



Petrinex Manitoba Inclusion Project Industry Readiness Handbook

Version 1.3

PMIP Industry Readiness Handbook Change Log

Version	Release Title	Key Changes	Release Date
V1.0	Initial Release		
V1.1		<p>Section 3.3.2 – Added comments for MB well commingling process.</p> <p>Appdx 11 – Added comments for collecting oil purchaser information from producers.</p> <p>Updates are highlighted in blue.</p>	
V1.2		<p>Section 3.3.1 – Added comments for collection of BA Information.</p> <p>Appdx 11 – Updated Business Associate section with details as to the information being collected from Industry. Updated deadline for BA & Facility conversion information for Go-Live.</p> <p>Appdx 12 – Updated IIO testing instructions to state that test files are now being accepted.</p> <p>Appdx 14 – Updated deadline for BA/Facility conversion information.</p> <p>General (not highlighted) – Updated all references to MGET to reference new Ministry (ARD).</p> <p>Updates are highlighted in blue.</p>	
V1.3		<p>Updated Go-Live date in various sections.</p> <p>Section 1.3 & 2.6 – Added comments for collection of commingled well information.</p> <p>Section 3.3.2 – Added comments for commingling updates and new salt well process.</p> <p>Section 3.3.4 & 3.3.5 – Added comments for RTA and RTP not being available at Go-Live.</p> <p>Appendix 5 – Added comments about RTA/RTP not being available at Go-Live for applicable stakeholders.</p> <p>Appendix 11 – Added comments for the collection of commingled well information. Updated conversion information deadlines. Added new post go-live activity for commingled injection wells. Added instructions for the USA to create new users and roles.</p> <p>Appendix 12 – Updated the production month requirements for IIO tests.</p> <p>Appendix 13 – Added comments for MB updates to learning modules, and deferral of RTA/RTP modules.</p> <p>Appendix 14 – Updated all important dates to reflect new Go-Live date.</p> <p>Appendix 15 – New – provides step-by-step instructions for setting up commingling scenarios.</p> <p>Updates are highlighted in blue.</p>	

<u>Notes</u>			
<ul style="list-style-type: none">• <i>Manitoba Change Leaders</i> will be notified of all available updates to this Guide.			

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1.0 Overview

1.1 The Petrinex Manitoba Inclusion Project (PMIP)

The Manitoba Ministry of Agriculture & Resource Development (ARD) has initiated a project to move several aspects of oil and gas reporting to Petrinex starting **May 4, 2020**. This project is expected to provide significant benefits to ARD and to the upstream oil and gas industry in Manitoba. Petrinex issued a letter to all Manitoba oil and gas operators on July 11, 2019. See [Appendix 1: Manitoba Communication to Stakeholders](#) for a copy of this letter.

Petrinex is an internet-based, joint strategic organization supporting Canada's upstream oil and gas industry and is represented by both Government and Industry.

Government stakeholders are represented by:

- Alberta Energy
- Alberta Energy Regulator (AER)
- Saskatchewan Ministry of Energy and Resources (GOS)
- BC Ministry of Finance (BC MOF)
- BC Oil and Gas Commission (BC OGC)
- BC Ministry of Energy, Mines and Petroleum Resources (BC EMPR)

Industry is represented by:

- Canadian Association of Petroleum Producers (CAPP)
- Explorers and Producers Association of Canada (EPAC).

Petrinex contributes to substantial improvement in the efficiency, accessibility and quality of information communicated between operators, producers, Government and Industry partners. For more information about Petrinex and the PMIP project structure, see [Appendix 2: About Petrinex and the Manitoba Inclusion Project](#), and visit the Petrinex website at www.petrinex.ca.

Oil and gas operators have been using Petrinex for volumetric, infrastructure and royalty-related reporting since October 2002 in Alberta, since March 2012 in Saskatchewan and since November 2018 in BC. Petrinex reporting includes mandated reporting to ministries and regulators, as well as non-mandatory reporting related to Industry-to-Industry business processes (e.g. partner reporting). Industry stakeholders have seen significant benefits from the move to Petrinex, including:

- Having a single venue for access to timely, accurate and secure data.
- Standardization of interfaces with company production accounting, financial and other systems.
- Tools to assure submissions for Government and Industry processes are timely, correct and complete.
- The ability to conduct paperless partner reporting in a standard and effective electronic venue.
- Petrinex consultation mechanisms that provide opportunities for Industry and Government to work together to achieve the best possible administrative processes for all stakeholders.

Individual companies and Industry associations have been strong advocates for the extension of Petrinex and its benefits to other Canadian jurisdictions, including Manitoba.

1.2 About this Handbook

This Handbook is designed to help your organization prepare for PMIP Go-Live. All individuals within your company who will be required to use Petrinex for administrative or Manitoba reporting purposes should review this Handbook.

We recognize that there is a wide range in experience levels between companies and individual users, from those who have extensive Petrinex knowledge through reporting in Alberta, Saskatchewan or BC; to those who have never used Petrinex before.

All prospective users should review **sections 1-3 in this Handbook**. These sections provide an overview of the project, steps to readiness, and provide a synopsis of what is changing for Manitoba reporting.

All of the other information in this Handbook is organized into **Appendices** that provide supplemental information in a variety of specific topic areas including:

- Changes from current Manitoba reporting processes.
- Petrinex reporting processes, concepts, and technical information.
- Information/instructions relating to readiness activities.
- Information related to data conversion.
- Testing instructions.
- Information on available training resources.
- Frequently asked questions.

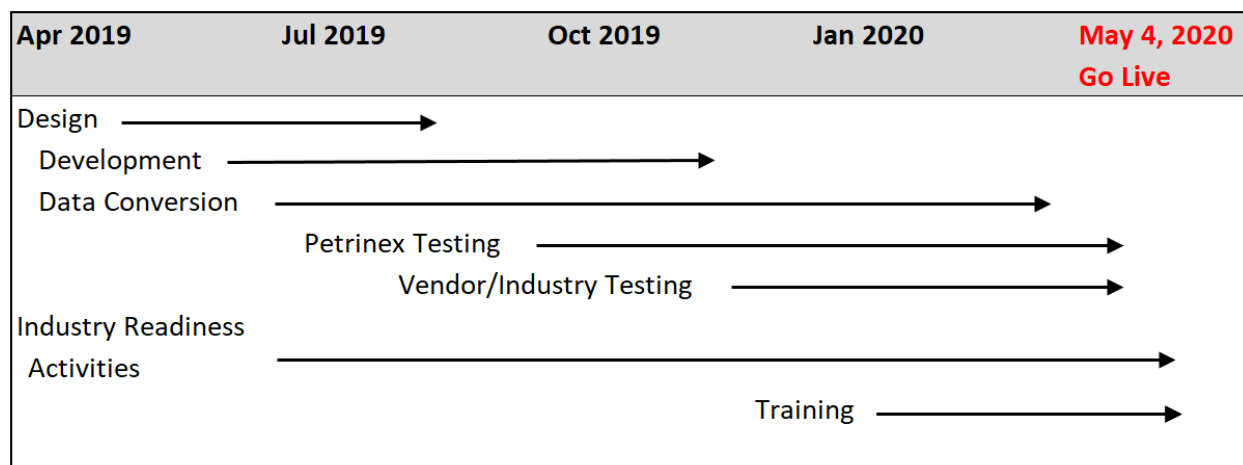
This Handbook is an evolving document that will be updated as new information becomes available. New releases will provide information on key activities such as Industry testing and training. Company “Change Leaders” will be notified when new releases are available; and all new changes will be highlighted and documented in the **Change Log** on page 2 of this document.

We encourage everyone to review the changes in the most current versions of this document as they become available.

1.3 High Level Project Scope, Timing and Organization

Reporting of volumetric and royalty-related information, along with the reporting of the supporting well and facility infrastructure information will begin in Petrinex on **May 4, 2020 (for the April production month)**. In advance of that date, project activities are underway or scheduled including detailed design, development, data conversion, testing and Industry readiness within the general timeframes identified below.

NOTE: The PMIP approach is based on the premise that, for the most part, existing Saskatchewan Petrinex functionality will meet stakeholders’ requirements for industry reporting. As such the design phase (now complete) of this project was focused on reviewing SK Petrinex functionality and confirming that overarching premise. Notwithstanding the above, some areas of divergence between MB and SK were identified. As such some existing SK functionality will not be included in PMIP; and a limited amount of new MB functionality will be included in the scope of the project.



A key success factor for PMIP is the active involvement of Industry stakeholders at each stage of the project. Along with the Petrinex Industry Team, a number of Manitoba operators have been actively involved in design workshops. The project team will continue to look to these and other Industry representatives for input related to design changes, testing, training and other Industry readiness activities.

The **Change Leader** program is an important component of the industry readiness strategy for this initiative. Each company impacted by PMIP is asked to identify a *Change Leader* to be the primary point of contact with Petrinex and take the lead in preparing their companies for the forthcoming changes. More information on *Change Leaders* is provided in the [“Recommended Steps to Readiness”](#) section.

Data conversion (collection of data from various ARD and industry sources to populate databases in Petrinex) will be happening throughout the design and development phases of this project. The vast majority of data to be converted will come from government systems; however, there are some items that require Industry involvement:

- **Collection of Business Associate Information:** The information on file with the Ministry is fragmented into different areas and different formats. Extraction for conversion into Petrinex has been unsuccessful. It has been decided that all required BA information for Petrinex will be collected from Industry. This ensures information is current and in a format that can be converted into Petrinex.
- **Identification of Manitoba Reporting Facilities.** Currently Manitoba only requires production volumes to be reported digitally at a well level; however, going forward Petrinex reporting requires a number of facility types in order to facilitate complete volumetric reporting across the province. This includes production at the well-head, injection, as well as the movement of all oil and gas products from the production source to the sales point. This also includes well-facility linkages. ARD’s system does not have facility information for conversion into Petrinex, so this information must be gathered from Industry.
- **Licence Numbers and Associated Well Events for Commingled Wells:** Industry must provide a list of well licence numbers (and the UWIs of their associated well events) for any oil producing well that has multiple events producing in different formations. Under this circumstance, the Ministry requires that Industry report monthly production to each well event separately. Each

producing well event will be linked to a multi-well battery. If the commingled well events are currently set up as single well batteries (not connected to an existing multi-well battery), a multi-well battery will be created. A facility licence will be issued that has the same number as the well licence, a multi-well battery will be created, and the well events will be linked to the new battery. By providing the list of applicable licence numbers and events ahead of time, ARD can create the necessary facility licences prior to Go-Live.

[Appendix 11: Pre & Post Go-Live Readiness Activities for Companies/Change Leaders](#) contains a detailed Industry conversion plan that all Change Leaders should review. Change Leaders should also review [Appendix 14: Important Dates for Industry](#) for a timeline of project activities that may have an impact on their companies.

Other Industry readiness activities will also be ongoing throughout the project. Examples of readiness activities include but are not limited to:

- **Communications Releases**
- **Manitoba Change Leader Meetings**
- **Software Vendor Meetings**
- **Interoperability Testing** (testing conducted by software vendors and Manitoba operators. See [Appendix 12: Instructions for Industry Testing](#) for more information).
- **Training Resources.** (See [Appendix 13: Instructions for Industry Training](#) for more information).

1.4 Key Contact Information

- For **Manitoba Policy** questions related to PMIP, contact **Peter Mraz**, Director of Regulatory Services, 204-945-6576, Peter.Mraz@gov.mb.ca
- For **PMIP Industry Readiness** questions, contact **Steve Freeman**, Industry Coordinator, 403-297-2311, steve.freeman@gov.ab.ca
- For **Petrinex Industry Policy** questions, contact **Ross Weaver**, Industry Team Manager, 403-297-4411, ross.weaver@gov.ab.ca

2.0 PMIP Steps to Readiness

Petrinex implementation will introduce significant changes for the Manitoba Government and for Industry companies. All companies are strongly encouraged to follow the outlined “PMIP Steps to Readiness” to ensure that they are ready for these changes.

Steps to Readiness
2.1 Identify and register a Change Leader for your company
2.2 Understand the impacts of PMIP on your company
2.3 Develop a plan to respond to the changes that will impact your company.
2.4 Prepare your systems
2.5 Ensure your staff are trained
2.6 Implement required pre-go-live activities
2.7 Go-Live and get the benefits

Detailed Steps to Readiness

2.1 Identify and Register a Change Leader for your Company

The Change Leader Program is a central readiness and communications strategy for PMIP. Every company should register a Change Leader to ensure that they receive all the information they need related to the new business processes and reporting changes.

Change Leaders have two primary roles:

a) Primary Point of Contact with Petrinex

- Pass on information received from Petrinex to the appropriate parties in your company, and ensure that the information is understood.
- Attend all Change Leader meetings scheduled by the PMIP team. PMIP Change Leaders will be notified with dates and venues for Change Leader meetings as they are scheduled.

b) Leader for PMIP Implementation in their company

- Develop a PMIP implementation plan for your company. Track and report progress against that plan and make adjustments as appropriate.
- Be the “go-to” person in terms of understanding what PMIP is all about and how it will impact your company.
- Ensure all of the “Steps to Readiness” are implemented efficiently, effectively and on a timely basis at your company.

Register your Change Leader: If you have not already done so, please provide Petrinex with the name, telephone number and e-mail address of the PMIP Change Leader for your company. Register your PMIP Change Leaders by contacting Petrinex at petrinexadmin@petrinex.ca.

2.2 Understand the Impacts of PMIP on your Company

PMIP impacts different stakeholder groups in significantly different ways. Stakeholders typically fall into one or more of the segments described below. Once you have identified which segment(s) your

company belongs to, carefully review Section 3 “What’s Changing” to understand the impacts of PMIP implementation as well as [Appendix 5: Information by Specific Stakeholder Group](#).

a) Oil & Gas Operating Producers

These are companies that operate wells (including licensees), batteries, or other oil and gas facilities. For the purposes of PMIP, operators fall into one of two categories:

- Multiple Jurisdictions – Companies that have operations in Alberta, Saskatchewan, and/or BC as well as Manitoba. These companies will have individuals that are familiar with Petrinex functionality and reporting procedures.
- Manitoba Only – Companies that have operations in Manitoba only and do not have prior experience with Petrinex.

b) Oil & Gas Non-Operating Producers/Royalty Tax Payers

These are companies that have an interest in oil and gas production, but do not operate any wells, batteries or other facilities. Non-operating producers fall into two subgroups:

- Take-in-kind Producers – Non-Operating Producers that pay their own royalties/taxes.
- Non Take-in-kind Producers – Non-Operating Producers that do not pay their own royalties/taxes. This group relies on their operating partner to pay their share of royalties/taxes.

c) Gas Midstream Facility Operators

These are companies that operate gas midstream facilities and pipelines where raw gas is processed into residue gas and NGL liquids and moved downstream. Most sales take place at these points.

- Gas Plants, Sales Meter Stations, Pipelines (Gas & NGL)

Note: It is understood that there are no mid-stream gas facilities currently operating in Manitoba. It is possible that such operations could exist in the future.

d) Oil Midstream Facility Operators

These are companies that operate oil midstream facilities where most sales take place. In Manitoba, these facilities receive deliveries of oil and/or field condensate.

- Oil Terminals (trucking and rail) and Pipelines

e) Marketers and Purchasers

These are companies that may be required to report sales volumes, energy, pricing, or other information required for royalty purposes.

f) Waste Plant & Custom Treater Facility Operators

These are companies that operate facilities that handle and treat emulsion or other chemical and solid waste materials. These facilities may also report recovered oil volumes.

Note: It is believed that there are no active waste plant operations in Manitoba at this time.

g) Service Providers

These companies provide services to one or more of the other segments identified in this list (i.e. production accounting services). Most often, producers/facility operators contract these service providers.

h) Production Accounting Software Providers

These companies are third party software providers to oil & gas producers who may have to alter or design their product to accommodate new reporting requirements.

Companies not specifically identified in any of the segments above should contact Petrinex to determine if there are any PMIP impacts to their operations.

2.3 Develop a Plan to Respond to the Changes that will Impact your Company

A company's plan to manage change may vary in detail and scope depending on the company's size and the number of segments the company is engaged in. Regardless of size, each company is strongly encouraged to have a plan in place that will assess the impact of change on each of its business segments, outline steps to implement any needed changes (both before and after Go-Live), and track progress against the plan. If you would like assistance in considering what elements should be included in your PMIP plan, please contact Steve Freeman at Petrinex (steve.freeman@gov.ab.ca or 403-297-2311) to discuss.

2.4 Prepare your Systems

a) Minimum Computer Specifications

Devices used to access Petrinex must meet certain minimum specifications, as well as to access the online learning modules. Details of these specifications can be found in [Appendix 7: Technical & Security Considerations](#).

b) System Interfaces

Companies may have a variety of systems that will need to interface with Petrinex including:

- Third Party Production Accounting Software Vendors – Petrinex is working with production accounting software providers that currently interface with Petrinex in other jurisdictions. Petrinex will be providing the specifications necessary to interface with Petrinex for Manitoba. Each company is encouraged to discuss PMIP with their software providers to ensure they are preparing for Petrinex reporting.
- Internally Developed Applications – If you have internally developed production accounting systems (other than simple spreadsheets) and require documentation with Petrinex specifications, please contact Sheryl Moody, 403-297-5575, sheryl.moody@gov.ab.ca.
- Internally Developed Spreadsheets – Petrinex has the ability to upload information from CSV spreadsheet files efficiently using batch upload functionality. Instructions on mapping and formatting internal spreadsheets for upload to Petrinex will be added to [Appendix 12: Instructions for Industry Interoperability Testing](#) later on in the project.

- Third Party Marketing/Pricing Software – Modifications to these systems may also be required. You are encouraged to discuss this with your software providers as required.

c) Take the Opportunity to Test your Upload Files

Petrinex has a comprehensive plan for testing uploads for all applicable functionality. All interested companies and software providers will have the opportunity to have samples of various CSV/XML upload files run in the Petrinex test system.

Interested parties will create these sample upload files and email them to Petrinex. The files will be uploaded into the test system by a Petrinex staff member. The results will be evaluated and feedback will be returned. This allows a company to ensure that they understand what information is required and that files are formatted properly.

Additional information regarding testing is provided in [Appendix 12: Instructions for Industry Interoperability Testing](#).

2.5 Ensure your Staff are Trained

a) Identify the Petrinex users in your company

A company (Business Associate) determines how many users are required depending on its size, segment(s), and complexity. Petrinex requires that a Business Associate have at least two user accounts, and it is strongly recommended that you have at least three user accounts. Specifically:

- Primary User Security Administrator (USA): Every Business Associate (BA) using Petrinex must have a Primary USA. The USA is responsible for managing user accounts including account creation and deactivation. The USA also creates User Security Roles and assigns these roles to the appropriate users within the company. User Security Roles define which functions a user can perform in Petrinex.
- Backup User Security Administrator: It is strongly recommended that each BA have a Backup USA with authority to perform the functions of the Primary USA should that individual not be available.
- Users: The Primary and Backup USA roles cannot perform any functions in Petrinex other than setting up user security roles and granting specific access to users. As such, at least one other user must be created to carry out the company's required reporting activities in Petrinex.

Instructions for setting up your USA are documented in [Appendix 11: Pre & Post Go-Live Readiness Activities for Companies/Change Leaders](#). As well, an email will be sent to Change Leaders in October with instructions and contact information for providing the USA information.

Details on how USAs set up users, and user security roles are provided in [Appendix 11: Pre & Post Go-Live Readiness Activities for Companies/Change Leaders](#).

b) Petrinex Learning Resources

Petrinex uses a number of approaches to help BAs ensure their users are fully trained in Petrinex functionality. Here are some of the Learning Resources that will be available for the PMIP project:

- PMIP Industry Readiness Handbook
This Handbook is an evolving document that will be continually updated as Go-Live approaches. It is meant to provide useful information and tips to assist Industry with the transition to Petrinex. Anyone identified as a future Petrinex user at your company is encouraged to keep current with the most recent updates to this guide as they become available.
- Change Leader Meetings: A number of Change Leader meetings will be scheduled over the life of the PMIP project at different locations. Change Leaders are a key focal point for Petrinex communications. The primary purpose of these meetings is to keep Change Leaders aware of ongoing project and implementation changes, demonstrate Petrinex Manitoba functionality, and provide a forum for having your questions answered. Change Leaders should communicate information shared in these meetings with the appropriate users in their companies.
- Learning Modules
All Petrinex functionality has associated web-based learning modules available on the Petrinex website under the Learning Centre. Existing learning modules will be updated with Manitoba content and new modules will be created for new functionality developed exclusively for Manitoba. More information on Manitoba training will be provided when available.
- Tips and Job Aids
Change Leaders will be alerted to new Tips and Job Aids posted to the Petrinex website in the coming months.

Job Aids are created to provide examples, templates, shortcuts, and other information that make using certain functions within Petrinex easier and more efficient.

Tips are communications intended to provide up-to-the-minute information and updates dealing with a variety of Petrinex issues.

- Online Help
Online help screens will be available for PMIP functionality at Go-Live. While logged into Petrinex, a user can access Online Help on any page by clicking on the Help symbol. Online Help is context sensitive and provides step-by-step “how to” information as well as related background information relating to the page.

All Change Leaders and future Petrinex users can access many of the resources listed above and more on the Petrinex website under Initiatives under the Petrinex Manitoba Inclusion Project (follow the link below): <https://www.petrinex.ca/Initiatives/Pages/Manitoba.aspx>

Examples of what can be found on this page include:

- The most recent update of the PMIP Industry Readiness Handbook
- Updates and links related to Training, Tips and Job Aids

- Materials presented at Change Leader meetings
- Announcements/New Releases related to this project

2.6 Implement Required Pre-Go-Live Activities

As the PMIP timeline moves forward Petrinex will communicate specific activities that should be performed prior to the go-live date. These activities will be communicated to Change Leaders well in advance. Some specific “Pre-Go-Live” activities have been identified below.

- Data Conversion
 - i. Collection of Facility Data

As mentioned previously in section 1.3, Petrinex reporting requires a number of facility types in order to facilitate complete volumetric reporting across the province. ARD’s system does not have facility information for conversion into Petrinex, so this information must be gathered from Industry.

Spreadsheet templates will be sent to individual Change Leaders as they are identified asking for their company’s facility infrastructure. A detailed instruction document is also included to aid in completing the spreadsheet.

ii. Collection of Commingling Well Data

This is concerning oil wells that have multiple events producing in multiple formations. Under this scenario, production (volumetrics) must be reported for each well event separately. ARD wants all commingled events to have active producing statuses and be linked to a multi-well battery. For those commingled events that are currently set up as single-well batteries, a new facility licence will be created that has the same number as the well licence. A new multi-well battery will be created using that licence and well events will be linked to the new battery.

Each company must provide a list of their well licences and associated well events that fall under this scenario so that ARD can create the new facility licences ahead of Go-Live.

iii. Review of Conversion Files

Certain spreadsheet files will be available to Industry BAs containing listings of information that is being converted into Petrinex. All BAs should review these lists to identify any missing data or possible errors in their data. Conversion files will be shared for the following items:

- Business Associate
- Well
- Facility

Details as to where these files can be found will be shared when available.

- BA Information and Primary User Security Administrator (USA) Identification

Business Associates will need to provide some general information about their company that Petrinex needs in order to fill out required BA information and identify their Primary USA prior to Go-Live. Those who already have a Primary USA for other Petrinex jurisdictions may choose to use the same person for Manitoba as well.

Each change leader will receive the BA Data Collection Form and USA Authorization Letter template. These must be completed and returned.

- Other activities as identified during the project

More details are provided in [Appendix 11: Pre & Post Go-Live Readiness Activities for Companies/Change Leaders](#). This includes all required Pre & Post Go-Live activities along with associated deadlines. Change Leaders should review this appendix to ensure that pre-go-live activities are completed on time.

2.7 Go-Live and Get the benefits

Petrinex has provided significant benefits to users in Alberta, Saskatchewan, and BC for many years. These benefits are now extending to users in Manitoba. It is important, especially during the early months after implementation, to monitor how Petrinex processes are working for your company and to investigate any issues that may arise that could detract from the benefits expected from the project. It is also important that your users are aware of and make full use of the various tools and reports provided through Petrinex to help them do their work efficiently and effectively.

The Petrinex Business Desk is an important resource for Petrinex users. The Business Desk serves as the single point-of-contact for queries related to the business functionality and operations of Petrinex. It supports both Industry and Ministry users by providing telephone and email support and providing management, coordination, analysis and response to user queries.

The Industry Team at Petrinex will also tell you how you can participate in directing the ongoing evolution and enhancement of Petrinex through participation in various committees such as the Petrinex Advisory Committee and the Industry Benefits Committee, a user group that meets monthly with Petrinex staff.

Change Leaders should review [Appendix 11: Pre & Post Go-Live Readiness Activities for Companies/Change Leaders](#) for a list of activities that must be completed after Go-Live.

3.0 What's Changing

Note: As you read through this section, you will find that many Petrinex reporting functions capture the same information that is submitted to ARD today. Petrinex, however, does not perform royalty calculations. Industry will still be responsible for calculating royalties and submitting the same royalty and tax forms (in addition to submitting data in Petrinex) until Manitoba implements its own royalty/tax system. ARD is working on creating a revised version of the forms that reduces the amount of redundancy reported in both Petrinex and on the forms.

