



JOB AID

EDIT/VALIDATION RULES RELATED TO ALBERTA MINEABLE OILSANDS DATA SUBMISSIONS IN PETRINEX

Updated: February 6, 2023



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1. EDITS

Edits are the business rules that are applied to information submitted to Petrinex.

Data Element Name	Validation Rule	Result Type	Message	Message Number
Facility ID	Must be an 11-digit, alphanumeric identifier (XX XX 9999999).	Error	Reported facility ID [value] is not a valid facility in Petrinex.	OSS001
Facility ID	First and second characters of id must be AB.	Error	Reported facility ID [value] is not a valid facility for Oil Sands submissions. First and second characters of id must be AB.	OSS008
Facility ID	Must be a valid facility ID in Petrinex.	Error	Reported facility ID [value] is not a valid facility in Petrinex.	OSS001
Facility ID	Third and fourth characters of id must be one of the reporting facility types (currently OS). This is validated against a database validation table to check that the facility type is allowed to make an Oil Sands submission.	Error	Reported facility ID [value] is not a valid facility for Oil Sands submission.	OSS002
Facility ID	This is the generic security error message, created when an event arises which is not covered by any of the following security related error messages.	Error	Access is denied for facility ID [value]. Consult your organization's security administrator (USA).	OSS003
Facility ID	Must be a valid facility associated with the BA as per infrastructure, for the production year month, or if BA has authority to do prior period amendment.	Error	Access denied. You are not identified as the operator of facility [value].	OSS014

Data Element Name	Validation Rule	Result Type	Message	Message Number
Facility ID	If the BA is not the operator of the Oil Sands facility, then no Oil Sands data can be viewed.	Error	Oil Sands Data for this facility/production month is not currently available to non-operators.	OSS004
Facility ID	Facility operational status must be 'active'. 'Active' includes any 'new' facilities made 'active' by the submission. The facility operational status is checked in a database validation table to ensure that the status is allowed to make an Oil Sands submission.	Error	Reported facility ID [value] does not have a valid operational status [value], for Oil Sands submission.	OSS005
Facility ID	If the facility operator's BA status is 'amalgamated' or 'amalgamated/continued out' the production month must be less than or equal to the 'established date'.	Error	The facility BA [BAId] is no longer valid. It has been amalgamated. The new id is [New BAId].	OSS012
Facility ID	For query submission: Facility start date must be earlier than the production month entered.	Error	Facility [value] does not exist/is not valid for production month [value].	OSS006
Facility ID	For on-line submission: Must be a valid facility associated with the user ID as per security.	Error	Access denied. You are not authorized for facility [value]. Please consult your organisation's security administrator (USA).	OSS015
Facility ID	For batch submission: Must be a valid facility associated with the submitter user ID as per security.	Error	Access denied. You are not authorized for facility [value]. Please consult your organisation's security administrator (USA).	OSS015
Facility ID	Petrinex will accept Oil Sands data for a BA whose corporate status is struck, continued out or dissolved. However a warning will be issued regarding their status.	Warning	Please be advised that the submitting BA has a corporate status of [value].	OSS011
Amendment Seq No	Online Query: Must be valid numeric value.	Error	Amendment number [value] is not valid.	OSS020
Production month	Cannot be blank.	Error	Reported production month cannot be blank.	OSS021
Production month	Must be a 6- digit numeric field. May be entered as YYYYM, but will be converted to 6 digit.	Error	Reported production month [value] is not valid, format should be YYYY-MM.	OSS022

Data Element Name	Validation Rule	Result Type	Message	Message Number
Production month	Must be reported as YYYYMM. This means it must be reported with year element first, as 4 digits.	Error	Reported production month [value] is not valid, format should be YYYY-MM.	OSS022
Production month	Must be a valid date (year month).	Error	Reported production month [value] is not valid, format should be YYYY-MM.	OSS022
Production month	Must be less than or equal to the current calendar month.	Error	Submission month [value] cannot be greater than the current production month.	OSS024
Production month	If production month is prior to Petrinex implementation, then Petrinex will reject the submission.	Error	Reported production month [value] is prior to Petrinex Oil Sands implementation. Contact AER for submission procedures.	OSS023
Activity	Cannot be blank.	Error	Reported activity cannot be blank.	OSS031
Activity	Must be a valid activity (see Section 4 – Activity Code List). This includes derived activities as well.	Error	Reported activity [value] is not valid.	OSS032
Activity	The activity must be valid for the reporting facility type (see Section 4 – Activity Code List)	Error	Reported activity [value] is not valid for reporting facility type [value].	OSS033
Activity	The combination of activity, product and from/to identifier must be unique for a reporting facility and production month.	Error	Activity [value], product [value] and from/to identifier [value] have been reported multiple times for this reporting facility and production month.	OSS034
Activity	Activity INVCL: Not valid if the submitting facility in the following production month has a status which is not 'active'.	Error	Submitting facility [value] has an operational status of [value] for production month [value], therefore INVCL cannot be reported for production month [value].	OSS047
Product	If reported: Must be a valid product (see database product table)	Error	Reported product [value] is not valid.	OSS061
Product	If reported: Must be a valid product for the activity (see Section 5 - Activity Code / Product validation table)	Error	Product [value] is not valid for activity [value].	OSS062

