Guidelines for the Form of Reports and Illustrations

as

Prescribed by the Minister as per Section 55(2) of The Consolidated Newfoundland and Labrador Regulation 1143/96 (As Amended)

(Revised - December, 2010)

Assessment Reports Format

per Section 55(2) of The Consolidated Newfoundland and Labrador Regulation 1143/96 (As Amended)

(revised December, 2010)

Note: Any reference to "mineral land tenure unit", "land tenure unit" or "mineral lands" in this document may refer to either of mineral licences, leases or Impost lands, as appropriate.

- **1.** Subject to Section 55 of the Consolidated Newfoundland and Labrador Regulation 1143/96 (As Amended) every report of assessment work pertaining to mineral rights and describing any one or combination of the activities listed in Section 48 shall be **suitable for reproduction** with the following provisions:
- a) the entire report must be submitted in PDF format, with accompanying digital files for data collected in computer readable form (see subsection 9).
- b) a paper copy of the report may also be submitted at the option of the mineral rights holder, but is not required. **Note:** Prospectors may file a paper copy only, without the requirement for digital files.
- **2.** The report shall be sequentially numbered on every page and must include:
- a) a title page (see subsection 3);
- b) a table of contents listing the main sections of the report;
- c) a table of illustrations listing the plans, sections, diagrams, photographs, logs, etc.;
- d) maps illustrating the nature and location of work, including but not limited to:
 - i) an index map showing the location of the property at a regional scale;
 - ii) a property location map displaying boundaries and identifiers of mineral lands;
 - iii) appropriate-scale maps depicting the nature and location of work conducted;
 - iv) appropriate-scale maps (see subsection 6) displaying results and interpretations.
- e) as appropriate to the nature of the report, sections describing property location (including physiography and access), previous work, current work being reported, methods (of sampling or other data collection, and of analysis), results, interpretation, conclusions, recommendations and references;
- f) a statement of expenditures with a breakdown by mineral land tenure unit if more than one unit is reported on:
- g) appendices as required with detailed data and supporting documents, organized appropriately (e.g. drill logs, assay certificates, sample listings, consultants/contractors reports, etc.); and
- h) other details as noted in subsection 4.

- **3.** The following information, where appropriate, shall appear on **the front cover** of all reports:
- a) the nature of the report, i.e. geological, geophysical, geochemical, engineering, etc.;
- b) the mineral land tenure unit(s) and the year of assessment to which the report pertains or, if appropriate, the year of supplement for each unit;
- c) the National Topographic Series reference(s) and geographic location for the area covered by the report;
- d) the name of the author(s) of the report;
- e) the name of the holder of each land tenure unit and, if different, the name of the person or company for whom the work was done;
- f) the dates between which the work was done:
- g) the total expenditures claimed;
- h) the total number of claims or hectares for each land tenure unit to which the report pertains; and
- i) the date of completion of the report
- **4.** The **text of any report** where appropriate shall include, in addition to the information described in subsections 2 and 3:
- a) the name and signature of the author and, if not the same, the name and signature of the person under whose supervision the work was conducted;
- b) the names and addresses of the persons who conducted the work;
- c) the number of days that each person referred to in subsection b) was employed in the conduct of the work; and
- d) as may be appropriate to the nature of the report, the following:
 - i) descriptions and locations of outcrops and float examined, and any geological features noted;
 - ii) assay results and the name and address of the assay laboratory;
 - iii) location of surveys, survey grid lines and surface or underground workings with reference to specific mineral land tenure units, and georeferenced with the datum specified as either NAD 27 or NAD 83;
 - iv) method and procedure of survey, type of instruments used, components measured, sensitivity, precision and scale, constant of instruments, aircraft type, speed, ground clearance and average flight line separation;
 - v) units measured, how corrected and adjusted;
 - vi) description of control surveys over known mineralization and known barren ground:
 - vii) description of topography, overburden and vegetation coverage, drainage and ground water;
 - viii) results of prior work and other surveys or observations;
 - ix) nature of media observed and sampled in geochemical surveys, period, depth, interval or density of sampling, preparation of samples, detection limits, method of analysis, name of laboratory and name of analyst;

