Payer.

Note that for injection facilities, Royalty/Tax Payer information is only required for those injection facilities that recover crude oil (RCO).

The purpose of the Royalty/Tax Payer work process is to assist in the administration of the Crown Royalty and Freehold Production Tax systems, as well as the Resource Surcharge, for the Government of Saskatchewan. This process will provide the information relating to the BA that is responsible for the payment of Crown Royalty, Freehold Production Tax, RCO Tax and Resource Surcharge. The information is then extracted from Petrinex to ER's systems to perform the Crown Royalty, Freehold Production Tax, or Resource Surcharge calculation.

There are three stream types that require the submission of Royalty/Tax Payer information and they are wells, units and injection facilities. Each stream type has a unique stream identifier (stream ID).

**Wells:** The initial Royalty/Tax Payer is the well licensee. When a well is made active, the well licensee must create a Royalty/Tax Payer record. Specifically, the well licensee must create a Royalty/Tax Payer record when a well first starts production of oil or gas; meaning, when the well completion status is changed to:

- OIL - ACTIVE - PROD - N/A;
- GAS - ACTIVE - PROD - N/A;
- HELIUM – ACTIVE – PROD – N/A;
- OIL - DRILL - PROD - N/A; or
- GAS - DRILL- PROD - N/A

**Units:** All unit IDs are set up in Royalty/Tax Attribute functionality by ER for industry to view and use as required. The operator of the unit must create the Royalty/Tax Payer record for the unit.

**Injection Facilities:** All injection facilities that have recovered crude oil are set up in Royalty/Tax Attribute functionality by ER for industry to view and use as required. The operator of the injection facility must create the Royalty/Tax Payer record for the injection facility.

Operators of well completions, injection facilities or units must submit a Royalty/Tax Payer record for oil and a separate Royalty/Tax Payer record for gas.

The operators of well completions, injection facilities and units must submit the following data:

- Royalty/Tax Payer BA ID;
- Working Interest Owner BA ID (if applicable);
- Ownership type (The operator of an injection facility is not required to enter the ownership type)
  - Crown
  - Crown SSB
  - Freehold
  - Freehold WIO Exempt
  - Freehold FED Exempt
  - Freehold FED 508 Exempt
- Portion of ownership (in percent format) as either a RTP percent or WIO percent.

If a WIO **does not** take product in kind, they are not considered as a Royalty/Tax Payer. The Royalty/Tax Payer operator of the well completion, unit, or injection facility is responsible for paying the applicable royalties or taxes on behalf of the applicable WIO BAs. Therefore, for reporting purposes, portions of WIO ownership (i.e. percentages of ownership) must be entered into the WIO Percent column and also entered into, as a total, the RTP Percent column (see example in Table 10.1). The portions of WIO ownership (i.e. percentages of ownership), that are entered into the RTP Percent column, must be identified as belonging to the Royalty/Tax Payer BA ID.

If a WIO does take product in kind, they are considered as a RTP. Their portions of RTP ownership (i.e. percentages of ownership) must be entered into the RTP Percent column (see example in Table 10.2).

Note that while the RTP ownership percentages must total 100%, the WIO ownership percentages are not required to total 100%. Also note that if a Royalty/Tax Attribute (RTA) record for a given stream ID contains an Ownership type of Freehold WIO Exempt, then the corresponding RTP record must also contain this information.

Table 10.1: Scenario 1: BA 2 and 3 are not Royalty/Tax Payers

RTA Record	RTP Record			
	BA ID	Ownership Type	RTP Percent	WIO Percent
BA 1 - Crown - 98.00000	BA 1	Crown	98.00000	
	BA 1	Freehold WIO Exempt	2.00000	
BA 2 - Freehold WIO Exempt - 1.00000	BA 2	Freehold WIO Exempt		1.00000
BA 3 - Freehold WIO Exempt - 1.00000	BA 3	Freehold WIO Exempt		1.00000
Totals			100.00000	2.00000
Crown Total			98.00000	
Freehold WIO Exempt Total			2.00000	2.00000

Table 10.2: Scenario 2: BA 1, 2 and 3 are Royalty/Tax Payers

RTA Record	RTP Record			
	BA ID	Ownership Type	RTP Percent	WIO Percent
BA 1 - Crown - 98.00000	BA 1	Crown	98.00000	
BA 2 - Freehold WIO Exempt - 1.00000	BA 2	Freehold WIO Exempt	1.00000	
BA 3 - Freehold WIO Exempt - 1.00000	BA 3	Freehold WIO Exempt	1.00000	
Totals			100.00000	
Crown Total			98.00000	
Freehold WIO Exempt Total			2.00000	

## 10.2 Security

The Royalty/Tax Payer designate is initially the licensee of the well completion. After initial Royalty/Tax Payer information is created, the designate can be changed to any active BA in Petrinex.

For a given stream ID, the current operator is the only BA that can make changes to Royalty/Tax Payer information for the months that they were the operator of record or have been granted prior period access.

For a given stream ID, the current Royalty/Tax Payer can query and edit all applicable Royalty/Tax Payer information.

For a given stream ID, previous Royalty/Tax Payers can only query and edit historical Royalty/Tax Payer information for the months that they were the Royalty/Tax Payer of record or have been granted prior period access.

The well licensee can query Royalty/Tax Payer records for their licensed wells.

Any BA listed as a Royalty/Tax Payer will be able to view the detail rows pertaining to their BA ID for both Royalty/Tax Payer Percent and WIO Percent.

ER can query Royalty/Tax Payer records for any stream ID.

### 10.3 Query or Edit Royalty/Tax Payer Information Online

Royalty/Tax Payer information can be queried or edited, using the appropriate selections under the 'Royalty/Tax Related Information' found in the Petrinex menu (see Figure 10.1 and 10.2).

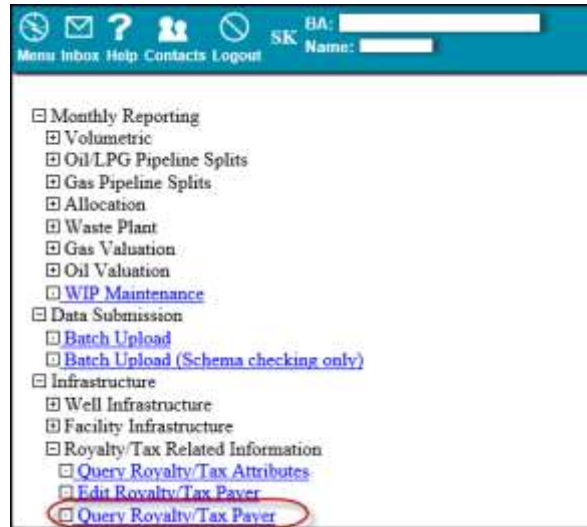


Figure 10.1: Infrastructure – Query Royalty/Tax Payer



Figure 10.2: Infrastructure – Edit Royalty/Tax Payer

A BA may query or edit Royalty/Tax Payer information that the BA has access to, as per the security outlined in section 10.2. The BA will enter a stream ID (unit, well completion or injection facility ID) or select a stream ID from the stream ID lookup, select the Product (Oil or Gas) and enter the start date (YYYY-MM). Since Royalty/Tax Payer information is date sensitive the information displayed will be as of the specified date (see Figure 10.3 and 10.4).

The screenshot shows a web browser window with a blue header bar. The header contains navigation icons (Home, Inbox, Help, Contacts, Logout) and user information: 'BA: 00000 MINISTRY OF THE ECONOMY' and 'Name: dwalface'. Below the header, the breadcrumb trail is 'Infrastructure > Royalty/Tax Related Information'. The main heading is 'Query Royalty/Tax Payer'. The form includes fields for 'Stream ID:' (with a dropdown arrow), 'Stream Name:', and 'Operator:'. To the right, there are 'Product:' (dropdown menu showing 'OL'), 'Start Date:' (text box with '2014-03' and navigation arrows), and 'End Date:'. A 'Go' button is located at the bottom right of the form area. At the bottom of the page, there are links for 'Menu-Inbox-Help-Contacts-Logout' and 'Top-SK'.

Figure 10.3: Query Royalty/Tax Payer

The screenshot shows a web browser window with a blue header bar. The header contains navigation icons (Home, Inbox, Help, Contacts, Logout) and user information: 'BA: 00000 MINISTRY OF THE ECONOMY' and 'Name: dwalface'. Below the header, the breadcrumb trail is 'Infrastructure > Royalty/Tax Related Information'. The main heading is 'Edit Royalty/Tax Payer'. The form includes fields for 'Stream ID:' (with a dropdown arrow), 'Stream Name:', and 'Operator:'. The 'Operator:' field is populated with '98765 SASK COMPANY'. To the right, there are 'Product:' (dropdown menu showing 'OIL'), 'Start Date:' (text box with '2011-10' and navigation arrows), and 'End Date:'. A 'Go' button is located at the bottom right of the form area. At the bottom of the page, there are links for 'Menu-Inbox-Help-Contacts-Logout' and 'Top-SK'.

