

Oil Forecast Tool Town Hall Meeting

Conoco Phillips Auditorium January 23, 2017











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- 1. Petrinex Overview
- 2. Oil Forecast Tool Project Background
- 3. The Oil Forecast Report
- 4. The Oil Forecast Tool
- 5. How to use the Oil Forecast Tool functions:
 - a. On line Screens
 - b. Batch submissions
- 6. What Reports are Available & When
- 7. APMC Perspectives
- 8. Questions and Answers





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1. Petrinex Overview



- Petrinex is a joint strategic organization supporting Canada's upstream, midstream and downstream petroleum industry through effective collection and dissemination of information critical to regulatory, royalty and commercial activities in the sector.
- Petrinex is governed, managed and funded by government and regulators (DOE, ECON, AER) and industry (represented by CAPP and EPAC).
- Petrinex continues to respond to changing needs of its users and sponsoring stakeholders.
- Work is underway or planned for inclusion of other jurisdictions in Petrinex (including BC and Indian Oil and Gas Canada).
- Petrinex has been challenged by the Petrinex Executive Board to identify "Bold Move" ideas that could benefit the sector in response to the downturn in commodity prices.
- <u>You</u> can influence and participate in the ongoing evolution of Petrinex.





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2. Oil Forecast Tool Project Background



The monthly oil forecasting process is used by:

- Producers to estimate and communicate the volume of oil to be delivered to pipelines and shippers (incl. Crown for royalty volumes).
- 2. Shippers to submit nominations to the pipelines.
- **3.** <u>**Pipelines**</u> to gage total demand vs. capability and, if required, apportion available space between shippers.
- Shipper/Marketers to assess the volumes they must market in the coming month.

Oil Forecasting Issues



- Historical forecast variances are significant:
 - Gross
 - Crown
 - Non-Crown
- <u>Gross</u> forecast errors impact all shippers.
- <u>Crown</u> share forecast errors impact the Crown and all other shippers even when Gross forecasts are accurate.
- Gross volume variances are inevitable due to operational changes.
- **Gross volume variances** can be reduced with increased focus and communication between forecasters and operational staff.

Oil Forecasting Issues (cont'd)



Crown Volumes

- <u>Crown</u> forecast volume variances are much greater than <u>Gross</u> variances.
- The Crown Royalty share is:
 - Not a fixed percentage.
 - Not the same as last month.
 - Calculated at the well level.
 - Significantly impacted by well royalty "attributes" and "programs".
 - Dramatically impacted by the **Par Prices** published monthly in advance of the forecasting cycle.
- Par Price changes account for most of the variance in most months.
- Given the complexity of the royalty calculations and vast number of wells, most operators forecast gross production at the battery level and apply the previous month's splits to derive a forecast for each shipper (including the Crown). This is called templating-forward.

Oil Forecasting Issues (cont'd)



- Crown variances have been over **300%**.
- Crown variances create an equal/opposite variance in non-Crown share.



Project Overview: History



Oil Forecast Tool Origins and Concepts:

- After over a year of industry consultation sponsored by the Wellhead-to-Dollars Committee (comprised of executive representatives from the DOE, APMC and Industry) a recommendation was made that an oil forecasting tool be developed on Petrinex and adopted as a standard across Industry.
- Development of the tool was approved by the Wellhead-to-Dollars Committee.
- Subsequently the CAPP Markets and Transportation Executive Policy Group, EPAC, the APMC and the Petrinex Steering Committee approved the tool and the funding approach.

Project Overview: Original Scope



Original Oil Forecast Tool scope had two components and an implementation of <u>Q2 2017</u>.

Part 1. Gross and Crown functionality

- Jointly funded by Industry and the APMC.
- Industry was invoiced October 2015 for its 50% funding share.

Part 2. Non-Crown functionality

- To be funded 100% by Industry
- Invoices were to be issued in April 2016.

In light of the current economic environment the Oil Forecast Tool project scope was:

- <u>Modified</u> and
- Accelerated.

Project Overview: <u>Revised</u> Scope



- **Part 2 Non-Crown** functionality was <u>not</u> be pursued but may be at a later date.
- **Part 1 Gross and Crown** functionality advanced in two releases:
 - 1a. Oil Forecast <u>Report</u>:

This Gross and Crown Forecast Report was available in Petrinex starting late January 2016. This is a "static monthly report".

- 1b. Oil Forecast Tool:

This Gross and Crown Forecast Tool will be implemented February 2017. This is an "interactive user-friendly tool"

 The Forecast <u>Report</u> will continue to made available for 6-12 months after the <u>Tool</u> is implemented.