- x) the total line kilometers per land tenure unit of each type of survey conducted, together with the interval along the lines at which observations were recorded or samples taken;
- xi) the location and current conditions of surface or underground openings and whether fenced, barricaded or left open;
- xii) complete drill logs including at minimum the following: name of contractor; collar location georeferenced with UTM grid coordinates and with the datum specified as either NAD 27 or NAD 83; depth, orientation and angle of the hole; lithologies and depths; sample intervals and descriptions; assay results if obtained; the disposition of the casing; the nature and results of any down-hole surveys conducted; the manner in which the horizontal location and elevation of the hole collar have been determined and the current location of the drill core or stored cuttings.
- **5.** Plans, profiles, sections, or diagrams, included in or accompanying any report must have a scale expressed in metric units and shall bear, as may be appropriate to the nature of each illustration, the following:
- a) location, orientation and reference data including:
 - i) a bar scale in metric units;
 - ii) an astronomic north arrow;
 - iii) the National Topographic Series Map reference(s);
 - iv) UTM grid coordinates with the datum specified as either NAD 27 or NAD 83:
 - v) the boundaries and identification of all mineral land tenure units:
 - vi) the date of preparation;
 - vii) the nature of work depicted;
 - viii) a complete legend and list of symbols;
 - ix) the source of the base map and historic data, if such were employed;
- b) location, extent and identification (as appropriate) of the following:
 - i) the principal local topographic and cultural features;
 - ii) all grid lines, flagged lines, flight lines or traverses, indicating whether cut or flagged;
 - iii) all drill collars, trenches, pits, stripped areas and underground workings with appropriate vertical or horizontal projection;
 - iv) all outcrops, mapped float and other features that may be displayed graphically, with relevant orientations and features observed;
 - v) all samples taken, including, as necessary, downhole or along-trench intervals, and observations recorded;
 - vi) all results displayed as numerical values, corrected and adjusted as necessary, or any basic data obtained, observations made and samples analyzed;
 - vii) the interpretation of data as profiles, contours, zones of variation, anomalies, etc.
 - viii) the location of geodesic and base station, reference, control, and tie-in points;

- **6.** With regard to the illustrations referred to in subsections 2 and 5 the following may not be accepted on a metric scale smaller than in the case of
- a) index maps -- 1:250,000;
- b) plans of
 - i) airborne surveys -- 1:50,000;
 - ii) ground surveys -- 1:50,000;
 - iii) trenching, pitting or stripping -- 1:5000;
 - iv) diamond drilling --1:10,000;
 - v) underground workings -- 1:5000.
- c) sections and profiles of
 - i) ground surveys -- 1:50,000;
 - ii) diamond drilling -- 1:2000;
 - iii) underground workings -- 1:5000.
- **7.** The costs incurred in completing the activities listed below **are acceptable** as expenditures towards assessment of mineral land tenure units. Credit will be given for this work where it is shown that new geoscientific information has been obtained as a result of the assessment.
- a) prospecting;
- b) trenching, pitting and stripping;
- c) line cutting and flagging;
- d) surface and underground geological surveys;
- e) airborne, surface and underground geochemical surveys;
- f) airborne, surface, underground and borehole geophysical surveys;
- g) photo-geological and remote imagery interpretations;
- h) drilling and core transportation to storage facilities of the Department of Natural Resources;
- i) land surveys;
- i) topographic surveys;
- k) baseline and other environmental studies resulting in the collection of pertinent data:
- I) shaft sinking and other underground exploration work and engineering evaluation reports:
- m) beneficiation studies, analyses, assays and microscopic studies;
- n) feasibility and other economic studies
- o) labor and field supervision of mineral exploration;
- p) supplies, consumables and maintenance, used directly in carrying out exploration surveys;
- q) all reasonable costs associated with conducting assessment work on mineral lands:
- r) access road construction where necessary and reasonable;
- s) cost of producing assessment reports;

