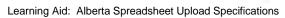






Last Revised: April 2022

By acceptance of the attached material, the requesting party acknowledges that all material released by the Petrinex is to be used for the sole purpose as initially stated by the requesting party and as agreed to by the Petrinex. This material shall not be used for any other purpose or disclosed to any other party without prior approval by the Petrinex.





Change Log

Date	Description
April 2022	Appendix A – Province/Territory/State/Country Codes. Added MX - Mexico



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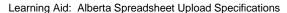
Reference Materials

Before attempting this Learning Aid, it is strongly suggested that you understand the Petrinex reporting requirements. The following reference materials will assist you in learning about these reporting requirements.

- AER Directive 007 Volumetric and Infrastructure Requirements (available on AER Website)
- AER Directive 007-1 Allowables Handbook. Guidelines for the calculation of monthly production allowables in Alberta (available on the AER Website)
- AER Manual 011 How to Submit Volumetric Data to the AER
- **AER Directive 047** Waste Reporting Requirements for Oilfield Waste Management Facilities (available on the AER Website)
- Alberta Energy Natural Gas Royalty Principles and Procedures (Available on the Alberta Energy and/or Petrinex Website)
- AER Directives (available on AER Website)
- **AER Bulletins** (available on AER Website)
- Gas Royalty Calculation Information Bulletins (available on the Alberta Energy and/or Petrinex Website)

This Learning Aid is intended as a supplement to the Resource Centre Training Modules. The following training modules will provide you with additional information on Petrinex reporting practices:

- 4.02 Manage Data Submission WIP and Batch
- 5.01 Manage Volumetric Submission
- 5.02 Manage Volumetric Submissions for Meter Stations
- 5.03 Manage Volumetric Submissions for Batteries and Injection Facilities
- 5.04 Manage Volumetric Submissions for Gas Plants and Gas Gathering Systems
- 5.05 Manage Volumetric Submissions for Terminals
- 5.07 Manage Waste Plant Submissions
- 5.09 Manage Oil/LPG Pipeline Splits
- 5.10 Manage Transportation Allowance and Overdelivery Claims and Crown Oil Inventory
- 5.12 Manage Allocations (SOV SAF OAF)





Introduction

There are two main ways that you can submit monthly data to Petrinex. You can submit data:

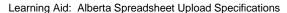
- **online**. Petrinex's online forms allow you to enter data that is reported to Petrinex. You may use Petrinex's Work-in-Progress (WIP) to edit volumetrics, allocations, and pipeline splits. For more information, see training module *4.02 Manage Data Submission WIP and Batch*.
- batch upload process. In a batch submission, you create data in your internal system, and then
 upload it to Petrinex. The standard for batch file submission is XML (Extensible Markup
 Language). You can also create your data in spreadsheets, and upload this data directly to
 Petrinex. You can only upload data created within a spreadsheet, if that data is saved as a CSV
 (Comma Separated Values) file.

You may upload data in spreadsheets for the following work processes:

- Volumetrics you submit mandatory information as required by the Alberta Energy Regulator (AER)
- **Allocations** you submit mandatory information as required by Alberta Energy for gas and gas by-product Crown Royalties, and optional industry-to-industry reporting. Allocations can be submitted in the following two formats:
 - Stream and Owner Allocation Factors (SAF and OAF)
 - Combined SAF/OAF allocation with volumes
- **Pipeline Splits** you submit **mandatory** information:
 - as required by the Alberta Petroleum Marketing Commission (APMC) for oil Crown Royalty reporting
 - when a Custody Transfer Point (CTP) facility (pipeline, meter station, or terminal) has been flagged with the "Full" participation level using the PLSPLIT file.
- **Pipeline Splits** you submit **optional** information:
 - when a Custody Transfer Point (CTP) facility (pipeline, meter station, or terminal) has been flagged with the "Lite" participation level.
 - in addition to current paper or electronic processes used by the pipeline, the pipeline will also accept split information from the operator via standardized electronic batch formats, similar to the batch processes used for other types of submissions to Petrinex using the PLLITE file. In the "Lite" approach, once the split is accepted by the pipeline, the pipeline will provide a "confirmation number". The operator will then batch detailed split information to Petrinex using the PLSPLIT file.
- Waste Plant Submissions you submit mandatory information as required by the Alberta Energy Regulator (AER) – Waste and Storage Section
 - o This is the data previously submitted on the paper S-25 form.
- **Oil Sand Submissions** you submit mandatory information as required by the Alberta Energy Regulator (AER)) Mineable Oil Sands Group Fort McMurray Office.
 - o This is the data previously submitted on the paper S-23 form.

Note: Petrinex will not accept uploads of data created in spreadsheets for work processes other than those listed above.

Note: Each spreadsheet upload is considered a full-facility replacement for the current production month. Each upload that you make to Petrinex overwrites earlier uploads, so new submissions must include all data for the month. If you report additional data after the first submission, then you must resubmit the initial data, along with the new data. For example, for volumetrics, if you initially only report oil data, and later submit gas data, the second gas submission must also include the oil data.





Create and Save Data within a Spreadsheet

You must follow specific rules to create and save data in a spreadsheet for upload to Petrinex. For example, you can only upload data created within a spreadsheet, if that data is saved as a CSV (Comma Separated Values) file. Petrinex does not accept data saved as any other format. You may create spreadsheets in any spreadsheet software (such as Microsoft Excel) that can save as a CSV file.

For illustration purposes only, Microsoft Excel conventions are used in the following step-by-step procedures. In this example, we use the terms spreadsheet and worksheet. A worksheet is an individual page that is organized into columns and rows, and is always stored in spreadsheet. A spreadsheet may contain many worksheets. Note: Microsoft Excel refers to spreadsheets as workbooks.

Follow these steps to create, and save data within a spreadsheet before uploading the data to Petrinex.

Step 1. Download the worksheet template for the work process data that you want to upload.

To download the worksheet template, complete the following steps.