Figure 10.4: Initial Royalty/Tax Payer Screen

If queried, the Royalty/Tax Payer record displayed will contain the BA ID, the BA Name, the Ownership Type and RTP Percent and WIO Percent. Ownership type total will be displayed at bottom of the screen, along with the Crown Freehold Split. The Ownership type total will not be displayed when the stream ID is for an injection facility (see Figure 10.5).

**Query Royalty/Tax Payer**

Stream ID: SK IF D403853    Product: OIL    Start Date: 2012-07  
 Stream Name: MIDALE ET AL HUNTOON RE SWD 3-18    End Date:  
 Operator: 80040 NORTH PETROLEUMS LTD.    **Go**

*RTP031 No RTP information exists for the supplied Start Date [2013-03]. The closest start date was returned.*

**Royalty/Tax Percentages**

BA ID	BA Name	RTP Percent	WIO Percent
80040	NORTH PETROLEUMS LTD.	100.00000	100.00000

**Cancel**

Figure 10.5: Query Royalty/Tax Payer Screen

If edited, the fields that are available to edit are the BA ID (BA Name will be updated), the Ownership Type, the RTP Percent and the WIO Percent. Ownership type total will be displayed at bottom of the screen, along with the Crown Freehold Split (see Figure 10.6).

**Edit Royalty/Tax Payer**

Stream ID: SK WI 191062800408W200    Product: OIL    Start Date: 2012-12  
 Stream Name: 28-4-E    End Date:  
 Operator: DON OIL

*RTP031 No RTP information exists for the supplied Start Date [2014-03]. The closest start date was returned.*

**Royalty/Tax Percentages**

DEL	BA ID	BA Name	Ownership Type	RTP Percent	WIO Percent
<input type="checkbox"/>	12345	DON OIL	CROWN	100.00000	100.00000
<b>CROWN Total</b>				RTP Percent	WIO Percent
				100.00000	100.00000

**Add   Validate   Submit   Cancel**

Figure 10.6: Edit Royalty Tax Payer – Oil Product Screen

### 10.4 Creating a New Royalty/Tax Payer Record

Using the Edit Royalty/Tax Payer screen, a BA that enters a stream ID with no previous Royalty/Tax Payer information on Petrinex will be able to create a new Royalty/Tax Payer record (see Figure 10.7).

Figure 10.7: Edit Royalty/Tax Payer – RTP Percent

### 10.5 Data Validation

Petrinex will compare the Royalty/Tax Payer information submitted by a reporting BA to ER’s Royalty/Tax Attributes (RTA) information held in Petrinex. This comparison is made to verify that the total of each ownership type is balanced. Out of balance Royalty/Tax Payer submissions will receive a warning message; however, the submission will still be accepted by Petrinex.

Royalty/Tax Payer submissions will not be accepted by Petrinex if the total of all Mineral Ownership types does not equal 100%. In this case, the submission will receive an error message and the Royalty/Tax Payer submission must be corrected prior to the data being accepted by Petrinex.

### 10.6 Royalty/Tax Payer Operator Change

The current RTP operator, of a specific stream ID, can request an operator change using the Operator Change function on Petrinex. Operator changes can be made for a current month or future dated.

Operator changes will be managed through Petrinex using a concurrence process whereby the out-going operator will initiate the reassignment process with an operator change request that is sent to the new operator. The new operator can either accept or reject the transfer of operatorship. Once accepted, the responsibilities of filing submissions will move to the new operator. Operator changes can be performed for all Petrinex stream IDs including wells, units, and facilities.

#### **10.7 Termination of a Royalty/Tax Payer Record**

A Royalty/Tax Payer record is automatically terminated in Petrinex when the stream ID is no longer active (i.e. well completion is abandoned). Note: A well completion or injection facility is still considered active when the status is suspended.

#### **10.8 Royalty/Tax Payer – Missing/Incomplete Report**

Petrinex scans the Royalty/Tax Payer data that has been submitted, and generates the Royalty Tax Payer Missing/Incomplete Report. This report is designed to minimize errors and missing data, and inform BAs of deficiencies in Royalty/Tax Payer submissions.

This report checks for the following:

- All active well completions in the current production month have a current RTP record for oil and/or gas as required;
- All current month RTP records have a matching Royalty/Tax Attribute (RTA) record.
- If an RTA record exists for a well completion or unit, that the balance of mineral ownership percentages for each mineral ownership type from the RTA matches the total for the same mineral ownership type in RTP
- If an RTA record exists for the mineral ownership type “Exempt” in RTA, that the RTP matches the mineral ownership type, BA ID and percentage.
- Injection Facilities with an oil disposition have a current RTP record.

Note: An RTP record can still be entered by industry if an RTA record does not exist. A Royalty/Tax Payer Missing/Incomplete report runs automatically, approximately two days before the Royalty Tax Payer Reporting Deadline or upon request from the Royalty/Tax Payer.

The final Royalty/Tax Payer Missing/Incomplete report is run at the Petrinex Royalty/Tax Payer Reporting Deadline, and the results are sent out to Industry and to ER for possible further escalation.



### **10.8.1 Royalty/Tax Payer Report**

The Royalty/Tax Payer report, that is accessed through Petrinex, provides the following information, by Stream ID, for a selected production month:

- Royalty/Tax ownership information for Royalty/Tax Payers, for any stream ID in which the requesting BA is named as operator;
- Royalty/Tax information pertaining only to the requesting BA's ownership for any stream ID in which the BA is not the operator;
- Royalty/Tax ownership information for all well completions requested;
- the BA that is named as the well completion licensee.

The Royalty/Tax Payer Report can be used to reference and verify the ownership percentage information in the Royalty Tax Payer records that are used in Royalty/Tax calculations.

#### **10.8.1.1 Report Notification**

Upon the completion of all report requests, and the completion of all pertinent automated reports, Petrinex will place a notification in the Royalty/Tax Payer's Petrinex Inbox and forward an email containing a hypertext link to this notification directly to the Royalty/Tax Payer.

Completed reports can be viewed on Petrinex, printed and downloaded.

## **11. Petrinex Compliance**

ER has implemented a Penalty Assessment Policy for non-compliance, with respect to monthly reporting, with the implementation of monthly reporting to Petrinex.

From the March 2012 production month forward, penalties assessed by ER for non-compliance, with respect to monthly reporting, will be based on the non-compliance events received by ER at the Saskatchewan reporting deadlines for Petrinex.

### **11.1 Compliance Assurance**

It is the responsibility of all operators, as specified in the legislation, to be aware of Ministry requirements and have the infrastructure in place to ensure compliance (the word “must” indicates a requirement for which compliance is required and that is subject to Ministry enforcement).

Non-compliance fees and penalties will be assessed on Petrinex non-compliance events as either ‘recurring’ or ‘current month’. Petrinex non-compliance events which have an assessment frequency of ‘recurring’ will be assessed each and every month until the data which has created the non-compliance event has been correctly submitted. Petrinex non-compliance events which have an assessment frequency of ‘current month’ will only be assessed a penalty in the month in which the penalty occurred. There will be no limit on the amount of penalty assessed per company over time.

### **11.2 Non-Compliance Invoices**

A BA that has outstanding errors that are not corrected before the applicable Saskatchewan reporting deadline, will receive an electronic invoice for penalties which can be found on Petrinex under ‘Ministry Invoices and Statements’. These same invoices can be found under ‘Invoices’ within the Billing Module of ER’s Integrated Resource Information System (IRIS). Assessed penalties will be invoiced each month until the missing or incomplete data has been correctly submitted. Payment for the assessed penalties is due within 30 days of the date of the invoice.

### **11.3 Purpose of Penalty Assessment Policy**

The purpose of ER’s Penalty Assessment Policy is to:

- ensure the timely and accurate Industry reporting of data on Petrinex in accordance with the applicable Acts, Regulations and Directives;
- provide Industry with simple, fair, equitable and transparent business rules and guidelines respecting the request and approval processes for waivers of penalty assessments; and
- ensure reporting compliance in order to protect the province’s oil and gas resource revenues.

#### **11.4 Reporting Deadlines**

The final non-compliance reports are run at the applicable Saskatchewan reporting deadlines and extracted by ER. This extraction forms the basis for any penalty assessments.

There are four reporting deadlines for the submission of Saskatchewan data to Petrinex:

- Volumetric Reporting Deadline (approximately the 20th day of the month);
- Pipeline Split Reporting Deadline (approximately the 20th day of the month);
- Oil Valuation Reporting Deadline (last business day of the month);
- Royalty/Tax Payer Reporting Deadline (last business day of the month).

The date of the Saskatchewan's reporting deadlines will vary slightly from month to month. To find out the exact deadline dates in a given month, please refer to the Petrinex Saskatchewan Reporting Calendars located on Petrinex.

The minister may vary any Saskatchewan reporting deadlines or submission dates, if the minister considers it appropriate and in the public interest to do so. If the minister varies a Saskatchewan reporting deadline or submission date, the minister must publish the change on ER's website at least 30 days prior to the new reporting deadline or submission date.