- t) head office supervision and expenditures to a maximum of 15% of the submitted expenditures. This is intended to include non-cash items such as amortization and depreciation;
- u) others that may be approved by the Minister.
- **8.** The following expenditures will **not** be accepted as expenditures towards assessment of mineral lands:
- a) Harmonized Sales Tax (HST) **is accepted** on individual items, but **must not be duplicated** on the total value of assessment;
- b) costs incurred in the staking and maintenance of mineral lands (e.g., recording fees, security deposits, government permitting fees, etc.);
- c) transportation costs incurred outside the province for visits which produce no new geoscientific information;
- d) purchase of major assets (vehicles, ATVs, boats, etc.);
- e) vehicle and heavy equipment repairs other than routine maintenance;
- f) costs incurred for drill core storage within the facilities of the Department of Natural Resources:
- g) legal surveys to bring mineral lands to mining and/or surface lease status;
- h) option payments, property acquisition costs and legal expenses associated with acquisition of properties;
- i) promotion of mineral properties, preparation and distribution of promotional materials:
- j) consultation and site visits by government geologists, without remuneration;
- k) community consultations;
- I) more than one compilation report (dealing with the same datasets) over the life of the mineral licence:
- m) other expenditures which do not directly affect the assessment of mineral lands.
- **9.** For all geoscientific and engineering evaluation data submitted for assessment work and where such data were collected in computer readable form or have been transferred to computer readable files, copies of these computer files are to be submitted along with the digital PDF files:
- a) For PDF files
 - i) when made from scanning hard copy, scan at 300 dpi for black and white, greyscale and colour; colour documents should be scanned and saved at a minimum of 24-bit RGB; provide PDF Searchable files.
 - ii) original image size must be maintained.
 - iii) when converting a vector file to a bit map (e.g. tif, jpeg, eps, etc.) for conversions to a PDF file, ensure the image is the original size (100%) at 300 dpi 24 bit RGB, or of comparable quality as the original vector file.
 - iv) table of contents, etc. should be linked to relevant sections in the report. Linking should only be at the first level of hierarchy as given in the

table of contents and is only required for reports with greater than 20 pages.

- b) Accompanying data files should be provided in the following acceptable format(s) and with an appropriately structured hierarchy of folders and subfolders:
 - i) text files, including the documentation file, are to be in MS Word or other PC-compatible format (e.g. .rtf).
 - ii) tables of data are to be in widely used PC-compatible tabular formats (e.g. .xls, .csv, .dbf, or .mdb); data collected along lines or profiles are to be stored in a format, preferably Geosoft database (.gdb) or XYZ text equivalent, which retains their organization as well as other pertinent information, such as line numbering or heading directions, as appropriate. Data columns should have a precision (decimal places) appropriate to the detection limits of the measuring instrumentation. iii) maps in vector format are to be in ArcView Shape File (.shp), MapInfo (.tab), Geosoft (.plt or .map) or exported to a portable format (e.g. AutoCAD .dxf) with all accompanying companion files present as appropriate; large geological, geophysical, geochemical etc. maps must also be submitted as PDF.
 - iv) raster or grid files are to be in Geosoft (.grd) or its text equivalent (.gxf; grid exchange format), or other PC-compatible formats.
 - v) all spatially related data are to be geographically referenced by UTM coordinates to a degree of precision appropriate to the scale of the survey. As well, the datum must be specified as either NAD 27 or NAD 83. vi) where data are submitted as 3-D volumes or depictions, its storage format must be one which has gained common acceptance at the time, and the data must be accompanied by viewing/translation software which enables ready access and sufficient resolution of the features discussed in the report.
- c) report should be accompanied by a **documentation file** (readme file) which is to include a list of all data files, their type (whether geological, geophysical, geochemical, engineering), their format (text, tables of data, vector files, raster files, profile data), lists of variables for each file with variable labels and units and value labels as appropriate, the coordinate system and datum to be specified for all spatial coordinates.
- d) report and accompanying data files should be provided on compact disk (CD-ROM), DVD, memory stick or other digital transfer medium (including but not limited to portable external hard drive) readable on IBM-PC and compatible systems.