- a. Go to the Resource Centre website page
- b. Click the Job Aid Alberta Spreadsheet Upload Templates.
- **Step 2.** Create a new worksheet from the template.
 - a. Create a new worksheet within your existing spreadsheet.
 - b. Copy the provided template into your new worksheet, or type the header row from the template into your new worksheet. Row 1, the header row, must contain the column descriptions in your new worksheet.

Note: You may only include one work process (volumetrics, allocations, pipeline splits, waste plant or oilsands submission) per worksheet, but you may include multiple facilities when submitting a file to Petrinex. When using the PLLITE file you may only include one facility in the file you submit to the CTP operator. The order of the header row must match the order that is specified in the templates for each work process (volumetrics, allocations, or pipeline splits, waste plant, or oil sands).

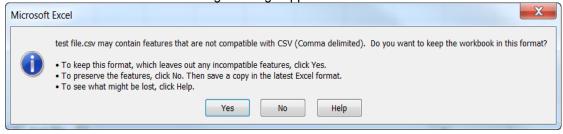
Header Row		Α	В	С	D
Trouder Its W				Format	Submitting
	1	Verb	Noun	Version	Facility Province
	2	4 e1D	140411	V 6131011	1 TOVILICE
	3				
	4				

- **Step 3.** Enter the data from your existing spreadsheet into the new worksheet.

 Starting in Row 2, copy, move, paste, or link the appropriate data from your spreadsheet into the new worksheet.
- **Step 4.** Select/highlight all data on the worksheet. Choose Format Cells Number (tab) and choose Text. Click OK. All data on the worksheet must be in text format prior to saving in .csv format.
- **Step 5.** Save your new worksheet. You may only save the worksheet in CSV format for upload to Petrinex. Further, only the active worksheet may be saved as a CSV file. Multiple worksheets, within a single spreadsheet, must be saved as individual CSV files, and uploaded separately.
 - a. On the File menu, select Save As
 - b. Type the file name that you want to use
 - c. Select the .csv file type



d. Click Save. The following message appears.

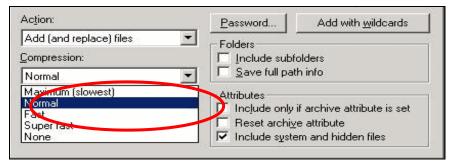


e. Click Yes.

If you were to open this worksheet at this point, you will lose all of the preceeding zero's in any of the data. Example BA Code 0123 would show as 123, Facility Identifier 0000123 would show as 123. If you were to upload this document to Petrinex in this manner it would not be accepted as it would not meet the required schema. Therefore we need to create a worksheet in text to upload.

- a. Open a new Excel worksheet, and click on Data to import your saved worksheet into this new worksheet.
- b. Click "From Text" to open the Import Text file window
- c. Highlight the document that you previously saved and click Import.
- d. This opens the Text Import Wizard:
 - 1. Click the radio button Delimited and click Next
 - Change the radio button under Deliminaters from Tab to Comma and click Next.
 - 3. You will want to change all of the columns to be Text rather than General. To do this Hold down the Shift Key and using the scroll bar on the bottom bring it as far to the right as you can. This will highlight all of the columns.
 - 4. Click the radio button Text
 - 5. Click Finish
 - You are now asked where you want to put the data? Click the radio button Existing Worksheet and click OK.
 - 7. Save the new worksheet in a .csv file format you can overwrite the original if you choose to ensure that you do not try to upload the wrong version.

Large files may be compressed, using the file compression utilities PKZIP or WinZip, or the built-in compression utility within Microsoft XP (referred to as NTFS compression). When using WinZip, files must be compressed in the **Normal** compression mode, as shown below. It is recommended that any files over 5Mg should be zipped.



Note: only one file can be included in a zipped file.



- **Step 6.** Submit the saved worksheet (with the .csv file extension) to Petrinex. You may only upload one file to Petrinex at a time.
 - a. Access Petrinex, using your Web browser.
 - b. On the Main Menu, select **Data Submission** and then **Batch Upload**.
 - c. Type in your CSV file location and name, or use the **Browse** button to locate the file.
 - d. Click **Upload**. You will receive an onscreen message indicating if the file is uploaded successfully. We recommend that you record the file incoming key number. If the batch was to fail, this number will help the Petrinex staff in assisting in determining the cause of the failure.
 - e. You will receive an e-mail notification detailing the results of the upload when Petrinex has processed the submitted upload.



Volumetrics Worksheet Format

	701	unicules v	7 O 1 10 0 10 0 0 1	. 011110	
Spreadsheet Column	<u>Data element</u>	Example Field Content	<u>Format</u>	Required on each row? Y/N	<u>Comments</u>
А	Verb	ADD		Y	ADD is the only valid verb
В	Noun	VOLUMETRIC		Y	VOLUMETRIC is the only valid noun
С	Format Version	001	(prefix with 0's)	Y	Current is 001
D	Submitting Facility Province	AB	2 chars	Y	Must be a valid Prov/State, see Appendix A
E	Submitting Facility Type	ВТ	2 chars	Y	Must be a valid facility type, see Appendix B
F	Submitting Facility Identifier	001001	max 7 digits (prefix with 0's)	Y	
G	Production Year-Month	2012-11	YYYY-MM	Y	Dash is mandatory
Н	Reference	BTY 07-05	max 16 digits	N*	Optional reference to your internal system
I	From/To Fac/Well Province	AB	2 chars	N*	Must be a valid Prov/State, see Appendix A
J	From/To Fac/Well Type	ВТ	2 chars	N*	Must be a valid facility type, see Appendix B; or WI for well
К	From/To Fac/Well	0002002	max 16 digits	N*	Maximum 7 digits for a facility
	Identifier		(prefix with 0's)		Maximum 16 digits for a well
L	Product	OIL	max 12 chars	Y*	Must be a valid product code, see Appendix C – Volumetric and ISC Product Codes
М	Activity	REC	max 12 chars	Y*	Must be a valid activity code, see Appendix D
N	Hours	123	max 3 digits	N*	
0	Volume	123456789.012	12 digits (3 decimals)	Y*	For ISC products volumes is 3 decimals, all other products are 1 decimal only
Р	Energy	1234567890.123	13 digits (3 decimals)	N*	For ISC products energy is 3 decimals, all other products are zero decimals only
Q	CCI Code	9	1 char	N*	Consecutive Concurrent Injection Code
R	Proration Product	OIL	max 12 chars	**	Only valid for the products Oil, Water and Gas
S	Proration Factor	1.23456	6 digits (5 decimals)	**	
L	1		1	l	<u>I</u>

^{**} If Proration Product and Proration Factor are included on a row, then all cells marked with * in the required column must be blank.