#### **11.5 Ministry Non-Compliance Errors**

Petrinex will generate Non-Compliance Errors in the following areas:

- VME Errors - Volumetric Balancing and Missing Data Errors
- WPE Errors - Waste Plant Balancing and Missing Data Errors
- PLS Errors - Pipeline Splits Compliance and Balancing Errors
- OVE Errors - Oil Valuation Compliance and Balancing Errors
- RTP Errors - Royalty/Tax Payer Missing/Incomplete Errors

Petrinex error numbers and related messages, along with their associated non-compliance fee rate are found in Tables 11.1, 11.2, 11.3, 11.4, and 11.5.

Table 11.1: VME Errors: Volumetric Balancing and Missing Data Errors

<b>Error Number</b>	<b>Error Message</b>	<b>Error Description</b>	<b>Noncompliance fee per month (if applicable)</b>	<b>Assessment Frequency Current Month (CM) or Recurring (R)</b>
VME0001	Message: Facility is missing <i>Details: Facility Operational Status = [Facility Operational Status]</i>	Facility has a facility operational status of ACTIVE for the current production month and a volumetric submission has not been made.	\$500 per facility	R
VME0002	Message: Amendment is missing for prior month <i>Details: Pending activity with no submission [Product] [Activity] [From/To] [Volume]</i>	An amendment has been made at a downstream facility. There is now a pending record at your facility, and you have not accepted the change (i.e. pending REC, DISP or PURDISP)	\$500 per facility	R
VME0003	Message: Amendment is missing for prior month <i>Details: Pending INVOP, LDINVOP or STINVOP with no submission [Product] [Activity] [Volume]</i>	An amendment has been made to a closing inventory (INVCL) or load fluid closing inventory (LDINVCL). This resulted in changes to the next month's opening inventory or load fluid opening inventory, and you have not accepted the change.	\$500 per facility	R
VME0004	Message: Facility is missing for prior month <i>Details: Retroactive Facility Operational Status Change for prior month</i>	A retroactive change to the facility has changed the facility operational status to ACTIVE and you have not submitted volumetric data for the production months that the facility is now active.	\$500 per facility	R

Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
VME0005	Message: Well is missing for current production month <i>Details:</i> <i>ActiveWellStatus(Well ID)</i>	Well has an active well status for the current production month and must submit a volumetric submission. The following situations may occur: If a well is linked to one facility for the entire month, it must be reported at that facility. If a well is linked to more than one facility for the entire month, it must be reported at one of the facilities (cyclical/ SAGD/storage wells). If a well is transferred mid-month to another facility, it must be reported at both facilities.	\$100 per well	R
VME0006	Message: Well is Missing for prior production month <i>Details:</i> <i>WellStatusChange (Well ID)</i>	A retroactive well status change has changed the well to an active well status and you have not submitted volumetric data for the production months that the well is now active.	\$100 per well	R
VME0009	Message: Well is missing for a prior production month <i>Details:</i> <i>ActiveWellStatus (Well ID)</i>	A facility amendment has been received that did not include all the wells previously reported. The missing well has not been reported at a new facility for the production month, or the well status has not been changed to an inactive well status for the production month.	\$100 per well	R

Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
VME0010	<p>Message: Activity PROD is missing for product GAS</p> <p><i>Details: Activity PROD must be reported for product GAS when OIL PROD of 50.0 m3 or more is reported at a crude oil or crude bitumen facility.</i></p>	<p>Gas production or gas recovery should be reported when total volume of oil and condensate production greater than or equal to 50.0 m3 has been reported at a crude oil or heavy oil facility in a production month with battery facility subtypes: 321, 322, 326, 327, 344</p>	\$100 per facility	R
VME0011	<p>Message: Total fractionated yield for spec products is more than available mix products</p> <p><i>Details: Total fractionated spec products [%s] is more than the total opening inventory for all mix products + total inventory adjustment for all mix products + total receipts for all mix products</i></p>	<p>The total fractionated spec product reported at the facility cannot be greater than the total mix product available. The available mix product is the total mix opening inventory plus the total receipts of mix product.</p>	\$100 per facility	R
VME0012	<p>Message: Activity PROC volume cannot be negative for Spec Product Group</p> <p><i>Details: PROC volume [volume] is calculated to be negative for Spec product group [Product Group]</i></p>	<p>Petrinex has calculated that a processed spec product is negative.</p>	\$100 per facility	R

Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
VME0013	Message: Activity PROC volume cannot be negative for Mix Product Group <i>Details: Total PROC volume for Mix product groups is calculated to be negative [volume]</i>	Petrinex has calculated that the sum of all mix products processed at the facility is negative.	\$100 per facility	R
VME0014	Message: Activity SHR volume cannot be negative for Spec Product Group <i>Details: SHR volume [volume] is calculated to be negative for product group [Product Group]</i>	Petrinex has calculated a shrinkage volume that is negative.	No charge	N/A
VME0015	Message: Metering difference is greater than or equal to 5 percent and less than 10 percent <i>Details: [Product Group] DIFF [volume] DIFF percentage = [Metering Difference Percent]</i>	Petrinex has calculated a metering difference percentage that may be reviewed by ER. This error only applies to the Gas Product Group. This error does not apply to meter stations, batteries linked to injection facilities, and injections facilities with solvent injection.	No charge	N/A

Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
VME0016	Message: Metering difference is over the acceptable tolerance <i>Details: [Product Group] DIFF [volume] DIFF percentage = [Metering Difference Percent]</i>	Petrinex has calculated a metering difference percentage that is subject to a noncompliance fee. This message is issued: when the percentage is greater than or equal to 10% and less than 100% and the volume difference is greater than 10.0 (103 m3); or when the difference is greater than or equal to 100%. This error only applies to the Gas Product Group. This error does not apply to meter stations, batteries linked to injection facilities, and injections facilities with solvent injection.	\$100 per facility	CM
VME0017	Message: Metering difference is other than 0.0 <i>Details: [Product Group] DIFF [volume] DIFF percentage = [Metering Difference Percent]</i>	Petrinex has calculated a metering difference at meter station. Meter stations cannot have a metering difference for the Gas Product Group. This error does not apply to meter stations with the facility subtype 634.	\$100 per facility	R
VME0018	Message: Imbalance is other than 0.0 <i>Details: [Product Group] IMBAL [volume] IMBAL percentage = [Imbalance Percent]</i>	Petrinex has calculated an imbalance indicating a product at the facility is out of balance.	\$100 per facility	CM



Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
VME0019	<p>Message: Metering difference is greater than or equal to 10 percent less than 100 percent and the volume difference is less than or equal to 10</p> <p><i>Details: [Product Group] DIFF [volume] DIFF percentage = [Metering Difference Percent]</i></p>	<p>Petrinex has calculated a gas metering difference percentage that is greater than or equal to 10%, less than 100%, and the volume is less than or equal to 10.0 (103 m3).</p>	No charge	N/A
VME0023	<p>Message: Water Metering Difference is 10 percent or greater</p> <p><i>Details: Petrinex has calculated water metering difference percentage of 10 percent or more and the volume is 200m3 or greater</i></p>	<p>Petrinex has calculated a water metering difference percentage greater than or equal to 10%, less than 100%, and the volume difference is greater than or equal to 200 m3.</p>	\$100 per facility	CM
VME0024	<p>Message: Water Metering Difference is 10 percent or greater</p> <p><i>Details: Petrinex has calculated water metering difference percentage of 10 percent or more and the volume is greater than 10m3 and less than 200m3</i></p>	<p>Petrinex has calculated a water metering difference percentage greater than or equal to 10%, less than 100%, and the volume difference is greater than 10 m3 and less than 200 m3.</p>	\$100 per facility	CM
VME0025	<p>Message: Water Metering Difference is 100 percent or greater</p> <p><i>Details: Petrinex has calculated water metering difference percentage that is 100 percent or greater indicating a missing volume</i></p>	<p>Petrinex has calculated a water metering difference that is 100 percent or greater, indicating a missing volume.</p>	\$100 per facility	R

Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
VME0026	<p>Message: Water Metering Difference is 10 percent or greater  <i>Details: The PRA has calculated water metering difference percentage of 10 percent or more and the volume is equal to or less than 10m3</i></p>	<p>Petrinex has calculated a water metering difference percentage greater than or equal to 10%, less than 100%, and the volume is 10 m3 or less.</p>	No charge	N/A
VME0027	<p>Message: Pending DISP created at a suspended facility  <i>Details: Pending DISP at suspended facility [product] [activity] [From/To] [volume]</i></p>	<p>Suspended Facility with a pending submission. Waste Plant operator reports a Receipt from a suspended facility (non-waste plant).</p>	\$500 per facility	R
VME0028	<p>Message: Submission required at a facility  <i>Details: STREC change at [value] requires a submission at your facility [value] for the production month [value]. The storage balance will be recomputed on submission.</i></p>	<p>Storage Facility submission required. STREC change at a battery linked to this storage facility requires the storage facility to submit in order to compute the storage balance.</p>	\$500 per facility	R
VME0029	<p>Message: Facility is missing.  <i>Details: Cross-border activity has failed. Submission is required.</i></p>	<p>Cross-border activity has failed, submission is required. Operator has requested a cross-border activity. This has failed in the other jurisdiction, and now requires the operator to re-submit to correct their submission.</p>	\$500 per facility	R

Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
VME0030	Message: Metering difference is greater than or equal to 5 percent and less than 10 percent <i>Details: [Product Group] DIFF [volume] DIFF percentage = [Metering Difference Percent]</i>	Petrinex has calculated a metering difference percentage for water that may be reviewed by ER.	No charge	N/A
VME0031	Message: Metering difference is greater than or equal to 5 percent and less than 10 percent <i>Details: [Product Group] DIFF [volume] DIFF percentage = [Metering Difference Percent]</i>	Petrinex has calculated a metering difference percentage for Solvent Product Group that may be reviewed by ER.	No charge	N/A
VME0032	Message: Metering difference is greater than or equal to 10 percent less than 100 percent and the volume difference is less than or equal to 10 <i>Details: [Product Group] DIFF [volume] DIFF percentage = [Metering Difference Percent]</i>	Petrinex has calculated a metering difference percentage for Solvent Product Group that may be reviewed by ER.	No charge	N/A
VME0033	Message: when the percentage is greater than or equal to 10% and less than 100% and the volume difference is greater than 10.0 10 <sup>3</sup> m <sup>3</sup> .; or when the difference is greater than or equal to 100%. <i>Details: [Product Group] DIFF [volume] DIFF percentage = [Metering Difference Percent]</i>	Petrinex has calculated a metering difference percentage that is subject to a noncompliance fee.	\$100 per facility	R

Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
VME0034	<p>Message: Flaring volume exceeds the acceptable tolerance for the month.</p> <p><i>Details: Total volume for Flare is greater than 30 103m3.</i></p>	<p>Total flaring volume exceeds 30 10<sup>3</sup>m<sup>3</sup> for the month at a Gas battery or Crude/Heavy Oil battery with subtypes: 311, 313, 314, 315, 316, 321, 322, 325, 326, 327, 344, 351, 361, 362, 363, 364.</p>	No Charge	N/A
VME0035	<p>Message: Venting volume exceeds the acceptable tolerance for the month.</p> <p><i>Details: Total volume for Vent is greater than 30 103m3.</i></p>	<p>Total venting volume exceeds 30 10<sup>3</sup>m<sup>3</sup> for the month at a Gas battery or Crude/Heavy Oil battery with subtypes: 311, 313, 314, 315, 316, 321, 322, 325, 326, 327, 344, 351, 361, 362, 363, 364.</p>	No Charge	N/A
VME0037	<p>Message: COND production has been reported at a Gas Multiwell Proration S.W. Saskatchewan battery.</p>	<p>Condensate production should not be reported at Gas Multi-well Proration S.W. Saskatchewan batteries (facility subtype 363). An additional facility may have to be set up or a subtype change may be required.</p>	No Charge	N/A
VME0041	<p>Message: Gas production or gas recovery has not been reported for a crude oil well when oil production of greater than 15.0m3 has been reported.</p> <p><i>Details: Oil production is [volume] for well [unique well identifier].</i></p>	<p>Gas production or gas recovery should be reported when crude/heavy oil production greater than 15m<sup>3</sup> has been reported at an crude/heavy oil well in a production month.</p>	No Charge	N/A

Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
VME0042	<p>Message: TOTAL gas production or gas recovery has not been reported for the crude oil or heavy oil well when oil and condensate production of greater than or equal to 50.0 m<sup>3</sup> has been reported.</p> <p><i>Details: Oil and Condensate Production is [volume] for well [unique well identifier].</i></p>	<p>Gas production or gas recovery should be reported when oil and condensate production greater than or equal to 50.0 m<sup>3</sup> has been reported at a crude oil or heavy oil well in a production month.</p>	\$100 per well	R

Table 11.2: WPE Errors: Waste Plant Balancing and Missing Data Errors

Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
WPE0001	Message: Facility is missing <i>Details: Facility Operational Status = Active or Suspended</i>	Facility has an ACTIVE operational status for the production month, and the required waste plant submission has not been made active in this instance means ACTIVE or SUSPENDED.	\$500 per facility	R
WPE0002	Message: Amendment is missing for a prior month <i>Details: Pending activity with no submission [From/To] [waste code] [activity]</i>	The operator of the facility that you delivered to/received from has amended the disposition/receipt volume at your facility, and you have not accepted the change (pending DISP/REC).	\$500 per facility	R
WPE0003	Message: Amendment is missing for a prior month <i>Details: Pending activity with no submission [activity]</i>	The operator of the facility amends the closing inventory for a prior month. This resulted in a change to the next month's opening inventory, and you have not accepted the change (pending INVOP).	\$500 per facility	R
WPE0004	Message: Imbalance is other than 0.0 <i>Details: [OIL] IMBAL = [volume]</i>	The facility is out of balance (i.e., the balance is not 0.0) for oil product group.	\$100 per facility	R
WPE0005	Message: Inventory adjustment exceeds tolerance <i>Details: [OIL] INVADJ = [percentage]</i>	The facility has an inventory adjustment (INVADJ) for oil product group which is greater than 10% of the total receipts (REC) for the same product group. This error does not apply to the facility subtype 702.	\$100 per facility	R

<b>Error Number</b>	<b>Error Message</b>	<b>Error Description</b>	<b>Noncompliance fee per month (if applicable)</b>	<b>Assessment Frequency Current Month (CM) or Recurring (R)</b>
WPE0006	Message: Imbalance is other than 0.0 <i>Details: [WATER] IMBAL = [volume]</i>	The facility is out of balance (i.e., the balance is not 0.0) for water product group.	\$100 per facility	R
WPE0007	Message: Imbalance is other than 0.0 <i>Details: [SOLIDS] IMBAL = [volume]</i>	The facility is out of balance (i.e., the balance is not 0.0) for solids product group.	\$100 per facility	R
WPE0008	Message: Inventory adjustment exceeds tolerance <i>Details: [WATER] INVADJ = [percentage]</i>	The facility has an inventory adjustment (INVADJ) for water product group which is greater than 10% of the total receipts (REC) for the same product group. This error does not apply to the facility subtype 702.	\$100 per facility	R
WPE0009	Message: Inventory adjustment exceeds tolerance <i>Details: [SOLIDS] INVADJ = [percentage]</i>	The facility has an inventory adjustment (INVADJ) for solids product group which is greater than 10% of the total receipts (REC) for the same product group. This error does not apply to the facility subtype 702.	\$100 per facility	R
WPE0010	Message: Imbalance is other than 0.0 <i>Details: [GAS] IMBAL = [volume]</i>	The facility is out of balance (i.e., the balance is not 0.0) for gas product group.	\$100 per facility	R
WPE0011	Message: Facility is missing for prior month <i>Details: Retroactive Facility Operational Status Change for prior month</i>	When facility status is changed from inactive to active for previous production months, submission is required.	\$500 per facility	R

Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
WPE0012	Message: Pending DISP created at a suspended facility <i>Details: Pending DISP at suspended facility [value] for[value] submission req'd</i>	Receipt from a suspended Waste Plant facility.	\$500 per facility	R
WPE0013	Message: Facility is missing <i>Details: Cross-border activity has failed.</i>	When a cross-border activity fails validation in the other jurisdiction, a submission is required.	\$500 per facility	R
WPE0014	Message: Flaring volume exceeds the acceptable tolerance for the month	When total volume for Flare is greater than 30 10 <sup>3</sup> m <sup>3</sup> for the month.	No Charge	N/A
WPE0015	Message: Venting volume exceeds the acceptable tolerance for the month	When total volume for Vent is greater than 30 10 <sup>3</sup> m <sup>3</sup> for the month.	No Charge	N/A



Table 11.3: PLS Errors: Pipeline Split Compliance and Balancing Errors

Error Number	Error Message	Error Description	Noncompliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
PLS094	This is a cascade split with no parent	Missing parent. Cascade split (receiving facility is not the same as the CTP facility) is missing parent split. (downstream facility doesn't report receipt).	\$500 per facility	R
PLS095	No shipper/owner has been submitted for this split.	Missing shippers/owners. Volume requiring split has not been split to shippers.	\$500 per facility	R
PLS097	The pipeline split imbalance volume [nn.n] does not equal zero. If this imbalance is not corrected by the pipeline split deadline this split data will not be included in the pipeline split reports.	Incomplete split. Volume requiring split does not match the sum of the volumes split to owners.	\$100 per facility	R
PLS146	A volume requiring split (VRS) does not currently exist for this pipeline split. Contact the receiving facility operator to ensure a corresponding VRS for your facility will be created. If not created by the pipeline split deadline this out of balance split will not be included in the pipeline split reports.	Missing VRS and ERS.	No Charge	N/A

