

Alberta Oil Sands Royalty Guidelines

Appendix

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Oil Sands Royalty Guidelines

Due to the size of this document the guidelines are under separate cover.

Appendix A

Oil Sands Royalty (OSR) Glossary

Act	In this document, the <i>Mines and Minerals Act</i> .
actual financial transaction	A transaction that has actually been incurred is supported by documentation and has specific, practical application for an OSR Project.
advance ruling	The Department's statement on how it will interpret the applicable laws, policies and guidelines with respect to proposed business arrangements or specific allowed costs that relate to OSR Projects.
allowed cost	Costs described in the Oil Sands Allowed Costs (Ministerial) Regulation (OSAC) that are eligible for deduction from OSR Project revenues in the calculation of oil sands royalty.
API gravity	The gravity of crude bitumen as measured by a hydrometer and expressed in degrees on the American Petroleum Institute (API) scale. $API\ gravity = (141.5 / \text{specific gravity}) - 131.5$. The lower the API gravity, the heavier and more viscous the bitumen. Athabasca bitumen has an API gravity number of less than 10°.
barrel	A measure of volume equivalent to 0.159 m ³ . For example 1590 m ³ is the equivalent of 10,000 barrels. For BVM purposes use a conversion factor of 6.29234 barrels per m ³ as per the BVM Regulation section 1(5)(a).
basic service	A service: provided, using a core or supporting asset that is not part of the OSR Project, 1) without which oil sands products, could not be physically recovered, or 2) that is necessary for the maintenance or operation of a core or supporting asset.
battery	A system of tanks or surface equipment that receives natural gas or crude oil from one or more wells prior to delivery to market or other disposition. A battery may include equipment for separating and measuring oil, gas and water.

bitumen	A sticky, tar-like form of crude oil which is so thick and heavy that it must usually be heated or diluted before it will flow. At room temperature, bitumen is much like cold molasses. It typically contains more sulphur, metals and heavy hydrocarbons than conventional crude oil. See also: crude bitumen, cleaned crude bitumen and blended bitumen.
blended bitumen	Cleaned crude bitumen that has been blended with diluent.
Board	In this document, the Energy Resources Conservation Board (ERCB).
cleaned crude bitumen	Crude bitumen from which impurities have been removed sufficiently to allow it, when blended with diluent, to be transported by pipeline.
cold production Project	Cold production Projects are any in-situ Projects that do not use steam or some form of heat in the reservoir. Examples of cold production Project would be secondary and tertiary recovery methods, such as waterflood or polymer flood. These Projects generally don't need fuel gas for extraction.
common management	Common Management will be defined by an organizational structure in which a single entity has responsibility for the day-to-day business decisions regarding the operation of only the OSR Project and that reflect the economic interests of the OSR Project and no other activity.
cogeneration	Co-generation means concurrent production of more than one usable form of energy from a single fuel source. For example, electricity and steam.
Corporate overhead	Costs that are not directly and solely incurred for the purposes of Project operations.
Crown	In this document, the Government of Alberta (that is, the Crown in right of Alberta).
Crown rights	Surface rights or mineral rights which are owned by the Crown.
crude bitumen	Despite section 1(1)(d) of the Mines and Minerals Act, "crude bitumen" means a viscous mixture, mainly of hydrocarbons heavier than pentanes, that may contain sulphur compounds and that is obtained from oil sands

cumulative cost	With regard to an OSR Project, the sum of (1) the OSR Project's prior net cumulative balance, (2) the OSR Project's allowed costs and (3) royalty paid to the Crown during the OSR Project's pre-payout Period.
cumulative cost balance	See net cumulative balance.
cumulative revenue	With regard to an OSR Project, the sum of Project revenue and other net proceeds received or receivable from the OSR Project's effective date onwards.
department	In this document, Alberta Energy.
development area	The lands and subsurface strata included as part of an OSR Project.
diluent	A hydrocarbon substance used to dilute crude bitumen so that it can be transported by pipeline.
disposition	Where any reference is made in the <i>Oil Sands Royalty Regulation, 2009</i> (OSRR'09, OSAC or BVMR) to the disposing or disposition of anything, the reference shall be construed as referring to a sale or any other disposition of the thing to a person who by reason of the sale or disposition becomes its owner.
effective date	With regard to an OSR Project, the date on which the OSR Project is approved and from which royalty begins to be calculated under the terms of the OSRR'09.
end of period statement (EOPS)	A type of royalty report required by the Department. An annual EOPS signed by an authorized officer is required for both pre-payout and post-payout OSR Projects. The statement provides a detailed summary of the financial- and production-related operations of the OSR Project.
facility	Includes but is not limited to, in the petroleum industry, an oil and gas battery, battery compressor station, gathering system, gas processing plant, reprocessing plant, gas injection facility, commercial storage facility, field dehydrator or separator, water disposal or injection plant, oil cleaning plant, waste processing and disposal facility, loading facility, truck or pipeline terminal.

fair market value	The Department's determination of the value of a good or service based on the value of comparable goods or services available on the open market.
freehold rights	Mineral rights that are not owned by the Crown in right of Alberta.
good faith estimate (GFE)	A type of royalty report required by the Department. A monthly GFE is required for post-payout OSR Projects. The estimate provides a detailed summary of the financial- and production-related operations of the OSR Project. It includes actual (or best estimates of) figures for previous months and forecasted figures for future months.
gross revenue	For an OSR Project, the Project revenue minus the cost of diluent contained in any blended bitumen included in the calculation of the Project's revenue.
handling charges	For an OSR Project, all charges incurred in moving an oil sands product from the royalty calculation point to the disposition point.
hedges	Transactions that use long term contracts, futures contracts, swap arrangements and other financial instruments to mitigate price fluctuations and reduce the risk of an investment.
"inside" a Project	Lands, leases, operations, facilities and infrastructure specified in an approved OSR Project description are said to be "part of the OSR Project" or "inside the OSR Project."
integrated Project	An OSR Project linked directly to a processing plant that has been designated as an integrated upgrader by the Minister.
lease	An oil sands agreement which grants rights to develop and use oil sands resources.
lessee	A holder of an oil sands agreement.
long-term bond rate (LTBR)	The rate, published weekly by the Bank of Canada that is applied as the return allowance, to the net cumulative balance or net loss of an OSR Project.

mineral rights	The rights to explore for, produce, and sell the minerals contained in a parcel of land. This entitlement may accrue through freehold ownership or through a Crown leasing arrangement.
Minister	In this document, the Alberta Minister of Energy.
month	As defined in the OSRR'09, the Period commencing at 8:00 AM on the first day of a month and ending immediately before 8:00 AM on the first day of the next month,
monthly royalty calculation (MRC)	A type of royalty report required by the Department. A monthly royalty calculation is required for pre-payout OSR Projects. It reports production, sales and royalty information for each oil sands product for the month.
net book value	For a capital asset, the original cost less accumulated depreciation.
net cumulative balance	The amount by which the cumulative costs of an OSR Project exceed its cumulative revenue. The net cumulative balance is sometimes referred to as the cumulative cost balance or the unrecovered balance.
net loss	For an OSR Project, the amount by which the allowed costs for a Period exceeds the sum of revenues and other net proceeds for the Period.
net revenue	For an OSR Project, the amount by which Project revenue exceeds Project costs (less other net proceeds) in a given reporting Period.
non-basic pipeline	Pipelines for transporting bitumen (or blended bitumen) to market (from a royalty calculation point to the point of disposition) are called non-basic pipelines. Similarly pipelines transporting diluents to an OSR Project are non-basic pipelines.
oil sands	Defined in the Mines and Minerals Act as <ul style="list-style-type: none">▪ sands and other rock materials containing crude bitumen▪ the crude bitumen contained in those sands and other rock materials▪ any other mineral substance (except natural gas) associated with the above-mentioned crude bitumen, sands or rock materials

oil sands product	Any product recovered from oil sands or any product obtained by processing oil sands, but not solution gas.
oil sands royalty (OSR) Project	An OSR Project for which royalty calculation and reporting is governed by the OSRR'09 and not a larger integrated Project of which the OSR Project may form a part.
opening balance	See prior net cumulative balance.
operator	An "operator" means the person who from time to time is shown in the records of the Department as the operator of an OSR Project or proposed project or if no such person is shown in the records of the Department, the person who is shown in those records as the lessee of the OSR Project, or proposed project respectively.
other net proceeds	Revenue (proceeds) earned as a result of selling, leasing or licensing OSR Project-related assets, technology or substances <i>other than</i> oil sands products.
"outside" a Project	Lands, leases, operations, facilities and infrastructure that are not specified in an approved OSR Project description are considered to be "outside the OSR Project."
participating interest	The proportion of ownership in the whole of an OSR Project that is held by any one OSR Project owner.
payout date	For a pre-payout OSR Project, the first day in the month in which the cumulative revenue of an OSR Project first equals the cumulative cost of the OSR Project.
Period	Each calendar year or portion thereof that occurs between an OSR Project's effective date and the date when OSR Project approval is revoked. If an OSR Project pays out during a year that year is divided into a pre-payout and a post-payout Period.
person	The term "person" includes firms, trusts, partnerships, joint ventures, associations, governments or government agencies.
post-payout period	Each Period commencing on or after the payout date of an OSR Project.