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3. The Oil Forecast <u>Report</u>



- The **Oil Forecast** <u>**Report**</u> is an existing internal APMC report.
 - Created in DOE/APMC systems at the <u>well</u> and <u>battery</u> level.
 - Delivered monthly (both versions) prior to the forecast reporting deadline, through <u>Petrinex</u>, in csv format.
 - Based on the <u>last month</u> reported production volume.
 - Assumes gross production <u>rate unchanged</u> (adjusts for days in the month).
 - Uses correct Par Price for the forecast month.

The **Oil Forecast** <u>**Report**</u> can be used to improve Crown volume forecasts:

1. It can be compared to gross/Crown forecasts generated by existing processes. Final forecasts can be modified using this information as appropriate.

Oil Forecast <u>Report</u> (Cont'd)



The Forecast Report is accessed by Industry via two menu options in Petrinex:

- 1. Ministry Invoices & Statement
- 2. Forecast Reporting

The Oil Forecast <u>Report</u> can provide an appropriate estimate of the Crown share <u>if your gross production has not changed.</u>

However the Forecast <u>Tool</u> should be used to provide a better forecast of the Crown share <u>if your gross production needs to be</u> <u>updated.</u>

The **Forecast** <u>**Report**</u> will continue to made available for 6-12 months after the <u>**Tool**</u> is implemented.





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4. The Oil Forecast Tool



- Oil Forecast "<u>Tool</u>" is to help industry create better forecasts of monthly Crown royalty "take-in-kind" volumes.
 - Crown share is very sensitive to Par Price changes.
 - Templating-forward "last month's" Crown split can lead to significant variances and has cost the Crown and industry many millions of \$.
- Oil Forecast "<u>Tool</u>"
 - Jointly funded by Industry and APMC
 - Implementation: February 2017 release.

4. The Oil Forecast Tool



- Oil Forecast "<u>Tool</u>" is a set of new Petrinex functionality allowing: Industry Forecasters (marketer/schedulers) to:
 - Create "Facility View Lists" (Groups of producing batteries) that align with their Form A submissions
 - Request the initial Oil Forecast Gross and Crown Forecast Report
 - Review the report and modify the gross volumes
 - at the Group, Battery or Well level;
 - <u>Petrinex will recalculate Crown share at the Well level and roll it up to the Battery or</u> <u>Group level as appropriate.</u>
 - Request an updated Oil Forecast Gross and Crown Forecast Report
 - Use the Gross and Crown Forecast report data to improve their existing forecast processes.
 - Compare the forecasted Gross and Crown to actuals reported
 All submissions can be performed "Online" or by "Batch" processes.

Initiatives – APMC/Industry Conventional Oil Forecast Tool Project





Broadcast Message: Click Here

Last Message Posted: 12/14/2016 9:53 AM

Last Review/Updated: January-03-17 10:05 AM



APMC/Industry Conventional Oil Forecast Tool Project

Documents

- Industry Readiness Guide updated Dec 20, 2016
- Information Bulletin Status update and notice of implementation date change posted Oct 7, 2016

Job Aids

- Instructions for Industry Interoperability Testing and Transmittal Form posted Jan 3, 2017
- How to Create Groups of Batteries for Petrinex Oil Forecast Tool Functions updated Dec 20, 2016
- Oil Forecast Submissions Spreadsheet Upload Specifications updated Dec 20, 2016
- <u>Oil Forecast Submissions Spreadsheet Templates</u> updated Dec 20, 2016
- How to Use the Conventional Oil Forecast Report updated Jan 29, 2016

Presentations

<u>Conventional Oil Forecast Update Meeting - January 25, 2016</u>





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5a. How to Use the Oil Forecast Functions: Oil Forecast Tool On line Functions



Each BA USA must create a role(s) for the Oil Forecast Tool functions.

This is an example of an Oil Forecast Edit role and all the applicable tasks.

Once created the role(s) must be assigned to a user at the BA.

Refer to the Industry Readiness guide for details on the steps required to do this setup. Menu Inbox Help Contacts Logout AB BA: Name: PRIMARY_USA

[Admin Functions] > [Security]

Manage User Roles

Current Roles

Oil Forecasting Edit

✓ Add Delete

Assigned Tasks

Batch Upload Batch Upload (Schema checking only) Edit Facility View List Edit Oil Forecast Oil Forecast - Facility View List Report Oil Forecast - Facility View List Report Oil Forecast - Gross and Crown Forecast Report Oil Forecast - Variance Report Oil Forecast - Variance Report Oil Forecast Manage Forecast Reporting Query Facility View List Query Oil Forecast Submit Report Request Task List Submit Cancel

⊠ ?

Menu Inbox Help Contacts Logout



The Oil Forecast Tool functions are found in two places on the Petrinex Menu

The first is under Monthly Reporting - Oil Forecast which includes all the edit and query tasks. Monthly Reporting Volumetric Oil/LPG Pipeline Splits Gas Pipeline Splits Allocation Waste Plant Oil Sands
 APMC Reporting Oil Forecast Edit Oil Forecast Ouerv Oil Forecast Edit User Forecast Facility View List Query User Forecast Facility View List Manage Forecast Reporting WIP Maintenance E Allowable Costs ∃ AC1 Facility Cost Centre Operator Change

BA:

Name:

AB



The Oil Forecast Tool functions are found in two places on the Petrinex Menu.