Data Element Name	Validation Rule	Result Type	Message	Message Number
Product	Product cannot be blank.	Error	Activity [value] reported with no product code.	OSS063
Received From/delivered to ID	Must be a valid from/to category type for the activity (see Section 6 - Activity Code / From/To validation table). The type could be 'Blank', 'Facility ID' or 'Miscellaneous ID'. For any production month after Saskatchewan "go-live" on Petrinex: This will include SK facility types. For any production month after British Columbia "go-live" on Petrinex: This will include BC facility types.	Error	From/to ID type [value] is not valid for activity [value].	OSS081
Received From/delivered to ID	Facility ID: Must be an 11-character, alphanumeric identifier.	Error	From/to facility ID [value] is not a valid facility.	OSS082
Received From/delivered to ID	Facility ID: First and second characters of id must be AB. For any production month after Saskatchewan "go-live" on Petrinex: First and second characters of id must be AB or SK. For any production month after British Columbia "go-live" on Petrinex: First and second characters of id must be AB, SK or BC.	Error	From/to facility ID [value] is not a valid facility.	OSS082
Received From/delivered to ID	Facility ID: Third and fourth characters of id must be one of the reporting facility type (OS stands for Oil Sands) or non-reporting facility types (BT, CT, CS, GS, GP, IF, RF, TM, MS, PL or WP). For any production month after Saskatchewan "go-live" on Petrinex: For SK facilities, third and fourth characters of id must be one of the reporting facility types valid for SK.	Error	From/to facility ID [value] is not a valid facility.	OSS082

Data Element Name	Validation Rule	Result Type	Message	Message Number
	For any production month after British Columbia “go-live” on Petrinex: For BC facilities, third and fourth characters of id must be one of the reporting facility types valid for BC.			
Received From/delivered to ID	Facility ID: Facility must exist in infrastructure/facility database tables.	Error	From/to facility ID [value] is not a valid facility.	OSS082
Received From/delivered to ID	Facility ID: Facility must have an 'active' status in infrastructure/facility database tables, for the reported production month.	Error	From/to facility ID [value] is not an “active” facility for production month [value].	OSS083
Received From/delivered to ID	Facility ID: from/to facility id must not be that of the reporting facility. For example, you cannot REC/DISP from/to yourself.	Error	From/to facility ID [value] is not valid for activity [value].	OSS084
Received From/delivered to ID	Facility ID: From/to facility id cannot be a meter station (MS) of subtype 635 or 636. These are summary meter stations, and do not participate in Oil Sands Submissions.	Error	From/to facility ID [value] is not valid. Summary meter station activity is not reported through the Oil Sands Submission process.	OSS107
Received From/delivered to ID	Miscellaneous ID: If first and second characters of id are AB, then there must be third and fourth characters. AB on its own, is invalid.	Error	From/to miscellaneous ID [value] is not valid.	OSS098
Received From/delivered to ID	Miscellaneous ID: If first and second characters of id are AB, then third and fourth must be one of the miscellaneous types (currently CO, EG, GE, IN, MC, ML, RE, R1, R2, OT). The from/to id must exist in infrastructure/miscellaneous database tables.	Error	From/to miscellaneous ID [value] is not valid.	OSS098
Received From/delivered to ID	Miscellaneous ID: For any production month prior to Saskatchewan “go-live” on Petrinex: If first and second characters of id are SK, then the from/to id is validated against the infrastructure/miscellaneous database	Warning	From/to miscellaneous ID [value] is not validated but accepted.	OSS099