In conjunction with this section, readers may also want to review the following appendices:

- [Appendix 4: Linking Existing Manitoba Forms to Petrinex Processes](#)
- [Appendix 5: Information by Specific Stakeholder Group](#)

3.1 User Administration

Each Business Associate (BA) in Petrinex requires a User Security Administrator (USA). The USA is responsible for the creation and maintenance of the BA's User IDs and User Security Roles. The User Security Roles assigned to a specific user determines which reporting functions the user will have access to in Petrinex. Access to these specific functions in Petrinex determines:

- What types of data submissions can be performed.
- What types of data can be queried.
- What informational notifications the user will receive.
- What types of reports can be generated.

Existing BAs in Petrinex may want to utilize the same User IDs that they have in other jurisdictions. It should be noted that while Manitoba shares much of the same functionality as Saskatchewan, each jurisdiction's information resides in separate databases. The USA will have to set up separate user profiles for the Manitoba jurisdiction.

3.2 Data Management

3.2.1 Submission Processes

Petrinex is comprised of web-based reporting and data retrieval processes. Information can be submitted to Petrinex via online screens or by batch processes.

- **On-line:** Information can be input directly through user-friendly screens. Infrastructure data is updated in Petrinex immediately upon submission. There are also certain transactional submissions that, when entered on-line, may initially be saved to a "work-in-progress" (WIP) area where the user can "park" information for further editing before making a final submission to the Petrinex database.
- **Batch:** Batches of data can be uploaded using either a Comma Separated Values (CSV) file (e.g. using an Excel spreadsheet); or an Extensible Markup Language (XML) file generated from a company's production accounting software system.

Note: Companies may need to use a combination of the data entry methods to meet their reporting requirements.

3.2.2 Frequency and Approach to Data Submission

Currently, form-based data is typically transmitted once per month in large batches. Petrinex, however, is designed to accept data as soon as it is available. Users can submit information as they receive it as opposed to waiting until they have all information for one submission. One significant advantage of Petrinex is that volumetric receipts reported at a facility are auto-populated as dispositions at the upstream delivering facility, thereby reducing the data entry effort and chance of error. Auto-population even extends to cross-border deliveries between BC, Alberta, Saskatchewan, and Manitoba. In order to maximize the benefits of the auto-population process for all Industry partners, users are encouraged to submit data as early as possible.

With the flexibility that Petrinex provides, a BA could consider one or more of the following data submission approaches:

- **By Product**: The data for each product can be submitted as soon as it is available. Often the gas volumes are not available as early as the oil and water volumes so facility operators may report the oil first.
- **By Activity**: As the data regarding an activity becomes available, it should be reported to Petrinex. Examples of activities are Production, Injection, Closing Inventory, Receipts, etc.
- **By Facility**: Operators may submit data for each facility as it is completed.

3.2.3 Petrinex Edits

Petrinex contains thousands of edits (rules regarding what data can be successfully submitted) that are intended to validate data, to the greatest extent possible, as it is received. The error messages that are generated by these edits are immediately relayed to the BA in order to correct any errors and avoid penalties and fees related to invalid reporting. For this reason, it is in the operator's best interest to submit data early in the reporting cycle. As discussed above, this is also in the best interest of other Industry stakeholders who may need the data to complete and validate their own reporting requirements for the month.

3.3 Infrastructure

3.3.1 Business Associate

Aligns to Manitoba Process:

New company procedures listed on the Manitoba Resource Development website

New Business Associate (BA) applications will be managed through Petrinex after Go-Live. Please review the information below for any changes to the existing process.

Data Conversion:

The current Operator Codes on file with ARD will be converted into Petrinex as the BA ID. BA IDs in Manitoba are 4 digit numeric codes.

Efforts to extract Business Associate information from the Ministry for data conversion into Petrinex has been unsuccessful. Information is fragmented in different areas and different data formats. It has since been decided that the required information will be collected from Industry. This has the advantage of ensuring that all information is current and provided in a format that can be turned into a conversion file for load into Petrinex.

Change Leaders will be receiving a form that must be completed and submitted back to Petrinex. This is an editable PDF form to collect General (main contact/address), Primary & Backup USA contact, and BA Roles information. Instructions on completing the form and a letter template for USA authorization will also be included in the email.

NOTE: More information collecting BA information is described in detail in [Appendix 11: Pre& Post Go-Live Readiness Activities for Companies/Change Leaders](#).

Impacts to Manitoba Processes:

- Business Associate information will be maintained on Petrinex.
- New applicants who do not have an existing operator code will apply for a BA ID by filling out the online application form found on the Petrinex website.
 - Companies must fill out all required information. If Petrinex access is required, then Primary USA information must be provided as well.
 - Companies will attach their Proof of Registration, a list of the company's directors and executive officers, along with any other documents that ARD require
 - ARD reviews and either approves or rejects all applications. Approval will not be granted until ARD has received the required Performance Bond.
 - Once approved, Petrinex will generate a BA ID. If necessary, ARD will communicate password information to the Primary USA.
- Existing BAs will also submit any changes to their company information through Petrinex. Changes are reviewed and either accepted or rejected by ARD.
 - The 4 digit BA ID cannot be changed.
 - Only ARD can change the company name. The requirements set by ARD to approve a corporate name change will not be changing. Companies must follow the same process and provide the appropriate documentation. The only addition to the process is for ARD to change the company name in Petrinex once approved.
- ARD will set Amalgamation Dates for BA IDs in Petrinex. Much like the name change, the required process with ARD for collecting the required amalgamation details is still conducted outside of Petrinex.

NOTE: Manitoba is collecting Primary USA and Backup USA information from all Industry Business Associates so that passwords can be communicated prior to Go-Live. More information on the collection of BA information is provided in [Appendix 11: Pre& Post Go-Live Readiness Activities for Companies/Change Leaders](#). Change Leaders will be receiving an email in October with instructions and contact information for providing the USA information.

3.3.2 Well Infrastructure

Aligns to Manitoba Form:

None. The processes for well licencing and reporting drilling/completion data remains outside of Petrinex.

Data Conversion:

ARD will be converting all active well licence and well attribute information to Petrinex. Abandoned wells will not be converted.

Converted well identifiers will consist of 20 characters. The first 4 characters represent the jurisdiction and type (MB WI) followed by a 16 character location.

- Example – MB WI 100101000110W100

Well statuses will be converted to the Petrinex method used in other jurisdictions. Petrinex well statuses are listed in 4 components:

- Fluid (Oil, Gas, Water, etc.)
- Mode (Drilling, Completed, Active, Suspended, Abandoned, etc.)
- Status (Producing, Injection, Storage, etc.)
- Structure (Commingled, Reporting, Drain, etc.)

If any of these values is unknown, it is set as N/A (Not Applicable).

Information is required from Industry for certain commingled wells. In particular, Industry must provide a list of well licence numbers (and the UWIs of their associated well events) for any oil producing well that has multiple events producing in different formations. Under this circumstance, the Ministry requires that Industry report monthly production to each well event separately. Each producing well event will be linked to a multi-well battery. If the commingled well events are currently set up as single well batteries (not connected to an existing multi-well battery), a multi-well battery will be created. A facility licence will be issued that has the same number as the well licence, a multi-well battery will be created, and the well events will be linked to the new battery.

By providing the list of applicable licence numbers and events ahead of time, ARD can create the necessary facility licences prior to Go-Live.

See bullet points below for more information on ARD commingling processes.

NOTE: Well conversion information will be sent to all Industry BAs to review. More details are available in [Appendix 11: Pre & Post Go-Live Readiness Activities for Companies/Change Leaders.](#)

Impacts to Manitoba Processes:

- ARD is adopting the Petrinex self-serve model that exists in other jurisdictions. As such, Industry will be able to edit the status for wells in which they are the licensee.
 - Ministry adds the well events and the statuses for drilling and completed. From there,

Industry manages the status of the well over its life cycle from putting it on production/injection for the first time up to the point that the well is ready to be abandoned. The Ministry does abandonments.

- In addition to the well status, Industry must provide additional information when a well is put on production/injection for the first time.
 - Gross Completion Interval Depths
 - Pool
 - Crude Oil Density (Light, Medium, Heavy)
 - Facility Linkage
- Both the Gross Completion Interval Depths and the Pool must be confirmed by ARD. There is a GCI Confirmation Status and Pool Confirmation Status in Petrinex that will initially be set to Pending when these values are first entered. ARD sets the status to Confirmed once approved. If ARD does not approve, they will contact the company and these values will need to be changed.
- All wells must be linked to a facility in order to report monthly volumetrics (production, injection, and disposal). Industry will submit the facility linkage when wells become active for the first time:
 - Producing statuses require the well to be linked to a battery (BT). The battery must have a subtype valid for the status (ex: a gas well cannot be linked to an oil battery).
 - Injection statuses require the well to be linked to an injection facility (IF).
 - There are certain statuses in which the well is both producing and injecting. If such a status is selected, there will be 2 facility link fields. The user must enter both a battery and an injection facility.
- A new status has been created for salt wells in Manitoba. These are wells that inject water down hole in order to dissolve salt into brine. That brine is then pumped back to the surface. In order to report all of the necessary volumetrics, a salt well will be simultaneously linked to both a water source production battery (WT) and an injection facility (IF). The process will be as follows:
 - Active salt wells will be given a status of SALT ACTIVE PROD/INJ N/A in the Edit Well Status screen. The PROD/INJ type is what allows a well to be linked to both a production and injection facility at the same time.
 - All active salt wells will be linked to an injection facility that is a 518 subtype (Disposal - Approved for Non-Oil & Gas Related Activities) and a formation water source battery.
 - Both injection facilities and water source batteries can be created in the Request Facility Identifier screen.
 - For monthly volumetric reporting at the Injection Facility (IF):
 - Receipts of water will be recorded under the Facility Level View. These could be volumes received from the water source battery for re-injection or receipts from other sources and facilities.
 - Injection of water will be recorded to the well event under the Well Level View.
 - Receipts of water must balance with injection of water.
 - For monthly reporting at the Water Source Battery (WT):
 - Production of water/brine will be recorded to the well event under the Well Level View.

- At the facility level, water or brine can be recorded to inventory, disposed back to the injection facility (recorded at the IF as a receipt), or disposed somewhere else. Evaporated water may have to be reported a disposition to a miscellaneous code (i.e. MB MC).
 - Production of water/brine must balance to dispositions and/or inventory.
- Industry has the ability to set a Suspended status for a well event in Petrinex. Wells that have a Suspended status do not have to report monthly volumetrics (see section 3.4.1 for more information on volumetric reporting). Industry has the ability to change from Suspended to an active status if the well has activity again.
 - Setting the status to Suspended does not officially suspend the well with ARD.
 - Industry will continue to apply for a well suspension just as is done today.
 - Once officially suspended, ARD will set a MINSUSPEND status on the well event in Petrinex. Only ARD can change the status again in the future once this is set.
 - The Suspended status that Industry sets is solely for the purposes of volumetric reporting.
- Well events can be commingled in Petrinex for reporting purposes. The process for obtaining commingling approval has not changed and is handled outside of Petrinex. Within Petrinex, well events will be commingled in one of three ways:
 - **Injection/Disposal Wells:** Industry will attach/commingle well events to the first (or reporting) well event within the Edit Well Status screen. The reporting event is given a status in which the Mode is REPORT (ex: WATER ACTIVE DISP REPORT). The selected commingled events are automatically assigned a status of N/A N/A N/A COMMING. The reporting event is linked to an injection/disposal facility and is used for all volumetric reporting. Commingled events are not reported.
 - For existing wells, ARD will not be converting the commingled events with the N/A N/A N/A COMMING status. Industry will commingle these events themselves after Go-Live.
 - **Production Wells:** The process is different for producing wells. Events are not commingled to the reporting event in the Edit Well Status screen. Industry reports production to each well event. Each well event will be individually linked to a multi-well battery. If the commingled well events are currently set up as single well batteries (not connected to an existing multi-well battery), a multi-well battery will be created. A facility licence will be issued that has the same number as the well licence. Industry can then create a multi-well battery using the new facility licence. Well events will be given an active producing status (OIL ACTIVE PROD N/A) and linked to the new facility in the Edit Well Status screen.
 - As noted above, a list of well licences and their associated well events is required from Industry for all wells that fall under this category of commingling.
- For wells producing/injecting in the same formation with multiple well events, the commingling process is handled as follows:
 - Industry will assign a DRAIN status to any non-reporting event (ex: OIL N/A PROD DRAIN). Wells with a DRAIN status are not linked to a facility. The reporting event would be assigned a normal active producing/injecting status and linked to a facility (ex: OIL

ACTIVE PROD N/A). Volumetrics for all events are reported at the one event linked to the facility.

- See [Appendix 15: Manitoba Commingling Processes](#) for step by- step instructions on how to set up the various commingling scenarios in Petrinex.
- ARD sends Well/Well Event Information to Petrinex. Users are able to query data for any well. Examples of information found in Petrinex include:
 - UWI & Associated Licence #
 - Confidential/Experimental Status (including effective date range)
 - Spud/Finish Drilling/Rig Release Dates
 - Perforation/Packer Information
 - Total Depth & True Vertical Depth
 - Lahee Class
 - Well Type (oil classification)
 - Crude Oil Density
 - Field/Pool
 - Well Event Statuses
 - Gross Completion Intervals
- New producing wells in Manitoba are considered confidential for the first 30 days (or longer in some cases). Certain data elements are hidden on a confidential well to anyone who does not have the necessary permissions to see them. See [Appendix 7: Technical & Security Considerations](#) for more information on Petrinex security and what information is hidden for a confidential well.

3.3.3 Facility Infrastructure

Aligns to Manitoba Forms:

None.

Data Conversion:

As mentioned in Section 1.3, because Manitoba has only ever collected reporting at a well level, they do not have facility level infrastructure to convert. ARD does have a few multi-well battery licences, but they do not have all of the facility attributes that are required in Petrinex (including well-facility linkages).

All facility information is being collected from Industry for inclusion at Go-Live. Change leaders should receive a spreadsheet template. Any company that operates/owns facility infrastructure in Manitoba should complete this template. As well, there will be a detailed instruction document to provide clarity in filling out the spreadsheet.

Converted facility IDs will consist of 11 characters. The first 4 characters represent the jurisdiction and facility type (battery, gas plant, etc.) followed by a 7 character numeric identifier. The following is an example of what a Petrinex battery ID would look like.

- Battery – MB BT 1234567

Petrinex facility types are broken down into subtypes that further define the nature of the facility. This can include fluid or measurement characteristics. A complete list of facility types and subtypes that can be set up in Petrinex is provided in [Appendix 6: Petrinex Facility Types & Subtypes for Manitoba Reporting](#).

Facilities can be created in Petrinex after Go-Live. This exercise affords companies the opportunity to retain the same facility codes they already have in their systems. Facilities created in Petrinex are assigned a sequential number that cannot be changed once created. It should also be noted that there can be no duplicate facility IDs in Petrinex. If we receive the same facility ID from different operators, one will need to be changed. Operators will be informed if their number needs to be changed because it is already in use.

NOTE: Facility conversion information will be posted for Industry to review for completeness and accuracy. More information collecting and sharing facility information is described in detail in [Appendix 11: Pre& Post Go-Live Readiness Activities for Companies/Change Leaders](#).

Impacts to Manitoba Processes:

- The following facility types are required in Petrinex to facility province wide volumetric reporting:
 - Single & Multi-Well Batteries
 - Fresh & Formation Water Source Batteries
 - Injection/Disposal Facilities
 - Sales Pipelines
 - Tank & Rail Terminals
 - Custom Treating Facilities
 - Waste Plants
- Under the Petrinex self-serve model, Industry will now be responsible for the following tasks:
 - Creating Petrinex Facility IDs.
 - Editing Petrinex facility information.
 - Creating and changing well to facility links.
 - Initiating Petrinex facility operator changes.
 - Users can query information on any operator's facilities.
- Some facility subtypes require a facility level licence in order to create a Petrinex ID. ARD will develop a process for creating facility licences and sending them to Petrinex.
- Operators initiate facility operational status changes throughout the facility's life cycle. This typically involves moving from New to Active to Suspended. There are certain statuses that only ARD can set. For example:
 - ARD will set the facility status to Abandoned at the appropriate time.
 - ARD can set a status of Minsuspend to prevent Industry from reporting volumetrics. This would be done in cases of non-compliance escalation.

- Manitoba will adopt the same Petrinex concurrence process that exists in Saskatchewan for facility operator changes and linking wells to other operators' facilities. Under this process, Petrinex notifies other operators of the intended operator change or link change. The new operator can then go into Petrinex and either accept or reject the requested change. Once accepted, the new operator assumes responsibility of filing any required submissions for the facility.

Batteries:

- Manitoba will follow the Saskatchewan method of having only measured or prorated battery subtypes. Industry should ensure the appropriate subtype is listed in their conversion information.
- If a battery is part of a Storage or Enhanced Oil Recovery (EOR) scheme, Industry can indicate this in the facility information and provide the Injection Facility ID associated with the battery.

Gas Meter Stations:

- Gas meter stations have a facility attribute for gas pipeline operators to identify a Common Stream Operator (CSO) for meter stations delivering onto their pipeline. There is also an attribute to state whether the disposition of gas from the upstream facility (i.e. the gas plant) will be auto populated or not. The CSO is quite often the operator of the gas plant.
- It is not anticipated there will be any gas meter stations to set up for Go-Live.

Oil Terminals:

- Terminals have a facility attribute to indicate whether the terminal is physically connected to a pipeline. If so, the Pipeline Facility ID is also entered. This information is optional for operators to provide. It is not needed for any reporting purposes.

Non-Reporting Facility Types:

- Industry has the ability to create **Water Source IDs** to identify sources of fresh water. These are geographical locations where fresh water is obtained for delivery to oil and gas facilities. These do not include licenced underground water source wells. Examples of fresh water sources include lakes, ponds, rivers, creeks, and dugouts. These IDs are used in volumetric submissions at official reporting facilities to record receipts of water only. They do not require volumetric reporting/balancing of their own.
- When a waste plant receives waste from, or disposes waste to, a non-Ministry regulated facility or location, that transaction must be reported to Petrinex using a **Waste Location ID**. Waste locations are either generators (delivering to a waste plant) or receivers (receiving from the waste plant). Waste locations are non-regulated as they generally fall outside of the typical oilfield reporting process. Examples of waste locations include landfills, gas stations, and tanker spillage sites.
 - Waste plant facility operators have access to listings of all existing waste receiver location IDs (regardless of which operator created it). Waste generator locations have

been deemed confidential and will only be available to the BA who created it.

3.3.4 Royalty Tax Attributes (RTA)

Aligns to Manitoba Forms:

None

Data Conversion:

Royalty tax information is created and maintained in ARD systems. However, some royalty tax information will be provided to Petrinex for query purposes only. Information will be available for both wells and units.

The following kinds of information will be available for wells:

- Oil and/or Gas Classification (New, Old, Third Tier)
- Oil and/or Gas Programs (Pre or Post-2014 Holiday)
 - Includes Holiday Volume, Royalty and/or Tax %
- Unit Participation (for wells wholly or partially in units)
 - Unit IDs and Participation %
 - Tract IDs participated in
 - Spacing Units well goes through
 - Production Volume %,
 - Crown and/or Freehold %
- Non-Unit Participation
 - Participation %
 - Spacing Units well goes through
 - Production Volume %,
 - Crown and/or Freehold %

The following kinds of information will be available for units:

- Tract Information
 - Tract IDs/Descriptions, Tract %
 - Pressure Maintenance Project Incentive (PMPI) Start/End Date (if applicable)
 - Crown and/or Freehold %
- Third Tier Exemption Factor (TTEF)
- All Well Events in the Unit and their Participation %

Note: ARD has encountered difficulties in collecting and integrating various data points needed for RTA as they are currently in multiple locations and formats. As such, RTA information will **NOT** be available for Go-Live. Functionality has been developed and RTA **WILL** be implemented at a future date. Companies will be notified prior to implementation.

Impacts to Manitoba Processes:

There is no impact to Industry reporting processes.

- The impact of not having the functionality for Go-Live is quite low. RTA is a valuable informational tool, but does not affect any monthly reporting.

3.3.5 Royalty/Tax Payer (RTP)

Aligns to Manitoba Forms:

None

Data Conversion:

ARD will be converting all existing royalty/tax payer (royalty interest) information associated with each stream (wells and units) for both gas and oil to Petrinex.

In Petrinex, the stream operator of a well or unit is responsible for submitting and maintaining royalty/tax payer information. For conversion purposes, the well licensee will be converted as the stream operator and sole royalty/tax payer for wells. The unit operator will be converted as the stream operator and sole royalty/tax payer for each tract within a unit. This aligns with current Manitoba processes.

Note: RTP functionality will **NOT** be active for Go-Live. It will be implemented at the same time RTA functionality becomes available (see section 3.3.4). Petrinex requires that RTA information exist in order to verify whether RTP submissions are required.

Impacts to Manitoba Processes:

- Manitoba will utilize the same Petrinex Royalty Tax Payer functionality that exists in Saskatchewan with some minor changes.
- Royalty/tax payer information is required for each stream (well and unit) and applicable product (oil/gas). The stream operator is responsible for submitting this information and updating it for any changes. The information collected for each stream/product includes:
 - Unit Tract Number & Tract Factor (automatically provided).
 - Royalty/Tax Payer IDs (valid Petrinex BA IDs).
 - Ownership Type (crown, freehold, etc.) associated with each royalty/tax payer.
 - The royalty tax payer's ownership percentage.
- Industry can perform stream operator changes using the same concurrence process utilized for facility operator changes.
- For new wells, the Licensee will be considered the stream operator. The Licensee will be responsible for either submitting royalty tax/payer information or transferring operatorship of the stream to someone else.
- There is no impact to not having RTP functionality at Go-Live as this submission is not required until RTA information exists.

3.4 Monthly Processes

3.4.1 Volumetrics & Waste Plants

Aligns to Manitoba Forms:

Monthly Oil & Gas Production Report & Crown Royalty Statement: Fields related to production volumes.
Monthly Freehold Oil & Gas Production Tax Statement: Fields related to production volumes.
Mandatory Electronic Data Submission: Information related to production volumes.

Data Conversion:

There will be no monthly volumetric or waste plant submission data converted to Petrinex for periods prior to the production month at Go-Live. Any prior period amendments made for production periods prior to Go-Live will be filed outside of Petrinex.

Impacts to Manitoba Processes:

Volumetrics:

- Volumetric data includes production, injection, and product movements of hydrocarbons and hydrocarbon by-product volumes and/or energy (GJs) that facility operators gather at wells and facilities.
- Manitoba will utilize the same Petrinex volumetric reporting processes that exist in Saskatchewan.
- Currently Manitoba only requires volumes to be reported at a well level; however, going forward Petrinex reporting requires a number of facility types in order to facilitate complete volumetric reporting across the province. This includes production at the wellhead as well as the movement of all oil and gas products from the production source to the sales point.
- Operators of active Ministry-regulated reporting facilities must report the monthly volumetric data for each product, identifying the applicable activities and from/to (location) information for each operated facility. See [Appendix 3: Important Petrinex Concepts & Processes](#) for related definitions and tables.
- Facility types that must report volumetric data in Petrinex are:
 - Batteries (BT)
 - Custom Treaters (CT)
 - Gas Gathering Systems (GS)
 - Gas Plants (GP)
 - Injection Facilities (IF)
 - Sales Gas Meter Stations (MS)
 - Sales Pipelines (PL)
 - Tank & Rail Oil Terminals (TM)

- Licenced Fresh/Formation Water Source Batteries (WT)
- In Petrinex, all active producing wells must be linked to a battery and all active injection/disposal wells must be linked to an injection facility for volumetric reporting.
- Different views (screens) are used to accommodate all of the required reporting at each facility:
 - Well View – used to report all relevant activities for wells attached to the facility if applicable (ex: production, injection, etc.) and associated hours. This includes the injection and recovery of load oil.
 - Facility View – used to report all relevant activities associated with the facility (ex: receipts, dispositions, fuel, etc.)
 - Proration Factors – used to enter proration factors for oil, gas, and water for proration applicable facilities.
 - Summary – provides balancing summaries by product along with a listing any non-compliance errors/warnings associated with the reporting.
- The Petrinex volumetric reporting process is based on the following principles. See [Appendix 3: Important Petrinex Concepts & Processes](#) for a description of certain concepts mentioned below.
 - Reporting is required for all active wells and facilities.
 - The use of auto-population or auto-calculation to derive certain data elements for balancing purposes and to reduce the risk of input error. (I.e. populating the opening Inventory based on previous month closing Inventory value or populating a facility disposition based on another facility's reported receipt.)
 - Balancing for all products at the facility level and between facilities (receipts and dispositions across the province).
 - Cross-Border balancing for all products (receipts and dispositions across Petrinex jurisdictions).
 - Data is submitted online or by batch file upload (CSV or XML).
 - Full-form amendments to reduce the risk of error.
 - Non-compliance reporting rules, algorithms, and processes to ensure monthly reporting are balanced and valid.
- The ability to submit and query volumetric information is subject to the standard Petrinex security model. See [Appendix 7: Technical & Security Considerations](#) for more information on Petrinex security.
- The Volumetric reporting deadline will align with other Petrinex jurisdictions (approximately the 19th-21st of the following month).
- A summary of the volumetric reporting changes for Manitoba is presented on the following pages.

