



Energy, Mines and Resources
Oil and Gas Resources

Guidelines: Reporting & Requirements for Geoscience Programs & Operations

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These guidelines are issued under the authority of the Yukon *Oil and Gas Act* (YOGA), the *Oil and Gas Geoscience Exploration Regulations* (OGGER), and the *Oil and Gas License Administration Regulations* (OGLAR). If there is any conflict or inconsistency between these guidelines and any provision of the Yukon *Oil and Gas Act* or its regulations, the Yukon *Oil and Gas Act* and its regulations prevails.

This document provides important information regarding reporting and other requirements for geoscience programs. Failure to submit a report within the submission timeline may result in penalties. All reports may be submitted to the Chief Operations Officer (COO) via e-mail, fax, or post.

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Types of Reports.....	2
Activity Benefits Report	2
Advance Notice of Operations	2
Geoscience Activity Report	2
Participant Report	2
Purchase Credit Report	3
Purchase and Reprocess Credit Report.....	4
Significant Event Notification	5
Examples of Significant Events.....	5
Status Reports.....	5
Commencement of Operation	5
Suspension of Operation.....	5
Re-commencement of Operation	5
Termination of Operation.....	5
Completion of Operation	5
Supplementary Non-Exclusive Survey Report.....	5
Survey Monuments	6
Requirements for Final Reports	6
Geophysical Operation Final Report	6
Geological Operation Final Report.....	8
Release of Information	10
Geophysical.....	10
Geological	11
Other Requirements	11
Correcting Errors and Omissions.....	11
Retention of Records	11
Availability of a Licence	11

TYPES OF REPORTS

Types of reports are listed in alphabetical order.

Activity Benefits Report

Timing: When a benefits agreement is in place, an *Activity Benefits Report* is required. The benefits agreement may indicate the timing of the report, otherwise submit within 3 months after the completion or termination of the operation.

Content: Report on each licensed activity. The benefits agreement may specify the contents required, otherwise complete the *Activity Benefits Report* form which can be downloaded from www.emr.gov.yk.ca/oilandgas/benefitsagreements.html.

Advance Notice of Operations

Timing: The COO will provide direction as to the timing required.

Content: According to directions supplied by the Chief Operations Officer, licensees will be responsible for providing advance notice of operations to trappers, guides, outfitters, and others in the area in which the operations will be conducted. Supply a copy to the COO.

Geoscience Activity Report

Timing: Weekly. Submit Monday morning each week during the operation, starting on the first Monday after the commencement of the operation.

Content: Report on the progress of a test hole, or geoscience operation. The *Geoscience Activity Report* form can be found online at www.emr.gov.yk.ca/oilandgas/formsandfees.html.

Participant Report

Timing: Within 12 months after the completion or termination of the operation.

Content: In accordance with the COO's directions, a participant report is required by each participant that has done an interpretation of the data from a participation survey. The report should include

- a) interpretative maps that are appropriate to the data collected including
 - i. relevant structure and isopach maps,
 - ii. time structure and time interval maps,
 - iii. velocity and residual velocity maps, and
 - iv. seismic amplitude and character change maps,
 - v. final Bouguer gravity data and any residual or other processed gravity maps, and
 - vi. final total magnetic intensity contour data and any residual, gradient or other processed magnetic maps;

- b) synthetic seismograms and seismic modeling studies that use synthetic seismograms, vertical seismic profiles at wells that were used in the interpretation of the operation data, amplitude versus offset studies, and seismic inversion sections, if any (optional for non-exclusive surveys where the data is available for purchase by the public);
- c) Interpretation of maps and seismic sections including
 - i. geological and geophysical correlations,
 - ii. where applicable, correlations between gravity, magnetic and seismic data,
 - iii. details of corrections or adjustments that were applied to the data during processing or compilation, and
 - iv. the licensee's velocity information that was used in a time-to-depth conversion.

Purchase Credit Report

Timing: According to the COO's directions and before the purchase cost is credited.