Data Element Name	Validation Rule	Result Type	Message	Message Number
	tables. These are not rejected, if failure to validate, but are recorded and a warning issued.			
Received From/delivered to ID	Miscellaneous ID: For any production month prior to British Columbia “go-live” on Petrinex: If first and second characters of id are BC, then the from/to id is validated against the infrastructure/miscellaneous database tables. These are not rejected, if failure to validate, but are recorded and a warning issued.	Warning	From/to miscellaneous ID [value] is not validated but accepted.	OSS099
Received From/delivered to ID	Miscellaneous ID: If first and second characters of id are not AB, BC or SK, then they must be one of OS (Off Shore), other Canadian provinces or territories, or US states. The from/to id must exist in infrastructure/miscellaneous database tables. Any additional characters entered would just fail the existence test on the DB tables. (Note: MTGP and NTGP are valid entries).	Error	From/to miscellaneous ID [value] is not valid.	OSS098
Received From/delivered to ID	Miscellaneous ID: The miscellaneous ID must be valid for the reporting facility type Oil Sands (see Section 8 - Miscellaneous Code /Facility Type Validation table). This test is in addition to the general activity/reporting facility type test.	Error	From/to miscellaneous ID [value] is not valid for the reporting facility type [value].	OSS100
Received From/delivered to ID	Miscellaneous ID: The miscellaneous ID must be valid for the product entered (see Section 7 - Miscellaneous Code / Product validation table). This test is in addition to the general activity/product test.	Error	From/to miscellaneous ID [value] is not valid for product [value].	OSS101
Quantity	If reported: Quantity must be a valid numeric value	Error	Reported quantity [value] is not numeric.	OSS111

Data Element Name	Validation Rule	Result Type	Message	Message Number
Quantity	If reported: Quantity must be a valid number; max 9 digits before the decimal and max 1 digit after the decimal place	Error	Reported quantity [value] is an invalid format, max 9 digits before the decimal and max 1 digit after the decimal place.	OSS112
Quantity	Reported Quantity cannot be zero.	Error	Reported quantity cannot be zero.	OSS118
Quantity	Quantity cannot be blank.	Error	Activity [value] reported with no quantity.	OSS113
Quantity	If reported: Quantity must be a positive number. Exception: If activity is PROD, PLTUSE, INVADJ or DIFF, then positive and negative are allowed.	Error	Reported quantity [value] must be a positive number, for activity [value] and product [value].	OSS116
Assay	If reported: Assay must be a valid numeric value	Error	Reported assay [value] is not numeric.	OSS121
Assay	If reported: Assay must be a valid number with a maximum of 2 digits, 2 decimals.	Error	Reported assay [value] is an invalid format, number with a max of 2 digits and 2 decimals only.	OSS122
Assay	Reported Assay cannot be zero.	Error	Reported assay cannot be zero.	OSS128
Assay	If reported: Assay cannot be reported as a negative number.	Error	Reported assay [value] cannot be a negative number.	OSS123
Assay	Assay can only be entered for product OILSANDS.	Error	Assay can only be entered for the product OILSANDS.	OSS125
Assay	Assay must be entered for product OILSANDS and activities MINED and PROC.	Error	Assay must be reported for activity [value] and product [value].	OSS124
Assay	If reported: Assay must be 'reasonable' compared to the quantity entered. Assay should be greater than 0 and less than 25.	Warning	Reported assay [value] is not reasonable compared to reported quantity [value], range is 0 to 25.	OSS127
Comments	The maximum allowable number of characters is 2000.	Error	Comment length [character count] exceeded 2000 characters limit.	OSS129

2. AUTO-CREATE

Upon submission, a number of activity types, will cause other activity type records to be auto-created.

Note: There is no cross-border auto-creation between an Alberta Oil Sands facility and a Saskatchewan facility following Saskatchewan go-live in Petrinex.

.Action	Description
Auto-creation of an inventory opening balance (INVOP)	An INVOP is auto-created at extraction time for the next production month if an inventory closing balance (INVCL) is present in the current month. A prior period amendment may change an INVCL quantity, which will auto-create a new INVOP in the following production month.
Auto-creation of Receipt (REC) of Purchased Natural Gas from Meter station disposition (DISP) of Gas volumetric submission	If the MS submits a DISP of Gas to an Oil Sands facility, a REC of PURCHGAS will be created for the Oil Sands facility.
Shadow auto-creation of from volumetric submission to Oil Sands	Upon volumetric submission of a receipt (REC) / a disposition (DISP) from Oil Sands facility, a disposition (DISP) / a receipt (REC) will be created for the Oil Sands facility in the from/to field. This is not a real auto-creation and no any data will be created. This is display only. (See Section 12)

3. UNIT OF MEASURE

The following shows the unit of measurement that reported data should be made in, for different Oil Sands products.

Quantity unit of measurement ...

For gas products: **10³m³ (thousands of cubic meters)**

Includes PROCGAS, PURCHGAS

For liquids: **m³ (cubic meters)**

Includes CRUDEBIT, INTERHYD, SYNCRD, DILUENT

For sulphur: **MTS (metric tonnes)**

Includes SUL

For oil sands products: **MTS (metric tonnes)**

Includes OILSANDS, COKE

Electrical power unit of measurement ...