pre-payout period	Each Period commencing before the payout date of an OSR Project.
prior net cumulative balance	For an OSR Project, the opening balance of costs less revenues incurred prior to the OSR Project's effective date.
processing plant	A facility for obtaining crude bitumen from oil sands that have been recovered, or for obtaining oil sands products from oil sands, crude bitumen or a derivative of crude bitumen that have been recovered, that is approved under the <i>Oil Sands Conservation Act</i> .
production month	The month in which an oil sands product is recovered or obtained and delivered to the royalty calculation point.
Project	See oil sands royalty Project.
Project description	The section of an OSR Project approval order that specifies the lands, leases, operations, and facilities that are considered to be "part of the Project" or "in the Project." The approved OSR Project description for a new OSR Project is called the initial Project description. When an OSR Project is amended, the approved description referred to as the amended OSR Project description.
Project operator	See operator.
Project owner	The lessee of oil sands rights and the person who, according to Land Titles Office records, has the right to recover oil sands from the development area of an OSR Project.
Project revenue	The sum of the volume of each oil sands product delivered to the royalty calculation point times its unit price.
Project substances	Oil sands and oil sands products recovered from the development area of an OSR Project.
return allowance	A return on investment allowed in the calculation of oil sands royalty. For OSR Projects, the allowance is calculated using Canada's long-term bond rate. For pre-payout OSR Projects, a monthly return allowance is provided on the net cumulative balance for the month. For post-payout OSR Projects, a return allowance is provided if the OSR Project has a net loss at the end of the Period.

royalty	A share of production or equivalent revenue that is paid to the owner of a mineral resource in exchange for the use of that resource. Owners of mineral rights may lease these rights to oil and gas companies in exchange for a royalty.
royalty calculation point	For an OSR Project, the point at which the Crown's royalty share of the OSR Project's sales is measured. Generally, the point at which an oil sands product is removed from OSR Project lands, or where clean crude bitumen is first produced.
Steam Assisted Gravity Drainage (SAGD)	An enhanced oil recovery technology for producing heavy crude oil and bitumen, in which a pair of horizontal wells are drilled into the oil reservoir, one a few metres above the other. Low pressure steam is continuously injected into the upper wellbore to heat the oil and reduce its viscosity, causing the heated oil to drain into the lower wellbore, where it is pumped out.
sales price	The calculated value of the sales revenue divided by the sales volume.
sales revenue	The total proceeds from the sale of an oil sands product.
sales volume	The actual volume of the oil sands product sold.
synthetic crude oil	A mixture, mainly of pentanes and heavier hydrocarbons, that may contain sulphur compounds, that is obtained from crude bitumen and that is liquid at a temperature of 15 degrees Celsius and at a pressure of 101.325 kilopascals.,
Total Acid Number (TAN)	Is a number (expressed in milligrams (mg) of potassium hydroxide needed to neutralize the acid in one gram of oil) used to indicate the acid content of a crude oil or blend.
unit price	For an OSR Project, the value of oil sands substances at the royalty calculation point.
unrecovered balance	See net cumulative balance.
West Texas Intermediate	A reference crude oil, the price of which is used in determining oil sands royalty rates.
zone designation	A description of the stratigraphic interval for a particular set of mineral rights.

Appendix B

Forms (OSR) Submission List

Oil Sands Royalty reporting forms are available for download on the Department's website in Excel or PDF format (From the Department's website (<http://www.energy.alberta.ca/>), navigate to "Our Business," then to "Oil Sands," then "[Forms.](#)"), however all submissions must be made through the secure web application Electronic Transfer System (ETS) in Excel format.

Please note these Excel spreadsheets will be downloaded into a database – therefore no revisions to the forms' formats are allowed.

Refer to Section 7 of the Oil Sands Royalty Guidelines "Administration and Enforcement" for additional details to the forms listed below. If you have any concerns with form access and require assistance contact the "Oil Sands Royalty Account Inquiries" team. (See Appendix G, "Contact Information" or via the OS Reporting Mailbox - OSReport@gov.ab.ca).

Project Application Forms

Project Application: Lessees who have, or are pursuing, an OSR Project may apply for royalty treatment under the provisions of the *Oil Sands Royalty Regulation, 2009*. Projects that do not make an application under the Regulation and are not covered by an existing individual agreement will be subject to conventional royalty rates under the *Petroleum Royalty Regulation, 2009*.

- Application (Oil Sands Royalty Regulation, 2009)
- Economic Evaluation Data Requirement (For New Applications, Amendments and Project Amendments)
- Prior Net Cumulative Balance: Summary, Capital Cost Detail, Operating Cost Detail, Revenue Detail

Pre-Payout Project - Monthly Royalty Calculation (MRC) Reporting Forms

- MRC Pre-2009 - Use this form to report pre-payout monthly royalty for production months prior to January, 2009.
- MRC Effective 2009, revised January 2009 - Use this form, commencing January 1, 2009 to December, 2009, to report pre-payout monthly royalty effective production month January, 2009.
- MRC Effective 2009, Revised January 2010 - Use this form commencing January 1, 2010, to report pre-payout monthly royalty effective production month January, 2009.
- MRC 2008-12 ONLY - Use this form to report December, 2008 pre-payout royalty if project has Pre-2009 inventory to report.

Pre-Payout Project – End-of-Period Statement (EOPS) Reporting Forms

- Pre-Payout EOPS Pre-2009 - Use this form to report pre-payout end of period royalty prior to Period January, 2009.
- Pre-Payout EOPS Effective 2009 - Use this form to report pre-payout end of period royalty from Period January, 2009.
- Pre-Payout 2008 EOPS, for 2008 ONLY - Use this form to report pre-payout 2008 end of period royalty if Project has Pre-2009 inventory.

Post-Payout Project Good Faith Estimates (GFEs) Forms

- GFE Pre 2009 - Use this form to report post-payout monthly royalty for production months prior to January, 2009.
- GFE Effective 2009, revised January, 2009 - Use this form, commencing January 1, 2009, to report post-payout monthly royalty effective production month January, 2009.
- GFE Effective 2009, revised January, 2010 - Use this form, commencing January 1, 2010, to report post-payout monthly royalty effective production month January, 2009.

Post-Payout Project – End of Period Statement Reporting Forms

- Post-Payout EOPS, Pre 2009 - Use this form to report post-payout end of period royalty prior to Period 2009
- Post-Payout EOPS, Effective 2009 - Use this form to report post-payout end of period royalty from Period 2009.
- Post-Payout 2008 EOPS, for 2008 ONLY - Use this form to report post-payout 2008 end of period royalty if Project has Pre 2009 inventory.

Operator's Forecast Report

- This report must be submitted for Projects in both pre-payout periods and post-payout Periods.

Non-Project - Conventional Oil Sands Royalty Form (PSR)

- Conventional Oil Sands Royalty Calculation Form (use for periods prior to January, 2009)
- Conventional Oil Sands Royalty Calculation Form (use for periods after and including January, 2009)
- Conventional Oil Sands Royalty Calculation Form (use for periods after and including January, 2011)

Appendix C

Cost Analysis and Reporting Enhancement (CARE) Forms List

Effective 2011 Reporting Periods and Forward, the CARE forms format has been re-designed. Rather than individual files for each form type (as per the 2009 and 2010 reporting Periods), an excel workbook has been designed for CARE - Costs, Project and Revenue reporting which encompasses all the forms respectively.