Table 11.4: OVE Errors: Oil Valuation Compliance and Balancing Errors

Error Number	Error Message	Error Description	Penalty Generated For	Non-compliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
OVE001	No price has been entered for this sale	Incomplete valuation. Price has not been entered.	OVRTP	\$100	R
OVE002	No price, density, sulphur and volume have been entered for this purchase	Incomplete valuation. Identify incomplete first purchases oil valuation.	Purchaser	\$100	R
OVE003	The [price] imbalance for this valuation is > [price tolerance percent low] % and actual difference of +/- [price tolerance value low].	Valuation imbalance. The difference in gross price is not within the predefined tolerance limit. This error only generates for production months 2012-03 to 2016-09.	OVRTP	No Charge	N/A
OVE003	The [density] imbalance for this valuation is > [density tolerance percent low] % and actual difference of +/- [density tolerance value low].	Valuation imbalance. The difference in density is not within the predefined tolerance limit.	OVRTP	No charge	N/A
OVE003	The [sulphur] imbalance for this valuation is > [sulphur tolerance percent low] % and actual difference of +/- [sulphur tolerance value low].	Valuation imbalance. Check if the difference in sulphur is within the predefined tolerance limit.	OVRTP	No charge	N/A

<b>Error Number</b>	<b>Error Message</b>	<b>Error Description</b>	<b>Penalty Generated For</b>	<b>Non-compliance fee per month (if applicable)</b>	<b>Assessment Frequency Current Month (CM) or Recurring (R)</b>
OVE003	The [volume] imbalance for this valuation is > [volume tolerance percent low] % and actual difference of +/- [volume tolerance value low].	Valuation imbalance. Check if the difference in volume is within the predefined tolerance limit.	OVRTP	No charge	N/A
OVE004	The [volume] imbalance for this valuation is > [volume tolerance percent low] % and actual difference of +/- [volume tolerance value low].	Valuation imbalance. Check if the difference in volume is within the predefined tolerance limited.	this error is not currently active	No charge	N/A
OVE005	A purchase was entered and no matching RTP transaction was found.	No OVRTP found for Purchaser record.	Purchaser	No Charge	N/A
OVE006	No price and volume have been entered for this purchase	Incomplete valuation. Identify incomplete subsequent purchaser oil valuation.	this error is not currently active	No Charge	N/A
OVE007	The Royalty/Tax Payer auto-generated sales volume [sales volume] is not within the predefined tolerance [volume tolerance value low] of the purchaser submitted volume [submitted volume].	Valuation imbalance. The difference between the Petrinex auto-generated sales volume and the corresponding Purchaser submitted volume is greater than 1.0 cubic metre. This error only generates from the production month 2016-10 forward.	OVRTP	\$100	R

Error Number	Error Message	Error Description	Penalty Generated For	Non-compliance fee per month (if applicable)	Assessment Frequency Current Month (CM) or Recurring (R)
OVE008	The [price] imbalance for this valuation against [DEL-REC-CTP] is greater than 5 cents.	Valuation imbalance. The difference in gross price between the Royalty/Tax Payer and Purchaser submitted price is greater than 5 cents. The OVE008 error was implemented commencing with the September 2016 production month, however, the error will not apply to price amendments related to production months prior to September 2016. This error only generates from the production month 2016-10 forward.	OVRTP	\$100	R

Table 11.5: RTP Errors: Royalty/Tax Payer Missing/Incomplete Errors

<b>Error Number</b>	<b>Error Message</b>	<b>Error Description</b>	<b>Noncompliance fee per month (if applicable)</b>	<b>Assessment Frequency Current Month (CM) or Recurring (R)</b>
RTP037	The sum of the [MinOwnership Type value] MinOwnership for WIO percentages must be less than or equal to the operator's [MinOwnership Type] RTP percentage.	Incorrect WIO Percentage.	\$100 per unit/well	R
RTP100	Stream is missing RTP details.	Missing RTP records.	No Charge	N/A
RTP101	RTP [value] Percent total [value] does not match the corresponding RTA [value] percent [value]	Mineral Ownership Percent Total.	\$100 per unit/well	R
RTP103	RTP exempt percent [value] does not match the RTA exempt percent [value] for exempt BA [value] and Mineral Ownership Type [value]	Exempt Percent.	\$100 per unit/well	R
RTP104	Exempt BA ID [value] (percent [value]) is missing from RTP for Mineral Ownership Type [value]	Exempt BA missing from RTP.	\$100 per unit/well	R
RTP105	Exempt BA ID [value] does not exist on the RTA for Mineral Ownership Type [value]	Exempt BA not found on RTA.	\$100 per unit/well	R

## 11.6 Shadow Billing Period

ER may provide a shadow billing period when new non-compliance errors are introduced or significant changes are made to existing errors and could be effective from any production month. A shadow billing period gives companies an opportunity to familiarize themselves with the reporting requirements and correct any outstanding reporting errors before penalties are actually assessed.

If, at any time, ER implements a shadow billing period, BAs will be notified of the amount of their penalties, but the penalties will not be assessed. The shadow billing detail will include the financial impact that would be felt if penalties were assessed.

## 11.7 Non-Compliance Processes and Reports

ER encourages all operators to be proactive by monitoring their compliance with Ministry requirements.

Petrinex provides the following processes and reports to assist the operator in identifying and correcting deficiencies in reporting to eliminate non-compliance errors and associated fees before the Saskatchewan reporting deadlines:

- Petrinex will provide the submitting Business Associate (BA) with warnings and error messages as data is submitted to Petrinex via online or by batch;
- an authorized BA may request reports from Petrinex at any time of the month which will identify balancing errors as well as missing and incomplete data for all their facilities or specific facilities. Note that it is the responsibility of the submitting BA to run the necessary non-compliance reports up to and including the day of deadline; and
- Petrinex automatically runs non-compliance reports for all operators and all facilities each month, two days before the applicable Saskatchewan reporting deadline (for example, volumetric non-compliance reports will run two days prior to the Volumetric Reporting Deadline, etc.). This is the final auto-generated notice/warning from Petrinex to Industry with regard to any outstanding errors that require corrections prior to the reporting deadline.

Non-compliance reports are sent to the facility operator via the Petrinex mailbox. The authorized BA will receive an email notification of the successful completion of the report, if the BA has requested email notifications.

### 11.7.1 Types of Non-Compliance Reports

The following Non-Compliance reports are available from Petrinex:

- Volumetric Non-compliance Report – Summary and Detail
- Waste Plant Non-compliance Report
- Pipeline Split Missing/Incomplete Report
- Oil Valuation Compliance and Balancing Report
- Royalty/Tax Payer Missing/Incomplete Report

### 11.8 Petrinex Non-Compliance Waiver Application

All BAs who have been assessed a penalty (i.e. non-compliance fee) and who have paid the penalty prior to the invoice due date, may apply to the minister for a waiver or partial waiver of any assessed penalties, by submitting a waiver application in an approved form and manner.

BAs must submit a waiver application for Petrinex non-compliance penalties through IRIS located at [Government of Saskatchewan - IRIS](#).

Guidelines:

- 1) A non-compliance invoice must be paid in full by the invoice due date before submitting a waiver application.
- The waiver application must be submitted through IRIS on or before the 45th day after the invoice date as prescribed in *The Oil and Gas Conservation Regulations, 2012*.
- A waiver can only be requested for non-compliance invoices (invoices starting with 'Z').
- To request a waiver, the BA must have the following information:
  - a) Invoice #;
  - b) The line numbers for those penalties on which a waiver is being requested;
  - c) Reason(s) for requesting a waiver; and,
  - d) Any supporting documentation for the request.

In addition to the above information, it would be helpful for the BA to provide ER with any applicable Petrinex Change Request number (CR#) or Service Desk ticket number.

### 11.9 Ministry Policy for Petrinex Non-Compliance Waiver Applications

After receiving a waiver application, the minister may:

- 1) Waive payment of any or all assessed penalties, if in the minister's opinion:
  - a) The penalty was levied in error; or
  - b) The failure to comply was due to a cause outside the control of the BA and could not have been avoided by the exercise of due care; or
  - c) It is appropriate and in the public interest to do so; or
- 2) Deny the request for waiver of the payment of any or all assessed penalties.

ER will review and process all the waiver applications and will provide a credit invoice for all the waiver applications that are approved. The credit invoices for all the processed applications will be sent to Petrinex and can be found under the 'Ministry Invoices and Statements'. These same credit invoices can be found under 'Invoices' within the Reports/Billing Module in IRIS.

In cases where there has not been a request for a waiver or assessed penalties, the minister may, on the minister's own initiative, waive any or all assessed penalties, if the minister is satisfied that the circumstances mentioned above in 1(a) or 1(b) apply to a non-compliance invoice.

For all cases where a waiver request is denied by ER, a letter detailing the decision will be provided to the Primary and/or Backup User Security Administrator (USA) as well as the submitter.