Content: A purchase credit report is required when there is a purchase of geophysical data that is used as a credit towards a work deposit or rental requirement. This report should include the following:

- a. interpretative maps that are appropriate to the data collected including
 - i. relevant structure and isopach maps, time structure and time interval maps, velocity and residual velocity maps, and seismic amplitude and character change maps;
 - ii. final Bouguer gravity data and any residual or other processed gravity maps; and
 - iii. final total magnetic intensity contour data and any residual, gradient or other processed magnetic maps;
- b. synthetic seismograms and seismic modeling studies that use synthetic seismograms, vertical seismic profiles at wells that were used in the interpretation of the operation data, amplitude versus offset studies, and seismic inversion sections, if any (optional for non-exclusive surveys where the data is available for purchase by the public);
- c. Interpretation of maps and seismic sections including
 - i. geological and geophysical correlations,
 - ii. correlations between gravity, magnetic and seismic data (where applicable),
 - iii. details of corrections or adjustments that were applied to the data during processing or compilation, and
 - iv. the licensee's velocity information that was used in a time-to-depth conversion.

Purchase and Reprocess Credit Report

Timing: According to the COO's directions and before the purchase cost is credited.

Content: Every licensee must submit a purchase and reprocess credit report when there is a purchase of geophysical data that is reprocessed and the costs are used as a credit towards a work deposit or rental requirement. The following content should be included in the report:

- a. a copy of the program parameter sheet;
- b. shotpoint maps, track plots, flight lines with numbered fiducial points, and gravity station maps, in a format approved by the COO;
- c. a fully processed, migrated seismic section for each seismic line recorded and, in the case of a 3D survey, each line generated from the 3D data set, in industry standard digital format or Internet based format and including the side-label parameters;
- d. a high-resolution seismic section for each line recorded in a pipeline route survey;
- e. interpretative maps that are appropriate to the data collected including
 - i. relevant structure and isopach maps,
 - ii. time structure and time interval maps,
 - iii. velocity and residual velocity maps, and
 - iv. seismic amplitude and character change maps,
 - v. final Bouguer gravity data and any residual or other processed gravity maps, and
 - vi. final total magnetic intensity contour data and any residual, gradient or other processed magnetic maps;
- f. synthetic seismograms and seismic modeling studies that use synthetic seismograms, vertical seismic profiles at wells that were used in the interpretation of the operation data, amplitude versus offset studies, and seismic inversion sections, if any (optional for non-exclusive surveys where the data is available for purchase by the public);
- g. interpretation of maps and seismic sections including
 - i. geological and geophysical correlations,
 - ii. correlations between gravity, magnetic and seismic data (where applicable),
 - iii. details of corrections or adjustments that were applied to the data during processing or compilation, and
 - iv. the licensee's velocity information that was used in a time-to-depth conversion.

Significant Event Notification

Timing: Immediately.

Content: Report to the COO, by the most rapid and practical means, any serious accident or incident that causes injury or loss of life, damage to property, or constitutes a threat to the environment. The COO may investigate a significant event.

Examples of Significant Events

- Imminent threat to personnel
- Major injury
- Fatality
- Damage to property
- Threat to environment
- Fire
- Loss of well control
- Oil spill
- Toxic spill
- Uncontrolled release of oil or gas

Status Reports

Commencement of Operation

Suspension of Operation

Re-commencement of Operation

Termination of Operation

Completion of Operation

Timing: Not later than the end of the day of the occurrence.

Content: Notification for these significant dates must be submitted by fax or phone.

Supplementary Non-Exclusive Survey Report

Timing: Within 12 months after the date on which the survey data ceased to be available and in accordance with directions from the COO.

Content: A supplementary non-exclusive survey report is required once the survey data ceases to be made available for sale. The report should contain the following data:

- a. interpretative maps that are appropriate to the data collected including
 - i. relevant structure and isopach maps,
 - ii. time structure and time interval maps,
 - iii. velocity and residual velocity maps, and
 - iv. seismic amplitude and character change maps,
 - v. final Bouguer gravity data and any residual or other processed gravity maps, and
 - vi. final total magnetic intensity contour data and any residual, gradient or other processed magnetic maps;

- b) synthetic seismograms and seismic modeling studies that use synthetic seismograms, vertical seismic profiles at wells that were used in the interpretation of the operation data, amplitude versus offset studies, and seismic inversion sections, if any (optional for non-exclusive surveys where the data is available for purchase by the public);
- c) interpretation of maps and seismic sections including
 - i. geological and geophysical correlations,
 - ii. where applicable, correlations between gravity, magnetic and seismic data,
 - iii. details of corrections or adjustments that were applied to the data during processing or compilation, and
 - iv. the licensee's velocity information that was used in a time-to-depth conversion.