The second is under Submit Report Request where there are 3 new reports available. These reports will be discussed later in the presentation. Menu Inbox Help Contacts Logout AB Name:

Reports and Queries]

Submit Report Request

Report:	AB Crown Shippers' Balance to Crown Splits Imbalance Report		Go
	AB Crown Shippers' Balance to Crown Splits Trace Report		
	AC1 - FCC Setup/Change Report		
	AC2 - FCC Capital and Operating Costs Allowance Report		
	AC2 - Status Report		
	AC3 - Allowable Costs Reallocations Report		
	AC4 - Operating Cost Claim Report		
	AC5 - FCC Custom Processing Fees Paid Report		
	Allocation - Cascade SAF Report		
	Allocation - OAF Report		
	Allocation - SAF Report		
	Allocation - Static Factor Report		
	Allocation - Variance Report		
	Allocation - WIO Report		
	APMC Transportation and Overdelivery Claims Report		
	APMC Volume P/L Split Report		
	Business Associate Report		
	Facility Infrastructure Report		
	Facility Operator Report		
	Licence Report		
	Oil Capability Delivery Report		
	Oil Capability Producer Report		
	Oil Forecast - Facility View List Report		
	Oil Forecast - Gross and Crown Forecast Report		
	Oil Polecast - Variance Report		
	Disalias Pacility Activity Report		
	Pipeline Split - CTP Operator Report		
	Pipeline Split - Current Report		
	Dipoline Split - Operator Report	\sim	
	ripeline Split - Owner Report		



Menu Inbox Help Contacts Logout AB Name:		Quicklist:	
[Monthly Reporting] > [Oil Forecast]			
Edit Oil Forecast			
Forecast Month: 2017-04 < > Refresh	Facility View List: ALL		< > Go

The Edit Oil Forecast Screen opens with options to type in or use the arrows to:

Change the Forecast Month Select a Facility View List



Menu Inbox Help Contacts Logout AB Name:	Quicklist:
[Monthly Reporting] > [Oil Forecast]	
Edit Oil Forecast	\searrow
Forecast Month: 2017-04 < Refresh	Facility View List: ALL < > Go Area One Area Two

The Edit Oil Forecast Screen opens with options to type in or use the arrows to:

Change the Forecast Month Select a Facility View List

Then click Go to open the details for the forecast selected.

Oil Fore	Oil Forecast Tool On line Functions (Cont'd)									PETRII	NEX MATION NETWORK
See	AB ^{BA:} _{Name:}								Quicklist:		
[Monthly Reporting] > [Oil Fore	cast]		_								
Edit Oil Forecast											
Forecast Month: 2017-04 🛛 <	Refresh				Facility	View List: ALI	L			~	< > Go
Submit Add Facility Cancel											
		Gro	oss Volume Fore	cast							
Facility/Well Event ID	<u>Facility/Well</u> <u>Name</u>	<u>Initial</u> Forecast	<u>Adjustment</u>	<u>Final</u>	Status	<u>Crown</u> <u>Forecast</u>	<u>Benefit</u> <u>Pgm</u> ✓	<u>New</u> Well ❤	Calc Method ✓	<u>Forecast</u> <u>Non-Crown</u>	Filter Reset
		7,217.0	0.0	7,217.0		1,238.7				5,978.3	
ABBT0000007	Oil & Gas Battery #7	83.5	0.0	83.5		0.0	Ν	Ν	BATTERY	83.5	
+ ABBT000008	Oil & Gas Battery #8	7,133.5	0.0	7,133.5		1,238.7	Y	Ν	BATTERY	5,894.8	
Submit Add Eacility Cancol											

Details displayed include: The initial forecast volume and the calculated Crown and non crown forecast volumes.

Users can change the Final Forecast Volume as necessary



Menu Inbox Help Contacts Logout AB Name:

Quicklist:

[Monthly Reporting] > [Oil Forecast]

Edit Oil Forecast

Forecast Month: 2017-04 < > Refresh

Submit Add Cancel

		Gro	oss Volume Fore	cast							
<u>Facility/Well</u> <u>Event ID</u>	<u>Facility/Well</u> <u>Name</u>	<u>Initial</u> Forecast	<u>Adjustment</u>	<u>Final</u>	Status	<u>Crown</u> Forecast	Benefit Pgm ✓	<u>New</u> Well ❤	<u>Calc</u> Method	<u>Forecast</u> <u>Non-Crown</u>	Filter Reset
_ <u>ABBT0000007</u> _	Oil & Gas Bty 7	83.5	0.0	83.5		0.0	Ν	Ν	BATTERY	83.5	
ABWI100100300101W400	Well 10-3	24.9	0.0	24.9		0.0	Ν	Ν		24.9	
ABWI100110400101W400	Well 11-4	13.0	0.0	13.0		0.0	Ν	Ν		13.0	
ABWI100050600101W400	Well 5-6	22.2	0.0	22.2		0.0	Ν	Ν		22.2	
ABWI100050400101W400	Well 5-4	23.4	0.0	23.4		0.0	Ν	Ν		23.4	