#### **11.10 Ministry Audit of Data Submitted Through Petrinex**

As part of its ongoing monitoring activities under *The Oil and Gas Conservation Act*, ER conducts a review of data submitted to ER through Petrinex (i.e. volumetric, valuation, Royalty/Tax Payer or infrastructure information). ER may at any time request supporting documentation to validate the information reported in Petrinex. ER may also require an amendment be made to information/data/records reported in Petrinex. Failure to comply with ER's requirement by the specified due date will result in non-compliance penalties in accordance with *The Oil and Gas Conservation Regulations, 2012*. The BA will incur daily penalties until the requested documentation or amendment has been submitted by the BA and verified by ER to be sufficient. A BA that incurs a penalty will be invoiced, and the invoice identifier will begin with the prefix 'Q'. These invoices are automatic and can be found on IRIS. BAs can request a waiver through the "Application for Waiver" functionality in IRIS.



**Appendix 1: Sample Letter Authorization of User Security Administrator for Petrinex**

*(On Corporate Letterhead)*

Date:

Revenue and Business Systems  
Saskatchewan Ministry of Energy and Resources  
1000-2103 11<sup>th</sup> Avenue,  
Regina, SK  
S4P 3Z8

Re: Authorization of User Security Administrator for Petrinex

I hereby authorize (USA's name here) to be the User Security Administrator for (enter BA name here), Business Associate ID (enter BA 5 digit identifier here).

-----  
Authorized by: (Print name)

-----  
Title

-----  
Signature

***Note: Replace underlined text above with USA Name, BA Name and BA identifier.***

## Appendix 2: Proration Factors for Crude Oil Batteries

Prorated production is where the total battery production is allocated to wells based on individual well tests.

Production from multiple crude oil wells may be commingled before separation and continuous single-phase measurement of the components. Individual well production must be tested periodically to determine the production rates that can be used to estimate the well's monthly production volume. The estimated monthly well production volume is corrected using a proration factor. The minimum test frequency and duration requirements apply to all crude oil wells under primary production and waterflood operations included in proration batteries. These frequencies, duration requirements and how to calculate the estimated production of each well from the test data can be found in Section 6 of Saskatchewan's *Directive PNG017*. Production must be estimated before it is possible for a proration factor to be determined.

### Calculation of Proration Factors and Monthly Production

Step 1) Calculate the total estimated battery production for oil, gas, and water:

Total estimated battery production = Sum of all wells' total estimated production

Step 2) Calculate the total actual battery production and production factors for oil, gas and water:

#### For oil and water:

Total actual battery production = Total monthly disposition + Closing Inventory – Opening Inventory – Total Receipts

#### For gas:

Total actual battery production = Total monthly disposition + FUEL + FLARE + VENT - Total Receipts

**Proration factor = Total actual battery production / Total estimated battery production**

The proration factors for oil, gas and water are calculated to 6 decimal places and rounded to 5 decimal places.

Note: that if a GOR is used to estimate the total battery gas production volume then it must be in accordance with Section 4 of Saskatchewan's *Directive PNG017*.

Estimated battery gas production = Actual battery oil production x GOR

Gas proration factor = 1.00000

Step 3) Calculate each well's monthly prorated production volumes for oil, gas and water:

Monthly prorated oil volume = Well estimated oil production x Oil proration factor

Monthly prorated gas volume = Well estimated gas production x Gas proration factor

Monthly prorated water volume = Well estimated water production x Water proration factor

Step 4) Check that total well production is equal to total actual battery production for oil, gas and water. If the volumes are not equal due to rounding, minor adjustments to the monthly volumes may be required.

Sum of prorated well production = Total actual battery production

### Appendix 3: Proration Factors for Gas Batteries

Production from multiple gas wells may be commingled before separation and continuous single-phase measurement of the components. Individual well production must be tested periodically to determine the production rates that can be used to estimate the well's monthly production volume. The estimated monthly well production volume is corrected using a proration factor. The minimum test frequency and duration requirements apply to all gas wells in proration batteries. These frequencies, duration requirements and how to calculate the estimated production of each well from the test data can be found in Chapter 7 of Saskatchewan's *Directive PNG017*. Production must be estimated before it is possible for a proration factor to be determined.

#### Calculation of Proration Factors and Monthly Production:

Step 1) Calculate total estimated gas production for the battery:

Total battery estimated monthly gas volume = Sum of all estimated monthly well gas volumes

Step 2) Calculate proration factor for gas:

Gas proration factor = Total battery measured monthly gas volume ÷ Total battery estimated monthly gas volume

The proration factors for gas are calculated to 6 decimal places and rounded to 5 decimal places and reported on Petrinex.

Step 3) Calculate actual monthly (prorated) well gas production:

Actual monthly well gas production = Gas proration factor x Estimated monthly well gas volume

Step 4) Ensure the sum of prorated well production equals the total actual monthly well gas production for gas. If the volumes are not equal due to rounding, minor adjustments to the monthly volumes may be required.

Sum of prorated well production = Total actual battery production

#### Appendix 4: Proration Receipts at Custom Treater

A custom treater produces no products, but rather accepts emulsion (oil and water) from producers in the surrounding area. The facility allocates actual volumes back to each producer's facility based on estimated volumes delivered. Typically the oil is then delivered to a pipeline or railcar. Water is delivered to an injection facility or waste plant for disposal.

#### Calculating Actual Receipts

The closing inventory for the custom treater for both oil and water must be calculated. This volume can be determined by using a ratio of oil to water as estimated during the receipt of the last trucked-in volumes from the month before and reporting it as the closing inventory for both oil and water.

To determine the ratio of oil and water from the trucked in volumes:

First, determine the total volume of emulsion in the inlet tanks (this is a measured volume)

For example:

**INLET TANK EMULSION VOLUME = 38 m<sup>3</sup>**

Using the last truckloads of emulsion received at the facility, determine the emulsion volumes for each truck load; water cut percentage, and total emulsion.

LAST TRUCK 1: 15m<sup>3</sup> emulsion, 7.1% water cut

LAST TRUCK 2: 12 m<sup>3</sup> emulsion, 12.6% water cut

LAST TRUCK 3: 14 m<sup>3</sup> emulsion, 11.5% water cut

**SUM OF ALL TRUCKED IN EMULSION VOLUMES = 41 m<sup>3</sup>**

Since the total of the last three truck loads is greater than the inlet tank emulsion volume it is assumed that the emulsion in the inlet tank came from these three truckloads.

Calculate the closing oil and water inventories for the inlet tanks.

1. Calculate the actual oil and water for inventory purposes, in the inlet tank as follows:
  - a) Determine the water volume held in each tank

LAST TRUCK 1: 15 m<sup>3</sup> x 7.1 % = 1.1 m<sup>3</sup>

LAST TRUCK 2: 12 m<sup>3</sup> x 12.6% = 1.5 m<sup>3</sup>

LAST TRUCK 3: 14 m<sup>3</sup> x 11.5% = 1.6 m<sup>3</sup>

**TOTAL WATER VOLUME IN THE INLET TANK = 4.2 m<sup>3</sup>**

b) Determine the water cut percentage:

Total emulsion received from the last three truck loads 41 m<sup>3</sup>

Total water in the last three loads is 4.2 m<sup>3</sup>

WATER CUT PERCENTAGE = (total water volume in the inlet tank/sum of all trucked in emulsion volumes) x 100

WATER CUT PERCENTAGE = (4.2 m<sup>3</sup> / 41 m<sup>3</sup>) x 100 = 10.2%

- Determine the water volume in the inlet tank:

WATER VOLUME IN INLET TANK = (total inlet tank emulsion volume) x (water cut percentage) = 38 m<sup>3</sup> x 10.2% = 3.9 m<sup>3</sup>

- Determine oil volume in the inlet tank:

OIL VOLUME IN INLET TANK = (total inlet tank emulsion volume) – (water volume in inlet tank)  
= 38 m<sup>3</sup> – 3.9 m<sup>3</sup>  
= 34.1 m<sup>3</sup>

## 2. Calculate inventory

CLOSING OIL INVENTORY = (treater oil in sales tank) + (oil in emulsion in inlet tank)

CLOSING WATER INVENTORY = (treated water in outlet tank) + (water in emulsion in inlet tank)

The treater oil in the sales tank and the treated water in the outlet tank are measured volumes.

**Calculating Actual Receipts**

These steps are for calculating actual receipts. Data for the example calculations that follow are from the table below.