Survey Monuments

Timing: Immediately.

Content: When a survey monument is discovered that is damaged, or damage is caused to a survey monument in the course of the operation, report to the COO.

REQUIREMENTS FOR FINAL REPORTS

Following are general suggestions. The content and format must be acceptable to the COO.

Geophysical Operation Final Report

Geophysical operation final reports are kept confidential for 15 years. Please refer to **Release of Information** in these Guidelines for more information.

Timing: Within 12 months after completion or termination of the operation.

Content: A final report is required on all the operational and engineering information that is relevant to the geophysical operation. There is no formal, prescribed outline or format for geophysical final reports, however the following content should be included:

Title Page

- a) Each report should contain a title page that includes the:
 - i. Geoscience Exploration Licence number,
 - ii. report title,
 - iii. type of operation conducted,
 - iv. location of the operation,
 - v. duration of operations at that field location,
 - vi. names of the contractors,
 - vii. legal company name of the licensee,
 - viii. participants and interest owners if any,

- ix. name of the report author, and
- x. date of the report;

Beginning of Report

- b) table of contents;
- c) an introduction or abstract;

Maps

- d) a locality map, at a suitable scale, showing the location of the survey with respect to the oil and gas interests involved, permits or leases involved and latitude/longitude co-ordinates;
- e) geological base maps showing outcropping rock formation, surface structural information or any other spatially distributed information which has been mapped;
- f) any interpretative maps as may be prepared indicating inferred paleogeography, facies, formation isopach, or structure;
- g) list of coordinates of sampling points or samples sections and a map showing location of localities visited and cross-referenced to catalogue numbers of samples;

Statistical summary

- h) a statistical summary, including
 - i. the mobilization and demobilization dates,
 - ii. the significant dates including commencement, suspension, recommencement and termination dates,
 - iii. a summary of conditions pertaining to weather and terrain, and
 - iv. a summary of factors which caused significant downtime;

Field Procedures

- i) a description of the field procedures;
- j) a summary or abstract of the objectives and results of the operation which ties the project into the regional framework;

Analyses

- k) cross-sections indicating stratigraphic correlations;
- l) descriptions of measured sections, indicating sampling points;
- m) sample descriptions;
- n) results of micro-paleontological and palynological analysis as relates to biostratigraphic correlations;
- o) results of geochemical analyses and any other analyses performed to further characterize the original condition of the samples taken; and

Environmental Monitoring

- p) a summary of environmental impacts such as observed displacement of wildlife, wildlife incidents or encounters;
- q) a summary of observations made by the environmental/wildlife monitor, if applicable;

When an operation is to be conducted using an aircraft:

- r) indicate the name and address of the aircraft owner/manager;
- s) include a general description of the aircraft indicating
 - i. registration,

- ii. designation,
- iii. call sign,
- iv. dimensions,
- v. fuel capacity,
- vi. range,
- vii. safety equipment,
- viii. communications and navigation equipment;
- t) include the flight procedures for the operation;
- u) include procedures to be applied in the event of an overdue aircraft;

Other

- v) a summary of any communication with trappers, guides, outfitters or other resource owners;
- w) photographic records or other imagery as appropriate.

Geological Operation Final Report

Geological operation final reports are kept confidential for 3 years. Please refer to **Release of Information** in these Guidelines for more information.

Timing: Within 12 months after completion or termination of the operation.

Content: There is no formal, prescribed outline or format for geological final reports, however the following content should be included:

Title Page

- a) Each report should contain a title page that includes the:
 - i. Geoscience Exploration Licence number,
 - ii. report title,
 - iii. type of operation conducted,
 - iv. location of the operation,
 - v. duration of operations at that field location,
 - vi. names of the contractors,
 - vii. legal company name of the licensee,
 - viii. participants and interest owners, if any,
 - ix. the name of the report author, and
 - x. the date of the report.

