



Ministry of
Energy, Mines and
Petroleum Resources



ASSESSMENT REPORT CHECKLIST

(revised April 2020)

OIC 1161-04 repeals the Mineral Tenure Act Regulations and outlines the requirements for submission of technical assessment work reports. To assist authors of assessment reports, a summary of the requirements is presented herein.

http://www.bclaws.ca/civix/document/id/complete/statreg/529_2004

COMMON TO ALL REPORTS

- To augment the mineral database, the Ministry will accept for assessment credit technical reports pertaining to geological, geophysical, geochemical, drilling and prospecting investigations either singly or combined. The described work must consist mainly of original studies rather than compilation of previous work. Accounts based on brief property visits and scanty data are not acceptable as technical reports. Previous work should be referenced in a standard bibliographic format.
- All work must comply with the relevant requirements of the *Mines Act* (Notice of Work and Reclamation).
- In general, assessment report credit may be applied for field work done on the claims within the anniversary year. Work done between the location and recording of the claims may be applied to first years' assessment. Technical work costs not directly applicable to the claims may be filed to Portable Assessment Credit.
- The BC Geological Survey reviews the reports for compliance with the *Mineral Tenure Act Regulation*. Rejection of submissions not conforming to the *Mineral Tenure Act Regulation* may cause forfeiture of title to the mineral claim(s).
- Reports submitted in conformity with these regulations will have confidential status for a period of one year from the date of submission of the statement to record work.
- Preparatory physical work is acceptable for credit when directly related to and submitted with technical surveys.
- Physical work only may be submitted directly to the Gold Commissioner's office; a technical report is not required.
- Airborne (geophysical) surveys extending up to 10 times the area of the claim boundaries may be applied to the claims. Otherwise, work must have been done within the boundaries of the claim or block of claims.

FORMAT

- A digital PDF version is the preferred format for the report. There must not be any locks or restrictions placed on the PDF file.
- Paper copies are accepted but are not the preferred format. A paper copy report must consist of letter-size (8-1/2" x 11") pages bound/removable in firm covers, reproducible with legible print; text and maps clearly readable and understandable. Supporting maps/figures larger than letter-sized pages may be submitted.
- Submit the technical report and any digital data files used or created in relation to the work described in the report (see Section on Report and Digital Data Submission below).

CONTENTS

- The report must contain the [Title Page Summary Form](#), with both pages fully filled out.
- Title Page listing general nature of the report, claims worked on, mining division, NTS map sheet, latitude, longitude, owner of claims, operator (who paid for the work), author(s) of the report, and date submitted.
- Table of Contents cross-indexed to pages, numbers and titles.
- Introduction: property geographic/physiographic location, access, history, economic and general assessment, and specific type and quantity of new work performed.
- Description of the regional and property scale geological setting with an accompanying geological map.
- Objective and scope of present work, discussion/interpretation of results relative to geology and conclusion.
- All measurements in metric units, identified in text and maps.
- The Ministry collects digital data files and welcomes submission of such data with the report.

MAPS

- Maps identified by number, title, metric bar scale, north arrow, complete legend.
- Index map showing property and regional geography and infrastructure.
- Claim map showing local physiography, with all claims labelled with name/number.
- All groundwork mapped (state method of control) at 1:10 000 or more detailed/legible scale showing sample identification numbers, numerical results/values at sample site, relative to claim posts/boundaries.
- Detailed work (trenches, sections, underground, etc.) mapped at 1:1000 or more detailed scale, indexed to a master plan.
- Geophysical coloured grids must have a fully correlated legend, with units of measurement of values indicated.
- Digital copy maps must be presented in PDF at a scale where information is legible at 100% PDF scale. PDF maps larger than letter-sized pages are encouraged (where appropriate) to clearly depict all relevant information.
- Paper maps to be less than 1.0 x 1.3 metres.

STATEMENT OF COSTS (*directly applicable to assessment work*)

- Value credited for assessment work is determined from the content of original work done and described in the report, and current commercial rate costs documented in a cost statement as follows: field personnel (person-days), consultant, food and accommodation, mobilization/demobilization within British Columbia, aircraft support, vehicle rentals, equipment and supplies, instrument rentals, laboratory analysis, contract jobs - unit costs, report preparation, management. Drilling reports may include reasonable costs of core storage. Receipts are not required but must be presented to the Chief Gold Commissioner upon request where clarification is necessary. Total survey costs may be apportioned to specific claims.
- A [cost statement template](#) is available for download.

STATEMENT OF QUALIFICATIONS

- The reports must be signed by the author and include a statement of all author's qualifications: geologists, geophysicists, geochemists, prospectors, and geological, geophysical and mining engineers must state pertinent training and experience.
- Assessment reports form part of the permanent record, which must be written by qualified authors and meet prescribed standards.

SURVEY SPECIFICS

- Specific objective of the survey.
- Specific procedures of the survey(s), including details on what and how any samples were collected.
- Make and model of any instruments used, and the procedure.
- Specific results stated and discussion/interpretation of results, conclusion.
- Results of work done during separate periods should be clearly differentiated, and suspect/unreliable results should be identified.
- Smoothed/filtered data should be accompanied by raw data.

GEOLOGICAL

- Geology maps must outline outcrops and identify lithology, structure, mineralization/specific minerals; comprehensive text and maps; petrographic and mineralographic analyses.
- Structural analysis or photo-interpretation must be accompanied by a comprehensive description of the underlying data source(s), any data-preparation methods, and a detailed description of the interpretive approach/analysis used. The types of software used, and any digital manipulators or filters used must also be described.
- Photo-geological interpretations should be accompanied by ground surveys, as per the definition of 'technical exploration and development' of the *Mineral Tenure Act Regulation*.