Clicking on the + sign beside a Battery ID will open up the data to display the well level details Users can change the Final Forecast Volume at the Facility, View List (Group) or Well level. as necessary

		Gro	Gross Volume Forecast								
<u>Facility/Well</u> <u>Event ID</u> 	<u>Facility/Well</u> <u>Name</u>	<u>Initial</u> Forecast	<u>Adjustment</u>	<u>Final</u>	Status	<u>Crown</u> Forecast	Benefit Pgm ✓	<u>New</u> Well ✓	<u>Calc</u> <u>Method</u> ✓	<u>Forecast</u> <u>Non-Crown</u>	Filter Reset
		7,217.0	0.0	7,217.0		1,238.7				5,978.3	
+ ABBT0000007	Oil & Gas Bty 7	83.5	0.0	283.5	Calculate	0.0	Ν	Ν	BATTERY	83.5	
+ ABBT000008	Oil & Gas Bty 8	7,133.5	0.0	7,133.5		1,238.7	Y	Ν	BATTERY	5,894.8	

Once the final volume is updated the status is changed to Calculate.

Image: Solution of the second sec	PETRINE	Ĕ,	il Forecast Tool On line Functions (Cont'd)									
in Oil Forecast recast Month: 2017-04 ≤ > Refresh Facility/Well Gross Volume Forecast Crown Benefit New Calc		Quicklist:	(AB ^{BA: ;} _{Name:}) 🗹 ? 🏦 🚫 nu Inbox Help Contacts Logout	
dit Oil Forecast recast Month: 2017-04 Selfresh Facility View List: Add Facility Cancel Facility/Well Facility/Well Initial Crown Benefit New Calc										ccast]	onthly Reporting] > [Oil Ford	
Add Facility View List: ALL abmit Add Facility Cancel Facility/Well											lit Oil Forecast	
Add Facility Cancel Facility/Well Facility/Well Initial Crown Benefit New Calc	< >			L	View List: ALL	Facility				Refresh	recast Month: 2017-04	
Gross Volume Forecast Crown Benefit New Calc									1		bmit Add Facility Cancel	
Tachty wen Tachty wen Innia	Format	Calc	Now	Bonofit	Crown		ecast	oss Volume Fore	Gro	Facility/Well	Facility/Well	
Event ID Name Forecast Adjustment Final Status Forecast Pgm Well Method	Non-Crown Reset	Method	Well	Pgm	Forecast	Status	<u>Final</u>	<u>Adjustment</u>	Forecast	<u>Name</u>	Event ID	
7,217.0 200.0 7,417.0 1,240.5	6,176.5				1,240.5		7,417.0	200.0	7,217.0			
▲BBT0000007 Oil & Gas Bty 7 83.5 200.0 283.5 × Pending 1.8 N N BATTERY	281.7	BATTERY	Ν	Ν	1.8	Pending	₽83.5 ×	200.0	83.5	Oil & Gas Bty 7	• ABBT0000007	
• <u>ABBT0000008</u> Oil & Gas Bty 8 7,133.5 0.0 7,133.5 1,238.7 Y N BATTERY	5,894.8	BATTERY	Ν	Y	1,238.7		7,133.5	0.0	7,133.5	Oil & Gas Bty 8	 ABBT000008 	

Clicking the Calculate button changes the volumes and the screen displays a *Pending* Status.

Oil Forecast Tool On line Functions (Cont'd) () \square BA: / AB Quicklist: Name: Menu Inbox Help Contacts Logout [Monthly Reporting] > [Oil Forecast] Edit Oil Forecast Forecast Month: 2017-04 < > Refresh Facility View List: ALL ✓ < > Go OFT099 Submission is successful. Submit Add Facility Cancel Gross Volume Forecast Facility/Well Facility/Well Initial Benefit New Crown Calc Forecast Filter Event ID Name Well Method Forecast Adjustment Final Status Forecast Pgm Non-Crown Reset \mathbf{v} \sim ••• 7.217.0 200.0 7,417.0 1.240.5 6,176.5 283.5 × Oil & Gas Bty 7 + ABBT000007 83.5 200.0 1.8 Ν Ν BATTERY 281.7 Oil & Gas Bty 8 0.0 7,133.5 Υ 5.894.8 ABBT0000008 7.133.5 1.238.7 Ν BATTERY

The user must click Submit to enter the data. Petrinex will display the new calculated volumes. This data will now be available on the reports and query screen.