SUMMARY OF VOLUMETRIC REPORTING CHANGES FOR MANITOBA	
REPORTING SUBJECT	SUMMARY OF CHANGES
General Well/Facility	<ul style="list-style-type: none"> • 24 Hour test values currently collected on the Monthly Oil & Gas Production Report & Crown Royalty Statement are not required in Petrinex. Production and injection volumes/hours are reported as one monthly total. • All active facilities/wells (not in a suspended status) must report volumetrics for the production month. Where active facilities/wells did not have activity, report as SHUTIN. • The operator must report the number of hours in a month that a well was producing or injecting. Although a well may have produced or injected multiple products, the hours are only reported once. The total hours cannot exceed the total hours available in a month (days x 24 hours). <i>Certain well statuses allow a well to be linked to both a battery (for production) and an injection facility (for injection). Hours can be reported at both facilities, but the combined total may not exceed the total hours available in the month.</i> • Proration factors must be reported at certain types of facilities. A proration subtype battery requires a proration factor for any reported production of Gas, Oil, or Water. Custom treaters require a proration factor for any receipt of Oil or Water. Oil terminals may optionally report proration factors for receipts of Oil or Water. • Heat values (MJ/m³) associated with gas production volumes reported in Saskatchewan will not be required in Manitoba.
Load Fluids	<ul style="list-style-type: none"> • Load oil will be reported in Manitoba in the same manner as Saskatchewan. • Load oil injection is reported at the well level. All load oil must be recovered before new production is reported. • Load oil purchased from another producer requires oil valuation and must be reported at the receiving facility as a purchase receipt (PURREC). • Load oil transferred between operated facilities does not require oil valuation and must be reported at the receiving facility as a receipt (REC).

<p>Cross-Border Receipts/Deliveries</p>	<ul style="list-style-type: none"> • Petrinex accommodates the movement of product across multiple jurisdictions. • Generally the facility reporting the receipt will auto-populate the disposition to the upstream cross-border facility. • Transactions between Manitoba and Saskatchewan require the use of the actual Facility IDs used in the corresponding province. • Users can use Petrinex facility lookups to find Facility IDs for facilities in other jurisdictions. • Manitoba users cannot query volumetric submissions made in other jurisdictions.
<p>Product Balancing</p>	<ul style="list-style-type: none"> • All products/product groups at a facility must balance. Balancing activities are auto-calculated by Petrinex. • Different products/product groups utilize different balancing activities. • Imbalances (IMBAL) are used for oil & NGL product groups where there are no metering tolerances. • Metering Differences (DIFF) are used for gas, water, and solvent product groups where there are acceptable metering tolerances. • IMBAL & DIFF are typically calculated as: Opening Inventory + Total Production + Total Receipts + Total Purchased Receipts + Total Load Recovery + Inventory Adjustment + Process – Total Fuel – Total Flare – Total Vent - Total Disposition – Total Purchase Disposition - Total Injection - Total Load Injected – Closing Inventory – Shrinkage - Fire/Theft/Spill. • At gas plants, Petrinex auto-calculates the process (PROC) volumes of NGL products extracted from the raw gas stream. This calculation is necessary to balance NGL product groups. • Petrinex also uses the PROC volumes to calculate the gas equivalent shrinkage (SHR) volume of each NGL product. Shrinkage is used in determining the gas metering difference at the plant.

<p>Validation & Non-Compliance</p>	<ul style="list-style-type: none"> • To ensure data integrity, all user submissions are first validated before being saved to the database. • Any submission rows that contain errors or warnings are displayed on screen (or in a notification for batch submissions). • All errors must be corrected. Facilities that still contain errors at the volumetric reporting deadline are considered to have missing or incomplete submissions and are in a state of non-compliance. • All outstanding errors/warnings are sent to the Ministry on the volumetric reporting deadline. Facilities that are in a state of non-compliance are then subject to any penalties or other repercussions as outlined in Ministry directives. • Non-Compliance errors are generally created for missing submissions for active facilities/wells, missing product reporting, product imbalances/metering differences, or utilization of invalid cross-border facilities. • Operators can request a volumetric non-compliance report at any time for a listing of their facilities that contain errors/warnings in both current and prior periods. • Petrinex will automatically generate a non-compliance report 2 days before the deadline to warn operators of any issues. Another report will be generated at the volumetric deadline to inform operators of errors/warnings sent to the Ministry.
<p>Volume Requiring Split</p>	<ul style="list-style-type: none"> • Dispositions or purchase dispositions of oil to certain facility types (custody transfer points) will generate a volume requiring split (VRS) in the oil pipeline splits module that must be responded to. See section 3.4.2 for information on pipeline splits.
<p>Crude by Rail</p>	<ul style="list-style-type: none"> • Railcar oil terminals are required to report all receipts of oil. • Receipts are balanced with dispositions to miscellaneous railcar (RC) codes. • If the final destination of the oil is known, the operator will report the disposition to the appropriate jurisdiction code followed by RC. (ex: Texas would be TXRC) • If the final destination of the oil is unknown, the operator will report the disposition to MBRC (Manitoba railcar).

Waste Plants:

Note: It is believed there are no waste plant facilities operating in Manitoba at this time. This reporting function will be applicable to any future active waste plant operations.

- Manitoba will utilize the same Petrinex waste plant reporting processes that exist in Saskatchewan. Waste plant operators will make a monthly submission of receipts and dispositions of oilfield and non-oilfield waste.
- Reporting waste plant volumes/activity embraces the same basic principles of volumetric reporting for other facilities:
 - Reporting required for every active waste plant.
 - Use of auto-population/auto-calculation.
 - Facility & Cross-Border balancing for all products.
 - Full-form amendments.
 - Non-compliance reporting to ensure correct monthly reporting.
- Waste plants are reported on a different screen than volumetrics due to the need to capture some different types of information. Receipts and deliveries at waste plants require the following information to be reported:
 - A waste code that determines the nature of the waste.
 - Classification of the waste as dangerous or non-dangerous.
 - Each receipt/disposition is broken out into the volumes of Oil, Solids, and Water that comprise the total volume.
- The waste plant reporting deadline will be the same day as the volumetric reporting deadline (approximately the 19th-21st of the following month).

3.4.2 Oil Pipeline Splits & Oil Valuation

Aligns to Manitoba Forms:

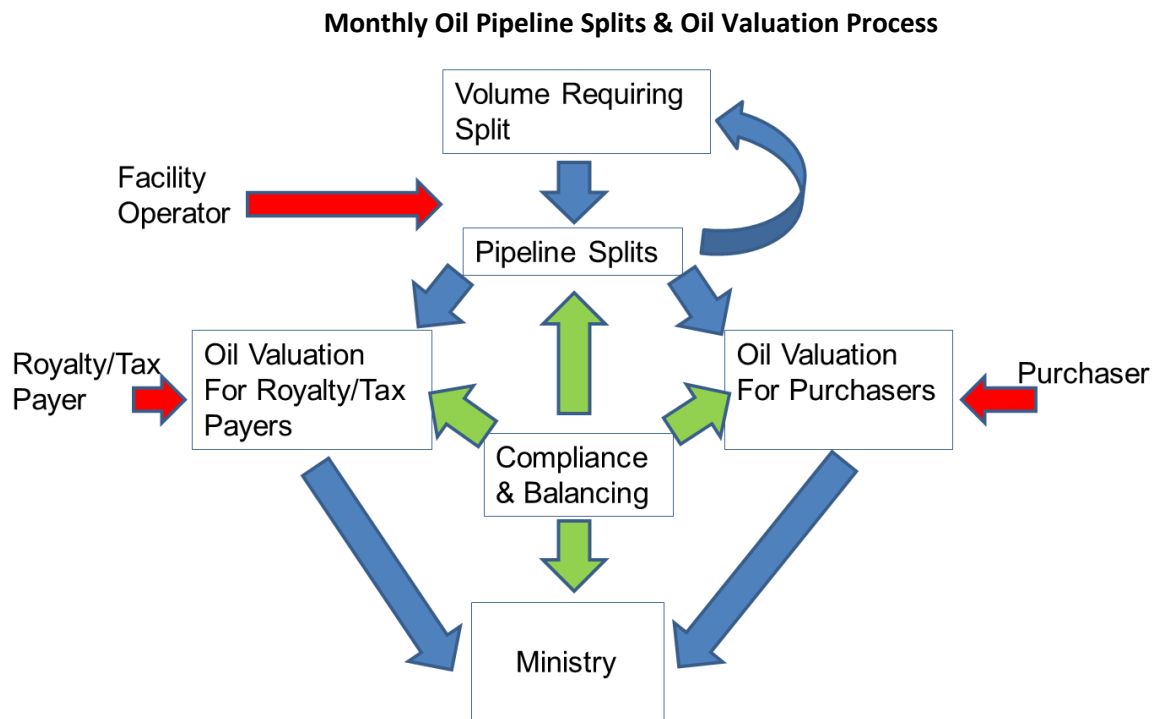
<p>Monthly Oil & Gas Production Report & Crown Royalty Statement: Field for Wellhead Price.</p>
<p>Monthly Freehold Oil & Gas Production Tax Statement: Field for Wellhead Price</p>

Data Conversion:

No monthly oil sales data will be converted to Petrinex for periods prior to the production month at Go-Live. Any prior period amendments made for production periods prior to Go-Live will be filed outside of Petrinex.

Impacts to Manitoba Processes:

- The following diagram provides an overview of the monthly Oil Pipeline Splits & Oil Valuation processes to be referenced when reviewing the points below.



Oil Pipeline Splits:

- Manitoba will utilize the same Petrinex oil pipeline splits reporting process that exists in Saskatchewan today.

Volume Requiring Split

- Volumetric dispositions of oil to certain facility types will auto-create a Volume Requiring Split (VRS) in oil pipeline splits.
- The facility types that auto-create a VRS are referred to as Custody Transfer Point (CTP) facilities in pipeline splits. The CTP is the sales point for the oil.
- In Manitoba CTP facilities include tank/rail terminals (TM) and Sales Pipelines (PL) for oil dispositions; along with Custom Treaters (CT) and Waste Plants (WP) for oil purchase dispositions.
- A VRS is also created for dispositions of Manitoba produced oil to out-of-province locations and for field purchase dispositions of oil (situations where a battery sells oil directly to another facility upstream of the CTP facility or a non-reporting entity).
 - Miscellaneous codes are used for dispositions to non-reporting entities (MB MC or MB RM)

Reporting Responsibility, Cascading, and Cross-Border

- The split is identified by a combination 3 facility IDs, all of which are necessary to report split information:
 - **Delivering Facility ID** - the facility that delivers and/or produces the oil.
 - **Receiving Facility ID** - the facility that directly receives the oil. The receiving facility can be the same ID as the custody transfer point facility if the delivering facility delivered directly to the CTP.
 - **Custody Transfer Point (CTP) Facility ID** - the facility at which the shipper/purchaser takes custody of the oil.
- The entire VRS must be split, by shipper, into the take-in-kind owners and purchasers of the volume.
- Delivering facility operators are responsible for submitting split information in Petrinex (online or by CSV/XML batch upload). These submissions must balance to the total VRS.
- The delivering facility may also have received oil from other facilities. As this oil was not produced at the facility, the operator can cascade the volume back upstream to the other facilities that they received the oil from. That operator will then report split information for produced volumes or continue to cascade volumes upstream for any non-produced volumes. This process continues until the entire VRS has been split into its owners and purchasers at all of the contributing producing facilities. Consider the following example below:

	Delivering Facility	Receiving Facility	CTP Facility	VRS	Produced Vol. Split	Cascaded to Facility	Cascade Vol.
1.	MB BT 1	MB TM 1234	MB TM 1234	100.0	60.0	MB BT 2	40.0
2.	MB BT 2	MB BT 1	MB TM 1234	40.0	30.0	MB BT 3	10.0
3.	MB BT 3	MB BT 2	MB TM 1234	10.0	10.0		
Total Produced Volume = Original VRS					100.0		

The operator of BT 1 delivered 100m3 of oil to the terminal. BT1 produced 60m3 and received 40m3 from BT 2. The operator at BT 1 would split the produced volume of 60 into owners and purchasers (by shipper) and cascade the received volume of 40 back to BT 2. This places responsibility to provide split information for the 40m3 on the operator of BT 2.

The operator of BT 2 has a VRS of 40m3, which was cascaded to them. BT 1 now becomes the receiving facility for BT 2. The CTP facility always remains as the terminal no matter how far back the cascades go. BT 2 produced 30m3 and received 10m3 from BT 3. The operator at BT 2 reports split information for the produced 30 and cascades the received volume of 10 back to BT 3.

The operator of BT 3 reports split information for their produced volume of 10m3. The split information made by each operator totals the original VRS of 100m3 (the volume delivered to the terminal by BT1).

- Volumes can be cascaded to out-of-province facilities. However, cascades to facilities in other Petrinex jurisdictions are not auto-populated in those jurisdictions. The pipeline splits process does not have cross-border reporting like volumetrics.

Reporting Splits

- Volumes are split by shippers of the oil. The volume associated with each shipper ID is then further split into the various owners and purchasers of the oil.
- The objective of oil pipeline splits reporting is to determine who is responsible for submitting oil valuation information. Both the royalty/tax payer and the purchaser of a specific volume reported in the split must submit valuation information. These two valuations are then compared to ensure reporting accuracy.
- An Oil Valuation Royalty Tax Payer record is created for each owner BA ID identified in the split.
 - A First POS (Point of Sale) flag is set by default. Most of the time, the CTP facility is the first point of sale, but sometimes there are in-field sales between facilities. If the delivering facility operator has actually purchased the split volume of oil from another facility, the First POS flag should be unchecked to tell the system that the CTP facility is NOT the first point of sale. In this case, there will be no oil valuation royalty/tax payer record created.

- A VRS would have been created for the purchase disposition separately. The delivering facility operator who sold the volume would have submitted split information that would have created the RTP oil valuation record at that time.
 - Volumes flagged as not being First POS are not included in the VRS balancing. The operator must also cascade the volume back to the facility who sold the volume in order to balance the VRS.
- The RTIK (Royalty Take in Kind) flag is set to off (unchecked) by default. This box would only be checked if the volume is being split to a royalty take in kind company. In this case, no oil valuation RTP record is created for the owner. The oil valuation purchaser record is created to balance the total volume sent to the CTP facility.
- An Oil Valuation Purchaser record is created for each purchaser BA ID identified in the split.
 - In some cases, the owner BA ID and the purchaser BA ID are the same. This is considered a non-arm's length transaction. In these cases where the royalty/tax payer and the purchaser are the same, there is no value in comparing the two valuation records. As such, there will be no oil valuation purchaser record created.
 - There is also functionality in Petrinex for a BA to identify other 'Related BA IDs' for pipeline splits reporting. A related BA ID is also considered non-arm's length. If the owner BA ID and purchaser BA ID are related, there will be no oil valuation purchaser record created. Companies will need to set up any related BA IDs in Petrinex after Go-Live.
 - Could be a parent/subsidiary relationship or a case where an entity's producing arm is set up under a different company structure than the marketing arm.
 - Companies engaged in non-arm's length transactions are required to file an annual EVAP (Enhanced Valuation Audit Program) declaration that provides executive sign-off attesting that they are following valuation rules for establishing a fair market price. See section 3.5.1 for more information about the EVAP program.
- The operator of the delivering facility submits oil pipeline splits; but in some cases, the split volume should be associated with a unit as opposed to a facility. There is a Stream ID field where a Unit ID can be entered for a specific owner/purchaser split. If a Unit ID is entered, the oil valuation royalty tax/payer record will be created for the Unit ID as opposed to the Facility ID.
- The deadline for Oil Pipeline Splits reporting is the same date as the Volumetric & Waste Plant reporting deadline (approximately the 19th-20th of the following month).
- The Petrinex pipeline splits reporting process is based on the following principles:
 - All auto-created VRS records must be reported.
 - All cascaded volumes associated with a VRS must also be reported.
 - Full-form amendments to reduce the risk of error.
 - A monthly Missing/Incomplete reporting process that identifies any VRS where the split information is missing or incomplete (does not balance) as well as any split that has been submitted without a matching VRS.
 - Operators can request a Pipeline Splits Missing/Incomplete report at any time.

- Petrinex will automatically generate the report 2 days before the deadline to warn operators of any issues. Another report will be generated at the deadline to inform operators of any errors sent to the Ministry.
- Missing/incomplete splits not corrected by the deadline are subject to any penalties or repercussions as per Ministry directives.
- The ability to submit and query pipeline splits (and oil valuation) information is subject to the standard Petrinex security model. See [Appendix 7: Technical & Security Considerations](#) for more information on Petrinex security.

Oil Valuation:

- Manitoba will utilize the same Petrinex oil valuation reporting process that exists in Saskatchewan today.
- The deadline for oil valuation reporting (both royalty tax/payer and purchaser) is the last day of the month following production.

Royalty/Tax Payer Valuation

- Valuation is filed by all BAs that pay their own royalties (online or by CSV/XML batch upload).
- Royalty/tax payers must submit the Gross Price/m³ and total Clean Oil Transportation costs associated with each facility or unit in which they were identified as an owner in pipeline splits.
- Petrinex will calculate the Average Well-Head Price/m³ based on the royalty/tax payer's submission.
- The royalty/tax payer cannot add or delete any valuation rows or change any volumes in the valuation screen. Only an amendment to pipeline splits can change the oil valuation information.
- Oil valuation is not required for cross-border deliveries of oil into Manitoba. Oil valuation is required, however, for deliveries of Manitoba produced oil to out-of-province locations.

Purchaser Valuation

- Purchasers must submit the Density, Sulphur Content, Submitted Volume, and Gross Price/m³ associated with the facilities in which they were identified as a purchaser in pipeline splits (online or by CSV/XML batch upload).
- The purchaser does not value each cascaded facility in the same way the royalty tax/payer does. Volumes are rolled up to the facility that directly delivered to the CTP facility for the same source producer (owner).
- Even though Petrinex auto-populates the volumes associated with the pipeline splits, the purchaser still submits their own volume as well in case their records are different from what

the operator submitted in pipeline splits.

- The purchaser cannot delete any valuation rows or change the volumes for records that were auto-created. Only an amendment to pipeline splits can change auto-created oil valuation information.
- The purchaser can add manual valuation rows for any purchases that have not been identified in pipeline splits. This sends a message to the royalty/tax payer listed that something is wrong. The royalty tax payer must then follow up to determine if the row was added in error or whether there is a missing pipeline split or volumetric submission.

Compliance & Balancing

- It is the responsibility of the royalty tax/payer to report the correct sales volume (reported through pipeline splits) and the correct pricing. The royalty tax/payer submission is used in the calculation of royalties.
- The purchaser valuation is not used for royalty calculations. It is used as an audit function. The purchaser price and submitted volume is compared to the royalty/tax payer submission.
- The onus is on the royalty tax/payer to follow up on any discrepancies between prices or volumes to determine whose record needs to be amended.
- There is a monthly compliance and balancing report process that identifies any outstanding reporting errors:
 - Missing valuation submissions for both the royalty tax/payer and purchaser.
 - Discrepancies between the royalty tax payer/purchaser gross price or volume.
 - Manually created purchaser valuation rows for which there is no matching royalty/tax payer valuation.
- Both royalty/tax payers and purchasers can request an Oil Valuation Compliance & Balancing report at any time. Petrinex will automatically generate the report 2 days before the deadline and again at the deadline.
- Outstanding errors existing at the deadline are subject to any penalties or other repercussions as per Ministry directives.

3.4.3 Allocations

Aligns to Manitoba Forms:

None

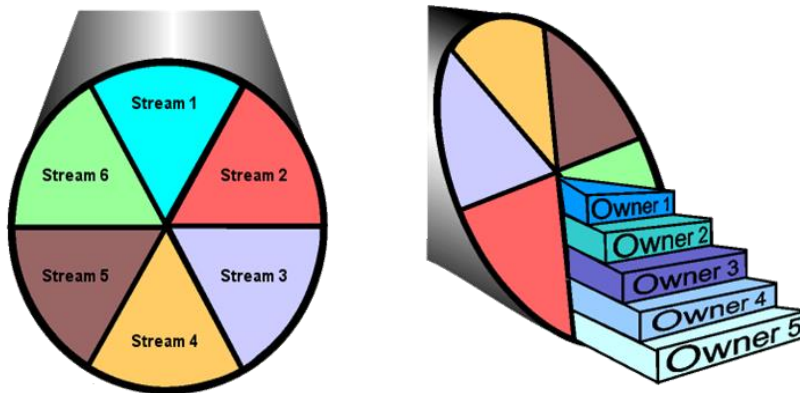
Data Conversion:

Not Applicable

Impacts to Manitoba Processes:

General:

- Manitoba will utilize the same basic Petrinex allocation reporting processes that exist in Saskatchewan where submitted volumetric transactions (product/activity/volume) can be allocated back to the various owners of that volume at the steam level.
- Allocations can be submitted for any volumetric submission (any product or activity). This includes manual submission rows as well as any auto-calculated/auto-populated transactions generated by Petrinex.
- In some jurisdictions, allocations for certain volumetric activities involving gas, NGLs, or sulphur must be reported for royalty purposes. These activities are referred to as Allocations Triggers. Currently Manitoba does not have any mandatory allocations triggers to report (same as Saskatchewan).
- In Manitoba (like Saskatchewan), the allocations functionality is provided to accommodate partner to partner reporting. Operators of all facilities in Petrinex can and are encouraged to file allocations for all volumetric activities. This process reduces or even eliminates the need for sending individual statements out to partners. All parties can go to Petrinex to get their working interest shares.
- In general, a volume to be allocated is first broken down into the individual streams (wells, units) that contributed to the total volume and energy (if applicable). Each stream is then broken down into the various owners' shares of the volume and energy (if applicable).



- Facility operators submit stream/owner allocations in Petrinex (online or by CSV/XML batch upload). These submissions must balance to the total volume and energy (if applicable) associated with the volumetric.

- The operator may not always know all of the individual streams that make up volumes delivered to them from non-operated facilities. In this case, the facility operator can cascade shares of the total volume back to the operators of those upstream delivering facilities. These operators are then responsible for completing their portion of the allocation, either by cascading volumes back upstream to other facility operators, or by submitting the stream/owner information. The cascade process continues until the entire volume and energy (if applicable) associated with the volumetric has been allocated to the stream/owner level.
- Allocations can be filed by factor or by volume.
 - Factors are expressed as a percentage of the total volume and energy. If filing by factor, the operator first makes a stream allocation factor (SAF) submission to split volumes out to individual wells/units (as a percentage of the total). An owner allocation factor (OAF) submission is then made to split volumes at individual streams to owner BA IDs.
 - When filing by volume, the operator splits the volume and energy out to streams and owners in the same submission. This is the method that is most commonly used.
- The ability to submit and query allocations information is subject to the standard Petrinex security model. See [Appendix 7: Technical & Security Considerations](#) for more information on Petrinex security.

3.4.4 Gas Plant Valuation

Aligns to Manitoba Forms:

None

Data Conversion:

Not Applicable

Impacts to Manitoba Processes:

Note: There are currently no gas plant facilities operating in Manitoba. This reporting function will be applicable to any future active gas plant operations.

- Manitoba will utilize the same Petrinex gas plant valuation reporting process that exists in Saskatchewan today.
- Industry submits information related to all monthly gas plant purchases and sales. This information is sent to Ministry for statistical and raw gas validation purposes.
- The following BAs would make monthly gas plant valuation submissions:
 - The operator of the gas plant can enter details for all plant purchases and sales.
 - A non-operator who has retained possession of, and has marketed, their own share of products processed at the plant can enter details for their purchases and sales.
- The following chart details the data required for all purchase and sales entries:

Activity	Submission Data Required
PURCHASE	PRODUCT PURCHASED PURCHASED FROM BA ID PURCHASED FROM FACILITY ID CONTRACT # (OPTIONAL) VOLUME ENERGY (GAS PURCHASE ONLY) PRICE (PER UNIT) UNIT (103M3, M3, TONNE, GJ)
SALE	PRODUCT SOLD SOLD TO BA ID SOLD TO FACILITY ID CONTRACT # (OPTIONAL) VOLUME PRICE (PER UNIT) UNIT (103M3, M3, TONNE, GJ)

- The Petrinex gas plant valuation reporting process is based on the following principles.
 - No cross-border reporting functionality.
 - Data is submitted online or by batch file upload (CSV or XML).
 - Full-form amendments to reduce the risk of error.
 - Submission of gas plant valuation is optional. There is no non-compliance process.
- The deadline for filing gas plant valuation is the last day of the following month (same as oil valuation).
- The ability to submit and query gas plant valuation information is subject to the standard Petrinex security model. See [Appendix 7: Technical & Security Considerations](#) for more information on Petrinex security.