- 1) **CARE Project Workbook.** Spreadsheets within this workbook cover:
 - Operations Data - Mining and In Situ Projects
 - Reserves Data - Mining and In Situ Projects
 - Reservoir Data - In Situ Projects
 - Deposit Data – Mining Projects
 - Volumetric Data - Mining and In Situ Projects (Non-Integrated)
 - Volumetric Data - Mining and In Situ Projects (Integrated Project)
 - Volumetric Data - Mining and In Situ Projects (Integrated Scheme)

- 2) **CARE Costs – In-Situ Project Workbook.** Spreadsheets within this workbook cover:
 - Allowed Cost / End of Period Statement Reconciliation – In-Situ Projects
 - Capital Cost Details
 - Allowed Operating Cost Summary
 - Allowed Operating Cost Details, Well Operations
 - Allowed Operating Costs Details, Cleaning Emulsion (Cold Production)
 - Allowed Operating Costs Details, Cleaning Emulsion & Water Treatment (Thermal Production)
 - Allowed Operating Cost Details, Steam Generation

- 3) **CARE Costs – Mining Workbook.** Spreadsheets within this workbook cover:
 - Allowed Cost / End of Period Statement Reconciliation – Mining Projects
 - Capital Cost Details
 - Allowed Operating Cost Summary
 - Allowed Operating Cost Details
 - Allowed Operating Costs Details, Extraction & Tailings
 - Allowed Operating Costs Details, Upgrading & Diluent Recovery Unit
 - Allowed Operating Cost Details, Utilities (UO/ES)

4) **CARE Revenue Workbook.** Spreadsheets within this workbook cover:

- Revenue Forms – Cover page
- Bitumen/Bitumen Blend Revenue - In Situ Projects
- Bitumen Blend Netback Calculation - In Situ Projects
- Diluent Supplied to Stream - In Situ Projects
- Transportation Costs - In Situ Projects
- Other Oil Sands Products Revenue - Mining and In Situ Projects
- Revenue Forms Summary

5) **Western Canadian Select (WCS) Sales**

Effective 2009 and 2010 Reporting Periods, any amendments to CARE forms for the Periods 2009 and 2010 must be completed in the original individual form's format as listed below:

CARE Volumetric, Operations, Reserves, Deposit and Reservoir Data Reports

- Volumetric Data (Integrated) - Mining and In-Situ
- Volumetric Data (Non-Integrated) - Mining and In-Situ
- Operations Data - Mining and In-Situ
- Deposit Data – Mining
- Reservoir Data - In-Situ
- Reserves Data - Mining and In-Situ

CARE Operating Cost by Function Reports

- Operating Costs – Mining
- Operating Costs - In-Situ

CARE Capital Cost by Function Report

- Capital Costs – Mining
- Capital Costs - In-Situ

CARE Revenues

- Bitumen/Bitumen Blend Revenue - In-Situ Projects
- Bitumen Blend Net Calculation - In-Situ Projects
- Transportation Costs - In-Situ Projects
- Diluent Supplied to Stream - In-Situ Projects
- Other Oil Sands Products Revenue - Mining and In-Situ Projects
- Western Canadian Select (WCS) Sales

Appendix D

CARE - Glossary

<p>The following definitions are specific to Cost Analysis and Reporting Enhancement (CARE) reporting forms. Any costs reported are allowable based on the <i>Oil Sands Royalty Regulation, 2009</i> (OSRR'09) and <i>Oil Sands Allowed Cost (Ministerial) Regulation</i> (OSAC).</p>	
<p>CAPITAL & OPERATING COSTS, OPERATIONS, VOLUMETRIC, and RESERVES DATA</p>	
<p>CAPITAL COST DEFINITIONS</p>	
<p>Bitumen Production Facilities and Equipment</p>	<p>For all primary, enhanced oil recovery (EOR), steam assisted gravity drainage (SAGD), cyclical steam stimulation (CSS) and other thermal in-situ Projects, this may include equipment at or near the producing wells including pump jacks, storage for chemicals, supplies and additives, chemical injection facilities, water injection facilities, additives injection facilities, steam injection facilities, diluent blending, metering and measurement equipment and bitumen storage tanks. Includes all administration buildings, operations offices, on-site housing, cafeterias, recreation facilities, warehouses, training facilities, maintenance and fabrication shops, wash bays, emergency services buildings, permanent camps, etc. May also include all or an allowable portion of any "off project" buildings and structures directly attributable to the Project in accordance with the Regulations. Includes all on or off-road vehicles, buses, snow clearing equipment, ski-doo's, aircraft, helicopters, boats, barges, fuel trucks, fire protection equipment, etc. dedicated to the Project or allocated portions of similar equipment.</p>
<p>Capitalization Methodology</p>	<p>Description of the capitalization policy adopted/used by the company. (e.g., Successful Efforts methodology, Full Cost methodology) Expressed as a narrative identifying dollar threshold determination and useful life measurement.</p>
<p>Co-Generation Plant(s)</p>	<p>Gas fired plant used to generate electric energy concurrently with thermal energy. Only includes the approved oil sands royalty (OSR) Project costs for the cogeneration plant(s), and associated infrastructure, supplying steam and electricity to the Project. It is necessary to segregate the capital associated with the generation of electricity from that used for generation of steam. Includes all administration buildings, operations offices, on-site housing, cafeterias, recreation facilities, warehouses, training facilities, maintenance and fabrication shops, wash bays, emergency services buildings, permanent camps, etc. May also include all or an allowable portion of</p>

	any "off project" buildings and structures directly attributable to the Project in accordance with the Regulations.
Delineation and Development	This relates to well activities that determine the boundaries or the extent of a reservoir or well activities within the proved reserve area. Includes seismic, core-hole testing, delineation and development drilling, well completions and all other related, incidental costs incurred on Project lands.
Emulsion Treating & Cleaning and Solid Waste Disposal	For in-situ Projects, include all costs associated with cleaning of produced bitumen, including gas separators and processing equipment, treaters, water reclamation and waste water disposal facilities, heaters, pumps, process tanks, solids waste removal or other waste product removal from the treatment of oil sands substances and disposal, solid waste landfills and salt caverns, processing related diluent blending and/or recovery, vapour recovery, metering and measurement devices, communications, buildings and shelters. Includes all administration buildings, operations offices, on-site housing, cafeterias, recreation facilities, warehouses, training facilities, maintenance and fabrication shops, wash bays, emergency services buildings, permanent camps, etc. May also include all or an allowable portion of any "off project" buildings and structures directly attributable to the Project in accordance with the Regulations.
Environmental Monitoring	Environmental monitoring provides data/information about the actual environmental impacts of a Project. They are used to monitor compliance with environmental standards or any other discharges to the environment, and to facilitate any needed Project design or operational changes. Includes the cost of air quality, soil, water quality and wildlife monitoring systems to the extent required or stipulated by the provincial or federal agencies or as part of the Project approval.
Extraction / Tailings	Separation of hydrocarbons from their source and water from the sand and clay to enable incorporation of solids into reclamation landscapes and recycling of water back into the operations. Within the extraction and tailings facilities, this may include separators, froth treatment equipment, chemical handling and storage, water systems, steam systems, tumblers, primary separation vessels, analyzers and scales, naphtha, vapour and diluent recovery units, tailings oil recovery facilities, water reclamation, tailings distribution, pumps, control systems, etc. and buildings or shelters to house these facilities. Includes all administration buildings, operations offices, on-site housing, cafeterias, recreation facilities, warehouses, training facilities, maintenance and fabrication shops, wash bays, emergency services buildings, permanent camps, etc. May

	also include all or an allowable portion of any “off project” buildings and structures directly attributable to the Project in accordance with the Regulations.
Gathering, Distribution & Storage	Gathering system means a pipeline or pipeline system, including installations and equipment associated with the pipeline or pipeline system, which transmits bitumen, solution gas used for Project operations and other oil sands products to a delivery point on Project lands. Includes all gathering systems, “in-Project” pipelines, bitumen storage and handling, water or steam distribution pipelines, power distribution systems, lighting systems, etc.
Strategic Capital	Capital expenditure to increase gross margin or decrease cost, e.g., through increased production capacity, product differentiation or reduced energy consumption.
Mining Equipment	<p>Includes all facilities in the “mining” and “extraction” areas of a mine. This may include dams and water systems, tailings units including pumps and pipelines, retaining walls, ramps, dump pockets, breakers, crushers, cyclo-feeders, conveyor systems, scales, etc. within the “mine”. Also includes all “in-mine” trucks, heavy haulers, shovels, drag-lines, reclaimers, graders, crawler tractors, loaders, buses, etc. associated with mining operations. Includes all administration buildings, operations offices, on-site housing, cafeterias, recreation facilities, warehouses, training facilities, maintenance and fabrication shops, wash bays, emergency services buildings, permanent camps, etc. May also include all or an allowable portion of any “off project” buildings and structures directly attributable to the Project in accordance with the Regulations.</p> <p>Includes all on or off-road vehicles, buses, snow clearing equipment, ski-doo’s, aircraft, helicopters, boats, barges, fuel trucks, fire protection equipment, etc. dedicated to the Project or allocated portions of similar equipment.</p>
Reclamation & Abandonment	Activities for the stabilization, contouring, maintenance, conditioning or reconstruction of the surface of land resulting in the land being able to support a range of activities similar to its previous use before oil sands development. By law, industry must post financial security equivalent to the cost of reclamation before beginning oil sands activity. Funds provided to the Environmental Protection Security Fund as required by law and returned to industry when reclamation certificates are issued. Provide aggregated capital costs for reclamation and abandonment related assets.