Users may edit existing Facility View Lists or Create New ones



- Clicking Add opens a new screen
- Clicking Update Facilities opens the Facility List Builder



Users select the facilities they would like to include in their list. By moving facilities from available to selected and back. Clicking OK updates the Facility View List

Facility List Builder

OK Cancel

Prov Type AB V BT V Facility Name Location	Number Operator ID	Production Month 2017-04
LSD SEC TWP RGE	M WALL V	GO
Available Facilities	~ >>	Selected Facilities AB BT 1000006 Provost Bty 6 AB BT 1000007 Provost Bty 7





[Monthly Reporting] >[Oil Forecast]

Edit User Forecast Facility View List

Forecast 1	Forecast Month: 2017-04 > Refresh Facility View List: New Group Name ✓ Go Add Delete										
OFT070	6 Facility View List [New Group Nat	ne] has been updated successfully.									
Submit Update Facilities Query Cancel											
Delete	Facility ID	Facility Name									
	AB BT 1000006	Provost Bty 6									
	AB BT 1000007	Provost Bty 7									

Once a view list has been added it is available for all users at the BA.





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5b. How to Use the Oil Forecast Functions: Oil Forecast Tool Batch Submissions



Batch submissions for the Oil Forecast Tool functions can be submitted in csv and xml.

Instructions for creating and uploading the various files in csv can be found on the Initiatives page – APMC/Industry Conventional Oil Forecast Tool Project

http://www.petrinex.ca/204.asp

For documents related to the xml versions of these files please contact Sheryl Moody via email Sheryl.Moody@gov.ab.ca.



The following Job Aids can be found on the initiatives page.

http://www.petrinex.ca/204.asp

Information regarding creating Groups of Batteries

www.petrinex.ca/PDFs/How_to_create_Groups_of_Batteries_OFT_final.pdf

Creating csv submission files & templates

http://www.petrinex.ca/PDFs/Oil_Forecast_Submissions_Spreadsheet_Upload_ Specs_v1_1_final.pdf

Oil Forecast Submissions Spreadsheet Templates - updated Dec 20, 2016

Copy_of_OFT_csv_template_Faclist_and_update_OF_1_0



•There are two types of submissions for the Oil Forecast Tool:

•Facility View List submissions (Update/Create and Delete Groups) •Oil Forecast submissions (Update/Change forecast volumes)

•The **Oil Forecast submissions** (csv uploads) data fields were created to **match the output (report)** and therefore **use the same templat**e.

•This means all the columns must be in the submission but depending on what is being submitted (i.e. Volume updates at the Facility View List (Group) level, at the Facility Level or the Well Event Level) some data fields should be left blank. If data is submitted in these fields then it will be ignored, however if the column is not included then the file will fail.



Example csv file – Update/Create a Facility View List (Group) submission

Note: For an Update all data fields must be filled in.

	Α	В	С	D	E	F	G	Н
1	VERB	NOUN	REVISION	FORECASTMONTH	VIEW	PROVINCESTATE	ТҮРЕ	IDENTIFIER
2	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #1	AB	BT	0000001
3	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #1	AB	BT	0000002
4	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #1	AB	BT	0000003
5	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #4	AB	BT	0000004
6	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	0000005
7	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	0000006
8	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	0000007
9	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	800000
10	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	0000009
11	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	0000010
12	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	0000011
13	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	0000012
14	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	0000013
15	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	0000014
16	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	0000015
17	UPDATE	OFFACILITYLIST	001	2017-04	Form A Delivery Battery #5	AB	BT	0000016



Example csv file - Delete a Facility View List (Group)

Note: For a Deletion the Province, Type and Identifier are not required.

	Α	В	С	D	E	F	G	Н
1	VERB	NOUN	REVISION	FORECASTMONTH	VIEW	PROVINCESTATE	TYPE	IDENTIFIER
2	DELETE	OFFACILITYLIST	001	2017-06	Form A Delivery Battery #1			
3								
4								
5								
6								

Information and suggestions on how to create your Facility View Lists (Groups) Can be found on the OFT Project Initiatives page under Job Aids

http://www.petrinex.ca/PDFs/How_to_create_Groups_of_Batteries_OFT_final.pdf



Oil Forecast Submissions - csv file column descriptions

The next few pages describe each column in the csv file template for Oil forecast submissions. Since the input template is the same as the output/report not all fields need to completed when submitting/updating data. The data required depends on what level of you are reporting at:

- 1. View List (group)
- 2. Facility or
- 3. Well Event Level

All Columns are required to be in the file however not all columns require data. Column A-E require data in all cases.