3.5 Annual Processes

3.5.1 Enhanced Valuation Audit Program (EVAP)

Aligns to Manitoba Forms:

None

Data Conversion:

Not Applicable

Impacts to Manitoba Processes:

Note: ARD has expressed interest in adopting an EVAP reporting program like that utilized in Saskatchewan. However, it is unlikely that the necessary legislative changes and directives will be in place to commence in the first year of Go-Live. **It is anticipated that the first EVAP declaration deadline will be in February 2022 (for the 2021 production year).**

- EVAP is an extension of the oil valuation process for sales of oil that are considered non-arm's length.
- When there is a non-arm's length relationship between a producer (royalty/tax payer) and a purchaser, Petrinex will not create an 'oil valuation purchaser' record from the pipeline split. This is because there is diminished value in comparing prices between the purchaser and the royalty/tax payer. Both sides could report a price that is not a fair representation of fair market value. See section 3.4.2 for more information on pipeline splits and oil valuation processes.
- A sale is considered to be non-arm's length in Petrinex if, in pipeline splits reporting, the Owner BA ID and Purchaser BA ID are the same or are considered to be related. Related BAs are covered in more detail further on in this section.
- Sellers engaged in non-arm's length oil sales are required to file an annual EVAP declaration that provides executive sign-off attesting that they are following valuation rules for establishing a fair market price. In general, an EVAP submission includes:
 - An official declaration whereby the company attests to a number of statements/conditions as determined by the Ministry. At least one senior executive within the company (with the appropriate authority to direct resources in this area) must sign the document.
 - Sample calculations.
 - An analysis of the company's controls that are in place to ensure accurate pricing. Controls are listed and evaluated in terms of their effectiveness. Companies should also identify any potential control deficiencies that could pose a risk to the process.
- Declarations are submitted at the end of the reporting year. All BAs required to submit a declaration have the same deadline. In Saskatchewan, the deadline is the end of February. For example, the 2019 declaration is due by the end of February 2020. Manitoba must still make a determination as to their submission deadline.
- EVAP is an online process in Petrinex. Industry submits declarations online and Ministry

evaluates the submission online as well. Ministry may accept or reject the declaration. If rejected, Industry must amend and resubmit their declaration until it is accepted.

- The EVAP process utilizes a number of functions explained below.

Related BA

- This is where sellers/producers can identify related purchaser BAs for oil pipeline splits reporting purposes.
 - When the producer BA ID is entered as an Owner and the related BA ID is identified as a Purchaser in a split, then no Oil Valuation Purchaser record is created and an EVAP declaration is required.
 - Relationships are date effective. They are created with a starting production month and can be end dated.
 - A producer can set up as many related BAs as are they require.
- Related BAs should be set up under the following circumstances:
 - When the producer and purchaser have common ownership such as a parent/subsidiary relationship or where a company sets up their producing and marketing arms under different corporate structures.
 - Crude oil is blended with condensate and/or natural gas liquids prior to the point of first sale.
 - Crude oil is transported downstream of a typical custody transfer point (terminal, pipeline, etc.) prior to the point of first sale.
 - Crude oil is transported to the outlet of a single shipper pipeline via a buy/sell arrangement with the pipeline operator.

Declaration Signatories

- This is where a company can set up their senior executives as valid signatories for their declaration.
 - The signatory record consists of a first and last name along with the individual's official title.
 - The user must choose one or more signatories from this list to be added to the declaration when completing the annual EVAP submission.
 - A signature line is added to the declaration document for each signatory chosen. A signature would then be required from each.
 - Signatories are date effective. They are created with a starting year and can be end dated.

EVAP Declaration Submission

- All submissions begin with a status of Incomplete. Users must complete the various sections on the screen until the overall status of the submission is Complete. At this point, the user can

submit the declaration to the Ministry for review. Ministry will review the declaration and either accept or reject the declaration online.

- The following table outlines the various sections that must be completed in order to submit the EVAP declaration to the Ministry.

EVAP DELCARATION SUBMISSION	
SECTION	DETAIL SUMMARY
Download EVAP Submission Template	<ul style="list-style-type: none"> • This section is for downloading the spreadsheet template in which a company can list and evaluate their pricing controls, identify control deficiencies, and list the sample calculations they will be including (as separate attachments). • In Saskatchewan, users click on the link provided in this section to take them to the SK Ministry website to download the spreadsheet template. The template is not within Petrinex itself. • Click the following link to see the SK spreadsheet template. https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/oil-and-gas/oil-and-gas-reporting-and-compliance/enhanced-valuation-audit-program • Note: ARD has yet to determine whether the same spreadsheet will be used or whether changes will be needed for Manitoba.
Declaration Signatories	<ul style="list-style-type: none"> • This section is where users will select from senior executives that they have already created in Petrinex. • Any signatories selected will have a signature line added to the official declaration.
Print	<ul style="list-style-type: none"> • Once the template is downloaded and signatories have been added, users can click the Print button to generate the official PDF declaration. • The official declaration must be printed and circulated for signatures by the identified signatories.
Attached Documents	<ul style="list-style-type: none"> • The following attachments are required for Ministry: : <i>A scanned copy of the signed declaration</i> : <i>The completed EVAP template (from first section).</i> : <i>Sample calculations.</i> : <i>Supporting business process documents.</i> : <i>Any other supporting documentation requested or necessary.</i>

3.6 Other Petrinex Processes

3.6.1 Ministry Invoices & Statements

Ministries can send invoices and supporting summary reports for Oil & Gas Royalties/Taxes, Non-Compliance reporting, and any other desired reports or statements online to clients through Petrinex. Examples of items found in other jurisdictions include but are not exclusive to:

- Client Monthly Invoices & Reports
 - Gas & By-Product Invoices
 - Oil Invoices
 - Royalty/Tax Billing Calculation Details
 - Royalty Holiday Reports

- Non-Compliance & Penalty Reporting
 - Non-Compliance Penalty Invoices
 - Provisional Assessment Invoices

- Annual Reports & Statements

It is yet to be determined what will be immediately available to Industry from ARD through this process. As ARD continues to build processes and systems, the goal is to be able to provide all of the kinds of reports and statements listed above.

More details on what Industry will be receiving through this function will be added as they are made available.

3.6.2 Reports & Queries

Queries are online requests for information relating to a single event (i.e. single facility for a specific production month) and do not span multiple production months or multiple facilities. Queried data can be viewed online or printed.

Reports are of a predefined layout but allow user-defined parameters (i.e. a list of facilities) to control what information is retrieved. In general, Petrinex generates report requests right away the same day; but some requests can be moved to the overnight queue depending on the size of the report being requested. Reports can span multiple production months and multiple facilities. Reports are available in Portable Document Format (PDF), Comma Separated Value (CSV), and Extensible Markup Language (XML) formats.

Access to report information is subject to the standard Petrinex security model. [See Appendix 7: Technical & Security Considerations](#) for more information on Petrinex security.

A full listing of reports that will be available to Manitoba users in Petrinex will be added to the Handbook when it is available.

3.7 User Support Services

3.7.1 Petrinex Business Desk

Petrinex has fully trained Business Desk personnel to address any questions or concerns relating to Petrinex functionality.

Business Desk Contact Information:

Phone: 403-297-6111 (Calgary)

Toll Free: 1-800-992-1144 (Other Locations)

Email: petrinexsupport@petrinex.ca

3.7.2 Petrinex Website

Petrinex communication protocols include many different tools available to communicate with Petrinex users, including the Petrinex Website. The website provides stakeholders with access to:

- Login to the client area of Petrinex
- The Petrinex Manitoba Reporting Calendars
 - Petrinex will have posted calendars outlining when data submissions must be completed (i.e. Volumetric or Valuation submission deadlines).
 - Petrinex calendars identify when automated reporting related activities occur (i.e. Warning notices that data is incomplete, incorrect, or missing prior to the associated submission deadline).
- Infrastructure Code Reports that can be used for Industry reference purposes:
 - Activity Codes
 - BA Identifiers
 - Facility Identifiers, Types, and Subtypes
 - Field, Pool, and Formation Codes
 - Product Codes
- Broadcast Messages
- User Tips & Alerts
- The Petrinex Learning Resource Centre (see section 3.7.5)
- Business Desk Contact Information
- Information on current major Petrinex initiatives

3.7.3 Industry Liaison & Support (Industry Team at Petrinex)

The Industry Team is funded by Industry and works on behalf of Industry in the collaborative Petrinex model. The Industry Team is comprised of a team of senior Industry Subject Matter Experts (SME's) and the Industry Manager. The Industry Team at Petrinex provides:

- An Industry voice on the Petrinex management team.

- Industry Subject Matter Expert (SME) support to the Petrinex Business Desk and contribution to user training; Petrinex change management and testing; Industry liaison, consultation and communications.
- Industry consultation and support for changes initiated by ministries.
- Industry support to the Industry Benefits Committee, and as well, to the Industry members of the Petrinex Advisory Committee and Petrinex Steering Committee.
- Ongoing focus on enhancing the level of benefits realized by Industry users of Petrinex.
- The Industry Team works with Industry and Government committees to identify, prioritize, advocate, and if approved, support implementation of potential Petrinex enhancement projects of benefit to Industry.

Going forward the team will work closely with ARD and any other groups focused on the needs of Manitoba users of Petrinex.

3.7.4 Change Management Process

Petrinex is always evolving to meet changing needs and technology. Petrinex Change Management protocols and processes ensure that Industry and Government technological and functionality enhancements are identified, vetted, prioritized, tested and implemented, and communicated in a timely manner that meets stakeholder approved and closely monitored Key Performance Indicators. All Petrinex stakeholder groups collaboratively participate in the Change Management process.

3.7.5 Learning Centre

The Petrinex Learning Centre provides access to Petrinex Learning Modules, Job Aids, Tips & Alerts and FAQs.

Petrinex has a suite of approximately one hundred online learning modules and job aids that will include updates to existing learning modules and the development of new learning modules for new Manitoba related functionality to incorporate changes required for Manitoba reporting purposes.

Appendix 1: Manitoba Communication to Stakeholders



CALGARY
Suite 300, 801 – 6th Avenue SW
Calgary AB T2P 3W2

EDMONTON
2nd Floor, North Petroleum Plaza
9942 – 108th Street NW Edmonton AB T5K 2G6

Toll Free 1-800-992-1144 Fax 403-297-3665 Email petrinexsupport@petrinex.ca www.petrinex.ca

To: All Manitoba Oil and Gas Operators

As an operator of oil and/or gas facilities in the province of Manitoba, you may already be aware that Manitoba has initiated a project to conduct volumetric and royalty related reporting through Petrinex.

By way of background, Petrinex is a joint strategic organization supporting Canada's upstream, midstream and downstream oil and gas industry. Petrinex is collaboratively governed by governments, regulators and industry across the Western Canadian Sedimentary Basin. For more information on Petrinex please visit www.petrinex.ca.

The Canadian Association of Petroleum Producers (CAPP) and the Explorers and Producers Association of Canada (EPAC) are strong supporters of the Manitoba Petrinex Inclusion Project. Industry benefits anticipated for the oil and gas industry in Manitoba include the following:

1. Increased standardization of business and operational processes between Manitoba, Saskatchewan, Alberta and British Columbia.
2. Extension to Manitoba users of the benefits Petrinex Industry users enjoy in other jurisdictions, including:
 - a. Having a single venue for access to timely, accurate and secure data;
 - b. Tools to assure submissions for government and Industry processes are correct and complete; and
 - c. The ability to conduct partner reporting in a standard, effective, electronic venue.

The design phase of this project commenced in April and will be completed in July 2019. To allow time for development, testing, training and implementation, Petrinex functionality for Manitoba operators will be implemented in the second quarter 2020.

As the Petrinex Industry Manager, I and my team of subject matter experts represent Industry's interests at Petrinex and contribute Industry expertise to Petrinex operations and management. The Industry Team is charged with ensuring that Manitoba oil and gas industry operators are aware and fully prepared for this change, scheduled for implementation Q2 2020.

To ensure that we are positioned to communicate with the correct individual in your company dealing with Petrinex, we encourage you to provide us with the name, telephone number, e-mail address, and the base working location (e.g., Winnipeg, Brandon, Calgary, etc.) of a prime contact (a Petrinex Manitoba "Change Leader") for your company.

To register your Manitoba *Change Leader* please contact the Petrinex Business Desk at 403-297-6111 in Calgary or 1-800-992-1144 toll free outside of Calgary; or e-mail your *Change Leader* contact information to us at petrinexsupport@petrinex.ca.

While the design process for including Manitoba in Petrinex is already well underway, access to Petrinex functionality is currently only available to registered AB, SK and BC Business Associates. Manitoba operators will be provided with access to Petrinex once the Manitoba functionality has been fully implemented in 2020.

Ross Weaver
Industry Manager

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Cell: 403-651-0005

Fax: 403-297-3665

Email: ross.weaver@gov.ab.ca



Appendix 2: About Petrinex and the Manitoba Inclusion Project

1. PETRINEX GOVERNANCE, OPERATIONS AND ADMINISTRATION

Petrinex is a joint strategic organization supporting Canada’s upstream, midstream and downstream petroleum industry, and is currently represented by government and Industry.

Government stakeholders are represented by:

- Alberta Energy
- Alberta Energy Regulator (AER)
- Saskatchewan Ministry of Energy and Resources (GOS)
- BC Ministry of Finance (BC MOF)
- BC Oil and Gas Commission (BC OGC)
- BC Ministry of Energy, Mines and Petroleum Resources (BC EMPR)

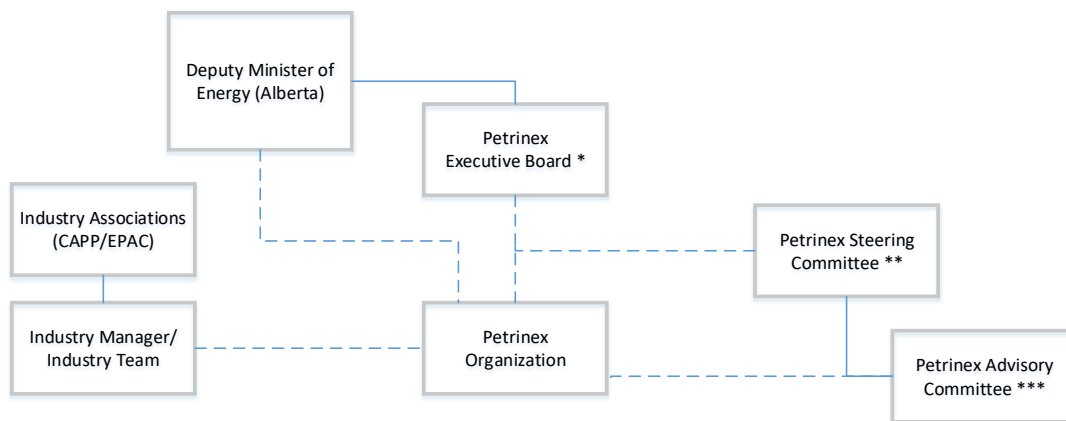
Industry is represented by:

- Canadian Association of Petroleum Producers (CAPP)
- Explorers and Producers Association of Canada (EPAC).

While Petrinex is owned by the Alberta Department of Energy, it operates under a unique and proven Crown-industry, multi-jurisdictional governance, management and funding structure. Serving multiple stakeholders across multiple jurisdictions, Petrinex facilitates efficient, standardized, safe and accurate management /exchange of "data of record" information essential to the operation of the petroleum sector. Petrinex is currently engaged in inclusion projects with the Province of Manitoba (this project) and Indian Oil and Gas Canada.

Petrinex is governed and managed in a manner reflecting its multi-stakeholder sponsorship:

Petrinex Governance and Organizational Structure



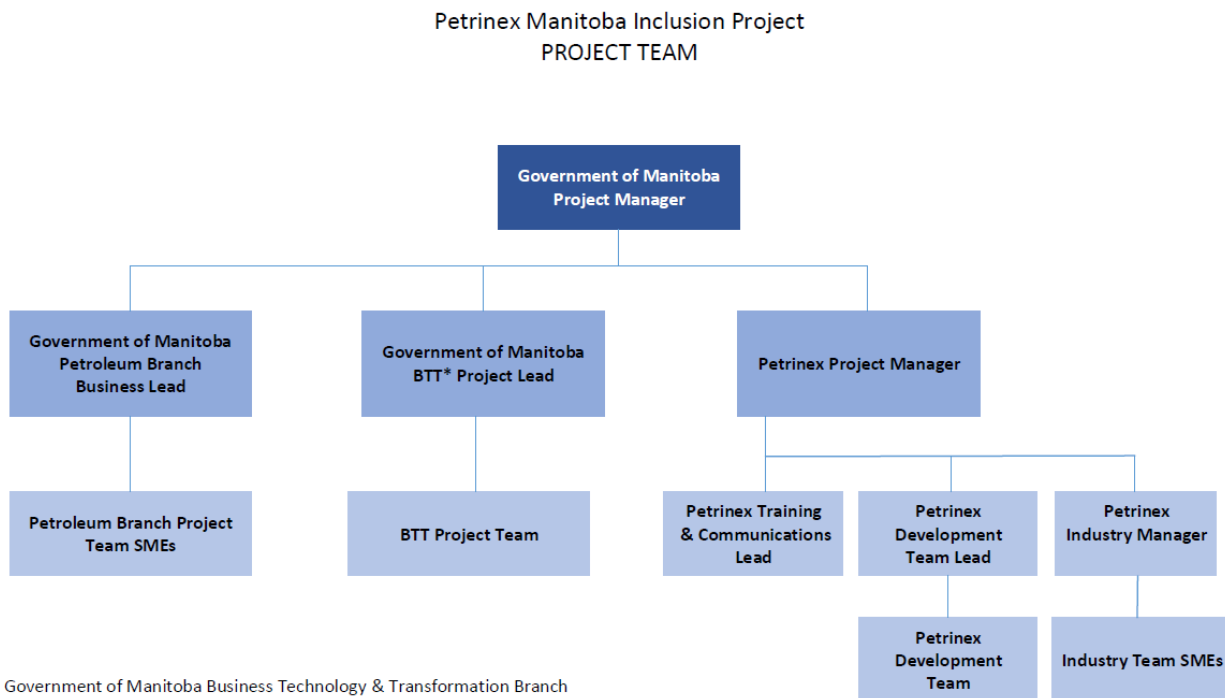
* Chaired by Alberta’s Deputy Minister of Energy, the Petrinex Executive Board is comprised of executive representatives from the Canadian upstream oil and gas industry (CAPP/EPAC), Alberta Energy Regulator, Alberta Energy, Saskatchewan Ministry of Energy & Resources, BC Ministries of Finance and Energy, Mines & Petroleum Resources, and the BC Oil and Gas Commission.

- ** Chaired by an Alberta Energy Assistant Deputy Minister, the Petrinex Steering Committee is comprised of senior representatives from the Canadian upstream oil & gas Industry (CAPP/EPAC), Alberta Energy Regulator, Alberta Energy, Saskatchewan Ministry of Energy & Resources, BC Ministries of Finance and Energy, Mines, & Petroleum Resources, and the BC Oil and Gas Commission.
- *** Chaired by Industry, the Petrinex Advisory Committee is comprised of line management representatives from the Canadian upstream oil & gas Industry and the Government sectors.

Petrinex has other multi-jurisdictional /multi-stakeholder committees focused on initiatives related to the Petrinex Executive Board sponsored Central Hub initiative. This initiative will expand the role of Petrinex in acting as a central collaborative hub for information management in the sector.

2. PMIP PROJECT STRUCTURE

The Petrinex Manitoba Inclusion Project (PMIP) also reflects multi-stakeholder participation:



3. INDUSTRY REPRESENTATION AND OPPORTUNITIES FOR INPUT

a. Petrinex Industry Team

The Industry Team is made up of the Industry Manager who participates on the Petrinex Steering Committee and is a member of the Petrinex Management Team, and a small number of senior subject matter experts that represent Industry’s interests and contribute Industry expertise to the Petrinex management, operations and evolution. The Industry Team is also charged with ensuring that all Manitoba stakeholders, including oil and gas operators, are aware and fully prepared for this significant change that is scheduled for May 4, 2020.

While Government funds the initial development and ongoing operations of Petrinex, Industry funds the Petrinex Industry Team. This funding is provided through a voluntary annual billing of Alberta, Saskatchewan, and BC operators, the amount of which is based on the number of wells each company operates. Manitoba operators will be included in the annual Petrinex Industry Team billing starting for the 2021 funding cycle.

With respect to PMIP, the Industry Team is responsible to help ensure that:

- **“Petrinex is ready for Manitoba Industry”**

- The Industry Team contributed Industry subject matter expertise to design workshops (along with Manitoba industry representatives, Manitoba government stakeholders and Petrinex technical representatives) and reviewed specification documentation of changes that are required to Petrinex for Manitoba inclusion.
- The Industry Team takes the lead in engaging Industry companies and various committees to get broad Industry stakeholder input with respect to functionality design and key implementation decisions.
- The Industry Team plays a key central role in testing Petrinex functionality associated with PMIP changes.
- More broadly, the Industry Team works with the rest of the Petrinex Team, industry reps and Manitoba government stakeholders to ensure PMIP delivers the benefits identified for Industry in the PMIP business case.

- **“Manitoba Industry is ready for Petrinex”**

- The Industry Team is responsible for working as part of the Petrinex Team and with Manitoba government and regulator stakeholders to ensure that Industry is aware and fully prepared for the implementation of Petrinex in Manitoba. As such, the Industry Team is actively involved in the following (among other) readiness activities:
 - Communication with stakeholders in the various Industry segments (including managing the *Change Leader* program).
 - Development of content for learning modules and other readiness vehicles, including this Handbook.
 - Working with production accounting software vendors to help these companies prepare for the change.

b. Industry Benefits Committee

The Industry Benefits Committee (IBC) is a standing committee of Alberta, Saskatchewan, BC and (post-implementation) Manitoba company representatives. The IBC has met monthly since 2000. The IBC is a user group of managers or senior subject matter experts that provides Industry input on the operation and evolution of Petrinex with the objective of assuring that Industry obtains the most benefits possible from Petrinex.

4. KEY CONTACT INFORMATION

- For **Industry queries related to PMIP and Petrinex** contact Steve Freeman, Industry Coordinator, 403-297-2311, steve.freeman@gov.ab.ca
- For Petrinex Industry Policy queries, contact Ross Weaver, Industry Team Manager, 403-297-4411, ross.weaver@gov.ab.ca
- For **Manitoba Policy related queries related to PMIP**, please contact the following:
 - Peter Mraz, Director of Regulatory Services (Ministry of Agriculture & Resource Development), 204-945-6576, Peter.Mraz@gov.mb.ca

Appendix 3: Important Petrinex Concepts & Processes

Petrinex has current concepts and processes, some of which that may be new terminology to some users. Key concepts and processes are briefly described below.

- Activities:** All active facilities and wells that are not suspended in a given production month are required to report activity. Some activities are specific to facilities or wells, and some can apply to both (see chart below). If a facility or well has an active status, but has had no activity in a given production month, operators should report a single activity of SHUTIN. If the only activity was opening inventory, then the operator must enter a closing inventory number.

Activity Code	Activity Name	Well/Facility
DISP	DISPOSITION	FACILITY
EMIS	EMISSIONS	FACILITY
FIRE	FIRE	FACILITY
FLARE	FLARE	BOTH
FRAC	FRACTIONATED YIELD (Gas Plants Only)	FACILITY
FUEL	FUEL	BOTH
INJ	WELL INJECTION	WELL
INVADJ	INVENTORY ADJUSTMENT	FACILITY
INVCL	CLOSING INVENTORY	FACILITY
INVOP	OPENING INVENTORY	FACILITY
LDINJ	LOAD FLUID INJECTED	WELL
LDINVADJ	LOAD FLUID INVENTORY ADJUSTMENT	WELL
LDINVCL	LOAD FLUID CLOSING INVENTORY	WELL
LDINVOP	LOAD FLUID OPENING INVENTORY	WELL
LDREC	LOAD FLUID RECOVERED	WELL
PROD	WELL PRODUCTION	WELL
PURDISP	PURCHASE DISPOSITION	FACILITY
PURREC	PURCHASE RECEIPT	FACILITY
REC	RECEIPT	FACILITY
SHUTIN	SHUT-IN	BOTH
SPILL	SPILLAGE	FACILITY
THEFT	THEFT	FACILITY
VENT	VENTED	BOTH

- Products:** There are quite a few products that can be used with a variety of activities and facility types. Not every product is the kind that is produced at the wellhead. There are also products that would typically be used in injection/disposal schemes, products that would typically be processed at a gas plant, and products that would be used for waste plant reporting. See the table below for the list of valid products.

Product Code	Product Name	Product Code	Product Name
ACGAS	ACID GAS	GAS	GAS
AIR	AIR	HELIUM	HELIUM
ALKWTR	ALKALINE WATER	IC4-MX	ISO-BUTANE MIX
ALL	ALL PRODUCTS	IC4-SP	ISO-BUTANE SPEC
ASP	ALKALINE SURFACTANT POLYMER	IC5-MX	ISO-PENTANE MIX
BRINE	BRINE	IC5-SP	ISO-PENTANE SPEC
BRKWTR	BRACKISH WATER	N2	NITROGEN
C1-MX	METHANE MIX	NAPHTHA	NAPHTHA
C2-MX	ETHANE MIX	NC4-MX	NORMAL BUTANE MIX
C2-SP	ETHANE SPEC	NC4-SP	NORMAL BUTANE SPEC
C3-MX	PROPANE MIX	NC5-MX	NORMAL PENTANE MIX
C3-SP	PROPANE SPEC	NC5-SP	NORMAL PENTANE SPEC
C4-MX	BUTANE MIX	O2	OXYGEN
C4-SP	BUTANE SPEC	OIL	CRUDE OIL
C5-MX	PENTANE MIX	POLYMER	POLYMER
C5-SP	PENTANE SPEC	SAND	SAND
CO2	CARBON DIOXIDE	SO2	SULPHUR DIOXIDE
CO2-MX	CARBON DIOXIDE MIX	SOLV	SOLVENT
CO2-SP	CARBON DIOXIDE SPEC	STEAM	STEAM
COND	CONDENSATE	SUL	SULPHUR
DIESEL	DIESEL OIL	SURF	SURFACTANT
ENTGAS	ENTRAINED GAS	SYNCRD	SYNTHETIC CRUDE OIL
FLUEGAS	FLUE GAS	WASTE	WASTE
FSHWTR	FRESH WATER	WATER	WATER

- Product Groups:** Product groups are logical groupings of products that are balanced together in Petrinex. Sometimes one product is balanced on its own and sometimes there are multiple products depending on the facility type and balancing activity (Imbalance, Metering Difference, Shrinkage, and Processed Volumes).
- From/To:** In order to track movement and use of products between facilities, most activities (with the exception of opening and closing inventory) require a from/to facility. The from/to facility is generally a valid Petrinex facility ID; and because cross-border reporting is supported, users can choose a valid facility ID from any Petrinex jurisdiction. Occasionally product may be received from or disposed to non-oilfield locations or non-Petrinex jurisdictions. In these cases the user must enter a valid miscellaneous ID in the from/to field.
 - Use of a miscellaneous ID is entered as a 2-digit province/state code followed by the 2 character miscellaneous code (ex: MB MC).
 - Province/state codes include non-Petrinex jurisdictions (ex: ND – North Dakota).
 - The table below provides a list of valid miscellaneous codes.