<p>Research</p>	<p>Costs for allowable in-house or third party research directly attributable to the Project as per the regulations. Costs to fund technology to solve a problem of immediate applicability to the particular Project, e.g., improving bitumen froth treatment in the Project facility; improving SAGD performance in a particular reservoir.</p> <p>Note: Any consideration received from the technology developed in the Project the cost of which were allowed costs in the Project must be included as other net proceeds.</p>
<p>Steam Generation & Distribution</p>	<p>Includes the cost of capital assets used solely for the purpose of generating steam for use in an OSR Project. The assets will be those between a boiler feed water metering facility at the inlet to the plant and the wellheads of all the steam injection wells on a Project. Steam plants may be located at a central facility or remotely located at various points within an approved OSR Project.</p> <p>Capital assets for steam generation within a co-generation facility are excluded from this category. Includes all administration buildings, operations offices, on-site housing, cafeterias, recreation facilities, warehouses, training facilities, maintenance and fabrication shops, wash bays, emergency services buildings, permanent camps, etc. May also include all or an allowable portion of any “off project” buildings and structures directly attributable to the Project in accordance with the Regulations.</p>
<p>Sustaining Capital</p>	<p>Capital expenditure required to preserve the integrity of the asset, includes investment to mitigate once-off or recurring Health Safety Security Environment (HSSE) and reputation risks, HSSE investment required by law without which the unit/site would not have an operating license. Capital expenditures required to sustain production levels of the Project including costs for replacement production wells.</p>
<p>Transportation Infrastructure</p>	<p>Includes all Project roads, bridges, marine and air transportation infrastructure facilities, airstrips, hangers, docks, fixed radio, meteorological or navigation equipment, hangers, docks, but excluding vehicles, aircraft, helicopters, boats, barges, etc. Also includes all or an allowable portion of any “off project” transportation infrastructure required to access the Project.</p>

<p>Upgrading Facilities</p>	<p>The process that converts bitumen and heavy crude oil into a lighter crude oil by increasing the ratio of hydrogen to carbon, either by removing carbon (coking) or adding hydrogen (hydro-processing). Includes all bitumen processing (i.e., “upgrading”) equipment, “downstream” of the Extraction plant, intended to produce synthetic crude oil. Such equipment may include diluent recovery facilities, cokers, hydrogen units, hydro-treaters, sulphur units, sour water treaters, water systems, interconnecting piping, feed, chemical and product storage tanks, pumps and compressors, electrical equipment and distribution systems and buildings or shelters to house all such equipment. Includes all administration buildings, operations offices, on-site housing, cafeterias, recreation facilities, warehouses, training facilities, maintenance and fabrication shops, wash bays, emergency services buildings, permanent camps, etc. May also include all or an allowable portion of any “off project” buildings and structures directly attributable to the Project in accordance with the Regulations.</p>
<p>Utility Plants (Mining)</p>	<p>Includes all plants providing “utility type” services to the Project including but not limited to raw water, treated and potable water, solid or liquid waste treatment, process steam, electricity, hydrogen, air, natural gas, syngas, etc. This category specifically excludes co-generation facilities whose costs must be reported separately. Includes all administration buildings, operations offices, on-site housing, cafeterias, recreation facilities, warehouses, training facilities, maintenance and fabrication shops, wash bays, emergency services buildings, permanent camps, etc. May also include all or an allowable portion of any “off project” buildings and structures directly attributable to the Project in accordance with the Regulations.</p> <p>Note: For in-situ Projects this cost would be reported under the category “Emulsion Treating & Cleaning”. In addition, for in-situ Projects that construct specific utility purpose facilities within the Project this cost should be segregated and reported in the “Other” cost category.</p>
<p>Water Treatment & Handling (In-Situ)</p>	<p>For in-situ Projects, include all costs associated with the sourcing, treatment, storage and distribution of water for the purpose of steam generation, water flood injection, potable water supply, etc. Includes the costs of any capital assets used to source the water and transport it to the OSR Project. Also includes all capital costs for water source facilities including wells. Includes all administration buildings, operations offices, on-site housing, cafeterias, recreation facilities, warehouses, training facilities, maintenance and fabrication shops, wash bays, emergency services buildings, permanent camps, etc. May also include all or an allowable portion of any “off project” buildings and structures directly attributable to the Project in accordance with the Regulations.</p>

OPERATING COST DEFINITIONS	
Cleaning Emulsion & Water Treatment Activity – Thermal Production	The separation of water and bitumen emulsion into components for further treating or upgrading. Treatment process includes separation of gas and other substances, such as sand, from the production stream and may also include blending within the treatment process.
Cleaning Emulsion Activity – Cold Production	The separation of water and bitumen emulsion into components for further treating or upgrading. Treatment process includes separation of gas and other substances, such as sand, from the production stream and may also include blending within the treatment process.
Contracted Services	Provide the total costs of all third party contracted services including the costs of labour, hardware, software, equipment (excluding long term equipment rentals/leases identified below), professional services, performance inducements, bonuses, etc. for all contracts. Includes aggregate costs for third party provided utilities including services as water, sewer, compressed air and communications.
Energy – Other	Provide the cost of any other purchased energy (e.g., hydrogen, steam, etc.) consumed on the Project and includes the provision of non-arm's length supplied energy commodities.
Environmental Levies	Payments to local governments for the specific purpose of funding environmental protection and natural resource management projects within the local government area.
Equipment Rentals	Provide aggregated costs associated with equipment rentals or leases.
Extraction / Tailings Activity	Separation of hydrocarbons from their source and water from the sand and clay to enable incorporation of solids into reclamation landscapes and recycling of water back into the operations.
Labour Compensation Off-Site – Direct	Direct Labour Costs defined as costs specifically tracked and assigned to a function or facility incurred off-site the Project. Provide total compensation costs for all Project employees including salaries, benefits, bonuses, stock options and any other form(s) of remuneration whether fixed or variable.

<p>Labour Compensation Off-Site - Shared</p>	<p>Provide total costs for all supplied corporate services, such as engineering, marketing, accounting, legal, human resources, etc. whose time is directly attributable to the Project and are incurred off-site of the Project. Costs include compensation (salaries, benefits, bonuses, stock options and any other form(s) of remuneration whether fixed or variable).</p>
<p>Labour Compensation On-Site – Direct</p>	<p>Direct Labour Costs defined as cost specifically tracked and assigned to a function or facility incurred on-site of the Project. Provide total compensation costs for all Project employees including salaries, benefits, bonuses, stock options and any other form(s) of remuneration whether fixed or variable.</p>
<p>Labour Compensation On-Site - Shared</p>	<p>Provide total costs for all supplied corporate type services, such as engineering, marketing, accounting, legal, human resources, etc. whose time is directly attributable to the Project and are incurred on-site the Project. Costs include compensation (salaries, benefits, bonuses, stock options and any other form(s) of remuneration whether fixed or variable). Shared Labour Costs defined as costs that are accumulated in a general labour pool and prorated to a function or facility based on a percentage basis.</p>
<p>Mining Activity</p>	<p>Mining is the recovery of oil sands from the ore body.</p>
<p>Municipal/Provincial Taxes & Fees</p>	<p>Includes the aggregate of all taxes and fees paid to municipal and provincial governments.</p>
<p>Processing Fees (Non-Arm’s Length)</p>	<p>Includes the cost of all fees paid to non-arm’s length parties for processing oil sands products.</p>
<p>Processing Fees (Third Party)</p>	<p>Includes the cost of all fees paid to third parties for processing oil sands products.</p>
<p>Purchased Energy - Electricity</p>	<p>Provide the cost of all purchased electricity consumed in the Project.</p>
<p>Purchased Energy – Natural Gas</p>	<p>Provide the cost of all purchased natural gas consumed in the Project. This includes solution gas “deemed to be sold from one Project to another for consumption purposes so the receiving Project has a purchase cost.”</p>

Purchased Feedstock (Non-Arm's Length)	Include the cost of all bitumen, or any other oil sands products, purchased from non-arm's length parties for processing within the Project.
Purchased Feedstock (Third Party)	Include the cost of all bitumen, or any other oil sands products, purchased from others for processing within the Project.
Steam Generation Activity	A boiler or steam generator used to create steam by applying heat energy to water.
Supplies & Materials	Provide costs for all supplies and materials purchased for the Project, including but not limited to chemicals, injectants, transportation fuels, office and administrative supplies, cleaning supplies, spare parts, maintenance items, etc.
Upgrading / DRU Activity	All operating costs associated with upgrading bitumen to synthetic crude oil. Diluent Recovery Unit is an operating unit for solvent or diluent recovery from oil sand product streams.
Utilities (UO/ES) Activity	The activity of supplying an energy source to be consumed in approved oil sands processes.
Well Operations Activity (Including Delineation & Development)	All costs related to the operation of a producing, observation, injecting, source and disposal wells.
VOLUMETRIC DATA	
Note: Reporting on the Volumetric form is on a Project basis and not on an equity basis if more than one joint venture participant.	
Bitumen	The principal hydrocarbon resource produced from an OSR Project in designated oil sands areas. Measured in m ³ . Note: On this form for volumetric data pertaining to bitumen, third party volumes means any volumes that do not originate at the OSR Project.
Coke	One of the products of a thermal cracking process used to convert long chain bitumen hydrocarbon into shorter chain gases and gas oils coke. Coke is a material that is essentially pure carbon. Measured in tonnes.