Spreadsheet Column	Data element	Example Field Content	Comments
A	VERB	UPDATE	UPDATE is the only valid verb
В	NOUN	OILFORECAST	OILFORECAST is the only valid noun
С	FORMAT VERSION	001	Current is 001
D	BA ID	ABCD	Must be the operator of the facilities being forecast
E	FORECAST MONTH	2017-05	



	Spreadsheet	Data element	Example Field	Comments
	Column		Content	
	F	ASOFDATE		Data not required, but need
				to include the column - leave
				this blank
	G	FACILITYVIEWLIST	Delivery Bty Group	Data only required when the
Column G & I			ABBT0000001	report type is VIEWLIST.
only require data				Data is not required for report
if the submission				type FACILITY or WELL EVENT
is at the View List				but need to include the
				column.
Level	н	IINITIALGROSSFORECASTVL		Data not required, but need
				to include the column - leave
Column F & H are				this blank
		GROSSFORECASTVL		This is the adjusted gross
				production volume for the
cases				Group of BT Facilities
				included in the VIEWLIST.
				Data only required when the
				report type is VIEWLIST.
				Data is not required for report
				type FACILITY or WELL EVENT
				but need to include the
				column.



	Spreadsheet	Data element	Example Field	Comments
	Column		Content	
	J	CROWNFORECASTVL		Data not required, but need
- · · · · · · · ·				to include the column - leave
Column M, N & O				this blank
only require data if	к	CROWNPERCENTAGEVL		Data not required, but need
the submission is at				to include the column - leave
the Eacility or Wall	L	NONCROWNFORECASTVL		Data not required, but need
				to include the column - leave
Event Level				this blank.
	М	FACILIYT PROVINCE/STATE	AB	Data only required when the
				report type is FACILITY.
Column L K L 9 D				AB is the only valid Province.
Column J, K, L & P				Data not required for report
are left blank in all				type VIEWLIST or WELLEVENT
cases.				but need to include the
				column.
	N	FACILITY TYPE	BT	BT is the only valid Type
	0	FACILITY IDENTIFER	0001001	Must be 7 digits
	Р	FACILITY NAME		Data not required, but need
				to include the column - leave
				this blank



Column Q is always required and identifies the type of data being submitted. ViewList, Facility or WellEvent level.

Column S only requires data if the submission is at the Facility Level

Columns R, T & U are always blank

Spreadsheet Column	Data element	Example Field Content	Comments		
Q	REPORT TYPE	VIEWLIST	VIEWLIST, FACILITY and WELLEVENT are the only 3 options		
R	INITIAL GROSS FORECASTBT		Data not required, but need to include the column - leave this blank		
S	FINAL GROSS FORECASTBT	200	This is the adjusted gross production volume for the BT. Can be left blank if the report type is VIEWLIST or WELLEVENT		
Т	CROWNFORECASTBT		Data not required, but need to include the column - leave this blank		
U	CROWNPERCENTAGEBT		Data not required, but need to include the column - leave this blank		



Columns Y, Z & AA is only require data if the submission is at the Well Event Level

Columns M, N & O (the Facility ID info) is required for Well Event submissions

Columns V, W & X are always blank.

Spreadsheet Column	Data element	Example Field Content	Comments
v	BENEFITPGMBT		Data not required, but need to include the column - leave this blank
W	NONCROWNFORECASTBT		Data not required, but need to include the column - leave this blank
х	AMENDMENTNUMBER		Data not required, but need to include the column - leave this blank
Y	PROVINCESTATEWI	AB	Data only required if Report Type is WELLEVENT . AB is the only valid province. Data not required for Report Type VIEWLIST or FACILITY,
Ζ.	TYPEWI	WI	Data is only required if Report Type is WELLEVENT Data not required for Report Type VIEWLIST or FACILITY,
AA	IDENTIFIERWI	100010200304W400	Data only required if Report Type is WELLEVENT. Data not required if Report Type is VIEWLIST or FACILITY,

Spreadsheet Data element

AF



Comments

Example Field Column Content AB WELLEVENTNAME Data not required, but need to include the column - leave this blank Data not required, but need AC INITIALGROSSFORECASTWI **Column AD only** to include the column - leave this blank requires data if the GROSSFORECASTWI 25.5 This is the adjusted gross AD submission is at the production volume for the Well Event Level Well. Data only required if Report Type is WELLEVENT. Columns AB, AC, Data not required if Report AE & AF are always Type is VIEWLIST or FACILITY, blank. but need to include the column. CROWNFORECASTWI Data not required, but need AE to include the column - leave this blank

CROWNPERCENTAGEWI

Data not required, but need to include the column - leave

this blank



Columns AG, AH, AI, AJ & AK are always blank.