Note: Proration rows must appear at the end of a facility's submission, and cannot be combined with Facility or Well Activity rows.



SAF Worksheet Format

	1			1	
Spreadsheet Column	Data Element	Example Field Content	<u>Format</u>	Required on each row? Y/N	Comment
А	Verb	ADD		Y	ADD is the only valid verb
В	Noun	SAF		Y	SAF is the only valid noun
С	Format Version	001	(prefix with 0's)	Υ	Current is 001
D	Submitting Facility Province	AB	2 chars	Y	Must be a valid Prov/State, see Appendix A
E	Submitting Facility Type	GP	2 chars	Y	Must be a valid Facility Type, see Appendix B
F	Submitting Facility Identifier	0001001	max 7 digits (prefix with 0's)	Y	
G	Production Year-Month	2012-11	YYYY-MM	Y	Dash is mandatory
Н	Product	GAS	max 12 chars	Y	Must be a valid product code, see Appendix C
I	Activity	DISP	max 12 chars	Y	Must be a valid Activity Code, see Appendix D
J	From/To Fac/Well Province	AB	2 chars	N	Must be a valid Prov/State, see Appendix A
К	From/To Fac/Well Type	MS	2 chars	N	Must be a valid Facility Type, see Appendix B
L	From/To Fac/Well Identifier	0002002	max 7 digits (prefix with 0's)	N	
М	Cascade Facility Province	AB	2 chars	N	Must be a valid Prov/State, see Appendix A
N	Cascade Facility Type	GP	2 chars	N	Must be a valid Facility Type, see Appendix B
0	Cascade Facility Identifier	0001003	max 7 digits (prefix with 0's)	N	
Р	Static Factor Indicator	YES	Yes/No	N	
Q	Reference	1234	max 16 digits	N	Optional reference to your internal system
R	Stream Fac/Well Province	АВ	2 chars	Y	Must be a valid Prov/State, see Appendix A. Max 5 for production entities.
S	Stream Fac/Well Type	WI	2 chars	Y	Must be a valid Facility Type, see Appendix B; or WI for well.
Т	Stream Fac/Well Identifier	100010100124W500	max 16 digits (prefix with 0's)	Y	Max. 7 digits for a facility. Max. 16 digits for a well. Max 5 for production entities.
U	Factor Volume	0.1234567890	11 digits (10 decimals)	Y	
V	Factor Energy	0.1234567890	11 digits (10 decimals)	Y	



OAF Worksheet Format

Spreadsheet Column	Data Element	Example Field Content	Format	Required on each row? Y/N	Comment
А	Verb	ADD		Y	ADD is the only valid verb
В	Noun	OAF		Y	OAF is the only valid noun
С	Format Version	001	(prefix with 0's)	Y	Current is 001
D	Submitting Facility Province	AB	2 chars	Y	Must be a valid Prov, see Appendix A
E	Submitting Facility Type	GP	2 chars	Y	Must be a valid Facility Type, see Appendix B
F	Submitting Facility Identifier	0001001	max 7 digits (prefix with 0's)	Y	
G	Production Year-Month	2012-11	YYYY-MM	Υ	Dash is mandatory
Н	Stream Fac/Well Province	AB	2 chars	Y	Must be a valid Prov, see Appendix A.
I	Stream Fac/Well Type	WI	2 chars	Y	Must be a valid Facility Type, see Appendix B; or WI for well.
J	Stream Fac/Well Identifier	100010100125W50 0	max 7 digits (prefix with 0's)	Y	Max. 7 digits for a facility. Max. 16 digits for a well. Max 5 for production entities.
К	Product	GAS	max 12 chars	Y	Must be a valid product code, see Appendix C
L	Activity	DISP	max 12 chars	Υ	Must be a valid Activity Code, see Appendix D
М	From/To Fac/Well Province	AB	2 chars	N	Must be a valid Prov, see Appendix A
N	From/To Fac/Well Type	MS	2 chars	N	Must be a valid Facility Type, see Appendix B
0	From/To Fac/Well Identifier	0002002	max 7 digits (prefix with 0's)	N	Max. 7 digits for a facility. Max. 16 digits for a well. Max 5 for production entities.
Р	Cascade Facility Province	AB	2 chars	N	Must be a valid Prov, see Appendix A
Q	Cascade Facility Type	GP	2 chars	N	Must be a valid Facility Type, see Appendix B
R	Cascade Facility Identifier	0001003	max 7 digits (prefix with 0's)	N	
S	Static Factor Indicator	YES	Yes/No	N	
Т	Reference	1234	max 16 digits	N	Optional reference to your internal system
U	Owner Identifier	ABCD	max 4 chars	Y	Must be a valid BA ID
V	Factor Volume	0.1234567890	11 digits (10 decimals)	Y	
W	Factor Energy	0.1234567890	11 digits (10 decimals)	Υ	