Consumed	A product utilized or expended in an approved oil sands process.
Delivered to the Royalty Calculation Point (RCP)	As defined in OSRR'09, Part 4, Division 2, Section 30.
Diluent	A hydrocarbon fluid that is used to dilute bitumen and heavy oil so as to reduce its viscosity for easier transportation. Measured in m ³ .
Electricity	Electricity may be generated on a Project site, normally using gas fired generators, or from a co-generation plant where steam is also produced. It may also be purchased from or sold to a third party through an electrical power transmission grid. Measured in KWh.
CO ₂ - Green House Gas (GHG) Emissions	Greenhouse Gas Emission: Release of CO ₂ equivalent based on the sum of direct emissions of carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), hydro fluorocarbons (HFC), per fluorocarbons (PFC), and sulphur hexafluoride (SF ₆). Measured in ktonnes.
Heavy Minerals	Heavy minerals include typically zirconium, titanium, thorium, tungsten and rare earth elements. Measured in kg.
Natural Gas	Naturally occurring mixtures of hydrocarbon gases and vapours, mostly methane (CH ₄) and may be used as a thermal energy source or as a source of hydrogen for various hydro-treating processes. Note: This included solution gas as defined in OSRR'09, Part 1, Section 1(1)(rr). Measured in 10 ³ m ³ .
Overburden	Overburden refers to the material that lies above the area of economic interest (i.e., the rock and soil that lies above the oil sands deposit). Overburden is removed during surface mining and is typically stored to be later used in reclamation to restore a mining site to a semblance of its condition before mining began. Measured in banked cubic metres.
Processed	Processing means the action of creating new product(s) from existing product(s) by: <ul style="list-style-type: none"> - Extracting component gases and/or liquids from a product; - Combining two or more products; and - Altering the state in which a product exists, i.e., changing a product from a solid state to a liquid state.

Produced	Produced means unsold, unprocessed substance composed of products recovered from a formation, which originates at the first point of separation/measurement after the wellhead or surface and ends at the next processing point.
Purchased	A product or service purchased for use in an approved oil sands process.
Solvents	Solvents are fluids, capable of dissolving with the oil they contact, injected into a reservoir to form a single liquid that can move through the reservoir to a producing well more easily than the original crude oil. Measured in m ³ .
Steam	Steam refers simply to vaporized water. It is a two-phase mixture of liquid water and steam produced from a generator or boiler. Higher quality steam has higher vapour content. In thermal recovery operations, it is injected into reservoirs to reduce the viscosity of the bitumen so it will flow more easily to a producing well bore or to provide heat to a variety of processing plants. Measured in tonnes/day and reported in cold water equivalent (CWE) m ³ . Steam is measured in the number of metres cubed of cold water that will be vaporized to generate the steam.
Sulphur	Elemental sulphur is produced from a process to remove hydrogen sulphide from produced hydrocarbons including bitumen, heavy oil and solution gas. It may be shipped to market in liquid or solid form or, due to ongoing limited markets and low prices, is often stored by pouring molten sulphur into large solid blocks pending its sale. Measured in tonnes.
Synthetic Crude Oil	A mixture mainly of pentanes and heavier hydrocarbons which may also contain sulphur compounds that is derived from crude bitumen and is liquid at the conditions under which its volume is measured. The output of a process employed to “upgrade” (through the addition of hydrogen or the rejection of carbon) bitumen into a marketable product as feedstock for multiple downstream refineries. Measured in m ³ .
Tailings	Tailings are the waste material from the Extraction Plant in an oil sands mining operation. Tailings are principally water but contain significant amounts of clay, residual hydrocarbon, heavy metals and other impurities. Measured in m ³ .

Water	In the context of an OSR Project, it may refer to ground water, produced water, surface fresh water, processed or treated water, waste water, etc. Measured in m ³ .
OPERATIONS DATA	
CO ₂ Capture	The total amount of CO ₂ captured and shipped to an approved “sequestration” project or facility which utilizes or further processes the CO ₂ such that it is not released into the atmosphere.
CO ₂ Emissions	The calculated total amount of CO ₂ emissions from the OSR Project in tonnes per year as required by the mandatory GHG reporting initiative started in 2004.
NO _x Emissions	The total amount of Nitrogen Oxides emissions in annual average tonnes per day from all sources within the OSR Project.
Number of Site Staff (Full Time Equivalency – FTE)	The total number of operator employed permanent staff whose principal place of work is at the OSR Project and whose compensation is charged to the Project as a component of the “operating cost”.
SO ₂ Emissions	The total amount of sulphur dioxide emissions in annual average tonnes per day from all sources within the OSR Project.
Water Recycle Rate	The amount of process water that is recycled as a percentage of total water used on the Project. Water Recycle Rate (%) = (Volume of produced water in recycle stream) / (Total inflow of water to the water processing plant) x 100
DEPOSIT & RESERVOIR DATA	
Bitumen Density	A measure of the mass of a substance per unit of volume (i.e., kg/m ³) the mass occupies, usually reported at standard temperature and pressure (STP). For bitumen, the density measurement is the value derived from a representative bitumen sample that has been prepared and measured according to generally accepted standard practices (i.e., ASTM4052).

Bitumen Viscosity	Viscosity is a measure of the resistance of a fluid to flow and normally measured in centipoises ("cP"). It is commonly perceived as "thickness".
Deposit Thickness	Provide the weighted average thickness of the recoverable oil sands deposit within the OSR Project.
Depth to Top of Deposit	The distance from the top of the oil sands deposit to the surface measured in metres.
Mine Area	The total expected surface area of the mine, excluding any sterilized area, measured in metres squared.
Oil Grade	The determination of the amount of bitumen within the oil sands deposit. <i>Low grade – approximately 8% bitumen</i> <i>Medium grade - approximately 10% bitumen</i> <i>High grade - approximately 13% bitumen</i>
Oil Saturation	The measurement of the fraction, or percentage of the total pore volume of the reservoir occupied by bitumen. Measured as a percentage.
Original Bitumen in Place (OBIP)	The original oil in place is the total hydrocarbon content of an oil reservoir before the commencement of production. Oil in place should not be confused with oil "reserves" that are the technically and economically recoverable portion of it. Provide the calculated OBIP for the producing horizon within the area as defined by the operator.
Permeability - Horizontal	The measure of ease with which a fluid flows in a horizontal direction through the connected pore space of a reservoir rock ability typically measured in Darcie's or milliDarcies. Permeability should be measured as the absolute permeability using 100 percent saturation of a liquid (brine) in the reservoir. Provide a weighted average permeability of the bitumen producing zone within the OSR Project. <i>Average – weighted average permeability of the bitumen producing zone within the OSR Project.</i> <i>Range – range across the Project area</i>

Permeability – Vertical	<p>The measure of ease with which a fluid flows in a vertical direction through the connected pore space of a reservoir rock ability typically measured in Darcie's or milliDarcies. Permeability should be measured as the absolute permeability using 100 percent saturation of a liquid (brine) in the reservoir.</p> <p><i>Average – weighted average permeability of the bitumen producing zone within the OSR Project.</i></p> <p><i>Range – range across the Project area</i></p>
Porosity	<p>The percentage of pore volume or void space that can contain fluids. Provide a weighted average porosity of the producing zone within the OSR Project.</p>
Reservoir Area	<p>The area used to determine the bulk volume of crude bitumen deposit measured in m²:</p> <ul style="list-style-type: none"> - For land based approvals, the reservoir area is the entire royalty Project area. - For well based approvals, the reservoir area is the well drainage area.
Reservoir Depth	<p>Provide the weighted average depth from surface to the top of the producing zone within the OSR Project.</p>
Reservoir Net Pay	<p>Defined as the thickness of the porous, permeable interval of the reservoir containing oil sands reserves which are anticipated to be economically recoverable. Calculated as the weighted average reservoir net pay over the entire OSR Project area.</p>
Reservoir Pressure - Initial	<p>The initial reservoir pressure at the reference elevation of a pool upon discovery.</p>
Reservoir Temperature - Initial	<p>The initial reservoir temperature at the reference elevation of a pool upon discovery.</p>
Reservoir Thickness	<p>Calculated as the weighted average thickness of the oil sands zone over the entire OSR Project area.</p>