Misc. Code	Description
CO	COMMERCIAL SALES
EG	ELECTRICAL GENERATION DELIVERY
GE	GAS EQUIVALENT
IN	INDUSTRIAL SALES
LF	LINE FILL
MC	MISCELLANEOUS
RC	RAIL CAR
RE	RESIDENTIAL SALES
RM	ROAD MAINTENANCE
RO	RUN OFF WATER
WC	WATER CONDENSATION USE
WM	WASTE MATERIALS

- **Auto-population:** As business processes and transactions are performed in Petrinex, key data and information may be automatically populated using data supplied by other processes or other individuals. This is referred to as auto-population. Auto-populated data appears on Petrinex pages as you work through business transactions. For example, opening inventories are auto-populated from the previous month’s closing inventories, and disposition volumes are auto-populated by the receipts reported by the receiving facilities. Auto-population reduces work for BAs, alleviates discrepancies, and provides continuity for smoother business processes.
- **Automatic Calculations:** Petrinex calculates or derives information wherever possible from other submitted information, eliminating the need for it to be reported manually. This data is then applied in all relevant Petrinex business processes. Examples of derived data include:
 - Facility totals
 - Opening Inventories
 - Shrinkage
 - Metering differences for gas
 - Imbalances for oil
 - Average Well-Head Price/m3 for oil valuation

Users will verify and confirm the auto-calculated data, but do not need to re-enter or re-calculate it.

- **Work in Progress (WIP):** The Work-in Progress (WIP) utility is a staging/holding area for online submissions where incomplete work can be stored and edited until it is ready for submission to Petrinex. WIP is available for most monthly reporting processes in Petrinex, including Volumetrics, Allocations, NGL/Sulphur Valuation, Oil Pipeline Splits and Oil Valuation. As long as data remains in WIP, it is not considered a Petrinex submission. Only valid data that has been submitted in Petrinex is included when determining if a deadline has been met.

Only the BA that stored the data in WIP may view the data. Once monthly data has been successfully submitted from WIP to Petrinex, it is available for other authorized BA users.

- **Allocations Triggers:** Allocations triggers are events caused by certain volumetric transactions that require a mandatory allocations filing. Specific triggers can differ by jurisdiction and are determined by Ministry requirements. Most triggers are necessary for a Ministry to calculate and invoice a royalty on a quantity of product to the correct royalty/tax payers. However, triggers may require allocations for other purposes as well.
- **Volume Requiring Split (VRS):** The VRS is a volume copied from volumetric reporting or can be created by a cascade, to which pipeline splits should balance. In volumetrics, dispositions to Custody Transfer Point (CTP) facilities are copied to pipeline splits as the VRS, identifying the delivering, receiving, and CTP Facility IDs. In general, CTP facilities for oil pipeline split reporting are terminals, pipelines, or waste plants.
- **Cascade:** To cascade is to allocate product from one facility to an upstream facility, because of the product ownership is unknown to the downstream operator. The products being allocated are referred to as cascaded volumes. This process applies to both the allocations and pipeline splits functions in Petrinex.
- **Validation Reports:** Petrinex generates different types of validation reports that are called by different names for different functions in Petrinex (Non-Compliance, Compliance & Balancing, Ensure Complete, or Missing/Incomplete). All of these reports are automatically generated 2 days prior to their applicable Ministry deadlines to allow users to make corrections. They are also generated at the deadline to advise users of outstanding problems that may be subject to penalties or default pricing for royalty/tax calculations. These reports can also be run online by request by users.
- **Concurrence:** In some Petrinex processes, all relevant parties must agree before a change is accepted. This online process is called concurrence and is required for Well and Facility Operator changes, and Well to Facility Link changes (between two operators). When concurrence is requested, the parties can respond online by accepting or rejecting the proposed change.
- **Batch File:** A batch file is a data submission that is uploaded to Petrinex (as opposed to being entered online). Most batch files are created using a Business Associate's internal system, but can be manually created as well. Batch uploading is available for most reporting processes. Acceptable upload formats for a batch file are Comma Separated Value (CSV) and Extensible Markup Language (XML).
- **Full-Form Amendment:** Full-form amendment is a submission method used in Petrinex whereby original data submissions are replaced by any subsequent submissions (amendments). This concept is important to keep in mind when making submission by batch upload. Each subsequent submission made to Petrinex completely overwrites the previous upload. This means that each new submission must include all data reported for the month (not just new or updated records).
- **Inbox and Notifications:** The Petrinex Inbox contains electronic notifications that are sent by e-mail to Business Associates. Petrinex uses notifications to inform BA users of successful submissions, errors, and other items or processes requiring action. Notifications are triggered by:
 - User actions initiated online
 - Calendar events

- Data changes
- Validation processes
- System processes
- Concurrence requests

All notifications are sent to a BA user's external email address as well as to the BA's Petrinex Inbox. This guarantees that all notifications are received by the BAs. All users can access notifications in their Petrinex BA Inbox. If there are any attachments to the notification, the notification will include a secure hypertext link, accessible only by the appropriate users. If a user is accessing this information from an external email address, the user is brought directly to Petrinex login page after clicking on the hyperlink. After logging into Petrinex, the user is brought directly to the applicable Petrinex page.

- **Contacts:** The Contacts button on Petrinex menu identifies the user who made the submission you are viewing, along with that user's contact information, including e-mail address and phone number.
- **Online Help:** Just one click away from any Petrinex page, the online Help system is a convenient utility that:
 - Provides immediate, context-specific information.
 - Provides detailed step-by-step instructions.
 - Provides a glossary and index of key words.
- **Tips:** Tips contain valuable advice for using Petrinex most effectively. Tips are accessible from the Petrinex website. You do not have to have access (user id and password) to view this information.
- **Alerts:** Alerts contain instructive work-arounds to resolve short-term problems in Petrinex. Alerts are accessible from the Petrinex website. You do not have to have access (user id and password) to view this information.

Appendix 4: Linking Existing Manitoba Forms to Petrinex Processes

1. Monthly Oil & Gas Production Report & Crown Royalty Statement

Report of _____ (Company Name)

(Address)

(Battery or Unit - Name and Location)

Month of _____ 20

Battery or Unit Production _____ m

MONTHLY OIL AND GAS PRODUCTION REPORT AND CROWN ROYALTY STATEMENT

CROWN ROYALTY CALCULATION												
Monthly Oil Production (m ³)	Crown Royalty Volume (m ³)*	MOP is the monthly volume of oil in cubic metres produced from a spacing unit, calculated to the nearest 0.1 of a cubic metre.										
50 or less	K ((MOP) ² /265)	K is equal to one of the following factors:										
over 50	K (9.43 + 0.45 (MOP - 50))											
* Crown royalty volume is calculated to the nearest 0.01 of a cubic metre. A result of 0.005 of a cubic metre or more is rounded up.		<table border="1"> <thead> <tr> <th>Classification of Oil</th> <th>Multiplying Factor (K)</th> </tr> </thead> <tbody> <tr> <td>Old Oil</td> <td>1.00</td> </tr> <tr> <td>New Oil</td> <td>0.55</td> </tr> <tr> <td>Third Tier Oil</td> <td>0.47</td> </tr> <tr> <td>Holiday Oil</td> <td>0.00</td> </tr> </tbody> </table>	Classification of Oil	Multiplying Factor (K)	Old Oil	1.00	New Oil	0.55	Third Tier Oil	0.47	Holiday Oil	0.00
Classification of Oil	Multiplying Factor (K)											
Old Oil	1.00											
New Oil	0.55											
Third Tier Oil	0.47											
Holiday Oil	0.00											
GAS: Crown royalty on gas is 12.5% of the volume sold, calculated for each producing month to the nearest 0.001 of a cubic metre.												

MINERAL RESOURCES
Petroleum Branch
360-1395 Ellice Ave
Winnipeg MB R3G 3P2
PH: (204)945-3905
FAX: (204)945-0586
EMAIL: htsdale@gov.mb.ca
WEBSITE: www.gov.mb.ca/petroleum

Well Name and Location	24-Hour Test Production				Days on Prod.	Monthly Oil Production m ³ (actual)	Gas Prod. 10 m ³	Water Prod. m ³	Tract Participation Factor %	Monthly Oil Production m ³ (allocated)	Multiplying Factor K	Crown Royalty Volume m ³	Crown Interest %	Working Interest Factor %	Wellhead Price \$/ m ³	Crown Royalty Payable \$	
	Date		Oil m ³	Gas 10 m ³													Water m ³
	Day	Month															
PRORATION FACTORS					TOTAL											TOTAL CROWN ROYALTY	
		Oil															
		Gas															
		Water															

Include bottom sediment produced by the well.

Cheque or money order must accompany this statement made payable to "The Minister of Finance - Manitoba".
PRODUCTION REPORTING AND INSTRUCTIONS ON REVERSE SIDE.

2. OIL DISPOSITION – (m³):		NEW WELLS ONLY:	Opening Inventory
		RECEIVING OR RECOVERING	Receipts
		COMPLETION (LOAD) OIL	(Location)
			Recovered
			Closing Inventory
OPENING INVENTORY			Oil Sold
Clean Oil Prod.			Transferred to:
Purchased or Received from:			
.....			CLOSING INVENTORY
=====			TOTAL
TOTAL			

3. PARTICULARS OF OIL SALES:						
Purchaser	Volume Sold m ³	Selling Price \$/m ³	Value of Sales \$	Total Transportation Charges \$	Net Value of Sales \$	Average Wellhead Price \$/m ³
.....
.....
.....
.....
Total	<input type="text"/>	Totals	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

4. GAS DISPOSITION AND CROWN ROYALTY STATEMENT:
 Manitoba Science, Technology, Energy and Mines should be contacted regarding reporting requirements for all gas sales.

5. WATER DISPOSITION (includes bottom sediment) (m³)		To Disposal Systems:.....
OPENING INVENTORY		(Location)
Water and Bottom Sediment Production	Pipeline Bottom Sediment and Water.....
Other Received (Specify)	Other Disposition
.....	=====	CLOSING INVENTORY
TOTAL	TOTAL

MONTHLY OIL & GAS PRODUCTION REPORT & CROWN ROYALTY STMT	
PETRINEX FUNCTIONALITY	FORM SECTIONS
Volumetrics	<ul style="list-style-type: none"> • Battery/Unit Name & Well Name/Location: All active wells are linked to a battery to report production. Volumetrics must be submitted for all active wells each month. Volumetrics are also reported at the facility level (inventory, receipts, dispositions, etc.). All volumetric activities at the battery (well & facility) must balance each month. It should be noted that volumetrics are not submitted for unit IDs. Whether the well is part of a unit or not is determined in the royalty tax attributes. All volumetric data is extracted and sent to ARD each month. • 24-Hour Test Production: Test values are no longer required to be reported. Users will simply report the total monthly production volumes for all products and one total hours value for the well. • Days on Production: Days on Production is reported in terms of total hours for the month. The total hours cannot exceed the monthly total (days x 24 hrs). • Monthly Production Volume Fields: All production volumes for all products are captured in Petrinex. Load fluids are also captured at the well level. All load fluids must be recovered before production can be reported. • Proration Factors: Proration factors must be reported at all applicable proration batteries for the production of Oil, Gas, and Water. • Oil Disposition: All details captured in this section are reported at the well level in volumetrics. This includes load oil injection, recovery, and inventory. This also includes production of clean oil. In Petrinex, all load oil must be recovered before production of new oil can be reported. The receipt of load oil from other sources and the disposition of oil downstream would be recorded at the facility level. • Water Disposition: All aspects of water reporting are reported in volumetrics. Receipts from other sources, dispositions downstream, and inventory are recorded at the facility level. Production and injection of water are recorded at the well level.

<p>Royalty Tax Attributes</p>	<ul style="list-style-type: none"> • Tract Participation Factor: All tract percentages for all units can be queried in Royalty Tax Attributes. All attributes listed are provided from ARD systems. • Crown Interest %: Crown percentages for all well spacing units and unit tracts can be queried in Royalty Tax Attributes.
<p>Royalty Tax Payer</p>	<ul style="list-style-type: none"> • Working Interest Factor: Stream operators (well licensees and unit operators) must submit working interests for all take-in-kind royalty payers for their streams.
<p>Pipeline Splits & Oil Valuation</p>	<ul style="list-style-type: none"> • Wellhead Price: All owners of oil volumes delivered to custody transfer points must submit Oil Valuation Royalty/Tax Payer data. Owners are determined by Pipeline Splits submissions. Owner volumes are populated into the Oil Valuation - Royalty Tax Payer module. The owner/RTP submits gross price and transportation costs for all deliveries. Petrinex then calculates the average wellhead price for the facility or unit. • Particulars Of Oil Sales: Both the Owner and Purchaser of a volume sold are identified in Pipeline Splits. This information is populated into both the Oil Valuation Royalty/Tax Payer and Oil Valuation Purchaser functions. As mentioned above, the owner/RTP will enter price and transportation costs for the volume sold to the purchaser. The Purchaser will enter price, density, and sulphur information for the volume purchased. They also enter their own volume that confirms whether the Pipeline Split is correct or not. The RTP and Purchaser records are then compared to ensure prices and volumes match.

Please Note:

Petrinex does not perform any of the royalty calculations indicated on the form. ARD is working on creating a revised version of this form that reduces the amount of redundancy reported in both Petrinex and on the form. This revised form will continue to be reported monthly in Manitoba until such time that ARD implements a royalty/tax system.

2. Monthly Freehold Oil & Gas Production Tax Statement



MINERAL RESOURCES
 Petroleum Branch
 360-1395 Ellice Avenue
 Winnipeg MB R3G 3P2
 PH: (204)945-8662
 FAX: (204)945-0586
 EMAIL: petroleum_royalties@gov.mb.ca
 WEBSITE: www.gov.mb.ca/petroleum

MONTHLY FREEHOLD OIL AND GAS PRODUCTION TAX STATEMENT								
for <div style="display: flex; justify-content: center; align-items: center; gap: 10px;"> _____ / 20 (month) (year) </div>								
MANITOBA FREEHOLD OIL PRODUCTION TAX RATE (%) FORMULAS								
Oil Classification	Monthly Production (m ³)	Tax Rate (%)						
Old Oil	20 or less over 20, and less than 65 65 and over	0.00 0.43(MOP) - 8.24 42.76 - 1500/MOP						
New Oil	36 or less over 36, and less than 65 65 and over	0.00 0.23(MOP) - 8.11 19.59 - 820/MOP						
Third Tier Oil	46 or less over 46	0.00 11 - 465/MOP						
Holiday Oil	all volumes	0.00						
MOP is the monthly oil production from, or allocated to a spacing unit, measured in cubic metres and calculated to the nearest 0.1 of a cubic metre.								
Tax Rate is calculated to the nearest 0.01 percent. A result that is .005 of a percent is rounded up.								
GAS tax rate on gas is 1.2% of all monthly production values; calculated to the nearest 0.001 of a cubic metre.								

I, _____ (Print Name) _____ (Title)
 of _____ (Name of Company)
 _____ (Address)

do hereby certify that the information contained in this statement is correct to the best of my knowledge and that I have revealed all relevant facts.

Date: _____, 20____ Signature: _____
 Telephone No.: _____ Fax No.: _____
 Email: _____

NOTES AND INSTRUCTIONS:

- Statement required pursuant to REGULATIONS under THE OIL AND GAS PRODUCTION TAX ACT.
- All applicable sections of this statement must be completed and received by the Branch, along with all taxes payable by the last working day of the month following the end of the month in which oil or gas is produced, or the taxpayer is subject to a penalty not exceeding \$50 per day for each day of delinquency in accordance with THE OIL AND GAS PRODUCTION TAX ACT.
- NIL statements must be filed, where there is no production.

Well Name and Location	Oil Classification	Tract Participation Factor%	Monthly Oil Production m ³	Tax Rate %	Freehold Interest %	Working Interest Factor%	Wellhead Price \$/m ³	Total Tax Payable\$	FOR OFFICE USE ONLY
TOTAL TAX									

Cheque or money order must accompany this statement made payable to "The Minister of Finance - Manitoba".

REPORTING INSTRUCTIONS ON REVERSE SIDE.

MONTHLY FREEHOLD OIL & GAS PRODUCTION TAX STMT	
PETRINEX FUNCTIONALITY	FORM SECTIONS
Volumetrics	<ul style="list-style-type: none"> • Battery/Unit Name & Well Name/Location: All active wells are linked to a battery to report production. Volumetrics must be submitted for all active wells each month. Volumetrics are also reported at the facility level (inventory, receipts, dispositions, etc.). All volumetric activities at the battery (well & facility) must balance each month. It should be noted that volumetrics are not submitted for unit IDs. Whether the well is part of a unit or not is determined in the royalty tax attributes. All volumetric data is extracted and sent to ARD each month. • Monthly Oil Production: All production volumes for all products, including oil, are captured in Petrinex. Load fluids are also captured at the well level. All load oil must be recovered before production of oil can be reported.
Royalty Tax Attributes	<ul style="list-style-type: none"> • Oil Classification: Oil classification and holiday incentive program information is provided for all wells. All attributes listed are provided from ARD systems. • Tract Participation Factor: All tract percentages for all units can be queried in Royalty Tax Attributes. • Tax Rate: Tax rates can be queried in Royalty Tax Attributes. • Freehold Interest %: Freehold percentages for all well spacing units and unit tracts can be queried in Royalty Tax Attributes.
Royalty Tax Payer	<ul style="list-style-type: none"> • Working Interest Factor: Stream operators (well licensees and unit operators) must submit working interests for all take-in-kind royalty payers for their streams.
Pipeline Splits & Oil Valuation	<ul style="list-style-type: none"> • Wellhead Price: All owners of oil volumes delivered to custody transfer points must submit Oil Valuation Royalty/Tax Payer data. Owners are determined by Pipeline Splits submissions. Owner volumes are populated into the Oil Valuation - Royalty Tax Payer module. The owner/RTP submits gross price and transportation costs for all deliveries. Petrinex then calculates the average wellhead price for the facility or unit.

Please Note:

Petrinex does not perform any of the tax calculations indicated on the form. This form will continue to be reported monthly in Manitoba until such time that ARD implements a royalty/tax system.

Appendix 5: Information by Specific Stakeholder Group

Readers are encouraged to read the stakeholder sections below that pertain to their BA.

• General for All Stakeholders

This Appendix should be read in conjunction with **Section 3.0 “What’s Changing”** to ensure you have an overview of the broad changes being introduced. We also encourage you to review the other appendices as needed to help you understand new reporting structure and requirements through Petrinex.

Users are also strongly encouraged to review the Petrinex learning modules applicable to their prospective use of Petrinex as well as review the additional resources related to PMIP implementation that are posted on the Petrinex website under Initiatives under the Petrinex Manitoba Inclusion Project (follow the link): <https://www.petrinex.ca/Initiatives/Pages/Manitoba.aspx>

User Administration:

- All stakeholder groups will require valid Manitoba BA identifiers.
- All stakeholder BAs must set up a User Security Administrator (and optionally a Back-Up User Security Administrator) and security profiles for all of their users. Instructions on how and when these user administrator activities are to be performed will be communicated later in the project timeline.

Ministry Invoices & Statements:

Ministries can send invoices and supporting summary reports for Oil & Gas Royalties/Taxes, Non-Compliance reporting, and any other desired reports or statements online to clients through Petrinex.

It is yet to be determined what will be immediately available to Industry from ARD through this process. As ARD continues to build processes and systems, the goal is to be able to provide invoices, statements, and non-compliance reporting to Industry through Petrinex.

Service Providers

Many companies use a service provider (ex: a Production Accounting Service Provider) to perform their Petrinex reporting responsibilities on behalf of them. BAs utilizing a service provider will need to:

- Ensure that your service provider has authority to complete work in Petrinex on your behalf. There are two ways to grant this authority:
 - You can set up individual users from your service provider as users within your BA. Effectively, you are treating these users as if they were users within your company. As with any Petrinex user that you manage at your company, your User Security Administrator can assign specific roles and facilities to those users.
 - Alternately, if the service provider already has a BA ID on Petrinex, you may assign a Designated BA role to that BA. The service provider can then log on to Petrinex under their own BA code and perform work for multiple clients. Under the Designated BA approach, the service provider will not be able to act as your User Security Administrator or Backup User Security Administrator.

Note: You may elect to engage a service provider to perform some Petrinex functions on your behalf, but not others. For example, you may have a service provider perform Monthly Reporting, but not activities related to well status or well to facility link changes. You are strongly encouraged to review this Handbook with your service provider to determine which functions they will and will not perform.

Data Management:

- All stakeholder groups will be able to submit data to Petrinex using online or batch (XML or CSV files) upload processes.
- All stakeholder groups will be able to access their information, and other public information on Petrinex through online queries and reports.

- **Oil & Gas Operating Producers (Including Well Licensee)**

The functionality used by this group can vary significantly depending on the number, type and complexity of the facilities a BA operates. The points below capture different reporting aspects of several types of operators. Not every point will pertain to every operator.

It should be noted that the Well Licensee in Petrinex is the BA who is the Licensee with ARD.

Infrastructure:

Oil & gas facility operators and/or well licensees will maintain current well and facility infrastructure records in Petrinex. Through the Petrinex Self-Serve mode, operators and licensees will perform the following functions:

- Well Status Changes (Licensee)
- Creating Petrinex Facility IDs (Facility Operator)
- Editing Petrinex facility information (Facility Operator)
- Creating initial well to facility links (Licensee)
- Changing well to facility links (Facility Operator)
- Initiating facility operator changes (Facility Operator)

Stream operators are required to maintain royalty tax/payer information by stream (well or unit) and applicable product (oil/gas) in Petrinex. When a new well initially comes on production, the well licensee is assigned as the stream operator. A stream operator may transfer operatorship to another BA, if necessary, using the Operator Change functionality in Petrinex.

Stream operators will be able to query the royalty tax attributes information associated with a stream in Petrinex. Royalty tax attributes are provided by ARD for query purposes only. A stream operator may query the royalty tax attributes for any stream (operated or non-operated); however, stream operators are only permitted to edit or query royalty/tax payer information for their operated streams.

Note: Royalty Tax Payer and Royalty Tax Attributes functionality will not be available at Go-Live. This functionality WILL be implemented at a future date. Companies will be notified in advance of implementation.

Monthly Reporting:

Volumetrics

Facility operators must report balanced volumetrics on a monthly basis for each product at any active facility they operate:

- All relevant well-related activities (ex: production, injection) and associated hours.
- Facility level activities such as receipts (dispositions are auto-populated), inventory and fuel. This includes receipts from cross-border facilities.
- Proration factors for oil, gas, and water (if applicable).
- See **section 3.4.1** for a summary of Manitoba reporting changes.

Oil Pipeline Splits & Oil Valuation

Oil pipeline split reporting will be mandatory for any dispositions of oil to a Custody Transfer Point (CTP) facility. Producer-Operators will be able to submit and query applicable oil pipeline split information associated with the production they manage.

- Dispositions to a CTP facility create a Volume Requiring Split (VRS) in pipeline splits.
- The VRS must be split to the owner/purchaser level at each producing facility or unit.
 - All cascaded volumes from downstream facilities must be reported.
- Pipeline splits are necessary to determine the take-in-kind royalty tax payers for oil valuation purposes

Any BA identified as an owner in pipeline splits must submit oil valuation royalty/tax payer information at the facility or unit level. Producer-Operators that are royalty/tax payers will be able to submit and query valuation information for the volumes in which they are the identified royalty/tax payer (owner) only.

- The royalty/tax payer must submit the gross price/m³ and total clean oil transportation costs associated with the split volume.
- Purchasers also submit valuation information. The volume and price of the royalty/tax payer valuation must match to the purchaser's volume and price.

Allocations

There are no regulatory requirements to submit allocations information. Facility operators can use allocations to report splits of any monthly volumetric submission (product or activity) for partner reporting purposes. Operators are highly encouraged to utilize this process for partner reporting as this can reduce or even eliminate the need for sending out individual statements to partners.

- Volumes and associated energy (if applicable) are broken down into the individual streams (wells, units) that contributed to the total. Each stream's volume/energy is then broken down into the individual owners' shares.
- Operators can cascade shares of volumes that were delivered to their facility to the upstream facility operators if stream/owner information is unknown. The upstream operator can then complete stream/owner allocations for their share of the volume.
- Allocations can be filed by volume or by factor.