For electrical: **MWH (mega watt hours)**

Includes ELECTRIC

4. ACTIVITY CODE LIST

The following table shows the activity codes which are valid for mineable oilsands (S-23) submissions.

INVOP	Auto-created activity
REC	Manual activity, auto-create activity, Shadow auto-create activity
PROD	Manual activity
FURPROC	Manual activity
DISP	Manual activity, Shadow auto-create activity
FUEL	Manual activity
PLTUSE	Manual activity
FLARWAST	Manual activity
DIFF	Manual activity
INVADJ	Manual activity
INVCL	Manual activity
MINED	Manual activity
PROC	Manual activity
IMBAL	Auto-created activity

5. ACTIVITY CODE / PRODUCT VALIDATION TABLE

The following table shows the validation data used when validating activities against products...

Activity Code	Products Allowed
DIFF	All Products except OILSANDS, ELECTRIC, PROGAS and PURCHGAS
REC	All Products except OILSANDS
PROD	All Products except OILSANDS
FURPROC	All Products except OILSANDS and ELECTRIC
DISP	All Products except OILSANDS
FUEL	All Products except OILSANDS and ELECTRIC
PLTUSE	All Products except OILSANDS and ELECTRIC
FLARWAST	All Products except OILSANDS and ELECTRIC
FURPROC	All Products except OILSANDS and ELECTRIC
INVADJ	All Products except OILSANDS, ELECTRIC, PROCGAS and PURCHGAS
INVCL	All Products except OILSANDS, ELECTRIC, PROCGAS and PURCHGAS
MINED	OIL SANDS
PLTUSE	All Products except OILSANDS and ELECTRIC
PROC	OIL SANDS
IMBAL	All products except OILSANDS, ELECTRIC and PURCHGAS

6. ACTIVITY CODE / FROM/TO VALIDATION TABLE

The following table shows the validation data used when validating activities against from/to types.

Activity Code	Received From/Delivered To ID
INVOP	Blank
REC	Facility ID, Miscellaneous ID Exception: for product ELECTRIC, FromTo must be blank.
PROD	Blank
FURPROC	Facility ID, Miscellaneous ID
DISP	Facility ID, Miscellaneous ID Exception: for product ELECTRIC, FromTo must be blank.
FUEL	Blank
PLTUSE	Blank
FLARWAST	Blank
DIFF	Blank
INVADJ	Blank
INVCL	Blank
MINED	Blank
PROC	Blank

7. MISCELLANEOUS CODE / PRODUCT VALIDATION TABLE

The following table shows the validation data used when validating miscellaneous codes against products...

Province/State	Type Code	Products Allowed
AB	CO	PROCGAS, PURCHGAS
AB	EG	PROCGAS, PURCHGAS
AB	GE	PROCGAS, PURCHGAS
AB	IN	PROCGAS, PURCHGAS
AB	MC	All Products except OILSANDS, ELECTRIC, PROCGAS, PURCHGAS ,
AB	ML	PROCGAS, PURCHGAS
AB	OT	All Products except OILSANDS, ELECTRIC, PROCGAS, PURCHGAS
AB	R1	PROCGAS, PURCHGAS
AB	R2	PROCGAS, PURCHGAS
AB	RE	PROCGAS, PURCHGAS
OS		All Products
BC		All Products
MB		All Products
NB		All Products
NL		All Products
NT		All Products
NS		All Products
NU		All Products
ON		All Products
PE		All Products
QC		All Products
SK		All Products
YT		All Products
AK		All Products
AL		All Products
AZ		All Products

Province/State	Type Code	Products Allowed
AR		All Products
CA		All Products
CO		All Products
CT		All Products
DC		All Products
DE		All Products
FL		All Products
GA		All Products
HI		All Products
IA		All Products
ID		All Products
IL		All Products
IN		All Products
KS		All Products
KY		All Products
LA		All Products
MA		All Products
MD		All Products
ME		All Products
MI		All Products
MN		All Products
MO		All Products
MS		All Products
MT		All Products
NC		All Products
ND		All Products
NE		All Products
NH		All Products
NJ		All Products
NM		All Products
NV		All Products
NY		All Products
OH		All Products
OK		All Products
OR		All Products
PA		All Products
RI		All Products
SC		All Products

Province/State	Type Code	Products Allowed
SD		All Products
TN		All Products
TX		All Products
UT		All Products
VA		All Products
VT		All Products
WA		All Products
WI		All Products
WV		All Products
WY		All Products

8. MISCELLANEOUS CODE / FACILITY TYPE VALIDATION TABLE

The following table shows the validation data used when validating miscellaneous codes against reporting Oil Sands facility ...