RESERVES DATA	
Initial Proven Reserves	<p>Defined in either COGEH or SPE - PRMS as bitumen reserves within the company defined Project area having a "high degree of certainty" (90% probability) of being produced using current technology at current prices, with current commercial and regulatory terms and conditions prior to first production at inception of the OSR Project application.</p> <p>For OSR Projects approved prior to June 30, 2009, operators may determine the "As at Date" to provide the DOE with a historical date. Operator defined date must be December 31, 2008 or earlier.</p> <p>Note: Report gross reserves calculated prior to royalty determination.</p>
Initial Proven + Probable Reserves	<p>Defined in either COGEH or SPE - PRMS as bitumen reserves within the company defined Project area that is reasonably probable (50% probability) of being produced using current or likely technology at current prices, with current commercial and regulatory terms and conditions prior to first production at inception of the OSR Project application.</p> <p>For OS Projects approved prior to June 30, 2009, operators may determine the "As at Date" to provide the DOE with a historical date. Operator defined date must be December 31, 2008 or earlier.</p> <p>Note: Report gross reserves calculated prior to royalty determination.</p>
Methodology Used to Determine Reserves	<p>Canadian Oil and Gas Evaluation Handbook (COGEH) Society of Petroleum Engineers –Petroleum Resource Management System (SPE-PRMS)</p>
Project Area	<p>Defined as the area consistent with the operator's current life plan for the Project. Identify all OSR Project(s), ERCB Approved Project Area(s) and Approved OS leases. Plat style map to be submitted to depict operator's definition of Project area with corresponding township, range and section.</p>
Remaining Proven Reserves	<p>Defined in either COGEH or SPE - PRMS as remaining bitumen reserves within the company defined Project area having a "high degree of certainty" (90% probability) of being produced using current technology at current prices, with current commercial and regulatory terms and conditions as of December 31 of the previous calendar date.</p> <p>Note: Report gross reserves calculated prior to royalty determination.</p>

<p>Remaining Proven + Probable Reserves</p>	<p>Defined in either COGEH or SPE - PRMS as remaining bitumen reserves within the company defined Project area that is reasonably probable (50% probability) of being produced using current or likely technology at current prices, with current commercial and regulatory terms and conditions as of December 31 of the previous calendar date. Note: Report gross reserves calculated prior to royalty determination.</p>
<p>REVENUE REPORTING</p>	
<p>COVER PAGE</p>	
<p>Cleaned Crude Bitumen</p>	<p>Crude bitumen from which impurities have been removed sufficiently to allow it, when blended with diluent, to be transported by pipeline or truck or any other means of transportation.</p>
<p>Density (Cleaned Crude Bitumen)</p>	<p>Bitumen Density – a measure of the mass of a substance per unit of volume (i.e., kg/m³) the mass occupies, usually reported at standard temperature and pressure (STP). For bitumen, the density measurement is the value derived from a representative bitumen sample that has been prepared and measured according to generally accepted standard practices (i.e., ASTM4052).</p>
<p>Sulphur Content (Cleaned Crude Bitumen)</p>	<p>The amount of sulphur, as a percentage of volume, contained within the cleaned crude bitumen at the royalty calculation point. Measured as a percentage of volume (i.e., (sulphur m³/bitumen stream m³) x 100% = sulphur %).</p>
<p>Stream Name</p>	<p>Bitumen blend that comes from a specific area with a consistent quality or bitumen that comes from a heated pipeline. Choose the “Stream Name” from the drop down. If the “Stream Name” does not appear in the drop down menu, use “Other Stream” and enter the name in the “If Other Stream” cell. If the moniker changes before it reaches the Point of Sale, please specify the new moniker in the notes section and contact the Department for a Secondary Blend Revenue form.</p>

REVENUE REPORTING	
BITUMEN/BITUMEN BLEND REVENUE	
Arm's Length Transactions	Where an operator sells goods and services to an entity with which the operator does not have a relationship, these transactions would be considered at arm's length. A relationship is considered arms length if it does not meet the Non Arm's Length definition below.
Handling Charge	As defined under the Regulation, the cost to transport the oil sands product from the RCP to a sales point relating to sales volumes sold in that month and reported on the GFE or MRC. Such costs may include prorated pooled costs relating to cost of service for use of the pipeline and pipeline tariffs and trucking costs incurred. Note: Enter one monthly total for all Arms' Length Volumes transacted in the month and one monthly total for all Non Arms' Length Volumes transacted in the month for the stream, irrespective of Point of Sale.
Month of Sale	The month in which the transfer of title occurs.
Non-Arm's Length Transactions	Where an operator sells goods and services to an entity with which the operator has a relationship these transactions would be considered at non-arm's length. Note: persons shall be regarded as not dealing at arm's-length with each other if, for the Period as defined under the Regulation, they are related parties within the meaning of the CICA Handbook published from time to time by the Canadian Institute of Chartered Accountants.
Point of Sale	The location where the title transfer of the product occurs. If the transfer occurs in Canada, identify the hub or terminal. If title transfer occurs in the US, identify the State and Petroleum Administration Defense District (PADD).

Product Type	<p>Bitumen or blended bitumen.</p> <p>Dilbit - Dilbit is a syllabic abbreviation of 'diluted bitumen.' The bitumen has been blended with condensate or naphtha or other types of diluents excluding synthetic crude oil. .</p> <p>SynBit - Bitumen has been blended with synthetic crude oil.</p> <p>SynDilBit – The bitumen that has been blended with synthetic crude oil and condensate.</p>
Product Volumes	<p>Bitumen blend stream volumes sold as measured in cubic metre. Identify in the footnote section whether the sales volumes contain oil sands sales volumes subject to conventional royalty calculations (PSR). Enter volumes sold at Arm's Length and Non-Arm's Length transactions.</p>
Product Price	<p>The consideration received in Canadian dollars per cubic metre for the blended bitumen stream volumes sold. If multiple sales occur at the same point of sale then report the weighted average price. For each Point of Sale, enter Product Prices for volumes sold at Arm's Length and Non-Arm's Length transactions.</p>
Bitumen Blend Netback Calculation	
Blend Volume	<p>Identify the volume of bitumen blend crossing the RCP. Report the volume in cubic metre.</p>
Diluent Sent back to Project	<p>Identify if the diluent was sent back to the OSR Project or to the diluent pool outside the OSR ring fence. Report "Yes" or "No" in the field.</p>
Diluent Type	<p>The type of diluent blended with the bitumen to meet pipeline specifications. E.g., butane, condensate, synthetic crude oil etc. Use drop down menu to select Diluent Type. If the Diluent Type does not appear in the drop down list choose Other, and enter the Diluent Type in the Notes section.</p>
Diluent Volume	<p>Diluent Volume is the volume of diluent (per diluent type) in the bitumen blend crossing the RCP. Report the volume in cubic metre. If diluent is added after the RCP yet before the Point of Sale, assume that the diluent is added at the RCP.</p>

Diluent Price	The price of diluent (per diluent type) used in the bitumen blend. If pooled diluent is used then the weighted average price should be reported.
Month of Sale	The month in which the transfer of title occurs.
Shrinkage Volume	Identify the shrinkage volume resulting from the blending of hydrocarbons with disparate densities. Report the volume in cubic metre.
DILUENT SUPPLIED TO PROJECT – IN-SITU PROJECTS	
Arm's Length Transactions	Where an operator acquires goods and services from an entity with which the operator does not have a relationship these transactions would be considered at arm's length. Note: Enter the diluent volume supplied at Arm's Length as a percentage of total diluent volume supplied.
Non-Arm's Length Transactions	Where an operator acquires goods and services from an entity with which the operator has a relationship these transactions would be considered at non-arm's length. Note: persons shall be regarded as not dealing at arm's-length with each other if, at a material time under the Regulation, they are related parties within the meaning of the CICA Handbook published from time to time by the Canadian Institute of Chartered Accountants.
Diluent Pool Location	The location where the diluent is injected into the diluent pool. The physical location of the diluent pool where the weighted average price (WAP) is calculated for application to the OSR Project. If referencing a pipeline, add the location of the pipeline.
Diluent Density	Density is defined as the mass of a substance per unit volume. Provide the diluents density in kg/m ³ . If diluent is pooled, identify the blended density of the diluent. .
Diluent Type	The type of diluent blended with the bitumen to meet pipeline specifications. E.g., butane, condensate, synthetic crude oil.
Mode of Transportation	The method of transporting the diluent product to the OSR Project. Report pipeline or trucking or any other means of transportation on separate lines.