Beginning of Report

- b) table of contents;
- c) an introduction or abstract;

Details of the Operation

- d) a summary of significant dates;
- e) the type and number of each type of equipment used;
- f) the total distance surveyed;
- g) the downtime per day;
- h) the number of kilometers of data recorded per day;

Maps

- i) location maps that show the boundaries of any existing permits or leases covered by the operation and the identification number of each permit or lease;
- j) interpretative maps that are appropriate to the data collected including
 - i. relevant structure and isopach maps,
 - ii. time structure and time interval maps,
 - iii. velocity and residual velocity maps,
 - iv. seismic amplitude and character change maps,
 - v. final Bouguer gravity data and any residual or other processed gravity maps, and
 - vi. final total magnetic intensity contour data and any residual, gradient or other processed magnetic maps;

(Interpretive maps are optional for non-exclusive surveys where the data is available for purchase by the public.)

Data

- k) the production data;
- l) a fully processed, migrated seismic section for each seismic line recorded and, in the case of a 3D survey, each line generated from the 3D data set, in industry standard digital format or internet based format and including the side-label parameters;
- m) a copy of the processing label for each line of the program;
- n) a high-resolution seismic section for each line recorded in a pipeline route survey;
- o) a series of gravity and magnetic profiles, if recorded, across all gravimetric and magnetic surveys for which interpretative maps have not been made;
- p) synthetic seismograms and seismic modeling studies that use synthetic seismograms, vertical seismic profiles at wells that were used in the interpretation of the operation data, amplitude versus offset studies, and seismic inversion sections, if any (optional for non-exclusive surveys where the data is available for purchase by the public);

Conditions

- q) a summary of weather and topographic conditions and their effect on the operation;

Environmental Monitoring

- r) a summary of environmental impacts such as observed displacement of wildlife, and wildlife incidents or encounters;
- s) a summary of observations made by the environmental/wildlife monitor, if applicable;

When an operation is to be conducted using an aircraft:

- t) indicate the name and address of the aircraft owner/manager;
- u) include a general description of the aircraft including
 - i. registration,
 - ii. designation,
 - iii. call sign,
 - iv. dimensions,

- v. fuel capacity,
- vi. range,
- vii. safety equipment, and
- viii. communications and navigation equipment,
- ix. the flight procedures for the operation, and
- x. procedures to be applied in the event of an overdue aircraft;

Other Observations

- v) a summary of any communication with trappers or other interested parties;
- w) a copy of the program parameter sheet;
- x) shotpoint maps, track plots, flight lines with numbered fiducial points, and gravity station maps, in approved format;

Interpretation of maps and seismic sections

(Optional for non-exclusive surveys where the data is available for purchase by the public.)

- i. geological and geophysical correlations,
- ii. correlations between gravity, magnetic and seismic data (where applicable),
- iii. details of corrections or adjustments that were applied to the data during processing or compilation, and
- iv. the licensee's velocity information that was used in a time-to-depth conversion.

RELEASE OF INFORMATION

Records pertaining to a geoscience license that are considered confidential may not be disclosed by the COO or any other employee of the government. The particulars of a specific timeline depend on the type of activity details of which can be seen below.

Geophysical

Non-Confidential

The following must be made available to the public at all times:

- the location of geophysical operation,
- the identity of the licensee,
- the status of the operation, and the
- number of kilometers shot or recorded (if applicable).

Confidential

All other records concerning a geological operation not designated as non-confidential, are classed as confidential.

Confidentiality Time Period of Geophysical Records

Geophysical records will be held confidential until 15 years from the date of completion or termination of the operation.

Geological

Non-Confidential

The following must be made available to the public at all times:

- the location of geological operation,
- the identity of the licensee,
- the status of the operation, and the
- number of kilometers shot or recorded (if applicable).

Confidential

All other records received concerning a geological operation not designated as non-confidential are classed as confidential.

Confidentiality Time Period of Geological Records

Geological records will be held confidential until 3 years from the date of completion or termination of the operation.

OTHER REQUIREMENTS

Correcting Errors and Omissions

Pursuant to section 29 of the OGGER, a person who has furnished a report shall, in respect of original survey data or interpreted survey data that pertains to the location of shotpoints or stations, immediately notify the COO of any errors, omissions or corrections identified in or made to the data subsequent to the furnishing of the report and immediately furnish the corrected or completed report.

Retention of Records

Pursuant to section 17 of the OGLAR, licensees, and former licensees are required to retain the records that were required in the preparation of documents submitted to the Minister. Records must be stored in Canada for a minimum of six years unless otherwise directed by the COO.

Availability of a Licence

The person in charge of the field crew conducting a geoscience operation shall, on the demand of any person, produce for examination by that person a copy of the Licence authorizing the geoscience operation.