Gas Plant Valuation

There are currently no gas plants operating in Manitoba. This functionality is available should this change in the future.

This functionality allows Industry to report information related to all monthly sales and purchases that happen at the plant. The following BAs can submit information:

- Gas plant operators.
- Other BAs who retain possession of, and market, their own share of products processed at the plant.

Ministry uses this information for statistical and raw gas validation purposes.

Please Note: Petrinex monthly reporting captures most of the information currently reported on the following forms in Manitoba today:

- Monthly Oil & Gas Production Report & Crown Royalty Statement
- Monthly Freehold Oil & Gas Production Tax Statement

Petrinex, however, does not perform any of the royalty/tax calculations reported on these forms. ARD will still require these forms to be reported monthly until they implement their own royalty/tax system. Revisions are being made to reduce the amount of redundant information reported both in Petrinex and on the forms.

Annual Reporting:

Enhanced Valuation Audit Program (EVAP)

Producer-operators who engage in non-arm's length sales of oil will be required to file an annual EVAP declaration providing executive sign-off that attests that the company is following valuation rules for establishing a fair market price.

A sale is considered non-arm's length if, in pipeline spits reporting, both the owner BA ID and purchaser BA ID are the same or are considered to be related. More details are provided in sections **3.4.2** and **3.5.1**.

An EVAP submission in Petrinex consists of:

- A scanned PDF copy of the official declaration with executive signatures.
- A completed EVAP template spreadsheet (see section **3.5.1**).
- Sample calculations.
- Other supporting documentation requested.

It is anticipated that the first EVAP declarations will be submitted in 2022, covering the 2021 reporting year.

- **Oil & Gas Non-Operating Producers/Royalty Tax Payers**

Infrastructure:

Royalty/Tax payers (who are not operators) will be able to query their interest by stream (well or unit) and applicable product (oil/gas) in Petrinex.

Non-operators will be able to query the royalty tax attributes information associated with a stream in Petrinex. Royalty tax attributes are provided by ARD for query purposes only.

Note: Royalty Tax Payer and Royalty Tax Attributes functionality will not be available at Go-Live. This functionality WILL be implemented at a future date. Companies will be notified in advance of implementation.

Monthly Reporting:

Volumetrics

Non-operators will be able to query gross volumetric information once the operator has filed it.

Oil Valuation

Any BA identified as an owner in a pipeline splits submission must submit oil valuation royalty/tax payer information at the facility or unit level. Non-operators that are royalty/tax payers will be able to submit and query valuation information for the volumes in which they are the identified royalty/tax payer (owner) only.

- The royalty/tax payer must submit the gross price/m³ and total clean oil transportation costs associated with the split volume.
- Purchasers also submit valuation information. The volume and price of the royalty/tax payer valuation must match to the purchaser's volume and price.

Allocations

Facility operators can use allocations to report splits of any monthly volumetric submission (product or activity) for partner reporting purposes. Non-operating partners will be able to query and generate reports for their owner shares of any submission filed by the operator.

Gas Plant Valuation

There are currently no gas plants operating in Manitoba. This functionality is available should this change in the future.

This functionality allows Industry to report information related to all monthly sales and purchases that happen at the plant. The following BAs can submit information:

- Gas plant operators.
- Other BAs who retain possession of, and market, their own share of products processed at the plant.

Ministry uses this information for statistical and raw gas validation purposes.

Annual Reporting:

Enhanced Valuation Audit Program (EVAP)

Non producer-operators (royalty/tax payers) who engage in non-arm's length sales of oil will be required to file an annual EVAP declaration providing executive sign-off that attests that the company is following valuation rules for establishing a fair market price.

A sale is considered non-arm's length if, in pipeline splits reporting, both the owner BA ID and purchaser BA ID are the same or are considered to be related. More details are provided in sections **3.4.2** and **3.5.1**.

An EVAP submission in Petrinex consists of:

- A scanned PDF copy of the official declaration with executive signatures.
- A completed EVAP template spreadsheet (see section **3.5.1**).
- Sample calculations.
- Other supporting documentation requested.

It is anticipated that the first EVAP declarations will be submitted in 2022, covering the 2021 reporting year.

• **Oil Midstream Facility Operators**

This section is focused on operators of facilities that are generally considered points of custody transfer (i.e. terminals and oil pipelines). For reporting purposes, this group also includes cross-border operators in other Petrinex jurisdictions that receive product that was produced in Manitoba.

Infrastructure:

Operators will maintain the appropriate facility infrastructure records in Petrinex. Through the Petrinex Self-Serve mode, operators will perform the following functions:

- Creating Petrinex Facility IDs
- Editing Petrinex facility information
 - Terminal operators may indicate whether the terminal is physically connected to a pipeline.
- Initiating facility operator changes

Monthly Reporting:

Volumetrics

Facility operators must report balanced volumetrics on a monthly basis for each product at any active facility they operate:

- Facility level activities such as receipts (dispositions are auto-populated), inventory and fuel. This includes receipts from cross-border facilities.

Oil Pipeline Splits

Oil pipeline split reporting will be mandatory for any deliveries of oil to a Custody Transfer Point (CTP) facility. Terminals and pipelines are considered to be CTP facilities for receipts of oil. Custom treaters

and waste plants are considered to be CTP facilities for purchase receipts of oil. CTP facility operators will be able to query applicable oil pipeline split information associated with oil receipts at their facilities.

Allocations

There are no regulatory requirements to submit allocations information. Facility operators can use allocations to report splits of any monthly volumetric submission (product or activity) for partner reporting purposes. Operators are highly encouraged to utilize this process for partner reporting as this can reduce or even eliminate the need for sending out individual statements to partners.

- Volumes are broken down into the individual streams (wells, units) that contributed to the total. Each stream's volume is then broken down into the individual owners' shares.
- Operators can cascade shares of volumes that were delivered to their facility to the upstream facility operators if stream/owner information is unknown. The upstream operator can then complete stream/owner allocations for their share of the volume.
- Allocations can be filed by volume or by factor.

• **Gas Midstream Facility Operators**

This section is focused on operators of facilities and pipelines where raw gas is processed into residue gas and NGL liquids and moved downstream. Most sales take place at these points.

There are currently no gas plants operating in Manitoba. The points below will apply to any future operators of these facilities.

Infrastructure:

Operators will maintain the appropriate facility infrastructure records in Petrinex. Through the Petrinex Self-Serve mode, operators will perform the following functions:

- Creating Petrinex Facility IDs
- Editing Petrinex facility information
 - Gas pipeline operators must identify a CSO (Common Stream Operator) for meter stations and whether the upstream facility will be auto-populated. Quite often, the CSO is the gas plant operator.
- Initiating facility operator changes

Monthly Reporting:

Volumetrics

Facility operators must report balanced volumetrics on a monthly basis for each product at any active facility they operate:

- Facility level activities such as receipts (dispositions are auto-populated), inventory and fuel. This includes receipts from cross-border facilities.
- Processed volumes of NGL products at a gas plant are auto-calculated by Petrinex.

Allocations

There are no regulatory requirements to submit allocations information. Gas plant operators can use allocations to report splits of any monthly volumetric submission (product or activity) for partner reporting purposes. Operators are highly encouraged to utilize this process for partner reporting as this can reduce or even eliminate the need for sending out individual statements to partners.

- Volumes and associated energy (if applicable) are broken down into the individual streams (wells, units) that contributed to the total. Each stream's volume/energy is then broken down into the individual owners' shares.
- Operators can cascade shares of volumes that were delivered to their facility to the upstream facility operators if stream/owner information is unknown. The upstream operator can then complete stream/owner allocations for their share of the volume.
- Allocations can be filed by volume or by factor.

Gas Plant Valuation

There are currently no gas plants operating in Manitoba. This functionality is available should this change in the future.

This functionality allows Industry to report information related to all monthly sales and purchases that happen at the plant. The following BAs can submit information:

- Gas plant operators.
- Other BAs who retain possession of, and market, their own share of products processed at the plant.

Ministry uses this information for statistical and raw gas validation purposes.

• **Marketers & Purchasers**

Monthly Reporting:

Oil Valuation

Any BA identified as a purchaser of oil in pipeline splits must submit oil valuation purchaser information. Volumes for valuation are rolled up to the facility that directly delivered to the Custody Transfer Point facility (terminal, pipeline, custom treater, or waste plant) for the same source producer (owner). The rolled up volume could include production from several upstream producing facilities.

- The purchaser must submit density, sulphur content, submitted volume, and gross price/m³ associated with oil deliveries made to a Custody Transfer Point facility by a source producer (royalty/tax payer).
- The purchaser may add manual rows that were not populated from pipeline splits if they feel that a transaction is missing.
- The source producer (royalty/tax payer) must also submit valuation information.
- The volume and price of the royalty/tax payer valuation must match to the purchaser's volume and price.

- It is the onus of the source producer to ensure that volumes and prices match and to communicate with the purchaser when they do not.
- In some cases, both the source producer (royalty/tax payer) and purchaser identified in a pipeline split are the same or are considered to be related. This is considered a non-arm's length transaction. In these cases, there is no value in comparing the two valuation records. As such, there will be no oil valuation purchaser record created. These transactions are covered under the Enhanced Valuation Audit Program (EVAP). More details are provided in sections **3.4.2** and **3.5.1**.

- **Waste Plant & Custom Treater Facility Operators**

It is believed there are currently no active waste plants or custom treater facilities operating in Manitoba. The points below will apply to any future operators of these facilities.

Infrastructure:

Facility operators will maintain the appropriate facility infrastructure records in Petrinex. Through the Petrinex Self-Serve mode, operators will perform the following functions:

- Creating Petrinex Facility IDs
- Editing Petrinex facility information
- Initiating facility operator changes

Monthly Reporting:

Volumetrics

Custom Treater facility operators must report balanced volumetrics on a monthly basis for each product at any active custom treater they operate:

- Facility level activities such as receipts (dispositions are auto-populated), inventory and fuel. This includes receipts from cross-border facilities.
- Proration factors for oil, gas, and water.

Waste Plant

Waste Plant facility operators must report balanced volumetrics on a monthly basis using the waste plant reporting functionality in Petrinex (separate from the standard volumetrics functionality).

- Waste plant reporting captures different information than standard volumetrics:
 - Receipts/dispositions are broken out into volumes of oil, solids, and water that make up the total volume.
 - Waste codes are used to determine the nature of the waste.
 - Classification of waste as dangerous/non-dangerous.

Oil Pipeline Splits

Oil pipeline split reporting will be mandatory for any deliveries of oil to a Custody Transfer Point (CTP) facility. Terminals and pipelines are considered to be CTP facilities for receipts of oil. Custom treaters and waste plants are considered to be CTP facilities for purchase receipts of oil. CTP facility operators

will be able to query applicable oil pipeline split information associated with oil receipts at their facilities.

- **Service Providers**

Service providers may be engaged to perform various Petrinex functions on behalf of their client. It is important to review the other stakeholder categories above with your client to determine which are applicable.

- Ensure the client reviews the User Administration points for setting up service providers in section 1 of this appendix (General for All Stakeholders).
- Most service providers would be engaged in activities for sections 2 (Oil & Gas Operating Producers) and/or 3 (Oil & Gas Non-Operating Producers) in this appendix. Service providers are encouraged to review these sections.

- **Production Accounting Software Providers**

Petrinex has and will continue to work closely with PA software companies to assure they are fully informed and have every opportunity to be ready for PMIP implementation. PA software companies are encouraged to contact the Industry Team at Petrinex directly if they have any questions that have not already been covered in meetings with respect to:

- Specification documents and updates
- Vendor Interoperability (VIO) Testing
- Industry Interoperability (IIO) Testing
- Other Petrinex Activities

Appendix 6: Petrinex Facility Types & Subtypes for Manitoba Reporting

The following table provides a listing of facility types and subtypes that will be available for Petrinex reporting in Manitoba. This table will continue to be updated with any changes that may be made prior to Go-Live.

Facility Type	Facility Subtype	Facility Subtype Title	Facility Subtype Description
Battery (BT)	311	Crude Oil Single-Well Battery	A production facility for a single oil well.
Battery (BT)	321	Crude Oil Multiwell Group Battery	A production facility consisting of two or more flow-lined oil wells having individual separation and measuring equipment but with all equipment sharing a common surface location.
Battery (BT)	322	Crude Oil Multiwell Proration Battery	A production facility consisting of two or more flow-lined oil wells having common separation and measuring equipment. Total production is prorated to each well based on individual well tests.
Battery (BT)	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 is not combined with production from other wells prior to delivery.
Battery (BT)	361	Gas Multiwell Group Battery	A production reporting 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 then delivered to a gas gathering system or other facility.

Battery (BT)	381	Drilling & 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.
Custom Treater (CT)	611	Custom Treating Facility	A treating facility that contains equipment to treat and separate emulsion that has been received by truck.
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.
Gas Plant (GP)	401	Gas Plant	A processing facility that receives gas.
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.
Injection Facility (IF)	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.
Injection Facility (IF)	504	Acid Gas Disposal	An injection facility for the disposal of acid gas, such as hydrogen sulphide and carbon dioxide, into an underground zone.

Injection Facility (IF)	507	Disposal (Approved as Part of a 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 license.
Injection Facility (IF)	518	Disposal (Approved for Non-Oil & Gas Related Activities)	An injection facility for the disposal of fluids associated with non-oil and gas related activities, such as potash mining, into an underground zone.
Meter Station (MS)	631	Field Receipt Meter Station	A meter whereby gas is received from a non-linked upstream facility (other than a gas pipeline) and delivers to a linked downstream gas pipeline.
Meter Station (MS)	632	Interconnect Receipt Meter Station	A meter whereby gas is received from a linked upstream gas pipeline and delivers to a non-linked downstream facility (including a gas pipeline).
Meter Station (MS)	634	Interconnect Non-Reconciled Meter Station	A meter that receives gas from or delivers gas to a facility that is not required to report on Petrinex. (Ex: meters associated with NEB federally regulated pipelines)
Pipeline (PL)	204	Gas Transporter	A facility type that consists of a network of interconnected gas pipelines that move gas within and out of the province of Manitoba.
Pipeline (PL)	207	Oil Pipeline	A facility type that consists of a network of interconnected pipelines that move oil within and out of the province of Manitoba.
Pipeline (PL)	208	NGL Pipeline	A network of interconnected pipelines that move Natural Gas Liquids (NGL) within and out of the province of Manitoba.

Pipeline (PL)	210	Oil Pipeline (Non-Reporting)	A network of interconnected pipelines that move oil within and out of the province of Manitoba. This subtype only applies to pipelines that are not required to report on Petrinex such as NEB regulated pipelines.
Pipeline (PL)	211	Gas Transporter (Non-Reporting)	A network of interconnected pipelines that move gas within and out of the province of Manitoba. This subtype only applies to pipelines that are not required to report on Petrinex such as NEB regulated pipelines.
Pipeline (PL)	212	NGL Pipeline (Non-Reporting)	A network of interconnected pipelines that move natural gas Liquids (NGL) within and out of the province of Manitoba. This subtype only applies to pipelines that are not required to report on Petrinex such as NEB regulated pipelines.
Pipeline (PL)	213	CO2 Pipeline	A network of interconnected pipelines that move CO2 within and out of the province of Manitoba.
Pipeline (PL)	214	CO2 Pipeline (Non-Reporting)	A network of interconnected pipelines that move CO2 within and out of the province of Manitoba. This subtype only applies to pipelines that are not required to report on Petrinex such as NEB regulated pipelines.
Refinery (RF)	651	Oil Refinery/Upgrader (Issued by ARD Only)	A processing facility that refines or upgrades crude oil. This subtype is not required to report on Petrinex. This subtype is issued by ARD only.
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.

Terminal (TM)	671	Tank Farm Oil Terminal	A terminal facility that consists of oil storage tanks and equipment associated with the operation of a pipeline.
Terminal (TM)	673	Third Party Tank Farm Oil Terminal	A terminal facility that consists of storage tanks and equipment associated with the operation of a pipeline operated by another party.
Terminal (TM)	675	Railcar Oil Terminal	A terminal facility that consists of oil storage tanks or equipment associated with the operation of a rail line.
Waste Location (WL)	904	Waste Location	A reporting entity used in waste plant reporting related to waste generated or waste received at non-regulated locations. This subtype is not required to report on Petrinex.
Waste Plant (WP)	701	Surface Waste Facility	A processing facility that collects and treats waste from crude oil, gas and other operations.
Water Source (WS)	905	Surface Water Source (Non-Reporting)	A reporting entity that identifies the surface location of a fresh (non-saline) water source, such as a river or lake. This subtype is not required to report on Petrinex.
Water Source (WT)	906	Formation Water Source	A production facility for formation water source wells. Water produced from below the base of the Ribstone Creek stratigraphic unit is considered formation water.
Water Source (WS)	907	Fresh Water Source	A production facility for fresh water source wells. Water produced from above the base of the Ribstone Creek stratigraphic unit is considered fresh water.

Appendix 7: Technical & Security Considerations

Technical Configuration:

To use Petrinex properly, stakeholders must ensure they (or their service provider) have access to the internet. Any device used to access Petrinex must meet the following minimum technical configuration:

SOFTWARE

- An Operating System that supports the use of the browsers listed in the next point.
- Browsers supported include Internet Explorer 11, and the 3 most recent versions of Microsoft Edge, and Firefox.

NOTE: For the best results, it is recommended that clients upgrade to the most recent browser versions.

- Whichever Internet browser you choose must have a minimum **128-bit encryption**. Without this level of encryption, clients will not be able to access the work area of Petrinex. This encryption level provides security for those using the system and for the information contained in Petrinex.
- JavaScript enabled
- Session Cookies must be enabled
- Screen resolution 1280x1024

Petrinex Security:

Petrinex contains effective processes to access information. Immediate access to definitive, shared data is available through Petrinex query and report functionality. Petrinex users can access this information, subject to authorization and confidentiality considerations. Reports can be viewed, printed, and downloaded electronically

Conceptually, Petrinex security is managed at three levels:

- 1. The System Level:** This level is managed by the Petrinex Team in conjunction with the Alberta Department of Energy (DOE). This level is focused on assuring that only those parties that are entitled to have access to Petrinex are able to gain access. Parties that are entitled to access Petrinex are called Business Associates (BA's). To become a Petrinex BA, companies must demonstrate through a formal application process that they have a legitimate requirement to access Petrinex (e.g. in Manitoba, they are required to report to ARD). In order to utilize the Petrinex application a user must have a valid Business Associate code, user id, and password. The Petrinex team has implemented Industry best practices around its technical architecture to ensure that only authorized BA users can access Petrinex.
- 2. The BA Level:** This level is managed by Petrinex and is focused on ensuring that BA's using Petrinex are only able to view data that they are entitled to see. Certain information is considered confidential and falls under the Petrinex "Security Blanket". A brief summary of security by business function is listed below:
 - **Facility and Well Infrastructure:** In general, well and facility information is available for any user to query. However, certain data fields associated with confidential wells will only be available to

a user at the licensee BA who has confidential/experimental permissions. These data fields are only hidden during the period in which the well is considered confidential. Hidden data elements include:

- Well Type (oil classification)
 - Gross Completion Intervals
 - Field/Pool
 - Crude Oil Density
 - Perforation/Packer Information
- **Royalty/Tax Payer:** Only the stream operator can see all of the royalty tax payers associated with the stream. Individual royalty/tax payers can only view their own interest in the stream.
 - **Volumetrics & Waste Plant:** Generally gross volumetric data is viewable by all BAs in Petrinex with the following exceptions:
 - A non-operator cannot query volumetrics for Terminal, Pipeline, Gas Plant, Meter Station, Refinery, Custom Treater & Waste Plant submissions.
 - A non-operator cannot query volumetrics for storage/EOR injection facilities (subtype 501). All other injection facility subtypes can be queried.
 - Dispositions to the above facility types are masked for the non-operators (e.g. a battery disposition to a terminal is masked for non-operators of the battery).
 - Dispositions to the above facilities types are viewable for users at the operating BA (e.g. A disposition to a terminal can be viewed by users at the BA operating the battery)
 - The battery operator can grant access for certain non-operators to see masked data using the [Volumetric Distribution List](#) functionality in Petrinex.
 - If a battery has a confidential well linked to it, then volumetrics for the entire battery cannot be queried by non-operators or by users at the operator BA who do not have confidential permissions. Volumetrics will be available to all BAs and users for periods in which the well is no longer confidential.
 - **Oil Pipeline Splits:**
 - The operator of the delivering, receiving, or CTP facility identified in the split can see all details of the submission (all shippers, owners, purchasers, and cascades to other facilities).
 - A shipper BA, who is not an operator of the delivering, receiving, or CTP facility, can only see the owner/purchaser information pertaining to their shipper ID.
 - Individual owners and purchasers cannot query their volumes within the online pipeline splits functionality, but can request reports that provide that information.
 - **Oil Valuation:**
 - Royalty/Tax payers can only see their own submission data. They cannot access other RTP or Purchaser valuation submissions.
 - Purchasers can only see their own submission data. They cannot access other Purchaser or RTP valuation submissions.
 - **Allocations:** There are 2 different stakeholders in Manitoba that can access owner split information in allocations:
 - The facility operator, who submits the splits, sees all owner volumes and energy (if applicable).

- Owners who are not the facility operator can see their own shares of the volume/energy only. The gross volume/energy for the facility is displayed but no other owner details.
- **Gas Plant Valuation:** BAs may only see their own submitted data for a plant:
 - Plant operators can only see their own submitted sales/purchases data.
 - Non-operators who have retained possession of, and have marketed, their own share of products processed at the plant can only see their own submitted sales/purchases data.
- **EVAP:** BAs may only see their own EVAP submissions.

3. The User Level: This level is managed by the BA and is focused on permitting the BA to assign specific access rights to individual users (e.g. one user may be given a comprehensive role, meaning that user can make submissions and read information for all facilities operated by that BA. Another user may be given “Read-Only” rights for specifically identified facilities). The BA’s User Security Administrator (BA USA) manages the assignment of user access “rights” for a BA. Only one BA USA and one Backup BA USA can be assigned for each BA.

Petrinex security assurance is provided through:

- Industry best practice security technical and business design.
- Industry best practice security operations and maintenance.
- Regular third party penetration testing.
- Regular review by the Alberta Office of the Auditor General.

In addition to the above, Petrinex is SysTrust certified. SysTrust certification is an extremely comprehensive internationally recognized annual certification process managed by accredited public accounting firms. Click on the SysTrust logo on the homepage of the Petrinex Website for more information.

Appendix 8: Manitoba Business Process Changes

This section is reserved as a placeholder for ARD to communicate any changes in their business processes to Industry stakeholders. It will be updated as needed throughout the project leading up to Go-Live.

Appendix 9: Changes to Non-Compliance Fees & Penalties

This section is reserved as a placeholder for ARD to communicate any new non-compliance fees/penalties associated with late or erroneous reporting in Petrinex. This section will be updated when details of these fees/penalties have been determined.

Appendix 10: Frequently Asked Questions

This section will be updated with frequently asked questions and responses throughout the project leading up to Go-Live.

Appendix 11: Pre & Post Go-Live Readiness Activities for Companies/Change Leaders

The Petrinex Industry Team, along with ARD, has developed an Industry Conversion Plan that outlines all aspects of Industry involvement in regards to data conversion and setup.

There are 3 major components of the plan:

- 1) Information Collected from Industry
 - Business Associate: General (Main Contact/Address), Primary & Backup USA information, and BA Roles.
 - Facility: All Facility IDs and Well-Facility Linkages (if applicable)
 - **Commingled Wells**
 - Oil Purchasers
- 2) Conversion Information Shared with Industry
 - Business Associate
 - Well
 - Facility
- 3) Activities at Go-Live
 - Primary USA must Create Users
 - Opening Inventories
 - Infrastructure Updates
 - Related Business Associates (for oil valuation purposes)

1. Information Collected from Industry

All information that is to be collected from Industry must be done prior to Go-Live. This to ensure there is sufficient time to create conversion files and test the data so that the correct information is in place and ready to use at Go-Live.

Business Associate

Efforts to extract Business Associate information from the Ministry for data conversion into Petrinex has been unsuccessful. Information is fragmented in different areas and different data formats. It has since been decided that the required information will be collected from Industry. This has the advantage of ensuring that all information is current and provided in a format that can be turned into a conversion file for load into Petrinex.

Change Leaders will be receiving an email with an editable PDF form and instructions for how to complete and submit that form. A USA authorization letter template (discussed below) will also be included. All forms & authorization letters must be completed and submitted to Petrinex no later than March 20, 2020 to be included in conversion for Go-Live. BAs will not be able to log in at Go-Live if they have not submitted their forms by the deadline.

General Business Associate Information

The image below shows the general information section of the form. Each company will provide main contact and address information. This information is loaded into Petrinex and used to update Ministry systems.

GENERAL BUSINESS ASSOCIATE INFORMATION			
Business Associate ID*:			
Contact Last Name*:	Contact First Name*:	Contact Middle Name:	
Contact Phone Country Code*(124 Can, 840 USA):	Contact Phone Number*:	Contact Phone # Ext	
Contact Fax Country Code*(124 Can, 840 USA):	Contact Fax Number:	Contact Fax # Ext	
Contact Email*:			
Corporate Address*:			
City*:			
Province/State*:			
Country*:			
Postal Code/ZIP*:			

Primary & Backup USA Contact Information

Each BA that is required to report in Petrinex must have a Primary User Security Administrator (USA). The USA is responsible for managing user accounts including account creation and deactivation. The USA also creates User Security Roles and assigns these roles to the appropriate users within the company. See “Activities at Go-Live” below for more information.