Combined SAF/OAF Worksheet Format

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Spreadsheet Column	<u>Data Element</u>	Example Field Content	<u>Format</u>	Required on each row? Y/N	Comment
А	Verb	ADD		Y	ADD is the only valid verb
В	Noun	SAFOAF		Y	SAFOAF is the only valid noun
С	Format Version	001	(prefix with 0's)	Υ	Current is 001
D	Submitting Facility Province	AB	2 chars	Y	Must be a valid Prov, see Appendix A
E	Submitting Facility Type	GP	2 chars	Y	Must be a valid Facility Type, see Appendix B
F	Submitting Facility Identifier	0001001	max 7 digits (prefix with 0's)	Y	
G	Production Year- Month	2012-11	YYYY-MM	Y	Dash is mandatory
Н	Product	GAS	max 12 chars	Y	Must be a valid product code, see Appendix C
I	Activity	DISP	max 12 chars	Y	Must be a valid Activity Code, see Appendix D
J	From To Fac/Well Province	AB	2 chars	N	Must be a valid Prov, see Appendix A
К	From To Fac/Well Type	MS	2 chars	N	Must be a valid Facility Type, see Appendix B
L	From To Fac/Well Identifier	0002002	max 7 digits (prefix with 0's)	N	Can use ALL. Should use ALL when responding to cascades using ALL.
М	Cascade Facility Province	AB	2 chars	N	Must be a valid Prov, see Appendix A
N	Cascade Facility Type	GP	2 chars	N	Must be a valid Facility Type, see Appendix B
0	Cascade Facility Identifier	0001003	max 7 digits (prefix with 0's)	N	
Р	Reference	1234	max 16 digits	N	Optional reference to your internal system
Q	Stream Fac/Well Province	AB	2 chars	Y	Must be a valid Prov, see Appendix A.
R	Stream Fac/Well Type	WI	2 chars	Y	Must be a valid Facility Type, see Appendix B; or WI for well.
S	Stream Fac/Well Identifier	100010100125W500	max 16 digits (prefix with 0's)	Y	Max. 7 digits for a facility. Max. 16 digits for a well. Max 5 for production entities.
Т	Owner Identifier	ABCD	4 chars	Y	Must be valid BA ID
U	Volume	123456789.0	10 digits (1 decimals)	Y	
V	Energy	1234567890	10 digits (0 decimals)	Y	



Pipeline Splits Worksheet Format – Version 002

Pipeline Split Worksheet Form – Version 1 is not the recommended worksheet, and has been removed from this document. Please use Version 2.

Spreadsheet Column	Column Header	Example Field Content	<u>Format</u>	Required on each row? Y/N	Comment
А	Verb	ADD		Y	ADD is the only valid verb
В	Noun	PLSPLIT		Y	PLSPLIT is the only valid noun
С	Format Version	002	(prefix with 0's)	Y	
D	Delivering Facility Province	AB	2 chars	Y	Must be a valid Prov, see Appendix A
E	Delivering Facility Type	ВТ	2 chars	Y	Must be a valid Facility Type, see Appendix B
F	Delivering Facility Identifier	0091001	max 7 digits (prefix with 0's)	Y	
G	Receiving Facility Province	AB	2 chars	Y	Must be a valid Prov, see Appendix A
Н	Receiving Facility Type	СТ	2 chars	Y	Must be a valid Facility Type, see Appendix B
I	Receiving Facility Identifier	0002002	max 7 digits (prefix with 0's)	Y	
J	Production Year-Month	2012-11	YYYY-MM	Y	Dash is mandatory
К	Product	OIL	max 12 chars	Y	Must be a valid product, see Appendix C – Volumetric and ISC Product Codes
L	Custody Transfer Point Facility Province	AB	2 chars	Y	Must be a valid Prov, see Appendix A. (see note below)
М	Custody Transfer Point Facility Type	TM	2 chars	Y	Must be a valid Facility Type, see Appendix B
N	Custody Transfer Point Facility Identifier	0003003	max 7 digits (prefix with 0's)	Y	
0	Reference	1234	max 16 digits	N	Optional reference to your internal system
Р	Shipper Pipeline Contract	654871	max 20 char	N	optional
Q	Shipper Identifier	ABCD	max 4 char	Y	Must be a valid BA ID
R	Shipper Owner Contract	200106	max 20 char	N	optional
S	Owner Identifier	0PMC	max 4 char	Y	Must be a valid BA ID
Т	Purchaser Identifier	ABCD	max 4 char	N	Must be a valid BA ID
U	Well Province	AB	2 chars	N	Must be a valid Prov, see Appendix A
V	Well Type	WI	2 chars	N	Must be a valid WI



Pipeline Splits Worksheet Format - Version 002, cont'd

Г	Themie Shire	AAOLVZIIGELL	-Oillial -	A 61 21011	002, cont u
W	Well UWI	100020300405W500	max 16 digits (prefix with 0's)	N	
Х	Owner Volume	1234567.8	8 digits (1 decimal)	Y	
Y	Owner Energy	123456789	max 9 digits (Gas split only)	N	
Z	Other Facility Province	АВ	2 chars	N	Must be a valid Prov/State, see Appendix A
AA	Other Facility Type	ВТ	2 chars	N	Must be a valid Facility Type, see Appendix B
AB	Other Facility Identifier	0095005	max 7 digits (prefix with 0's)	N	
AC	Other Facility BC/SK Operator	FLAK	max 20 char	N	Required if other Prov not AB.
AD	Other Facility Volume	1234567.8	8 digits (1 decimal)	N	
AE	Other Facility Energy	123456789	max 9 digits (Gas split only)	N	
AF	Other Facility Shipper Pipeline Contract	200206	max 20 char	N	
AG	Other Facility Shipper ID	ABCD	max 4 char	N	Must be a valid BA ID
АН	Other Facility Forecasted Nominated Volume	1234567.8	8 digits (1 decimal)	N	
Al	Other Facility Forecasted Nominated Energy	123456789	max 9 digits (Gas split only)	N	
AJ	Other Facility Estimated Volume	1234567.8	8 digits (1 decimal)	N	_
AK	Other Facility Estimated Energy	123456789	max 9 digits (Gas split only)	N	
AL	Confirmation #		max 16 char		
	_ i		1	I .	l

Note: Effective April 2014 production month, operators are required to use the Petrinex "Edit Oil/LPG Shipper/Owner Pipeline Split" functionality to report the APMC volumes delivered to specific SK custody transfer point (CTP) facilities (listed in Appendix F), either online or by batch files.