Spreadsheet Column	Data element	Example Field Content	Comments
AG	BENEFITPGMWI		Data not required, but need to include the column - leave this blank
АН	NONCROWNFORECASTWI		Data not required, but need to include the column - leave this blank
AI	DENSITYCODE		Data not required, but need to include the column - leave this blank
AJ	CROWNOILINTERESTPER CENT		Data not required, but need to include the column - leave this blank
AK	ROYALTYATTRIBUTE		Data not required, but need to include the column - leave this blank



Update Forecast – View List (Group) Level

Example of data in required fields all other columns must be included A – AK but they would be blank

	А	В	С	D	E
1	VERB	NOUN	REVISION	BAID	FORECASTMONTH
2	UPDATE	OILFORECAST	001	0001	2017-04
3					
4					
5					
6					

	G	I	Q
1	FACILITYVIEWLIST	GROSSFORECASTVL	REPORTTYPE
2	View List1	50000	VIEWLIST
3			
4			
5			
6			



Update Forecast – Facility Level

Example of data in required fields all other columns must be included A – AK but they would be blank

	А	В	С	D	E
1	VERB	NOUN	REVISION	BAID	FORECASTMONTH
2	UPDATE	OILFORECAST	001	0001	2017-04
3					
4					
5					
6					

	М	N	0	Q	S
1	PROVINCESTATE	TYPE	IDENTIFIER	REPORTTYPE	GROSSFORECASTBT
2	AB	BT	0000002	FACILITY	500
3					
4					
5					
6					



Update Forecast – Well Event Level

Example of data in required fields all other columns must be included A – AK but they would be blank

	А	В	С	D	E
1	VERB	NOUN	REVISION	BAID	FORECASTMONTH
2	UPDATE	OILFORECAST	001	0001	2017-04
3					
4					
5					
6					

	М	N	0	Р	Q	Y	Z	AA	AD
1	PROVINCESTATE	TYPE	IDENTIFIER	FACILITYNAME	REPORTTYPE	PROVINCESTATEWI	TYPEWI	IDENTIFIERWI	GROSSFORECASTWI
2	AB	BT	0000003		WELLEVENT	AB	WI	10001020304005W400	100
3	AB	BT	0000003		WELLEVENT	AB	WI	10002020304005W400	150
4									
5									
6									





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6. What Reports are Available & When



The Oil Forecast Reports are available under Submit Report Request. There are 3 new reports available for Industry.

- 1. Oil Forecast Facility View List Report
- 2. Oil Forecast Gross and Crown Forecast Report
- 3. Oil Forecast Variance Report

Forecast reports are available in PDF, CSV and XML

 Image: Second state
 Image: Second state
 Image: Second state
 AB
 BA: Name:

 Menu
 Inbox
 Help
 Contacts
 Logout
 AB
 Name:

Reports and Queries]

Submit Report Request

Report:	AB Crown Shippers' Balance to Crown Splits Imbalance Report		Go
•	AB Crown Shippers' Balance to Crown Splits Trace Report	~	
	AC1 - FCC Setup/Change Report		
	AC2 - FCC Capital and Operating Costs Allowance Report		
	AC2 - Status Report		
	AC3 - Allowable Costs Reallocations Report		
	AC4 - Operating Cost Claim Report		
	AC5 - FCC Custom Processing Fees Paid Report		
	Allocation - Cascade SAF Report		
	Allocation - OAF Report		
	Allocation - SAF Report		
	Allocation - Static Factor Report		
	Allocation - Variance Report		
	Allocation - WIO Report		
	APMC Transportation and Overdelivery Claims Report		
	APMC Volume P/L Split Report		
	Business Associate Report		
	Facility Infrastructure Report		
	Facility Operator Report		
	Licence Report		
	Oil Capability Delivery Report		
	Oil Capability Producer Report		
	Oil Forecast - Facility View List Report		
	Qil Forecast - Gross and Crown Forecast Report		
	Oil Forecast - Variance Report		
	Oil Sands Facility Activity Report		
	Pipeline Split - CTP Operator Report		
	Pipeline Split - Current Report		
	Pipeline Split - Operator Report	\sim	
	Pipeline Split - Owner Report		



Petrinex Oil Forecast Report Availablity

Each month Petrinex will automatically create, around the 27th of each month, an <u>initial</u> **Oil Forecast - Gross and Crown Forecast Report** (amendment 0) for each producing operator of conventional oil batteries.

This forecast (amendment 0) will be for 2 months in advance of when it is generated. For example at the end of February 2017 the forecast for April 2017 will be created.

Each BA should review and make/submit any adjustments to the final gross forecast volumes in Petrinex and then request the Gross and Crown Forecast report with the adjusted Gross and recalculated Crown volumes. This will result in updated forecast volumes that should be used to improve the gross and crown forecasts used on Form A's.

It is recommended that the Facility View Lists (groups) be set up or modified as soon as possible each month to have them included on the initial Oil Forecast - Gross and Crown Forecast Report (amendment 0).