Each BA may optionally set up a Backup USA as well. The Backup USA performs the same functions in the event that the Primary is unavailable.

ARD must collect Primary/Backup USA information so that passwords can be communicated prior to Go-Live. The following image below, taken from the new BA application form, shows what kind of information ARD will be collecting.

The image below shows the USA section of the form. In addition to this information, each BA must submit a letter, signed by an authorized person in the company, stating that the Primary and Backup USA contacts provided have corporate permission to hold these roles. **Each change leader will receive an authorization letter template along with the form. The template must be transferred to corporate letterhead, signed, scanned and included along with the submitted form.**

BA USER SECURITY ADMINISTRATOR DATA		
Primary User Security Administrator Data		
USA Last Name*	USA First Name*	USA Middle Name:
USA Telephone Country Code* 124	USA Phone Number*	USA Phone # Extension:
USA Fax Country Code: 124	USA Fax Number:	USA Fax Extension:
USA Email*:		
USA Mailing Address (only if different from corporate address):		
City:		
Province/State:		
Country:		
Postal Code/ZIP:		
Back-Up User Security Administrator Data (optional):		
Backup Last Name:	Backup First Name:	Backup Middle Name:
Backup Telephone Country Code: 124	Backup Phone Number:	Backup Phone Extension:
Backup Fax Country Code: 124	Backup Fax Number:	Backup Fax Extension:
Backup Email:		

Business Associate Roles

The image below shows the BA roles section of the form. This section displays a list of the roles that can be assigned to a company in Petrinex. Change Leaders should check all roles that are applicable to their company.

Business Associate Roles (check if applicable)

Facility Operator:

Licensee:

Admin Only:
 (A company that will require access to Petrinex for administrative purposes only such as Shipper, Over-Rider Royalty)

Production Accounting Services:
 (A company which provides a fee for service basis administrative function for other companies/individuals)

Working Interest Owner:
 (A royalty client must be set up with a working interest owner role to receive volumetric allocation from an operator of a facility or a company/individual who has an ownership in a well or facility)

Facility

The Petrinex Industry Team has been collecting facility information from Industry BAs. This is necessary because Petrinex utilizes a number of facility types in order to facilitate complete volumetric reporting across the province. This includes production at the wellhead, injection, as well as the movement of all oil and gas products from the production source to the sales point.

Currently Manitoba only requires production volumes to be reported at a well level. ARD’s system does not have all of the facility information for conversion into Petrinex. This exercise gives Industry the opportunity to convert any facility IDs they may have set up in their own production accounting systems into Petrinex.

Change Leaders should have received a spreadsheet template for collecting facility information. This template includes a detailed [instruction document](#) for providing information.

Each BA is being asked to provide any of their **operated** facilities relating to the list below:

- Single & Multi-Well Batteries
- Fresh & Formation Water Source Batteries
- Injection/Disposal Facilities
- Sales Pipelines
 - This does not include flow lines.
- Tank & Rail Terminals
- Custom Treating Facilities
- Waste Plants

All Petrinex facilities start with a provincial code (MB), a 2-digit facility type code (BT, IF, PL, etc.), and are followed by a 7-digit identifier (ex: MBBT0000123). The template allows BAs to fill in their facility information in the Petrinex format. A BAs facility ID becomes the identifier, which can contain both numeric and alphabetical characters.

It should be noted that there can be no duplicate IDs in Petrinex. If duplicates are received, they will need to be changed. Where possible, duplicates will be changed to incorporate the licence number as the identifier.

There are 4 tabs in the conversion spreadsheet template:

Multi-Well Batteries: The only facility level licences ARD has in their system are for multi-well oil batteries. These facilities are being converted to Petrinex using the licence number as the facility identifier.

The template contains a list of all multi-well batteries in ARD's system along with any known well linkages for these facilities. BAs should review their operated batteries, provide any missing information (as per the template) and ensure well linkages are correct.

Single-Well Batteries: ARD has provided a list of active wells from their system that are not linked to multi-well batteries. BAs should review their operated/licensed wells and fill in the required facility information. In Petrinex, all producing wells must be linked to a battery and all injection wells must be linked to an injection facility.

BAs should also add any missing wells or indicate if a listed well is no longer active and does not require a facility ID.

Some of the single wells provided by ARD are injection wells. As these should be linked to an injection facility (not a battery), they should be added to the "Facilities Non-BT" tab.

Facilities (Non-BT): This tab is to provide all other types of facilities they may operate other than batteries. BAs should review the instruction document and fill out the template accordingly.

Facility Subtype Descriptions: This tab is an informational tab that provides a list of the Petrinex facility subtypes available in Manitoba. This is the same list as is provided in **Appendix 6** of this document.

Conversion data loading and testing has concluded. Change Leaders were emailed a copy of the Industry Data Conversion refresh reports on February 12. Updates and corrections to data can still be submitted any time up until the cut off for Go-Live, which is **April 9, 2020**. Completed spreadsheets should be sent to steve.freeman@gov.ab.ca.

Commingled Wells

Oil Producing Wells with Well Events in Multiple Formations

The Petrinex Industry Team is collecting Information for any commingled oil well that has multiple events producing in different formations. Under this circumstance, the Ministry requires that Industry report monthly production (volumetrics) to each well event separately. Each producing well event will be linked to a multi-well battery.

If the commingled well events are currently set up as single well batteries (not connected to an existing multi-well battery), a multi-well battery will be created. A facility licence will be issued that has the same number as the well licence. Industry can then create a new multi-well battery using the new facility licence and link the applicable well events to that facility by assigning an active producing status to each event.

By providing the list of applicable licence numbers and events ahead of time, ARD can create the necessary facility licences prior to Go-Live. If licences are created with enough time, it may be possible to create the new batteries and establish the well linkages ahead of time as well.

Each company is asked to provide a list of their well events and associated licence numbers that meet the commingling scenario described (should they have any):

- An oil producing well that has 2 or more well events producing in different formations.
- These well events are not currently linked to an existing multi-well battery.

Information can be sent to steve.freeman@gov.ab.ca. Information will be collected and passed on to the Ministry. As the attempt is to issue facility licences, create the necessary multi-well batteries, and link events to these new batteries in time for Go-Live, **Industry is encouraged to send their information ASAP. No new lists will be accepted after April 9.**

See [Appendix 15: Manitoba Commingling Processes](#) for step by- step instructions on how to set up the various commingling scenarios in Petrinex.

Oil Purchasers

Oil purchasers are required to submit monthly oil valuation information in Petrinex after Go-Live (see section 3.4.2 for more information on oil valuation reporting).

As such, Petrinex needs to identify and engage with all companies that purchase oil. To accomplish this, we will be following up with all producers to ask who their purchasers are. An email has been sent to Change Leaders asking for a list of companies that purchase their oil.

2. Conversion Information Shared with Industry

Certain infrastructure conversion files that are being loaded into the Petrinex test environment will be shared with Industry. Details as to where these files will be uploaded and maintained will be provided when they are available.

Below is a list of files that will be provided:

Business Associate

- Contains a listing of business associates being loaded into Petrinex from ARD systems.
- Each business associate includes BA ID & Name, Corporate Status & Corporate Status Effective Date, BA Roles set and the BA Role Start Date, Petrinex Status.
- **Primary/Backup USA information is confidential and will not be included in the report.**

Well Infrastructure

- Contains a listing of the well events loaded into Petrinex from ARD systems.
- Each facility includes the Well ID, Licence & Licensee information, Linked Facility information, Field & Pool information, Current Well Status, Lahee Class, Spud/Finished Drill/Rig Release Dates, Directional Drill information (vertical, horizontal, and directional), Final & Max True Vertical Depths.
- **Field & Pool information will not be displayed for confidential wells.**

Facility Infrastructure

- Contains a listing of the facilities created from Industry collected information.
- Each well event includes Facility ID & Name, Licence & Licensee information, Operator information, Location, Operational Status, and Subtype.
 - Battery – If BT is tied to Storage/EOR and associated injection facility (if applicable)
- Information not included:
 - Terminal – Physically Connected to Pipeline Flag/Pipeline ID may be provided by Industry after Go-Live.

Change Leaders should ensure that the appropriate individuals in their company review the files that are of importance to them to identify any possible errors or missing data. Examples include:

- Wrong facility type or subtype, well-facility linkages, well statuses, etc.
- Missing wells or facilities.

Any missing facilities or errors discovered in the facility report should be sent to steve.freeman@gov.ab.ca. Any missing information or errors found in either the business associate or well report should be communicated to ARD.

Data Refresh Schedule

The last major conversion file refresh for the test system took place in January. Reports were sent to Change Leaders on February 12.

Companies are highly encouraged to review files and communicate errors as soon as possible to ensure there is plenty of time to accommodate corrections. Changes can be accommodated for Go-Live prior to the final conversion deadline, April 9 2020.

3. Activities at Go-Live

There are a number of activities that must happen after Petrinex Go-Live. Petrinex Go-Live is scheduled for May 4, 2020 (reporting for the April production month).

Primary USA must Create Users/Roles

The Primary or Backup USA must create all User IDs and assign them User Security Roles before any reporting can commence on Petrinex. Use Security Roles define which functions a user can perform in Petrinex. At least one user must be created for each company. The Primary & Backup USA cannot perform reporting functions in Petrinex.

The Primary and Backup USA will also continue to manage user access and roles going forward in Petrinex.

Communication of passwords to USAs, along with instructions for logging in and for creating users will be communicated closer to Go-Live.

NOTE: Scroll to the end of this appendix for detailed instructions on creating User IDs and User Security Roles:

- [Manage User ID and Access \(Primary/Backup USA\)](#)
- [Manage User Roles \(Primary/Backup USA\)](#)

Enter Opening Inventories in Volumetrics

Opening inventories for the April production month will not be collected prior to Go-Live as there is not much time between reporting the ending inventory for the prior month and getting that number

converted into Petrinex ahead of time. **Instead, users will report opening inventories as Inventory Adjustments in Petrinex.**

- Inventory reported at the Facility level will use activity INVADJ.
- Load Inventory reported at the Well level will use activity LDINVADJ.
- Closing inventories will be reported using normal Petrinex activities (INVCL or LDINVCL for load inventory).
- Opening inventories going forward will be auto-populated from the prior month's closing inventory.

Infrastructure Updates

i. Terminals

Operators of terminals that are physically connected pipelines may optionally update pipeline link information in Facility Infrastructure.

- Edit Facility Information for the terminal in Petrinex Facility Infrastructure.
- Set the Physically Connected to a Pipeline Flag to "Yes."
- Enter the associated Pipeline ID in Terminal-Pipeline Link.

ii. Wells & Facilities

After Go-Live, you may find wells that have incorrect statuses or incorrect/missing facility linkages. There is also the possibility that a facility could be set up under the wrong operator. Industry has the ability to correct this online in Petrinex.

- Wells can be linked to different facilities using the **"Request Well to Facility Link Change"** screen. If transferring to another operator's facility, the operator must concur with the link change request.
- Well statuses can be changed using the **"Edit Well Status."** A facility is linked to the well when it is first put in an active producing or injecting status.
- Facility operatorship can be transferred to another BA using the **"Request Operator Change"** screen. The new operator must concur with the transfer request.

iii. Commingled Wells

Injection/Disposal Wells with Well Events in Multiple Formations

Under this scenario, volumetrics are reported for all well events under one reporting event. In the Edit Well Status screen, the reporting event is given a status in which the Mode is REPORT (ex: WATER ACTIVE DISP REPORT).

When setting the status for the reporting event, the user will click the Commingle Events button. This will list all other well events that exist under that same licence number. The user will select all events that they wish to commingle to the reporting event. Commingled events are automatically assigned a

status of N/A N/A N/A COMMING. The reporting event is linked to an injection/disposal facility and is used for to report volumetrics for all commingled events.

For existing wells, ARD will not be converting the commingled events with the N/A N/A N/A COMMING status. Industry will commingle these events themselves after Go-Live. ARD has a list of the applicable wells for this scenario. **Change Leaders will receive an email with a list of the wells they must commingle after Go-Live. If you did not receive an email, this activity does not apply to your company.**

See [Appendix 15: Manitoba Commingling Processes](#) for step by- step instructions on how to set up the various commingling scenarios in Petrinex.

iv. Royalty/Tax Payer (Once Functionality is Available)

Some BAs that have been identified as the Stream Operator for Royalty/Tax Payer purposes may have to request an operatorship change.

The RTP operator is responsible for maintaining the list of royalty/tax payers for that particular stream and product for the appropriate ownership type (Crown or Freehold).

For conversion purposes, the RTP operator for units will be the operator on record provided in the Royalty Tax Attributes. The RTP operator for a well will be the Licensee. This may not be who the operator should be. For example, the Licensee may have contracted the Facility Operator to be responsible for this information.

BAs can request a stream operatorship change using the Request Operator Change functionality under the Infrastructure menu in Petrinex.

Related Business Associates (for oil valuation purposes)

Oil that is delivered to a Custody Transfer Point requires a pipeline splits submission where the volume is broken out into its individual owners and purchasers. An Oil Valuation Royalty Tax Payer record is created for each owner listed in a pipeline split and an Oil Valuation Purchaser record is created for each purchaser. Both the Owner and Purchaser must submit their oil valuation pricing information. The owner's price is compared to the purchaser's price as an audit check and must match. See section 3.4.2 for more information on pipeline splits and oil valuation.

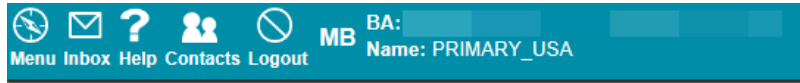
Some companies market their own volumes. In these cases, both the owner and the purchaser in the pipeline split are the same. This is considered non-arm's length. In these cases, Petrinex does not create the Oil Valuation Purchaser record.

Sometimes a company's producing and marketing functions can have different Business Associate IDs. As this is still a non-arm's length sale, Petrinex must be able to determine that they are related for the purposes of oil valuation.

Companies may enter their Related Business Associates in the Audit menu section of Petrinex. By entering the related BA ID, Petrinex knows not to create an Oil Valuation Purchaser record when these 2 companies are used together in a pipeline split.

Manage User ID and Access (Primary/Backup USA)

Manage User ID and Access is the menu item in which the Primary or Backup USA can create new users or modify existing users for their company.



- ☐ Data Submission
 - ☐ [Batch Upload](#)
- ☐ Reports and Queries
 - ☐ [Submit Report Request](#)
 - ☐ [Upload Report Request](#)
- ☐ Admin Functions
 - ☐ [Manage Quicklist](#)
 - ☐ Security
 - ☐ [Manage User ID and Access](#)
 - ☐ [Manage User Roles](#)
 - ☐ [Manage Designate BA Relationship](#)
 - ☐ [Change Password](#)

There are 3 screen views under the Manage User ID and Access menu item:

- Initial Top Screen – This is the first screen seen. The USA may enter an existing User ID or add a new one.
- Personal Info View – This screen is accessed after a User ID has been selected. This is where the USA adds/modifies a user’s personal information.
- Facility Assignment View – This screen is also accessed after a User ID has been selected. This is where the USA adds/modifies a user’s facility assignments (the facilities a user is authorized to edit or view within certain Petrinex functions).



[\[Admin Functions\]](#) > [\[Security\]](#)

Manage User ID

User ID 1 Views 2

Surname First Name Second Name 3

[Select](#)
[Go](#)

1. User ID: The USA will enter an existing User ID or a new one (to be created).
 - If the User ID is new, the USA must also fill out the Surname and First Name. The Second Name is optional.

2. **Views:** The USA may use the drop-down menu to select which view (Personal Info or Facility Assignment) they would like to open for the user.
3. **Select:** If the User ID is unknown, the USA may click Select to open a lookup table with all of the User IDs for that BA. Once selected from the lookup, the ID is automatically populated in the User ID field along with the name information.

Click Go to move to the next screen.

Personal Info View

Manage User ID

Views
 Personal Info 1

Personal Information 2

User ID: testuser

Surname: Test

First Name: User

Second Name:

Telephone: 1 - CANADA -4035551234 (Country code - number - extension)

Fax: 1 - CANADA -4035554567 (Country code - number - extension)

Email: testuser@testco.com

Access

Experimental Confidential Wells: Yes No 3

Active User: Yes No

Mail Override: Yes No

Roles 4

Available Roles

Read Only -

EVAP Comprehensive -

Assigned Roles

Comprehensive -

Submit Cancel Reset Password Save As

1. **Views:** The USA may use the drop-down menu to move between views (Personal Info or Facility Assignment).
2. **Personal Information:** Every user must have a surname, first name, phone number, and email address. Second name and fax number are optional.
3. **Access:** There are 3 access options that must be set to either Yes or No:
 - Confidential Wells – Determines whether the user should have access to view or edit confidential well data for the BA.
 - Active User – Determines whether the user is active. When a user moves out of the company, this option should be set to No to remove the user’s login ability.
 - Mail Override – This is a special permission that can be assigned to selected personnel (usually supervisors), enabling them to access any Inbox notifications for any user in the BA.

4. **Roles:** Users must have at least one role in order to login to Petrinex. The USA will select one or more roles from the list of Available Roles and move them to the Assigned Roles list. The list of Available Roles varies by BA. Most BAs create customized roles to meet their reporting needs. More on this is covered in the next section. As a default, Petrinex also creates a Comprehensive and Read-Only role.
- Comprehensive – Grants edit and query access to most BA Unit Tasks associated with monthly reporting and infrastructure. Audit functions are not included. This role is generally assigned to supervisors.
 - Read Only – Grants query access only to most of the BA Unit Tasks associated with monthly reporting and infrastructure. Audit functions are not included.

Facility Assignment View

Manage User ID

Views
Facility Assignment

User ID: testuser
Surname: Test
First Name: User
Second Name:

Assigned Roles 1
- Comprehensive

Assigned Facilities 2
[Empty box]

Blanks in Assigned Facilities box represents the "all" facility access

Submit Cancel Update Facility Assignment 3

1. **Assigned Roles:** Users may have different roles within the BA or may even have roles assigned as a designate of another BA (more on designates is covered in a later section). The USA can apply facility assignments to any one particular role that user may have.
2. **Assigned Facilities:** If a user has any facility assignments for the selected role, they will be listed here. If there are no facilities listed, then the user has access to all facilities pertaining to the functions associated with the role. If there are facilities listed, then the user is restricted to editing and/or viewing those specific facilities.
3. **Update Facility Assignment:** Clicking this button will open the Facility List Builder lookup window. From there, the USA can select the appropriate facilities for assignment. All selected facilities will be returned to the Assigned Facilities box.

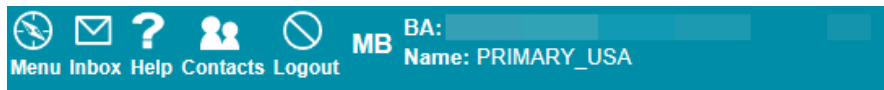
Manage User Roles (Primary/Backup USA)

Manage User Roles is the menu item in which the Primary or Backup USA can create or modify customized User Security Roles.

User Security Roles define which reporting functions a user can perform in Petrinex. The USA will be able to create as many User Roles as needed within their organization. The USA defines the role by linking appropriate Petrinex Unit Tasks to it. Unit tasks determine which screens/functions the user role grants access to (ex: Edit Volumetric Submission).

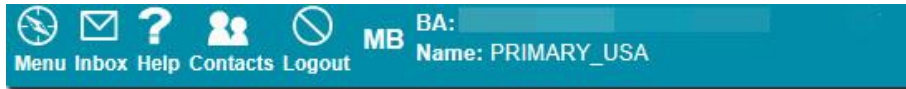
Instead of creating the User Roles from scratch, the BA USA will have the option to use template user roles already defined by the Petrinex Administration group for some commonly found roles across all organizations. Moreover, Petrinex will also create two user roles by default for each industry BA (mentioned in the previous section):

- Comprehensive – Grants edit and query access to most BA Unit Tasks associated with monthly reporting and infrastructure. Audit functions are not included. This role is generally assigned to supervisors.
- Read Only – Grants query access only to most monthly reporting and infrastructure functions. Audit functions are not included.



- Data Submission
 - [Batch Upload](#)
- Reports and Queries
 - [Submit Report Request](#)
 - [Upload Report Request](#)
- Admin Functions
 - [Manage Quicklist](#)
- Security
 - [Manage User ID and Access](#)
 - [Manage User Roles](#)
 - [Manage Designate BA Relationship](#)
 - [Change Password](#)

Creating New User Roles

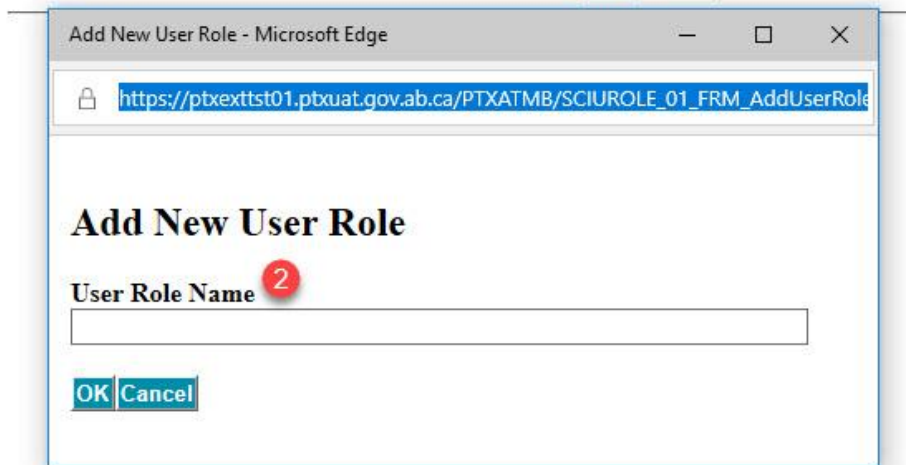


[\[Admin Functions\]](#) > [\[Security\]](#)

Manage User Roles

Current Roles 1

Select Item



1. Current Roles: Click the drop-down arrow to see a list of existing user roles for the BA. Select one to edit the task list. Click Add to create a new user role.
2. Add New User Role: Enter the name of the new user role and click OK to edit the task list. Click Cancel to exit without creating a new role.

Manage User Roles

Current Roles

Assigned Tasks 3

3. Assigned Tasks: Once the new User Role Name has been entered, click Task List to open the Add/Modify Tasks lookup window.

Add/Modify Tasks

Role Name: New User Role

Roles &/or Templates

BA	Template or Role Name 4
Petrinex	Comprehensive
Petrinex	EVAP Declaration
Petrinex	Marketing
Petrinex	Operations
Petrinex	Operator Well Counts

Available Tasks

Accept/Decline Facility Operator Change
Allocation - Cascade SAF Report
Allocation - OAF Report
Allocation - SAF Report
Allocation - Static Factor Report

Assigned Tasks

Accept Well to Facility Link Change

4. Role Templates: Click on any template from the top list. A list of the tasks associated with that role will be populated in the Available Tasks list below.
5. Task Selection: USAs can select any tasks in the Available Tasks menu by clicking on them. Selected tasks are moved to and from the Assigned Tasks list using the Arrow buttons. A role can be customized to have as many or as few tasks as desired. The USA can choose tasks from as many role templates as necessary to create or modify the assigned tasks for the user role. Once all tasks have been selected, click OK to return to the main page.

Manage User Roles

Current Roles

New User Role

6

Assigned Tasks

- Accept Well to Facility Link Change
- Accept/Decline Facility Operator Change
- Batch Upload (Schema checking only)
- Batch Upload
- Business Associate Report
- Cancel Pending Facility Operator Change
- Cancel Pending Well to Facility Link Change
- Change Commingling Well Status
- Change Facility Operational Status
- Change Password
- Cross Border Results Processing
- Delete Future Dated Facility Operator Change
- Edit Facility Information
- Edit Oil Valuation - Deliveries to Refineries
- Edit Oil Valuation - Purchaser
- Edit Oil Valuation - Royalty/Tax Payer
- Edit Oil/LPG Monthly Shipper List
- Edit Oil/LPG Shipper/Owner Pipeline Split
- Edit Oil/LPG Static Shipper List
- Edit Volumetric Distribution List
- Edit Volumetric Submission
- Edit Water Source Information

6. Submit New/Modified Task List: All tasks from the Assigned Task list are returned to the main page. Click Submit to save the task list. Once a new role has been created, it will be available to assign to users in the Manager User ID and Access screen covered in the previous section.

Appendix 12: Instructions for Industry Interoperability Testing

Industry Interoperability Testing Scope

Industry Interoperability Testing (IIO) provides BAs the opportunity to submit batch files to the Petrinex Industry Team for testing:

- Files generated by the BA's production accounting software (in XML or CSV format)
- Spreadsheets developed for uploading data to Petrinex (in CSV format).

Note: Industry will not be engaged in testing Petrinex online functionality; the Petrinex Industry Team will perform this.

Each BA will have to assess how much, if any IIO testing they will conduct. The Petrinex Industry Team anticipates that:

- At least one company will submit IIO files for every PA system that will interface with Petrinex.
- All companies developing internal software with interfaces to Petrinex will test their software.
- Most companies preparing CSV spreadsheets for upload to Petrinex will want to test this capability.