With this change to Petrinex, the manual ADD TAOC function has been disabled for these SK CTP facilities only.



Pipeline Splits Gas "Lite" Format

Spreadsheet Column	Column Header	Example Field Content	<u>Format</u>	Required on each row? Y/N	Comment
Α	Verb	ADD			ADD is the only valid verb
В	Noun	PLLITE			PLLITE is the only valid noun
С	Format Version	001	(prefix with 0's)		Current is 001
D	Prod Month	2010-04	YYYY-MM		Dash is mandatory
E	Billing Month	2012-11	YYYY-MM		Dash is mandatory
F	Product	GAS			GAS is the only valid Product
G	CTP Facility Prov	AB	2 chars		Must be a valid Prov, see Appendix A
Н	CTP Facility Type	MS	2 chars		Must be a valid Facility Type, see Appendix B
I	CTP Facility ID	0002002	max 7 digits (prefix with 0's)		
J	PL Location ID	0001001	Max 8 digits (prefix with 0's)		CTP operator internal id for CTP facility
К	Volume Requiring Split	1234567.8	8 digits (1 decimal)		
L	Energy Requiring Split	123456789	max 9 digits		
M	Shipper Pipeline Contract	200106	max 20 char		
N	Shipper Name		max 20 char		
0	Nominated/Forecasted Volume	1234567.8	8 digits (1 decimal)		
Р	Nominated/Forecasted Energy	123456789	max 9 digits		
Q	Estimated Volume	1234567.8	8 digits (1 decimal)		
R	Estimated Energy	123456789	max 9 digits		
S	Actual Shipper Volume	1234567.8	8 digits (1 decimal)		
Т	Actual Shipper Energy	123456789	max 9 digits		
U	Confirmation #		Max 16 char		
V	Split Status	FINAL			Blank or FINAL
W	Comments		Max 20 char		



Waste Plant Submission Worksheet Format

	774010 1 14	THE CASITIO	SOLULI VVOI	1011001	1 Office
Spreadsheet Column	<u>Data element</u>	Example Field Content	<u>Format</u>	Required on each row? Y/N	<u>Comments</u>
Α	Verb	ADD		Y	ADD is the only valid verb
В	Noun	WASTEPLANT		Υ	WASTEPLANT is the only valid noun
С	Revision	001	(prefix with 0's)	Υ	Current is 001
D	Reporting Facility Province State	AB	2 chars	Υ	Must be AB
E	Reporting Facility Type	WP	2 chars	Y	WP is the only valid facility type
F	Reporting Facility Identifier	0001001	7 digits (prefix with 0's)	Y	Must be 7 digits
G	Production Month	2012-11	YYYY-MM	Y	Dash is mandatory
Н	Reference Code	WP 09-03	max 16 digits	N	Optional reference to your internal system
I	From/to Fac/Well/WL Province State	АВ	2 chars	N	From/to facility must be a valid Prov/State, see Appendix A
J	From/to Fac/Well/WL Type	ВТ	2 chars	N	Must be a valid facility type, see Appendix B; or WI for well or WL for waste location
К	From/to Fac/Well/WL Identifier	0002002	max 16 digits (prefix with 0's)	N	Maximum 7 digits for a facility and waste location
					Maximum 16 digits for a well
L	Waste Code	COEMUL	max 12 chars	N	Must be a valid waste code, see Appendix E
М	ND Flag	N	max 1 char	N	Must be a N or D or blank
N	Activity ID	REC	max 12 chars	Y	Must be a valid activity code, see Appendix D
0	Oil Volume	123456789.1	10 digits (1 decimal)	N	M ³ one decimal only
Р	Water Volume	123456789.1	10 digits (1 decimal)	N	M ³ one decimal only
Q	Solids Volume	123456789.1	10 digits (1 decimal)	N	M ³ one decimal only
R	Gas Volume	123456789.1	10 digits (1 decimal)	N	10 ³ M ³ one decimal only



Oil Sands Submission Worksheet Format

Spreadsheet Column	<u>Data element</u>	Example Field Content	<u>Format</u>	Required on each row? Y/N	<u>Comments</u>
А	Verb	ADD		Y	ADD is the only valid verb
В	Noun	OILSANDS		Y	OILSANDS is the only valid noun
С	Revision	001	(prefix with 0's)	Y	Current is 001
D	Submitting Facility Province State	AB	2 chars	Y	Must be AB
E	Submitting Facility Type	OS	2 chars	Y	OS is the only valid facility type
F	Submitting Facility Identifier	0001001	7 digits (prefix with 0's)	Y	Must be 7 digits
G	Production Month	2012-11	YYYY-MM	Υ	Dash is mandatory
Н	Reference Code	OS 09-03	max 16 digits	N	Optional reference to your internal system
I	From/to Province State	AB	2 chars	N	From/to facility must be a valid Prov/State, see Appendix A
J	From/to Type	ВТ	2 chars	N	May be a valid facility type, see Appendix B, Misc ID, Out of province Misc ID.
K	From/to Identifier	0002002	max 16 digits	N	Maximum 7 digits for a facility
			(prefix with 0's)		Maximum 16 digits for a well
L	Product	CRUDEBIT	max 12 chars	Y	Must be a valid product code, see Appendix C – Oil Sands Product Codes
М	Activity Id	REC	max 12 chars	Y	Must be a valid activity code, see Appendix D
N	Quantity	123456789.1	10 digits (1 decimal)	N	
0	Assay	999.99	Percentage Max 5 digits (2 decimals)	Y	The quality or pureness % should only be entered when the product is OILSANDS; otherwise must be left blank.
Р	Comments		Max 2000 Characters	N	All comments to be entered on first row only. NOTE: Do not use comma's in your comments.