GEOPHYSICAL

- Magnetic survey: component measured identified, absolute/relative values and diurnal correction specified.
- Electromagnetic survey: specific method used; location of VLF transmitter noted.
- Induced polarization survey: specific method and electrode array described.
- Airborne survey: results in contour form, 1:50 000 scale or more detailed, noting physiography, claim boundaries, flight lines, ground clearance, speed, weather/wind vector.
- Other types of surveys must be fully described.

GEOCHEMICAL

- Material sampled identified and described as to location coordinates, appearance, soil horizon/depth; silt from active channel/bank; rock- type (full lithological descriptions); vegetation species/part of plant; assays and metallurgical investigations described.
- Details on how the samples were collected.
- Analytical laboratory, chemist, mesh fraction analysed, strength of reagents and time of digestion, testing instruments; ashing technique for bio-surveys identified.

- Analytical certificates from the laboratory included in report (as non-protected .pdf files).
- Results must plot the numerical value of each sample (not just highlights) for elements of interest with its unit of measurement stated.
- Airborne radiometric surveys - presentation similar to airborne geophysical surveys.

DRILLING

- Drill-hole collar location, elevation, inclination/azimuth, dip test results (note if not done), hole/core diameter.
- Core/cuttings logs described by geologists (qualifications included in report).
- Location of core/cuttings storage.
- Assay results correlated with logs (note if assays not done).
- Plan map showing the location of all drillholes with respect to claim boundaries
- Cross-section drawings showing total depth, lithology/stratigraphy, and mineralization (with assay results) intersected in each hole.
- Short holes for blasting do not constitute drilling.

PROSPECTING

- Prospecting activities are only acceptable for exploration and development credit by the same owner or operator during the first 3 years of the holding of the claim.
- An accurate map showing location of traverses, location and description of rock outcrops/float, sample locations, analytical results, and instrument readings described and plotted.

PHYSICAL WORK

- Lines/grid, local trail/road, topography, trenches, open cuts, underground cuts, reclamation, helipad, legal claim post-boundary survey, etc. must be shown on maps with metric dimensions noted. Upon request by an official of the Ministry, the recorded owner of the mineral claim must show where the work has been performed on the ground.

ARCHAEOLOGICAL WORK

- Archaeological work completed under the requirement of a *Mines Act* permit is acceptable toward assessment credit. The report on the archaeological study must be submitted as an appendix of the technical assessment report but will be removed from the version of the report made available for public download.

REPORT AND DIGITAL DATA SUBMISSIONS

- Submit the technical report (PDF) any digital data files used or created in relation to the work described in the technical assessment report.
- Reports and data can be uploaded through the [Assessment Report and Digital Data Submission portal](#) or e-mailed to ARIS.digital@gov.bc.ca.
- Archives of previous assessment report data are accepted and encouraged for submission.
- Data types to be submitted include:
 - Geochemical data: sample location information, sample descriptions/notes, analytical certificates (e.g. .csv, .xlsx, .accdb)
 - Geological data: station location information, station descriptions/notes, structural measurements, mapping polygons and features (e.g. .csv, .xlsx, .shp)
 - Drilling data: collar location information, azimuth/dip, depth, downhole orientation surveys, core logs, sample intervals, geotechnical measurements, analytical certificates (e.g. .csv, .xlsx, .accdb)
 - Geophysical data (ground and airborne): raw data, processed data (e.g. .gdb, .xyz, .csv, .grd)
 - Imagery data: LiDAR, orthophotos, DEMs, ASTER (e.g. .tif, .dem, other raw data files)
 - GIS Products
 - Any other raw or processed digital files used in the creation of the report

COMMON DEFICIENCIES

- Missing a description of the geological setting and the accompanying geological map
- Missing location coordinates for all samples taken
- Missing plots of all samples labelled with their sample identification number
- Missing plots of numerical values of geochemical results (for elements of interest) for all samples taken
- Missing detailed descriptions of sampling procedures
- Missing cross-sections for new drilling showing how new holes can be interpreted along historical section lines
- Missing unique symbols to delineate different sampling periods or sampling types
- Missing outcrop outlines on geological maps
- Missing lithological sample descriptions and coordinates to support geological maps

PORTABLE ASSESSMENT CREDIT (PAC)

PAC DEPOSITS

- Upon approval of technical reports submitted pursuant to the Regulation, the value of work requested will be applied to the claims as designated on the Statement of Work. Approved value in excess of that requested to be applied to the claims will be credited in a PAC account to registered owners and/or operators as designated on the Statement of Work.
- When value applied to claims is not requested, the total value may be credited to the submitters' PAC account. All PAC reports must document work performed within 3 years of the time of submission for PAC consideration.
- Fees are not required on PAC deposits.

PAC WITHDRAWAL

- If desired by the owner or operator, PAC may be used for assessment work credit as follows: upon submission of an assessment report, up to 30% of the value of the assessment work approved may be taken from the owners' or operators' PAC account and added to the work value to make up the total value of work requested to be applied to the claims. When this procedure is chosen, recording fees must be paid on the total value to be applied to the claims at the time of recording the Statement of Work.
- Where a minimum of 10 years work has been recorded on a claim, the owners may, upon application and submission of recording fees within 60 days prior to forfeiture, use their PAC based on \$40 per hectare per year to hold that identical claim up to a maximum additional five years. Only one such extension can be applied for.

Physical work, prospecting, and placer work are not acceptable for Portable Assessment Credit deposits.