IIO Testing "Window"

The Petrinex Industry Team is currently accepting test files for all Monthly Reporting including:

- Volumetrics
- Waste Plant
- Oil Pipeline Splits
- Oil Valuation (Royalty Tax Payer & Purchaser)
- Allocations

IIO Testing Procedures

IIO test files can be submitted in either CSV or XML. Each test file submission along with the IIO transmittal form is to be emailed to Petrinex.testing@petrinex.ca with **Manitoba Inclusion Project in the Subject Line**. If the transmittal form is incomplete or not included, the batch submission will not be processed. The file will be sent back to the BA with a request for the additional required information. The transmittal form can be found on the Petrinex website under Initiatives under the Petrinex Manitoba Inclusion Project (follow the link below):
<https://www.petrinex.ca/Initiatives/Pages/Manitoba.aspx>

The target timeframe for the initial processing of a file is 3 business days, however, it may take longer depending of the volume of activity and the amount of data preparation required.

After the batch is processed, the BA will be sent an e-mail with:

- The processing results
- A detailed explanation of any problems encountered
- Recommendations, as appropriate on what was needed to successfully process the file

The e-mail will include attachments, as appropriate, including the transmittal form with completed actual test results section and any Petrinex generated additional outputs or validation results.

NOTE: All submission files should be created for **Production Month 2019-12**. This does not mean that the data must be from that production period, but the date must be set to 2019-12.

If you have any questions related to IIO testing, please contact Steve Freeman at 403-297-2311 or email steve.freeman@gov.ab.ca.

Appendix 13: Instructions for Industry Training

Overview

As mentioned in Step 2.5 of the PMIP Steps to Readiness, the Petrinex Team uses a number of approaches to help companies ensure their users are fully trained in how to use Petrinex. These include:

- **Change Leader Meetings:** A number of Change Leader meetings will be scheduled over the life of the PMIP project at different locations. Dates, times, and venues will be communicated when these details are available.
- **Petrinex Learning Centre:** The following learning resources are accessed through the public Petrinex website at <http://www.petrinex.ca/>
 - **Online Learning Modules:** Learning modules provide information and “hands-on” instruction for all aspects of Petrinex, from general overview to the specifics of each function. Modules include test questions and practice in a simulated environment that has the same look and feel of Petrinex. By completing exercises within the module, learners are evaluated in terms of their understanding of the function.

Changes to existing modules along with new learning modules for RTA/RTP functionality will be released to help users understand using Petrinex functionality for Manitoba.

- Changes to the knowledge piece in the existing modules have been made to reflect Manitoba and will be released by March 6. The “Step-by-Step” and “Exercise” portions in each of the modules will be available at a later date. It should be noted that RTA/RTP functionality will not be immediately available at Go-Live. See sections 3.3.4 and 3.3.5 for more information. The learning modules pertaining to these functions will be released closer to the implementation of that functionality.
- **Job Aids:** Job Aids are compiled to provide examples, templates, shortcuts, tips and information that make using Petrinex easier and more efficient. Unlike the Learning Modules, Job Aids do not include learner evaluation.
- **Tips & Alerts:** These communication vehicles provide up-to-the-minute information and instruction for dealing with a variety of Petrinex user issues. Tips and Alerts are catalogued for quick and easy reference. Tips and Alerts can be accessed through the Petrinex website and are also available on the Petrinex Training System in the individual user training profiles.
- **Online Help:** After logging in, a user can access the Online Help related to any Petrinex page by clicking on the HELP symbol. Petrinex Online Help is context sensitive and provides step-by-step “how to” information as well as related background and tips for that page. PMIP related online help will be available upon Go-Live.

NOTE: It is anticipated that learning modules will begin release in March 2020. Availability of other training resources will be communicated to Change Leaders as they become available. Once learning modules are available, instructions on accessing these modules through the Petrinex website will also be communicated.

Appendix 14: Important Dates for Industry

A number of dates have been communicated throughout the Handbook that are important for Industry to remember. These important dates relate to:

- Readiness activities that must be complete both pre and post Petrinex Go-Live.
- Conversion information deadlines.
- Interoperability testing windows.

The tables below provide a summary of the important dates by topic. The first table provides a summary of Industry deadlines and activities happening ahead of Go-Live and the second provides deadlines and activities that must happen after Go-Live on May 4.

Prior to Petrinex Go-Live		
Target	Activity	Responsibility
Now	<ul style="list-style-type: none"> • Submit Industry Interoperability (IIO) Test files. 	Vendors/Industry
Now	<ul style="list-style-type: none"> • Begin reviewing SK Learning Modules. 	Industry
Ongoing	<ul style="list-style-type: none"> • Review conversion files and communicate errors, missing data, updates, applicable commingled well licenses (and associated well events). • Submit BA Data Collection Form and USA Authorization Letter. 	Industry
March	<ul style="list-style-type: none"> • Begin releasing Learning Modules with MB updates. <i>Subject to MB decision on exercise development</i> 	Communications Team
Mar 20	<ul style="list-style-type: none"> • Deadline to submit BA Data Collection Form and USA Authorization Letter (necessary to log in at Go-Live). 	Industry
Apr 9	<ul style="list-style-type: none"> • Deadline to include Facility, Well Linkage data in final conversion for Go-Live. 	Industry
TBD	<ul style="list-style-type: none"> • Login/Password information communicated to Primary USA. 	ARD

Post Petrinex Go-Live		
Target	Activity	Responsibility
May 4	<ul style="list-style-type: none"> • Petrinex Go-Live for April Production Month. • Primary USA sets up users and roles for their company. 	Project Team Industry
Early May	<ul style="list-style-type: none"> • Update opening inventories for all operated facilities. • Make any corrections to well status, well-facility linkages, facility operatorship, operational status, etc. • Set up injection/disposal commingled wells (if previously instructed to do so). 	Industry Industry Industry
May 21	<ul style="list-style-type: none"> • Enter any Related BA relationships for Oil Valuation purposes. • Petrinex Volumetric & Pipeline Splits Submission Deadline. 	Industry Industry
May 29	<ul style="list-style-type: none"> • Petrinex Oil Valuation Submission Deadline. 	Industry
TBD	<ul style="list-style-type: none"> • Release Learning Modules for RTP/RTA. 	Communications Team
TBD	<ul style="list-style-type: none"> • Request an Operator Change for any stream (well, unit) in which another BA should be responsible for submitting Royalty Tax Payer information. 	Industry

Appendix 15: Manitoba Commingling Processes

The following pages provide step by step instructions for Industry in how to set up their applicable wells under the 3 different commingling processes established in Manitoba:

1. Injection/Disposal Wells with Well Events in Multiple Formations
2. Producing Wells with Well Events in Multiple Formations
3. Producing or Injection/Disposal Wells with Well Events in the Same Formation

These are instructions for setting commingling well statuses within Petrinex after Go-Live. See [Appendix 11: Pre & Post Go-Live Readiness Activities for Companies/Change Leaders](#) for commingling information required from Industry for data conversion purposes prior to Go-Live.

1. Injection/Disposal Wells with Well Events in Multiple Formations

In this example there is a well that has 2 well events: MB WI 100010201212W100 & MB WI 100010201212W102. For the purposes of this example, we are assuming that these 2 events are in different formations.

Under this scenario, volumetric activity for all events is reported at a single reporting event. This is the only event linked to a reporting facility. The process described below is the only scenario where the standard Petrinex commingling process is followed.

Step 1: Go to **Edit Well Status** and open the well event that will be the reporting event. In this case it is assumed that the '00' event is the reporting event. Click Add to add a new status.

[\[Infrastructure\]](#) > [\[Well Infrastructure\]](#)

Edit Well Status

Well ID: MB WI 100010201212W100

Licence No: 12345

Licence Issue Date: 2018-12-15

Licensee: 4321 GLOBAL OIL LTD.

Licence Status: ISSUED

Licence Status Date: 2018-11-07

Well Status	Well Status Start Date	Facility Link Start Date	Facility Link(s)
WATER ACTIVE INJ N/A	2019-10-01		MBIF0005678
N/A N/A N/A N/A	2018-12-15		

Add **Modify** **Insert** **Delete** **GCI**

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

Gross Completion Interval Top:

Base:

GCI Confirmation Status:

Field: 07

Pierson

Step 2: Click the **Drop-Down** menu next to New Status and select **WATER ACTIVE INJ REPORT**. Enter a **Status Date** and click **OK**.

NOTE: It has been assumed that this is an injection well. Had it been a disposal well, then the user would select the status **WATER ACTIVE DISP REPORT**.

ADD Well Status Details

	Well Status	Status Date
New Status:	<input type="text" value="WATER ACTIVE INJ REPORT"/>	<input type="text" value="2019-10-02"/>
Before Status:	WATER ACTIVE INJ N/A	2019-10-01

Step 3: Enter a **Facility ID** that the well event will be linked to. Because it is an injection well, it must be linked to an injection facility (**MBIF0005678** in this example). Click **Commingle Events**. This will display a list of all other well events that share the same well licence number. Check all well events that are to be commingled to the reporting event. In this example, the '02' event is checked. Click **Submit**.

ADD Well Status Details

Well ID: MB WI 100010201212W100

Licence No: 12345

Licence Issue Date: 2018-12-15

Licensee: 4321 GLOBAL OIL LTD.

Licence Status: ISSUED

Licence Status Date: 2018-11-07

Well Status: WATER ACTIVE INJ REPORT

Status Date: 2019-10-02

Gross Completion Interval Top: Base: **Perforation/Packer**
 Field: 07 Pierson Pool: ... Mission Canyon 3a A
 Undefined Pool: ...
 Crude Oil Type: TENTATIVE

Facility ID Facility Name
 Facility Link: ...

Commingle Events

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

Commingled	Well Event	Current Status	Start Date
<input checked="" type="checkbox"/>	MB WI 100010201212W102	WATER ACTIVE INJ N/A	2019-10-01

Once submitted, the user returns to the main screen. As can be seen from the image below, the new status has been added (WATER ACTIVE INJ REPORT) and has been linked to the injection facility.

Edit Well Status

Well ID: MB WI 100010201212W100

Licence No: 12345

Licence Issue Date: 2018-12-15

Licensee: 4321 GLOBAL OIL LTD.

Licence Status: ISSUED

Licence Status Date: 2018-11-07

Well Status	Well Status Start Date	Facility Link Start Date	Facility Link(s)
WATER ACTIVE INJ REPORT	2019-10-02	2019-10-01	MBIF0005678
WATER ACTIVE INJ N/A	2019-10-01	2019-10-01	MBIF0005678
N/A N/A N/A N/A	2018-12-15		

Add **Modify** **Insert** **Delete** **GCI**

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

Gross Completion Interval Top: 1014.40 **Base:** 1015.00 **GCI Confirmation Status:**

Field: 07 Pierson

There is no additional action that needs to be taken with the commingled (02) event. Any commingled events are automatically assigned a status of **N/A N/A N/A COMMINGLED**. Only the reporting event is linked to the facility. Volumetric reporting for all events (reporting and commingled) should be entered at the reporting event.

Edit Well Status

Well ID: MB WI 100010201212W102

Licence No: 12345

Licence Issue Date: 2018-12-15

Licensee: 4321 GLOBAL OIL LTD.

Licence Status: ISSUED

Licence Status Date: 2018-11-07

Well Status	Well Status Start Date	Facility Link Start Date	Facility Link(s)
N/A N/A N/A COMMINGLED	2019-10-02		
WATER ACTIVE INJ N/A	2019-10-01		MBIF0005678
N/A N/A N/A N/A	2018-12-15		

Add **Modify** **Insert** **Delete** **GCI**

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

Gross Completion Interval Top: 1014.40 **Base:** 1015.00 **GCI Confirmation Status:**

Field: 07 Pierson

NOTE: The image above shows how an injection well event was commingled and automatically assigned a commingled status. The date set for this status was 2019-10-02. This was the earliest the date could be set because it had an active injection status that was effective as of 2019-10-01. Petrinex can only support 1 status for a given date, and as per the Ministry, the well event has to start with an active status in order to initially set the pool code. Because the pool code for the commingled event can differ from the reporting event, this can't be automatically set.

The outcome of this scenario is that the well event is considered to be active for 1 day in that production month and will end up being linked to the injection facility for volumetric reporting purposes for that month. However, a company may not wish to report volumetrics for the commingled event, as the active status was only set to establish the pool code. If a company finds itself in this situation and does not wish to report volumetrics for the commingled event for one day, simply report an activity of SHUTIN for that event in volumetrics for that month. The commingled event will not be linked to the injection facility and will not be visible in volumetrics beyond that month.

2. Producing Wells with Well Events in Multiple Formations

In this example there is a well that has 2 well events: MB WI 100021200323W100 & MB WI 100021200323W102. For the purposes of this example, it is assumed that these 2 events are in different formations.

Because they are in different formations, each event must report its own production volumes. Under the approved Manitoba business processes, a facility licence will be created that has the same number as the well licence for the events. In the image below, the well licence is 99999; therefore the Ministry will create facility licence 99999.

Query Well

Well ID	Name	Licence#	Licensee	Location	Licence Status	Licence Status Date	Well Status	Well Status Date
eg. 02140 or ABWI100021		99999	4321	eg. 06-28-044	(ALL)		(ALL) %comp%	
MBWI100021200323W100	Global Oil Crystal Lake	99999	4321	100/02-12-003-23W100	Issued	2019-10-31	N/A COMP N/A N/A	2020-01-05
MBWI100021200323W102	Global Oil Crystal Lake	99999	4321	100/02-12-003-23W102	Issued	2019-10-31	N/A COMP N/A N/A	2020-01-05

Step 1: Once the facility licence is created, a new multi-well oil battery must be created. Go to **Request Facility ID** and enter the subtype of the new facility. The user can click the **lookup [...]** to see a list of available subtypes. There are 2 types of multi-well oil batteries. Subtype 321 is for a Crude Oil Multiwell Group (measured) battery and 322 is for a Crude Oil Multiwell Proration battery. Subtype 321 will be selected for this example.

Request Facility ID

Facility Sub-Type:

Facility Location

LSD SEC TWP RGE

https://ptxextst01.ptxuat.gov.ab.ca/PTXATMB/IFIFSBLK_FacilitySubTypeListBuilderLookup.aspx?sessionId=9640cbbf-fa1d-421d-bbec

Facility Sub-Type

Sub-Type Id	Sub-Type Description	Facility Type
311	CRUDE OIL SINGLE-WELL BATTERY	BT - BATTERY
321	CRUDE OIL MULTIWELL GROUP BAT...	BT - BATTERY
322	CRUDE OIL MULTIWELL PRORATION...	BT - BATTERY
351	GAS SINGLE WELL BATTERY	BT - BATTERY
361	GAS MULTIWELL GROUP BATTERY	BT - BATTERY
381	DRILLING AND COMPLETING	BT - BATTERY
611	CUSTOM TREATING FACILITY	CT - CUSTOM TREATING FACILITY
401	GAS PLANT	GP - GAS PLANT

Step 2: Enter the **Facility Licence** number (matches the well licence number). The user may enter it directly or click the **lookup [...]** to find the number. Enter the **Location** values. The location values must match the licence location. If the licence is selected from the lookup, the location fields will be filled in automatically. Click **Go**.

Request Facility ID

Facility Sub-Type: CRUDE OIL MULTIWELL GROUP BATTERY

Facility Location

LSD	SEC	TWP	RGE	M	Licence
<input type="text" value="02"/>	<input type="text" value="12"/>	<input type="text" value="003"/>	<input type="text" value="23"/>	<input type="text" value="W 1"/>	<input type="text" value="F99999"/> <input type="button" value="..."/>

Step 3: Enter a **Facility Name**. If the battery is tied to an Enhanced Oil Recovery scheme, the user may indicate that and enter an associated injection facility ID. For this example it is assumed that this battery is not tied to such a scheme. Once the name is entered, click **Submit**. The user will receive a message with the ID of the new battery just created. In the image below, this is **MB BT 2300025**.

Request Facility ID

Facility ID: MB BT 2300025 Operator ID: 4321 Start Date: 2020-02-01

Facility Sub-Type: 321 CRUDE OIL MULTIWELL GROUP BATTERY

Facility Location

LSD	SEC	TWP	RGE	M	Licence
02	12	003	23	W 1	F99999

MSG005 Facility ID Application [MB BT 2300025] has been processed successfully.

Licensee: 4321 - GLOBAL OIL LTD. Status: ISSUED Status Date: 2020-01-15

Facility Licence Type: Multi Well Oil Battery

Facility Name: COMMINGLING TEST BATTERY

Operational Status: NEW

Experimental Confidential: No

Tied to Storage/EOR Facility: Yes No Storage/EOR Facility:

Step 4: Once the battery has been created, all applicable reporting events can be linked to it. Go to **Edit Well Status**. Open one of the reporting events and click **Add** to add a status (MB WI 100021200323W100 in the image below).

Edit Well Status

Well ID: MB WI 100021200323W100

Licence No: 99999

Licence Issue Date: 2019-07-01

Licensee: 4321 GLOBAL OIL LTD.

Licence Status: ISSUED

Licence Status Date: 2019-10-31

Well Status	Well Status Start Date	Facility Link Start Date	Facility Link(s)
N/A COMP N/A N/A	2020-01-05		
N/A N/A N/A N/A	2019-11-20		

Add **Modify** **Insert** **Delete** **GCI**

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

Step 5: Click the **Drop-Down** menu next to New Status and select **OIL ACTIVE PROD N/A**. Enter a **Status Date** and click **OK**.

ADD Well Status Details

	Well Status	Status Date
New Status:	<input type="text" value="OIL ACTIVE PROD N/A"/>	<input type="text" value="2020-02-01"/>
Before Status:	N/A COMP N/A N/A	2020-01-05

Step 6: In the **Facility Link** field, enter the newly created battery ID (**MB BT 2300025** in this example). Please note that if GCI Top & Bottom, Pool, and Crude Oil Type have not been provided in a previous status, then this information must be filled in as well. Click **Submit**.

ADD Well Status Details

Well ID: MB WI 100021200323W100

Licence No: 99999

Licence Issue Date: 2019-07-01

Licencee: 4321 GLOBAL OIL LTD.

Licence Status: ISSUED

Licence Status Date: 2019-10-31

Well Status: OIL ACTIVE PROD N/A

Status Date: 2020-02-01

Gross Completion Interval Top: **Base:** **Perforation/Packer**

Field: 03 Waskada **Pool:** Mission Canyon 3b B

Undefined Pool:

Crude Oil Type: TENTATIVE

Facility ID **Facility Name**

Facility Link:

Commingle Events

Once submitted, the user returns to the main screen. As can be seen from the image below, the new status has been added (OIL ACTIVE PROD N/A) and has been linked to the battery.

Edit Well Status

Well ID: MB WI 100021200323W100

Licence No: 99999

Licence Issue Date: 2019-07-01

Licensee: 4321 GLOBAL OIL LTD.

Licence Status: ISSUED

Licence Status Date: 2019-10-31

Well Status	Well Status Start Date	Facility Link Start Date	Facility Link(s)
OIL ACTIVE PROD N/A	2020-02-01	2020-02-01	MBBT2300025
N/A COMP N/A N/A	2020-01-05		
N/A N/A N/A N/A			

Add **Modify** **Insert** **Delete** **GCI**

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

NOTE: Repeat Steps 4-6 for each well event that needs to be linked to the battery.

In this example, steps 4-6 would be repeated for MB WI 100021200323W102.

3. Producing or Injection/Disposal Wells with Well Events in the Same Formation

In this example there is an oil producing well that has 2 well events: MB WI 100030401221W100 & MB WI 100030401221W102. For the purposes of this example, we are assuming that these 2 events are in the same formation.

Because they are in the same formation, all volumetric activity is reported at a single reporting event. The reporting event must have an active status and the commingled event(s) must be given a status with a DRAIN structure. The reporting event is linked to a reporting facility, while the commingled events are not.

The process described below is the same for both producing and injection/disposal wells in this case.

Step 1: Go to **Edit Well Status** and open the well event that will be the reporting event. In this example it is assumed that the '00' event is the reporting event. Click Add to add a new status.

Edit Well Status

Well ID: MB WI 100030401221W100

Licence No: 05678

Licence Issue Date: 2019-02-08

Licensee: 4321 GLOBAL OIL LTD.

Licence Status: ISSUED

Licence Status Date: 2019-03-23

Well Status	Well Status Start Date	Facility Link Start Date	Facility Link(s)
N/A COMP N/A N/A	2019-12-08		
N/A N/A N/A N/A	2019-10-05		

Add **Modify** **Insert** **Delete** **GCI**

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

Step 2: Click the **Drop-Down** menu next to New Status and select **OIL ACTIVE PROD N/A**. Enter a **Status Date** and click **OK**.

NOTE: If this had been an injecting/disposal well, the status chosen would be **WATER ACTIVE INJ N/A** or **WATER ACTIVE DISP N/A**.

ADD Well Status Details

	Well Status	Status Date
New Status:	<input type="text" value="OIL ACTIVE PROD N/A"/>	<input type="text" value="2020-01-25"/>
Before Status:	<input type="text" value="N/A COMP N/A N/A"/>	<input type="text" value="2019-12-08"/>

Step 3: Enter a **Facility ID** (**MB BT 0001234** in this example). Please note that if GCI Top & Bottom, Pool, and Crude Oil Type have not been provided in a previous status, then this information must be filled in as well. Click **Submit**.

NOTE: If this had been an injecting/disposal well, the Facility ID would be an injection facility.

ADD Well Status Details

Well ID: MB WI 100030401221W100 Licence No: 05678 Licence Issue Date: 2019-02-08
Licence Status: ISSUED Licensee: 4321 GLOBAL OIL LTD.
Licence Status Date: 2019-03-23

Well Status: OIL ACTIVE PROD N/A Status Date: 2020-01-25

Gross Completion Interval Top: Base: **Perforation/Packer**

Field: 03 Waskada Pool: ... Lower Amaranth A

Undefined Pool: ...

Crude Oil Type: ... TENTATIVE

Facility ID Facility Name
Facility Link: ...

Commingle Events

Once submitted, the user returns to the main screen. As can be seen from the image below, the new status has been added (OIL ACTIVE PROD N/A) and has been linked to the battery.

Edit Well Status

Well ID: MB WI 100030401221W100

Licence No: 05678

Licence Issue Date: 2019-02-08

Licensee: 4321 GLOBAL OIL LTD.

Licence Status: ISSUED

Licence Status Date: 2019-03-23

Well Status	Well Status Start Date	Facility Link Start Date	Facility Link(s)
OIL ACTIVE PROD N/A	2020-01-25	2020-01-25	MBBT0001234
N/A COMP N/A N/A	2019-12-08		
N/A N/A N/A N/A	2019-10-05		

Add **Modify** **Insert** **Delete** **GCI**

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

Step 4: Go to **Edit Well Status** and open the commingled well event (the '02' event in this example). Click **Add** to add a new status.

Edit Well Status

Well ID: MB WI 100030401221W102

Licence No: 05678

Licence Issue Date: 2019-02-08

Licensee: 4321 GLOBAL OIL LTD.

Licence Status: ISSUED

Licence Status Date: 2019-03-23

Well Status	Well Status Start Date	Facility Link Start Date	Facility Link(s)
N/A COMP N/A N/A	2020-01-06		
N/A N/A N/A N/A	2019-10-05		

Add **Modify** **Insert** **Delete** **GCI**

Step 5: Click the **Drop-Down** menu next to New Status and select **OIL N/A PRODUCING DRAIN**. Enter a **Status Date** and click **OK**.

NOTE: If this had been an injecting/disposal well, the status chosen would be **WATER N/A INJ DRAIN**

ADD Well Status Details

	Well Status	Status Date
New Status:	<input type="text" value="OIL N/A PRODUCING DRAIN"/>	<input type="text" value="2020-01-25"/>
Before Status:	N/A COMP N/A N/A	2020-01-06

Step 6: As can be seen in the image below, there is no option to enter a Facility ID. Please note that if GCI Top & Bottom have not been provided in a previous status, then this information must be filled in. Click **Submit**.

ADD Well Status Details

Well ID: MB WI 100030401221W102 Licence No: 05678 Licence Issue Date: 2019-02-08
Licence Status: ISSUED Licensee: 4321 GLOBAL OIL LTD.
Licence Status Date: 2019-03-23

Well Status: OIL N/A PRODUCING DRAIN Status Date: 2020-01-25

Gross Completion Interval Top: Base: **Perforation/Packer**
Field: 03 Waskada Mission Canyon

Crude Oil Type: Status:

Facility ID Facility Name

Commingle Events

Once submitted, the user returns to the main screen. As can be seen from the image below, the new status has been added (OIL N/A PROD DRAIN). There is no facility link.

NOTE: Repeat Steps 4-6 for each commingled (DRAIN) well event.

Edit Well Status

Well ID: MB WI 100030401221W102

Licence No: 05678

Licence Issue Date: 2019-02-08

Licensee: 4321 GLOBAL OIL LTD.

Licence Status: ISSUED

Licence Status Date: 2019-03-23

Well Status	Well Status Start Date	Facility Link Start Date	Facility Link(s)
OIL N/A PROD DRAIN	2020-01-25		
N/A COMP N/A N/A	2020-01-06		
N/A N/A N/A N/A	2019-10-05		

[Add](#) [Modify](#) [Insert](#) [Delete](#) [Go](#)