Alberta Crown Oil Inventory Submission Worksheet Format

AIDC	ita Giowii Gii	in ventor y	Cubilliss	011 110	i koneet i oi illat
Spreadsheet Column	<u>Data element</u>	Example Field Content	<u>Format</u>	Required on each row? Y/N	<u>Comments</u>
А	Verb	ADD		Y	ADD is the only valid verb
В	Noun	CROWNINV		Y	CROWNINV is the only valid noun
С	Revision	001	(prefix with 0's)	Y	Current is 001
D	Production Month	2015-12	YYYY-MM	Y	Dash is mandatory
Е	Facility Province State	AB	2 chars	Y	Must be AB
F	Facility Type	ВТ	2 chars	Y	Must be valid Facility Type
G	Facility Identifier	0001001	7 digits (prefix with 0's)	Y	
Н	Open Inventory	10.0	Max 1 digit after decimal	Y	
1	Delivered Inventory	5.0	Max 1 digit after decimal	У	
J	Undelivered Inventory	5.0	Max 1 digit after decimal)	у	
K	Anticipated Delivery Month	2016-01	YYYY-MM	Y	Must be blank if closing inventory calculates to zero



Appendix A – Province/Territories/State/Country Codes

Province/Territories Codes

AB	Alberta
BC	British Columbia
MB	Manitoba
NB	New Brunswick
NF	Newfoundland
NS	Nova Scotia
NT	Northwest Territories
NU	Nunavut
ON	Ontario
PE	Prince Edward Island
QC	Quebec
SK	Saskatchewan
YT	Yukon

Note: for Waste Plant submissions any non-Alberta waste generators or receivers will be reported as AB WL waste locations.

State Codes

AK	Alaska
AL	Alabama
AR	Arkansas
AZ	Arizona
CA	California
CO	Colorado
CT	Connecticut
DC	District of Columbia
DE	Delaware
FL	Florida
GA	Georgia
HI	Hawaii
IA	lowa
ID	Idaho
IL .	Illinois
IN	Indiana
KS	Kansas
KY	Kentucky
LA	Louisiana
MA	Massachusetts
MD	Maryland
ME	Maine
MI	Michigan
MN	Minnesota



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State Codes, Cont'd.

Missouri
Mississippi
Montana
North Carolina
North Dakota
Nebraska
New Hampshire
New Jersey
New Mexico
Nevada
New York
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Virginia
Vermont
Washington
Wisconsin
West Virginia
Wyoming

Country Codes

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ĺ	MX	Mexico



Appendix B – Facility Codes

Facility Code	Description
ВТ	Battery
CS	Compressor Station
СТ	Custom Treating Facility
GP	Gas Plant
GS	Gas Gathering System
IF	Injection/Disposal Facility
MS	Metering Station
OS	Oil Sands Processing Plant
PL	Pipeline
RF	Refinery
TM	Terminal
WP	Waste Plant
WS	Water Source



Appendix C - Product Codes

This appendix lists all Product Codes that are valid for Petrinex reporting. The first table shows the normal products that are reported, and the next shows the In Stream Component (ISC) Product Codes. When reporting Volumes, potentially any product from either table may be reported. However, when reporting Energy (GJ), only Gas and all ISC products are valid.

Note: These volumetric product codes and ISC product codes are not valid for Waste Plant (WP) reporting see Appendix E for WP Waste Codes

Volumetric Product Codes

General Information		
Product Code	Unit of Measurement	Description
ACGAS	10 ³ m ³	Acid Gas
AIR	10 ³ m ³	Air
BRKWTR	m ³	Brackish Water
C1-MX	m ³	Methane Mix
C2-MX	m³	Ethane Mix
C2-SP	m ³	Ethane Spec
C3-MX	m³	Propane Mix
C3-SP	m ³	Propane Spec
C4-MX	m ³	Butane Mix
C4-SP	m³	Butane Spec
C5-MX	m ³	Pentanes Mix
C5-SP	m ³	Pentanes - Spec
C6-MX	m ³	Hexane Mix
C6-SP	m³	Hexane Spec
CO2	10 ³ m ³	Carbon Dioxide
CO2-MX	m ³	Carbon Dioxide Mix
COND	m ³	Condensate
DIESEL	m ³	Diesel Oil
ENTGAS	10 ³ m ³	Entrained Gas
FSHWTR	m ³	Fresh water
GAS	10 ³ m ³	Gas
IC4-MX	m ³	Iso-Butane Mix
IC4-SP	m³	Iso-Butane Spec
IC5-MX	m³	Iso-Pentane Mix
IC5-SP	m³	Iso-Pentane Spec
LITEMX	m³	Lite Mix
N2	10 ³ m ³	Nitrogen
NC4-MX	m³	Normal Butane Mix



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NC4-SP	m ³	Normal Butane Spec
NC5-MX	m ³	Normal-Pentane Mix
NC5-SP	m ³	Normal-Pentane Spec
O2	10 ³ m ³	Oxygen
OIL	m ³	Crude Oil, Crude Bituman
SAND	m ³	Sand
SBASE	tonnes	Sulphur – Basepad
SBLOC	tonnes	Sulphur – Block
SFORM	tonnes	Sulphur – Formed
SLATE	tonnes	Sulphur – Slate
SMOLT	tonnes	Sulphur – Molten
SOLV	10 ³ m ³	Solvent
SPRILL	tonnes	Sulphur – Prill
STEAM		Steam
SUL	tonnes	Sulphur
SYNCRD	m ³	Synthetic Crude
WASTE	m ³	Waste
WATER	m ³	Water

ISC Product Codes

General Information		
ISC Product Code	Unit of Measurement	Description
C1-IC	10 ³ m ³	Methane In Stream
C2-IC	10 ³ m ³	Ethane In Stream
C3-IC	10 ³ m ³	Propane In Stream
C4-IC	10 ³ m ³	Butane In Stream
C5+-IC	10 ³ m ³	Pentanes In Stream
CO2-IC	10 ³ m ³	Carbon Dioxide In Stream
H2-IC	10 ³ m ³	Hydrogen In Stream
H2S-IC	10 ³ m ³	Hydrogen Sulphur In Stream
HE-IC	10 ³ m ³	Helium In Stream
N2-IC	10 ³ m ³	Nitrogen In Stream
O2-IC	10 ³ m ³	Oxygen In Stream
SUL-IC	10 ³ m ³	Sulphur In Stream