Operator	Facility ID	Estimated Receipts(Inlet Volume)		Dispositions(Outlet Volume)	
		Oil (m3)	Water (m3)	Oil (m3)	Water (m3)
INVOP Oil:30.0 m <sup>3</sup> INVOP Water: 50.0 m <sup>3</sup>					
99988	SKBT1234567	137.2	21.0	137.0	21.0
99989	SKBT1234568	26.8	30.1	26.7	30.0
99990	SKBT1234569	310.1	40.3	300.3	39.8
99991	SKBT1234564	140.0	120.1	129.9	119.0
99992	SKBT1234562	415.3	30.8	414.2	30.7
99993	SKBT1234561	9.8	9.1	9.6	8.8
99994	SKBT1234588	226.0	121.3	225.1	121.0
99995	SKBT1234528	50.5	15.3	50.1	15.2
99996	SKBT1234548	155.9	113.3	150.8	112.4
<b>Total for the Month</b>		<b>1471.6</b>	<b>501.3</b>	<b>1443.7</b>	<b>497.9</b>
INVCL Oil: 40.0 m <sup>3</sup> (calculated using formula above) INVCL Water: 60.0 m <sup>3</sup> (calculated using formula above)					

**Calculate the Total Actual Oil Disposition**

Total Actual Oil Dispositions = Total Oil Dispositions + Oil Closing Inventory – Oil Opening Inventory

$$\text{Total Actual Oil Disposition} = 1443.7 \text{ m}^3 + 40.0 \text{ m}^3 - 30.0 \text{ m}^3 = 1453.7 \text{ m}^3$$

**Calculate the Total Actual Water Disposition**

Total Actual Water Disposition = Water Dispositions + Water Closing Inventory – Water Opening Inventory

$$\text{Total Actual Water Dispositions} = 497.9 \text{ m}^3 + 60.0 \text{ m}^3 - 50.0 \text{ m}^3 = 507.9 \text{ m}^3$$

**Oil Proration (Allocation) Factor Calculation**

Oil Proration Factor = Total Actual Oil Dispositions ÷ Total Estimated Oil Receipts

$$\text{Oil Proration Factor} = 1453.7 \text{ m}^3 / 1471.6 \text{ m}^3 = 0.987836 \text{ (calculated to 6 decimal places and rounded to 5 decimal places and reported on Petrinex) } = 0.98784$$

**Water Proration Factor Calculation**

Water Proration Factor = Total Actual Water Dispositions ÷ Total Estimated Water Receipts

Water Proration Factor =  $507.9 \text{ m}^3 / 501.3 \text{ m}^3 = 1.013166$  (calculated to 6 decimal places and rounded to 5 decimal places and reported on Petrinex) = 1.01317

The actual receipts are calculated for each receipt line by multiplying the product’s proration factor by the estimated receipt.

Operator	Facility ID	Actual Receipts (Inlet Volume)		Disposition (Outlet Volume)	
		Oil (m3)	Water (m3)	Oil (m3)	Water (m3)
INVOP Oil: 30.0 m <sup>3</sup> INVOP Water: 50.0 m <sup>3</sup>					
99988	SKBT1234567	137.2 x 0.98784 =135.5	21.0 x 1.01317 =21.3	137.0	21.0
99989	SKBT1234568	26.8 x 0.98784 =26.5	30.1 x 1.01317 =30.5	26.7	30.0
99990	SKBT1234569	310.1 x 0.98784 =306.3	40.3 x 1.01317 =40.8	300.3	39.8
99991	SKBT1234564	140.0 x 0.98784 =138.3	120.1 x 1.01317 = 121.7	129.9	119.0
99992	SKBT1234562	415.3 x 0.98784 =410.2	30.8 x 1.01317 =31.2	414.2	30.7
99993	SKBT1234561	9.8 x 0.98784 =9.7	9.1 x 1.01317 =9.2	9.6	8.8
99994	SKBT1234588	226.0 x 0.98784 =223.3	121.3 x 1.01317 = 122.9	225.1	121.0
99995	SKBT1234528	50.5 x 0.98784 =49.9	15.3 x 1.01317 = 15.5	50.1	15.2
99996	SKBT1234548	155.9 x 0.98784 =154.0	113.3 x 1.01317 =114.8	150.8	112.4
<b>Total for the Month</b>		1453.7	507.9	1443.7	497.9
INVCL Oil: 40.0 m <sup>3</sup> INVCL Water: 60.0 m <sup>3</sup>					

Once the actual receipts have been calculated the receipts should balance with the dispositions and inventories. **The actual receipts are entered into Petrinex.**



**Appendix 5: Proration Receipts for Terminals**

A terminal produces no products, but rather accepts oil from producers in the surrounding area. The facility allocated actual volumes back to each producer’s facility based on estimated volumes delivered. The oil is then delivered to a pipeline or railcar. Water is delivered to an injection facility or waste plant for disposal.

**Calculating Actual Receipts**

These steps are for calculating the actual receipts. Data for this example calculation is found below.

Operator	Facility ID	Estimated Receipts(Inlet Volume)		Dispositions(Outlet Volume)	
		Oil (m3)	Water (m3)	Oil (m3)	Water (m3)
INVOP Oil: 30.0 m <sup>3</sup> INVOP Water: 50.0 m <sup>3</sup>					
99988	SKBT1234567	137.2	21.0	137.0	21.0
99989	SKBT1234568	26.8	30.1	26.7	30.0
99990	SKBT1234569	310.1	40.3	300.3	39.8
99991	SKBT1234564	140.0	120.1	129.9	119.0
99992	SKBT1234562	415.3	30.8	414.2	30.7
99993	SKBT1234561	9.8	9.1	9.6	8.8
99994	SKBT1234588	226.0	121.3	225.1	121.0
99995	SKBT1234528	50.5	15.3	50.1	15.2
99996	SKBT1234548	155.9	113.3	150.8	112.4
Total for the Month		1471.6	501.3	1443.7	497.9
INVCL Oil: 40.0 m <sup>3</sup> INVCL Water: 60.0 m <sup>3</sup>					

Sum by product all the estimated receipts and all the dispositions. Determine the terminal’s opening and closing inventories by product.

**Calculate the Total Actual Oil Disposition**

Total Actual Oil Dispositions = Total Oil Dispositions + Oil Closing Inventory – Oil Opening Inventory

$$\text{Total Actual Oil Disposition} = 1443.7 \text{ m}^3 + 40.0 \text{ m}^3 - 30.0 \text{ m}^3 = 1453.7 \text{ m}^3$$

Total Actual Water Disposition = Water Dispositions + Water Closing Inventory – Water Opening Inventory

$$\text{Total Actual Water Dispositions} = 497.9 \text{ m}^3 + 60.0 \text{ m}^3 - 50.0 \text{ m}^3 = 507.9 \text{ m}^3$$

**Oil Proration (Allocation) Factor Calculation**

Oil Proration Factor = Total Actual Oil Dispositions ÷ Total Estimated Oil Receipts

Oil Proration Factor =  $1453.7 \text{ m}^3 / 1471.6 \text{ m}^3 = 0.987836$  (calculated to 6 decimal places and rounded to 5 decimal places and reported on Petrinex) = 0.98784

**Water Proration Factor Calculation**

Water Proration Factor = Total Actual Water Dispositions ÷ Total Estimated Water Receipts

Water Proration Factor =  $507.9 \text{ m}^3 / 501.3 \text{ m}^3 = 1.013166$  (calculated to 6 decimal places and rounded to 5 decimal places and reported on Petrinex) = 1.01317

The actual receipts are calculated for each receipt line by multiplying the product’s proration factor by the estimated receipt.

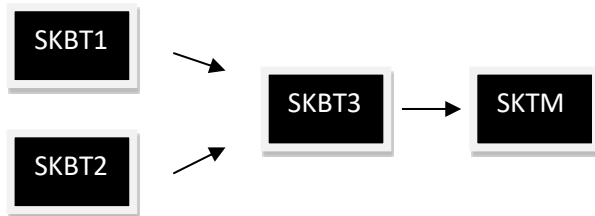
Operator	Facility ID	Actual Receipts (Inlet Volume)		Disposition (Outlet Volume)	
		Oil (m3)	Water (m3)	Oil (m3)	Water (m3)
INVOP Oil: 30.0 m3 INVOP Water: 50.0 m3					
99988	SKBT1234567	$137.2 \times 0.98784 = 135.5$	$21.0 \times 1.01317 = 21.3$	137.0	21.0
99989	SKBT1234568	$26.8 \times 0.98784 = 26.5$	$30.1 \times 1.01317 = 30.5$	26.7	30.0
99990	SKBT1234569	$310.1 \times 0.98784 = 306.3$	$40.3 \times 1.01317 = 40.8$	300.3	39.8
99991	SKBT1234564	$140.0 \times 0.98784 = 138.3$	$120.1 \times 1.01317 = 121.7$	129.9	119.0
99992	SKBT1234562	$415.3 \times 0.98784 = 410.2$	$30.8 \times 1.01317 = 31.2$	414.2	30.7
99993	SKBT1234561	$9.8 \times 0.98784 = 9.7$	$9.1 \times 1.01317 = 9.2$	9.6	8.8
99994	SKBT1234588	$226.0 \times 0.98784 = 223.3$	$121.3 \times 1.01317 = 122.9$	225.1	121.0
99995	SKBT1234528	$50.5 \times 0.98784 = 49.9$	$15.3 \times 1.01317 = 15.5$	50.1	15.2
99996	SKBT1234548	$155.9 \times 0.98784 = 154.0$	$113.3 \times 1.01317 = 114.8$	150.8	112.4
Total for the Month		1453.7	507.9	1443.7	497.9
INVCL Oil: 40.0 m3 INVCL Water: 60.0 m3					

Once the actual receipts have been calculated the receipts should balance with the dispositions and inventories. The actual receipts are entered into Petrinex.