Month of Supply	The month in which the transfer of title occurs.
Diluent Price	The diluent purchased price in Canadian dollars per cubic metre. If diluent is pooled, report the weighted average price.
Transportation Costs	Costs associated with transporting diluent from the diluent pool location, where the weighted average price (WAP) calculation is triggered, to the OSR Project. If the diluent price includes the transportation cost, input "Included".
Volume	Volume of diluent from the diluent pool that goes to the OSR Project. Report volumes in cubic metre. This does not have to match with the GFE/MRC-1 forms.
TRANSPORTATION COSTS – IN-SITU PROJECTS	
Destination	For each mode of transportation, identify the point where the product was unloaded, reaches a Canadian hub or reaches its title transfer point. For Canadian hub, identify (e.g., Hardisty or Edmonton). For US destinations, identify State and Petroleum Administration Defense District (PADD).
Includes Diluent Return	Indicate with Yes or No whether diluent return line costs are included in the transportation costs.
Mode of Transportation	The method of transporting the sales product from RCP to the title transfer point of sale. Report pipeline, rail or trucking on separate lines.
Month	The month in which the transportation costs are incurred.
Origin	For initial transportation identify the OS Project area (e.g., Cold Lake, Wabasca, Peace River, etc.) If the title transfer occurs in the US, identify the Canadian hub (e.g., Hardisty or Edmonton).

Product	<p>Bitumen or blended bitumen.</p> <p>Dilbit - Dilbit is a syllabic abbreviation of 'diluted bitumen'. The bitumen has been blended with condensate or naphtha or other types of diluents excluding synthetic crude oil.</p> <p>SynBit - The bitumen has been blended with synthetic crude oil.</p> <p>SynDilBit – The bitumen that has been blended with synthetic crude oil and condensate.</p>
Stream	<p>Bitumen blend that comes from a specific area with a consistent quality or bitumen that comes from a heated pipeline (LLE). Example: <i>Cold Lake Blend (CLB)</i> <i>Peace River Blend (PRB)</i></p>
Volumes Transported	<p>Actual transported volumes from the origin to the destination. Measured in cubic metre and based on product movement.</p>
Transportation Cost	<p>Aggregated transportation costs based on actual invoices or cost of service and product movement related to a title transfer location. If the title transfer occurs in the US, the costs must be disaggregated into a Canadian component and an US component. (I.e., Aggregate costs from the OSR Project location to a Canadian hub and from the Canadian hub to the US State/PADD).</p>
OTHER OIL SANDS PRODUCTS REVENUE – MINING & IN-SITU PROJECTS	
Arm's Length Transactions	<p>Where an operator sells goods and services to an entity with which the operator does not have a relationship these transactions would be considered at arm's length.</p>
Non-Arm's Length Transactions	<p>Where an operator sells goods and services to an entity with which the operator has a relationship these transactions would be considered at non-arm's length.</p> <p>Note: persons shall be regarded as not dealing at arm's-length with each other if, at a material time under the Regulation, they are related parties within the meaning of the CICA Handbook published from time to time by the Canadian Institute of Chartered Accountants.</p>
Destination	<p>The location where the title transfer of the product occurs.</p>

Mode of Transportation	The method of transporting the sales product from RCP to the title transfer point of sale. Report pipeline, rail or trucking on separate lines.
Month of Sale	The month in which transfer of title occurs.
Other Handling Costs	Costs other than transportation that are incurred to move the product to the destination.
Price	Price per other oil sands product type in Canadian dollars per product unit.
Other Oil Sands Product	As defined in the Regulation. Examples include coke, sulphur (excluding sulphur from solution gas) etc.
Transportation Cost	Cost incurred to transfer the product from the OSR Project to the destination (title transfer point) in Canadian dollars.
Volume	Volume of the Other Oil Sands Product. State specific product unit.

Appendix E

CARE – Timeline and Timetable

<p>Capital and Operating costs are filed on a year to date basis. Amendments to these forms can be trued up in the next quarter's filing or with the last quarter filing where reconciliation to the End of Period Statements (EOPS) is required. Amendments to all other forms are full form replacement and should not be trued up in the last quarter but amended in the quarter the changes relate.</p>		
CARE Spreadsheet	Frequency	Filing Requirement
<p>CARE – Cost Workbooks for both In-Situ and Mining</p> <p>(Allowed Cost/EOPS Reconciliation, Capital and Operating Costs)</p>	<p>Quarterly - Year to Date and Detailed by Month</p>	<p>1st Qtr – May 20 2nd Qtr – Aug 20 3rd Qtr – Nov 20 4th Qtr – April 30 of the following year</p>
<p>CARE – Revenue Workbook</p>	<p>Quarterly - Year to Date and Detailed by Month</p>	<p>1st Qtr – May 20 2nd Qtr – Aug 20 3rd Qtr – Nov 20 4th Qtr – Feb 20 of the following year</p>
<p>CARE – Project Data Workbook for both In-Situ and Mining</p> <p>(Reserves, Operations, Reservoir, Deposit and Volumetric reporting)</p>	<p>Annually - Year to Date</p>	<p>June 30th of the following year</p>
<p>Western Canadian Select Revenue</p>	<p>Quarterly - Year to Date and Detailed by Month</p>	<p>1st Qtr – May 20 2nd Qtr – Aug 20 3rd Qtr – Nov 20 4th Qtr – Feb 20 of the following year</p>
<p>CARE – Statement of Approval</p>	<p>Quarterly or Annually (dependent on workbook)</p>	<p><u>For CARE – COSTS & REVENUE Workbooks:</u> 1st Qtr - May 20th of the period 2nd Qtr - Aug 20^h of the period 3rd Qtr - Nov 20th of the period 4th Qtr - Feb 20th of the period (REVENUE Workbook) 4th Qtr - April 30th of the following year (COSTS Workbook)</p> <p><u>For CARE – PROJECT Workbook:</u> Due June 30th following the Period</p>

Appendix F

Abbreviations Used in Guideline

AFE	Authorizations for Expenditure
BVM	Bitumen Valuation Methodology
BVMR	Bitumen Valuation Methodology (Ministerial) Regulation
CAPP	Canadian Association of Petroleum Producers
CARE	Cost Analysis and Reporting Enhancement
CHP	Combined Heat and Power
CRW	standard condensate stream
COS	Cost of Service
EOPS	End of Period Statements
ERCB	Energy Resources Conservation Board
ETS	Electronic Transfer System
FCP	Fuel Charged to Power
FCS	Fuel Charged to Steam
FMV	Fair Market Value
GFE	Good Faith Estimate
HRSG	Heat Recovery Steam Generator
LTBR	Long-Term Bond Rate
MRC	Monthly Royalty Calculation
NAL	Non-Arms Length
OSAC	Oil Sands Allowed Cost (Ministerial) Regulation
OSR	Oil Sands Royalty
PNCB	Prior Net Cumulative Balance
RCP	Royalty Calculation Point
RORC	Rate of Return On Capital
SAGD	Steam Assisted Gravity Drainage
SCO	Synthetic Crude Oil

TA	Transportation Allowance
TAN	Total Acid Number
TPDT	Third Party Disposition Threshold
WCS	Western Canadian Select
WTI	West Texas Intermediate

Appendix G

Contact Information

Mailing Address (Edmonton)
Oil Sands Strategy and Operations Division
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North Petroleum Plaza
9945 - 108 St
Edmonton, Alberta Canada
T5K 2G6

Mailing Address (Calgary)
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Receptionist: 9945 - 108 St. / 8th Floor NPP

Couriers: 9915 - 108 St. / Main Floor SPP

For more information about this document and about Alberta's oil sands royalty regime, please go to Alberta Energy website at <www.energy.gov.ab.ca> under 'Our Business', 'Oil Sands', then 'Oil Sands Contacts' or contact the following Alberta Energy staff:

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Director, Resource Revenue and Operations, Oil Royalty Operations

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Supplies, Statutes & Regulations

Queen's Printer Bookstore
602 620 – 7 Avenue SW
Calgary, Alberta T2P 0Y8
Phone: 403 297-7157

Or

Queen's Printer Bookstore
10611 – 98 Avenue
Edmonton, Alberta T5K 2P7
Phone: 780 427-4952
Fax: 780 452-0668

Also available on-line at: <http://www.qp.gov.ab.ca>

CIBC Rapidtrans (royalty payment) deposit slips

Alberta Energy
Calgary Information Centre
300, 801 - 6th Avenue SW
Calgary, Alberta T2P 3W2
Phone: 403 297-8955
Fax: 403 297-8954

Financial Services (Cashiers)

Alberta Energy
Financial Services Branch
North Petroleum Plaza
9945 - 108th Street
Edmonton, Alberta T3K 2G6
Phone: 780 427-3600

Appendix H

Electronic Transfer System (ETS) - File Naming Conventions

The following form types can be submitted through ETS, Project operators must select the appropriate form type for the submission that is being made. To facilitate the management of files in ETS, Project operators will be asked to name their ETS submission files in accordance with the file naming conventions below.