Oil Sands Product Codes

Product Code	Unit of Measurement	Product Description
OILSANDS	MTS	Oil Sands
	(Metric Tonnes)	
CRUDEBIT	m ³	Crude Bitumen
INTERHYD	m ³	Intermediate
		Hydrocarbon
SYNCRD	m ³	Synthetic Crude Oil
DILUENT	m ³	Diluent Naphtha
PROCGAS	10 ³ m ³	Process Gas
SUL	MTS	Sulphur
	(Metric Tonnes)	
COKE	MTS	Coke
	(Metric Tonnes)	
PURCHGAS	10 ³ m ³	Purchased Natural Gas
ELECTRIC	MWH	Electrical
	(mega watt hours)	
Blank Product		Blank Product



Appendix D – Activity Codes

Items in *italics* are not valid for data submission, but will be calculated by Petrinex. Items shown with an asterisk (*) can be submitted only when associated with a non-reporting facility such as a disposition to a Saskatchewan or BC facility or for specific circumstances i.e. Gas to a WP.

Activity Code	Description	Valid Facility Types
DIFF	Difference	All except WP
DISP *	Disposition	All
EMIS	Emission	All except WP
FLARE	Flare	All except WP
FLARWAST	Flared or Wasted	OS
FRAC	Fractionate	GP
FUEL	Fuel	All
FURPROC	Further Processing	OS
IMBAL	Imbalance	All
INJ	Injection	IF
INVADJ	Inventory Adjustment	All
INVCL	Inventory Close	All
INVOP	Inventory Open	All
LDINJ	Load injection	BT, GS
LDINVADJ	Load inventory adjustment	BT, GS
LDINVCL	Load inventory close	BT, GS
LDINVOP	Load inventory open	BT, GS
LDREC	Load recovered	BT, GS
MINED	Oil Sands Mined	OS
PLTUSE	Plant Use	IF, OS
PROC	Process to create product	GP, GS, OS
PROD	Production	BT, GS, OS
PURDISP *	Purchase Disposition	All except WP
PURREC	Purchase Receipt	All except WP
REC	Receipt	All
RECYC	Recycle	IF
SHR	Shrinkage	BT, CT, GP, PL, TM
SHUTIN	Shut in	All
UTIL	Utilities	IF
VENT	Vent	All except WP

Appendix E – Waste Codes

Waste Code	Waste Code Description
ACID	Acid Solutions (unneutralized)
ACTCRB	Activated Carbon
ASBEST	Asbestos
BATT	Batteries (Wet and Dry Cell)
BLBDWT	Boiler Blowdown Water
BRKWTR	Saline Water/Brackish Water - TDS > 4000 ppm
CATNS	Catalyst (Non-Sulphur)
CATSU	Catalyst (Sulphur)
CAUS	Caustic Solutions (unneutralized, spent)
CEMENT	Cement (Returns Dry)
COEMUL	Crude Oil/Condensate Emulsions (residuals after treatment)
CONMAT	Construction and Demolition Material
CORINH	Corrosion Inhibitor/Oxygen Scavenger Solutions
DESICT	Dessicant
DMDS	Dimethyl Disulphide Solutions
DOMWST	Garbage/Domestic Waste
DRWSHC	Drilling Waste Hydrocarbon
DRWSGC	Drilling Waste Gel Chemical
DRWSAC	Drilling Waste Advanced Gel Chemical
EMTCON1	Aerosol Cans
EMTCON2	Barrels, Pails
EMTCON3	Crude Oil Sample Bottles
EMTCON4	Cutting Oil Tubes
EMTCON5	Grease Cartridges
EMTCON6	Mud Sacks - Drilling
EMTCON7	Paint Cans/Brushes
EMTCON8	Pipe Dope Containers/Brushes
FILAPC	Filters - Air Pollution Control
FILFWT	Filters - Raw/Fresh Water
FILGLY	Filters Glycol
FILLUB	Filters - Lube Oil (Waste Type 201)
FILMTH	Filters - Methanol
FILOTH	Filters - Other (Raw/Fuel Gas, NGL's)
FILPWT	Filters - Produced/Process Water
FILSWT	Filters - Gas Sweetening (MEA, DEA, MDEA, Sulphinol)
FILWTT	Filters (Media) - Water Treatment

Appendix E – Waste Codes, cont'd

	1
FLBWSW	Filter Backwash Liquids (Gas Sweetening)
FLBWWT	Filter Backwash Liquids (Water Treatment)
FRCSND	Frac Sand - Non-Radioactive
FRFLDW	Frac Fluid (Water Based)
FRFLDH	Frac Fluid (Hydrocarbon Based)
FRSDR	Frac Sand - Radioactive (Plus other Radioactive Diagnostic Materials)
FSHWTR	Non-Saline Water/Fresh Water - TDS < 4000 ppm
GLYC	Glycol Solutions (No Heavy Metals)
GLYCHM	Glycol Solutions (Containing Lead or other Heavy Metals) (Waste Type 202)
HYDOIL	Hydraulic and Transmission Oil
IEXLIQ	Ion Exchange Resin Regenerant Liquids
IEXRES	Ion Exchange Resin
INCASH	Incinerator Ash
INOCHM	Chemicals (Inorganic)
IRNSPG	Iron Sponge
LDDOPE	Lead Based Products (Pipe Dope/Greases)
LDTAPE	Lead Based Products (H2S Sensing Tape)
LUBOIL	Lubricating Oil (Hydrocarbon and Synthetic)
MNFCTR	Manufacture
METHNL	Hydrotest Fluids - Methanol
NONOFD	Non-Oilfield Waste
NORM	Naturally Occurring Radioactive Materials - NORMs
OILABS	Absorbants
OILRAG	Rags
ORGCHM	Chemicals (Organic)
PCBBAL	Polychlorinated Biphenyls (PCBs) - Fluorescent Light Ballasts
PCBLIQ	Polychlorinated Biphenyls (PCBs) Askarel Liquids
PCBSLI	Polychlorinated Biphenyls (PCBs) - Contaminated Solids > 50 ppm < 1000 ppm
PCBSGI	Polychlorinated Biphenyls (PCBs) - Contaminated Solids > 1000 ppm
PCBSLF	Polychlorinated Biphenyls (PCBs) - Contaminated Solids < 50 ppm
PIGWST	Pigging Waste (Liquid and Wax)
PSTCON	Pesticide/Herbicide Containers
PSTHRB	Pesticides/Herbicides
PWTRHM	Water - Process (with Heavy Metals)
PWTROR	Water Process (with Organic Chemicals)