Submit Report Request

	Report: Oil Forecast - Facility View List Report							
The Facility								
<u>View List</u> <u>Report</u> has two report types	Start Forecast Month :				2017-04			
	End Forecast Month :				2017-04			
	BA ID:		O All	List	ABCD Oil & Gas Co.			
<u>View List</u> – which details the View								
Lists that exist for the BA	Report T	ype:			View List Unassigned			
	Facility V	iew List:	● All	⊂List	Area One			
<u>Unassigned</u> – details the					~			
batteries that are	Report F	ML CSV						
View List	notification when the report is ready.							
(Group)	Submit	Cancel Save						



View List Report Example

PETRINEX Oil Forecast - Facility View List Report ABCD Oil & Gas Ltd

Operator: ABCD Oil & Gas Ltd ^{TD.} Forecast Month: 2017-04

2017-04			
View List Name	Facility ID	Facility Name	
Area One	ABBT0005010	South Battery A	
Area One	ABBT0005011	South Battery B	
Area One	ABBT0005012	South Battery C	
Area One	ABBT0005013	South Batttery D	







Submit Report Request

Report: Oil Forecas	st - Gross and	I Crown Fore	ecast Report 🗸 Go
Forecast Month Star	t:		2017-04
Forecast Month End	:		2017-04
BA ID:	© All	●List	ABCD OIL & GAS LTD.
Facility View List:	® All	⊂List	Area One Area Two
Report Type:			Facility Well Event
Facilities:) All	⊂List	
Wells:) All	⊂List	
Report Format:	PDF		ML CSV

Note: This report will be queued for processing. You will receive an e-mail notification when the report is ready.

The Gross and **Crown Forecast <u>Report</u>** is the main report used for the Petrinex Oil Forecast Tool, It can be organized by Facility View List, Facility Level and/or Well Event details. It is available in CSV, PDF & XML and can be run at anytime during the day.



PETRINEX Oil Forecast - Gross and Crown Forecast Report

ABCD Oil & Gas Co.

 Operator:
 ABCD
 Oil & Gas Co.

 Forecast Month:
 2017-04

 Facility View List:
 Area One

Facility ID	Facility Name	Gross Forecast	Crown Forecast	Crown % of Gross	Benefit Program	Non-Crown Forecast	Amend#
ABBT0005010	Battery South A	17,786.2	2,413.0	13.57%	E	15,373.2	0
ABBT0005011	Batttery South B	33.7	0.0	0.00%	Ν	33.7	0
ABBT0005012	Battery South C	4,713.5	308.1	6.54%	Y	4,405.4	0
ABBT0005013	Battery South D	8.2	0.0	0.00%	Ν	8.2	0
	Total:	22,541.6	2721.1	12.07%		19820.5	

Oil Forecast Tool: <u>Recap</u>



- Oil Forecast "<u>Tool</u>" is a set of new Petrinex functionality allowing: Industry Forecasters (marketer/schedulers) to:
 - Create "Facility View Lists" (Groups of producing batteries) that align with their Form A submissions
 - Request the initial Oil Forecast Gross and Crown Forecast Report
 - Review the report and modify the gross volumes
 - at the Group, Battery or Well level;
 - <u>Petrinex will recalculate Crown share at the Well level and roll it up to the Battery or</u> <u>Group level as appropriate.</u>
 - Request an updated Oil Forecast Gross and Crown Forecast Report
 - Use the Gross and Crown Forecast report data to improve their existing forecast processes.
 - Compare the forecasted Gross and Crown to actuals reported
 All submissions can be performed "Online" or by "Batch" processes.

Initiatives – APMC/Industry Conventional Oil Forecast Tool Project







APMC/Industry Conventional Oil Forecast Tool Project

Documents

- Industry Readiness Guide updated Dec 20, 2016
- Information Bulletin Status update and notice of implementation date change posted Oct 7, 2016

Job Aids

- Instructions for Industry Interoperability Testing and Transmittal Form posted Jan 3, 2017
- How to Create Groups of Batteries for Petrinex Oil Forecast Tool Functions updated Dec 20, 2016
- Oil Forecast Submissions Spreadsheet Upload Specifications updated Dec 20, 2016
- <u>Oil Forecast Submissions Spreadsheet Templates</u> updated Dec 20, 2016
- How to Use the Conventional Oil Forecast Report updated Jan 29, 2016

Presentations

Conventional Oil Forecast Update Meeting - January 25, 2016

Oil Forecast Tool training modules are being developed and will be available in the "Resource Centre" by end of February.





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7. APMC Perspectives



- The APMC sees poor forecasting of the Crown share of production as a serious issue.
- The APMC encourages industry to use the Oil Forecast tool to:
 - Reduce cost to the Crown and industry to manage incorrect royalty splits.
 - Benefit the Crown and industry by optimizing pipeline space.
 - Benefit Albertans by maximizing value of the royalty barrel.
- Currently the APMC does not apply penalties or cost recovery for incorrect forecast volumes however, this is an option.





Thank You!