Province/State	Type Code	Type Name	Type Description	Facility Types Allowed
AB	CO	Commercial	The operator of the facility will enter AB CO when GAS is delivered to customers that are engaged in selling, warehousing or distributing a commodity, in some business, profession, social or economic activity (e.g., offices, stores, clubs, hotels, etc.), or in servicing something that does not fall directly under a certain classification of service, such as residential and industrial. An operator may also use this code when gas is delivered for farm gas purposes.	OS
AB	EG	Electrical generation	The operator of the facility will enter AB EG when GAS is delivered to micro-turbines that generate electricity for delivery to the power pool (grid). The operator will also use this code to report the gas used to generate electricity delivered to the power pool (grid) from cogeneration.	OS
AB	GE	Gas equivalent	The operator of the facility will enter AB GE whenever liquids are removed from a gas stream.	OS
AB	IN	Industrial	The operator of the facility will enter AB IN when GAS is delivered to customers engaged in creating a product or changing raw or unfinished materials into another form or product, (e.g., factories, mills, machine shops, mines, oil wells, creameries, canning, packaging plants).	OS
AB	MC	Miscellaneous	The operator of a facility will enter AB MC for receipt of a product from a source other than a facility and that product is blended with heavy oil at a producing facility to meet pipeline delivery specifications. An operator may use this code to report the disposition of gas due to fire.	OS

Province/State	Type Code	Type Name	Type Description	Facility Types Allowed
			An operator may also use this code when the product is received from or delivered to a source not identifiable by any other code.	
AB	ML	Mainline	The operator of the facility will enter AB ML when showing gas movement between the facility and the mainline.	OS
AB	OT	Other	An operator may also use this code when the product is received from or delivered to a source not identifiable by any other code.	OS
AB	R1	Residential	The operator of the facility will enter AB R1 when GAS is delivered to customers who supply gas for residential purposes under individual contracts on a single-family dwelling or building or an individual apartment in a multiple-facility dwelling that has ≤ 4 or 5 units that are occupied as the home, residence, or sleeping place of one or more persons.	OS
AB	R2	Residential	The operator of the facility will enter AB R2 when GAS is delivered to customers who supply gas for residential purposes under individual contracts on a single-family dwelling or building or an individual apartment in a multiple-facility dwelling that has ≥ 4 or 5 units that are occupied as the home, residence, or sleeping place of one or more persons.	OS
AB	RE	Residential	The operator of the facility will enter AB RE when GAS is delivered to customers who supply gas for residential purposes under individual contracts on a single-family dwelling or building or an individual apartment in a multiple-facility dwelling or portion thereof that is occupied as the home, residence, or sleeping place of one or more persons.	OS
OS				OS
BC				OS
MB				OS
NB				OS
NL				OS
NT				OS
NS				OS
NU				OS
ON				OS
PE				OS
QC				OS
SK				OS
YT				OS
AK				OS

Province/State	Type Code	Type Name	Type Description	Facility Types Allowed
AL				OS
AZ				OS
AR				OS
CA				OS
CO				OS
CT				OS
DC				OS
DE				OS
FL				OS
GA				OS
HI				OS
IA				OS
ID				OS
IL				OS
IN				OS
KS				OS
KY				OS
LA				OS
MA				OS
MD				OS
ME				OS
MI				OS
MN				OS
MO				OS
MS				OS
MT				OS
NC				OS
ND				OS
NE				OS
NH				OS
NJ				OS
NM				OS
NV				OS
NY				OS
OH				OS
OK				OS
OR				OS
PA				OS
RI				OS
SC				OS
SD				OS
TN				OS
TX				OS
UT				OS
VA				OS

Province/State	Type Code	Type Name	Type Description	Facility Types Allowed
VT				OS
WA				OS
WI				OS
WV				OS
WY				OS

9. **PETRINEX SHADOW AUTO-POPULATED QUANTITY INFORMATION**

The current Oil Sands functionality requires the Oil Sands operator to enter every transaction except INVOP, IMBAL and REC PURCHGAS from a meter station.

For information purposes, Petrinex will provide quantity data that has been reported by other facilities that receive from / deliver to the Oil Sands facility.

This information will be displayed with the letter "i" on the Facility Activity view and is not editable. Also, the information lines will be displayed based on the PRA pre-defined reporting order.

These quantities will not be included in the balancing formula or displayed on the Summary view or the Oil Sands Facility Activity Report.