Appendix E – Waste Codes, cont'd

SALT	Salt Heat Medium
SAND	Sand - Produced
SLGCTW	Sludge - Cooling Tower
SLGEML	Sludge - Emulsion
SLGGLY	Sludge - Glycol/Gas Drying
SLGHYD	Sludge - Hydrocarbon
SLGLIM	Sludge - Lime
SLGPIT	Sludge - Flare Pit
SLGPRO	Sludge - Process
SLGSUL	Sludge - Sulphur
SLGSWT	Sludge - Gas Sweetening Systems
SMETAL	Metal (Scrap)
SOILCH	Contaminated Debris and Soil (Chemical/Solvent)
SOILCO	Contaminated Debris and Soil (Crude Oil/Condensate)
SOILEM	Contaminated Debris and Soil (Emulsion)
SOILHM	Contaminated Debris and Soil (Mercury/Metals)
SOILPT	Contaminated Debris and Soil (Pesticide/Herbicide)
SOILPW	Contaminated Debris and Soil (Produced/Salt Water)
SOILRO	Contaminated Debris and Soil (Refined Fuels/Oils)
SOILSU	Contaminated Debris and Soil (Sulphur)
SOLALP	Solvents/Residues (Non-Halogenated Aliphatic)
SOLARO	Solvents/Residues (Non-Halogenated Aromatic)
SOLHAL	Solvents/Residues (Halogenated)
SWSFLD	Swabbing Fluid
SWTLIQ	Sweetening Agents (Liquids)
SWTSOL	Sweetening Agents (Solids)
THPROT	Thread Protectors - Casing/Tubing
TRTHAY	Treater Hay
WASTE	Special waste code for a waste plant disposing to/receiving from another waste plant or injection facility
WATER	Water - Produced (Including Brine Solutions)
WOODCT	Wood (Chemically Treated/Cooling Tower)
WPAINT	Paints
WSHORG	Wash Fluids - Organic
WSHWTR	Wash Fluids - Water
WSTCGS	Waste Compressed or Liquified Gases
WSTCLQ	Waste Corrosive Liquid



Appendix E – Waste Codes, cont'd

WSTCSO	Waste Corrosive Solid
WSTFLQ	Waste Flammable Liquid
WSTFSD	Waste Flammable Solid
WSTMIS	Waste - Miscellaneous
WSTOLQ	Waste Oxidizing Liquid
WSTOSD	Waste Oxidizing Solid
WSTPLQ	Waste Poisonous Liquid
WSTPSD	Waste Poisonous Solid
WSTRDM	Waste Radioactive Material
WWOFLD	Well Workover Fluids



Appendix F – Applicable Out of Province

Facilities for Reporting APMC Volumes **SASKATCHEWAN**

SKCT0010821 – Baytex Tangleflags 8-24 Cleaning Plt

SKCT0012003 – Secure Kindersley FST

SKCT0012046 - Baytex Buzzard 16-27-47-26W3 CT

SKCTC100012 – Husky Landrose Cleaning Plant

SKCTC100014 – Husky Tangleflags 13-36

SKCTC100015 – Husky Lashburn Cleaning Plant

SKCTC100018 - Secure Silverdale

SKCTC100169 – CNRL East Till Cleaning Plant

SKCTC100883 - CNRL Golden Lake Cleaning Plant

SKCTC100887 – Caltex Dulwich Cleaning Plant

SKPLOP00013 - Husky Pipeline

SKPLOP00015 – Manito Pipeline

SKPLOP00018 - South Saskatchewan Pipeline

SKPLOP00060 – Mid Sask Pipeline (Light)

SKPL0025881 – Kerrrobert Lite Pipeline System

SKTM0013727 – Altex New Lashburn Terminal

SKTM0026182 – Secure Kerrobert Terminal

SKTMTT10002 - Dodsland Terminal

SKTMTT10007 – Dodsland Cleaning Plant Terminal

SKTMTT13003 – Tangleflags Terminal

SKTMTT13004 – Altex Lashburn Terminal

SKTMTT13006 – Husky Landrose Terminal

SKTMTT18002 – Gull Lake Terminal (Gibson)

SKTMTT15003 – Dulwich Terminal

SKTMTT18008 – Gull Lake Terminal (Plains)

SKTMTT21002 - Plover Lake Cleaning & Terminal

NOTE: If a Saskatchewan CTP Facility identified above is reported in pipeline splits as the Receiving Facility, it must also be reported as the CTP Facility.

British Columbia

BC TM 0007341 - Boundary Lake Terminal

BC CT 0007341 – Boundary Lake Custom Treater

BC OM 0008633 - Secure Dawson Creek FST

BC PT 0000300 – Plateau Delivery

BC PT 0000400 - Boundary Lake

BC PT 0000444 - Taylor Terminal

BC PT 0000500 - BC Light



Note: If using the above BC facilities as the Submitting Facility BA you must be signed in Petrinex with your AB BA.

Note: any changes to the lists above must be approved by the APMC