## Appendix 6: Using the First POS Flag: Examples

### Example #1

#### Physical Movement of Oil:



#### Sales Scenario:

Company BBB purchases 500m<sup>3</sup> from Company AAA.

- Company BBB receives the 500m<sup>3</sup> at SKBT3 from SKBT1 and SKBT2:
  - 250m<sup>3</sup> from SKBT1.
  - 250m<sup>3</sup> from SKBT2.

Company CCC purchases 1000m<sup>3</sup> from Company BBB.

- Company CCC receives the 1000m<sup>3</sup> at SKTM.
  - 500m<sup>3</sup> is produced from SKBT3 (First POS).
  - 500m<sup>3</sup> is re-sold (Non First POS).

Menu  Inbox  ? Help  Contacts  Logout SK BA: Company BBB Name: Quicklist:

[\[Monthly Reporting\]](#) > [\[Oil/LPG Pipeline Splits\]](#)

### Edit Shipper/Owner Pipeline Split

Delivering Facility ID: SKBT 3 Location: Production Month: 2014-03  
 Name: Receiving Facility ID: SKTM Location: Product: OIL  
 Name:

Custody Transfer Point: SKTM Location:   
 Name:

Confirmation Number: Reference Code:

Volume Requiring Split: 1000.0 Total Actual: 0.0  
 Pipeline Split Imbalance: 1000.0

D Shipper/PL Contract	Shipper ID	Name	Actual Volume
<input type="checkbox"/>		Company CCC	<input type="text"/>

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[\[Monthly Reporting\]](#) > [\[Oil/LPG Pipeline Splits\]](#)

### Edit Pipeline Split by Owner

Delivering Facility ID: SKBT 3 Location: Production Month: 2014-03  
 Name: Receiving Facility ID: SKTM Location: Product: OIL  
 Name:

Custody Transfer Point: SKTM Location:  
 Name:

Shipper P/L Contract: Shipper ID: Shipper Name:

*CME0005 Saved to WIP Successfully*

D Owner Contract	Owner ID Purchaser ID	Owner Name Purchaser Name	RTIK	First POS	Stream ID	Actual Volume
<input type="checkbox"/>		Company BBB	<input type="checkbox"/>	<input checked="" type="checkbox"/>		500.0
<input type="checkbox"/>		Company CCC				
<input type="checkbox"/>		Company BBB	<input type="checkbox"/>	<input type="checkbox"/>		500.0
<input type="checkbox"/>		Company CCC				

Total: 1000.0

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BA:  Name:  Quicklist:

[\[Monthly Reporting\]](#) > [\[Oil/LPG Pipeline Splits\]](#)

### Edit Shipper/Owner Pipeline Split

**Delivering Facility ID:** SKBT 3      **Location:**      **Production Month:** 2014-03  
**Name:**      **Receiving Facility ID:** SKTM      **Location:**      **Product:** OIL  
**Name:**

---

**Custody Transfer Point:**   **Location:**   
**Name:**

---

**Confirmation Number:**       **Reference Code:**   
**Volume Requiring Split:** 1000.0       **Total Actual:** 500.0  
**Pipeline Split Imbalance:** 500.0

D Shipper/PL Contract	Shipper ID	Name	Actual Volume	
<input type="checkbox"/> <input type="text"/>	<input type="text"/>	Company CCC	500.0	<input type="button" value="Owners"/>

**Other Facilities**

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 BA:

[\[Monthly Reporting\]](#) > [\[Oil/LPG Pipeline Splits\]](#)

### Edit Cascade to Other Facilities

**Delivering Facility ID:** SKBT 3      **Location:**      **Production Month:** 2014-03  
**Name:**      **Receiving Facility ID:** SKTM      **Location:**      **Product:** OIL  
**Name:**






---

**Custody Transfer Point:** SKTM      **Location:**  
**Name:**

*CME0005 Saved to WIP Successfully*

D Facility ID OOP Operator	Facility Name OOP Operator Name	Volume Requiring Split	
<input type="checkbox"/> SKBT 1	Company AAA	250.0	<input type="button" value="Edit Shippers"/>
<input type="checkbox"/> SKBT 2	Company AAA	250.0	<input type="button" value="Edit Shippers"/>

**Total: 500.0**

 SK BA: Company BBB  
 Name:
 

 Quicklist:

[\[Monthly Reporting\]](#) > [\[Oil/LPG Pipeline Splits\]](#)

### Edit Shipper/Owner Pipeline Split

**Delivering Facility ID:** SKBT 3      **Location:**      **Production Month:** 2014-03  
**Name:**

**Receiving Facility ID:** SKTM      **Location:**      **Product:** OIL  
**Name:**

---

**Custody Transfer Point:** SKTM      **Location:**  
**Name:**

---

**Confirmation Number:**       **Reference Code:**

**Volume Requiring Split:** 1000.0            **Total Actual:** 1000.0

**Pipeline Split Imbalance:** 0.0

*CME0002 Submitted Successfully*

*CME0004 \*\*\* Data from Petrinex \*\*\**

	D Shipper/PL Contract	Shipper ID	Name		Actual Volume	
<input type="checkbox"/>	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>	Company CCC		500.0	<input type="button" value="Owners"/>
<b>Other Facilities</b>					500.0	<input type="button" value="Facilities"/>

**Example #2**

**Physical Movement of Oil:**



**Sales Scenario:**

Company CCC purchases 1000m3 from Company BBB.

- Company CCC receives the 1000m3 at SKTM.
  - 1000m3 is produced from SKBT3, and of that:
    - 500m3 is owned by the operator, Company BBB.
    - 500m3 is owned by the RTP Company AAA.

Because only Company BBB has a contract with Company CCC, for reporting purposes, the RTP oil must be shown as sold to the operator (Company BBB).

Menu Inbox Help Contacts Logout
SK BA: Company BBB  
Name: 
Quicklist:

[\[Monthly Reporting\]](#) > [\[Oil/LPG Pipeline Splits\]](#)

### Edit Shipper/Owner Pipeline Split

**Delivering Facility ID:** SKBT 3      **Location:**      **Production Month:** 2014-03  
**Name:**      **Receiving Facility ID:** SKTM      **Location:**      **Product:** OIL  
**Name:**

---

**Custody Transfer Point:**  ... **Location:**   
**Name:**

---

**Confirmation Number:**       **Reference Code:**   
**Volume Requiring Split:** 1000.0 ...      **Total Actual:** 0.0  
**Pipeline Split Imbalance:** 1000.0

D Shipper/PL Contract	Shipper ID	Name	Actual Volume
<input type="checkbox"/>	<input type="text"/>	Company CCC	<input type="button" value="Owners"/>

**Other Facilities**



Menu Inbox Help Contacts Logout SK BA: Company BBB Quicklist:

[Monthly Reporting] > [Oil/LPG Pipeline Splits]

### Edit Pipeline Split by Owner

Delivering Facility ID: SKBT 3 Location: Production Month: 2014-03  
 Name: Receiving Facility ID: SKTM Location: Product: OIL  
 Name: Query

Custody Transfer Point: SKTM Location:  
 Name:

Shipper P/L Contract: Shipper ID: Shipper Name:

D Owner Contract	Owner ID Purchaser ID	Owner Name Purchaser Name	RTIK	First POS	Stream ID	Actual Volume
<input type="checkbox"/>		Company BBB	<input type="checkbox"/>	<input checked="" type="checkbox"/>		500.0
<input type="checkbox"/>		Company CCC	<input type="checkbox"/>	<input type="checkbox"/>		500.0
<input type="checkbox"/>		Company BBB	<input type="checkbox"/>	<input checked="" type="checkbox"/>		500.0
		Company AAA				
		Company BBB				
Total: 0.0						

Add Save to WIP OK

[Menu-Inbox-Help-Contacts-Logout](#)  
(Top-SK)

Menu Inbox Help Contacts Logout SK BA: Company BBB Quicklist:

[Monthly Reporting] > [Oil/LPG Pipeline Splits]

### Edit Shipper/Owner Pipeline Split

Delivering Facility ID: SKBT 3 Location: Production Month: 2014-03  
 Name: Receiving Facility ID: SKTM Location: Product: OIL  
 Name: Query Go

Custody Transfer Point: SKTM Location:  
 Name:

Confirmation Number: Reference Code:

Volume Requiring Split: 1000.0 Total Actual: 1000.0  
 Pipeline Split Imbalance: 0.0

*CME0002 Submitted Successfully*  
*CME0004 \*\*\* Data from Petrinex \*\*\**

D Shipper/PL Contract	Shipper ID	Name	Actual Volume
<input type="checkbox"/>		Company CCC	1000.0

Other Facilities Owners