

FINAL REPORT: FORMAT AND CONTENT REQUIREMENTS

1. Title page, which indicates:
 - right holder's report name
 - type of survey
 - survey locality
 - duration of field work
 - name of program operator (or legal representative or agent) and right holder(s)
 - names of prime contractors
 - specific right involved
 - name of author or person responsible for the report
 - report date
 - signature of project geophysicist or geologist

2. Table of Contents, and List of Enclosures.

3. An introduction or abstract.

4. A location map, preferably page size, which indicates the locations of the survey with respect to the interests involved using reservations.

5. Details of the program, including:
 - mobilization/demobilization dates
 - significant dates such as commencement, suspension, recommencement and termination
 - number of technical and non-technical personnel
 - production data, including total distance surveyed, time lost, and daily production
 - summary of conditions pertaining to weather, terrain, etc.
 - summary of factors which caused significant downtime
 - number of kilometres of data recorded per day

6. Description of the data acquisition equipment and field procedures, including:
 - all components of the positioning system, with estimates of accuracy and repeatability
 - all vehicles or aircraft
 - the energy source, including source array geometry
 - the detector equipment, including detector array geometry

- the recording system
 - the field processing facility
 - recording parameters, such as shot or sweep interval, station interval, sampling rate, recording filter settings, aircraft elevation
 - refraction field work for weathering corrections in the case of vibratory surveys
7. Description of the geophysical data processing, including:
- for seismic reflection data, each type of processing for which sections were generated including the processing procedures applied to the data, such as:
 - gain recovery
 - bandpass filter
 - mute pattern
 - type of deconvolution and parameters
 - type of velocity analysis, distance between analyses, and picking method
 - stacking velocities used if not listed on section labels
 - static correction method and parameters
 - migration method and parameters
 - time amplitude display method, length and application of scaling operations
 - percent of CDP stack
 - any special processing or display techniques
 - for gravity data:
 - all corrections applied
 - method of correcting discrepancies at line intersections
 - method of spatial filtering, residual mapping and second derivative mapping
 - method of gravity modeling
 - loop closure maps for elevation control
 - for magnetic data:
 - all corrections applied to the total field data
 - correction for diurnal
 - correction with regional field
 - method of spatial filtering, residual mapping and second derivative mapping
 - method of correcting discrepancies at line intersections
 - method of magnetic modeling
8. Seismic shotpoint maps, gravity station maps, and flight lines with numbered fiducial points on a working scale and shown in relation to the operator's previous data in the area. One paper print of each map should accompany each copy of the report. In addition, one mylar (film) copy of each shot point map is required.

9. Copies of each migrated seismic section recorded and in the case of a 3-D survey, all lines generated from the 3-D dataset. Where no migrated sections were prepared, copies of the last processing of non-migrated sections should be submitted. A total of two copies prefolded paper and one film (mylar) copy is required. Copies of other versions of the processed seismic may be requested. The explorer shall submit migrated seismic sections in digital form in a manner approved by the Administrator.
10. Interpretative maps appropriate to the type of survey presenting the interpretation of data from this survey and relevant previous surveys, as follows:
 - for seismic reflection surveys, all maps displaying time structure, depth structure, isopach, isochron, velocity, seismic amplitude, and character change
 - for gravity surveys, all maps displaying Bouguer gravity, residual gravity field, derivative maps and, if maps were not made, individual gravity profiles with sufficient annotation for interpretation
 - for magnetic surveys, all maps displaying total magnetic intensity, corrected total field, residual magnetic fields, derivative maps and, if maps were not made, individual profiles with sufficient annotation for interpretation
11. Any other interpretative information such as synthetic seismograms, seismic modeling and amplitude versus offset (AVO) studies.
12. Written discussion of the maps and sections including geophysical to geological correlations, correlations between gravity, magnetic and seismic data, details of corrections or adjustments applied to the data during interpretation, examples of correlated seismic sections which illustrate the interpretative technique for structural and stratigraphic interpretation, and all velocity information used for time-to-depth conversion.
13. Geological program reports should include a written discussion of the results of the project and time the project into the regional geological framework. Illustrations should include, as applicable,
 - measured sections
 - correlations or structural cross-sections
 - core or sample descriptions
 - geochemical and other analyses
 - micro-palaeontology and palynology
 - interpretative maps such as paleogeographic, facies, isopach, etc.

14. ADDITIONAL REQUIREMENTS FOR 3-D SURVEYS

The following information is required for 3-D seismic surveys in addition to the requirements specified for 2-D:

- (a) positioning methods and estimate of accuracy and repeatability;
- (b) methods of velocity analysis, static derivation and application, and migration;
- (c) methods of grouping the data within the data volume;
- (d) methods of interpolation for cross-lines and crooked lines;
- (e) copies of all horizontal time slice sections, including those with special display options, such as instantaneous phase, frequency and amplitude. The number of paper and mylar copies required is as specified for seismic sections in Section 9;
- (f) copies of all crooked lines and cross-lines as specified in Section 9.