Form Type	Form Abbreviation	File Naming Convention
OS Monthly Royalty Report	OSMRR	<MRC, GFE, PSR or Multi>.<Project#, PSR ID, or Multi*>.<Report Month>.xls E.g. MRC.OSR001.201001.xls E.g. GFE.OSR045.201001.xls E.g. PSR.Buffalo.201001.xls E.g. PSR.10512.201001.xls E.g. Multi.Multi.201001.xls *Multi is used to accommodate operators that combine multiple forms for multiple Projects in one excel workbook
OS End of Period Statement	OSEOP	EOP.<Project#>.<Period>.xls E.g. EOP.OSR010.2009.xls
OS Monthly Statement of Approval	OSSOAMONTH	SOA.Monthly.<Project# or Multi>.<Report Month>.pdf E.g.SOA.Monthly.OSR010.201003.pdf E.g. SOA.Monthly.Multi.201001.pdf
OS Operator Signature and EOP Statement of Approval	OSSOAEOPS	SOA.EOP.<Project# or Multi>.<Period or Multi>.pdf E.g. SOA.EOP.OSR007.2009.pdf E.g. SOA.EOP.Multi.2009.pdf E.g. SOA.EOP.Multi.Multi.pdf
OS Payment Allocation	OSPAYALLOC	PayAlloc.<Report Month>.pdf E.g. PayAlloc.201001.pdf
OS EOPS Independent Auditor's Opinion	OSAUOPIN	AuditOpin.<Project#>.<Period>.pdf E.g. AuditOpin.OSR005.2009.pdf

ETS CARE Form File Naming

Effective May 2011, the CARE form naming conventions has been amended. When saving the form documents in Excel format you must use the following conventions:

Workbook Name	Workbook Naming Convention
CARE-Costs – In-Situ	COSTS(IS)_V1
CARE-Costs – Mining	COSTS(M)_V1
CARE-Revenue	REVENUE_V1
CARE-Project	PROJECT_V1
Statement of Approval	CARESOA
Western Canadian Select Sales	WCSS_V1

CARE – Cost Workbooks for both In-Situ and Mining (Allowed Cost/End of Period Statement Reconciliation, Capital and Operating Costs)

ETS File Naming Convention:

OSR/CSR Project#_Year_QTR_COSTS(IS or M)_Version #

e.g., OSR012_2011_QTR1_COSTS(IS)_V1 for In-Situ Projects or
OSR012_2011_QTR1_COSTS(M)_V1 for Mining Projects

CARE – Revenue Workbook

ETS File Naming Convention:

Company Name_BA ID_Stream Abbreviation _Year_QTR_REVENUE_Version #

e.g., Oil Company_0ABC_LLE_2011_QTR1_REVENUE_V1

CARE – Project Data for both In-Situ and Mining (Reserves, Operations, Reservoir, Deposit and Volumetric reporting)

ETS File Naming Convention:

OSR/CSR Project#_Year_PROJECT_Version #

e.g., OSR012_2011_PROJECT_V1

NOTE: Ensure that access has been granted to the new form naming conventions as shown above by your ETS Site Administrator otherwise these will not appear in the Form Type drop down selection list.

Effective 2009 and 2010 Reporting Periods, when saving the form documents in Excel format you must use the following conventions:

For Cost/Operation Forms for the reporting Periods 2009 and 2010

OSR Project Number, Year and Quarter (where applicable), Report Name, Version Number

Examples: OSR015_2009_QTR2_CAPEX(M)_V1
OSR047_2009_DPST(M)_V1

For Revenue Forms for the reporting Periods 2009 and 2010

Company Name, BA ID, Stream, Year & Quarter, Report Name, Version Number

Example: Oil Company_0ABC_LLE_2009_QTR2_BLENDREV_V1

Note: Company Name can be a maximum of 50 characters.
 Quarter must be in the format of: QTR1, QTR2, QTR3 or QTR4.
 Stream Abbreviation can be a maximum of 5 characters.

Form Name	Form Naming Convention
Bitumen/Bitumen Blend Revenue	BLENDREV
Bitumen Blend Netback Calculation	NETBKCAL
Diluent Supplied to a Stream	DILUENT
Transportation Costs	TRANSCST
Other Oil Sands Products Revenue	OOSPREV
Western Canadian Select Sales	WCSS
Capital Cost - In Situ	CAPEX(IS)
Capital Cost - Mining	CAPEX(M)
Operating Costs – In Situ	OPEX(IS)
Operating Costs – Mining	OPEX(M)
Deposit – Mining	DPST(M)
Operations	OPER
Reserves	RESERVES
Reservoir – In Situ	RSVR(IS)
Volumetric Non-Integrated	VOLNINT
Volumetric Integrated	VOLINT
Statement of Approval	CARESOA

ETS Operator’s Forecast Form File Naming

Form naming conventions for the Operator’s Forecast Report. When saving the form in Excel format you must use the following conventions:

OSR Project Number, Year, Report Name

- Example: OSR015_2009_Operators_Forecast.xls

Appendix I

Oil Sands Royalty Project Reporting Interest Rules

Type of Royalty Compensation	Interest OSRR'09 Section	EOPS Filed	Report Due Date	Due Date Payment or Refund	Interest Calculated	Interest Rule	Effective Date of Interest Calculation
Pre-Payout Projects OSRR'09							
MRC Underpayment EOPS Receivable	s.45(1)(a) and s.45(1)(c)	N/A	Last day of the month following the month for which the report is required.	No later than the last day of the following month.	Compound (Simple, but amount includes interest)	Prime+1%	1 st day after MRC payment due date until the amount is paid to the Minister.
MRC Overpayment	No Provisions	N/A	Last day of the month following the month for which the report is required.	No Provisions	N/A	N/A	N/A
Post-Payout Projects OSRR'09							
EOPS Receivable (underpayment) and Royalty Adj. >10%	s.45(2) and s.45(3)(b)	Yes	Within 3 months after the end of the Period.	Not later than the last day of the 4 th month following the Period.	Compound (Simple, but amount includes interest)	Prime+1%	Commencing July 1 of the Period of the EOPS amendment until the amount is paid to the Minister.
EOPS Receivable (underpayment) and Royalty Adj. <10%	s.45(3)(b)	Yes	Within 3 months after the end of the Period.	Not later than the last day of the 4 th month following the Period.	Compound (Simple, but amount includes interest)	Prime+1%	First day after annual royalty payable due, until the amount is paid to the Minister.

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EOPS Refund and Royalty Adj. >10%	s.45(6)(b)	Yes	Within 3 months after the end of the Period.	Last day of the 4 th month following the end of the Period.	Simple	Prime+1%	Commencing July 1 of the Period of the EOPS amendment to the date of the cheque requisition
EOPS Refund and Royalty Adj. <10%	s.45(6)(b)	Yes	Within 3 months after the end of the Period.	Last day of the 4 th month following the end of the Period.	Simple	Prime+1%	First day after annual royalty payable due, until the amount is paid to the Minister.
Large Instalment Overpayment s.33(11)	s.45(6)(a)	Yes	N/A	N/A	Simple	Prime+1%	Commencing from the day following the last day of the Period (January 1 of the following Period) to the date of the cheque requisition.
Non-project OSRR'09							
Monthly royalty underpayment or trucking cost repayment	s.45(1)(a)	N/A		Royalty is due by the last day of the month following the production month.	Compound (Simple, but amount includes interest)	Prime+1%	1 st day after payment due date until the amount is paid to the Minister.
Monthly royalty overpayment or additional trucking cost payment	s.45(6)(d)	N/A		Royalty is due by the last day of the month following the production month.	Simple	Prime+1%	1 st day after payment due date until the date of the cheque requisition.