# Submitting an Application to Exploration Application System (ExAS)

**Intended User:** Geophysical applicants

## Overview

This quick reference guide (QRG) describes the requirements for submitting an application to the Exploration Application System (ExAS) which primarily involves sending an email with a zip file attachment that contains all required information for your application.

## Submitting an Application to ExAS

For security reasons, ExAS does not use a client-facing software application for submissions. Applicants must send an email to GEOSub@aer.ca containing the requirements outlined in this QRG.

### Email Subject Line

ExAS uses the email subject line as the first validation in the process. Use the following format in your email subject line:

**[submission type] [space][SUBMISSION[space]for[space]PROSPECT:][space][Prospect Name]**

Example: GEO SUBMISSION for PROSPECT: ABC Project 12

> **Important**
>
> If errors are detected in the email subject line, ExAS will not respond.

### Zip Files

For each stage of the application (e.g., preliminary, amendment, or final plan) and spatial format (e.g., shapefile), compress files into a single zip file. Maximum size is 25 MB.

### Content Requirement

See Appendix A for a list of required files and file formats for each application stage. Be sure to maintain the spatial format within your submission.

### File Naming: Submission Files

- Preliminary submissions where the geophysical activity number is unknown: Use the Exploration Seismic License number of the applicant in naming the zip file.
- Amendment and final plan submissions: Add the pre-fix “p”, “a”, “i”, “d”, or “f” which signifies the application types (preliminary, amendment, interim, declaration, and final). Following that add an underscore (“_”) separator and then the geophysical activity number.

**Examples:**

- Zip file name for an amendment to GEO990008 would be “a_GEO990008.zip”.
- Company X whose Exploration Seismic License number is 9999, the preliminary application zip file name would be “p_9999.zip”.

## File Naming: Content Files

Within each compressed zip file, name individual submission files with the zip file name and the file type separated by an underscore ("_"). Below are valid file types:

- Application Detail (det) – e.g., "**p_9999_det.csv**"
- Cover Letter (covlet) – e.g., "**p_9999_covlet.docx**"
- Proof Notice of Intent (int) – e.g., "**p_9999_int.pdf**"
- Program Plan (img) – e.g., "**f_geo990008_img.jpg**"
- Geophysical Field Report (gfr) – e.g., "**p_9999_gfr.docx**"
- Amendment Summary (ams) – e.g., "**a_geo990008_ams.docx**"
- Program Lines Spatial Data (lin) – e.g., "**f_geo990008_1in.shp**"
- Facility Spatial Data Point Features (pnt) – e.g., "**a_geo990008_pnt.shp**"
- Shot Points Spatial Data (spf) – e.g., "**f_geo990008_spf.shp**"
- Interim Final Declaration (dec) – e.g., "**d_geo990008_dec.docx**"

Appendix A summarizes the zip file contents and file naming conventions for each application type.

## Submission Files

This section describes files contained in the zip file. Program application details must be structured as a comma delimited file (.csv). Field names should be entered in **uppercase letters**.

**Cover Letter (*_covlet.*)**

Complete a cover letter for preliminary, amendment, and final plan applications. Submit the document in Word (.docx) or PDF (.pdf) format. The cover letter (cover sheet) is located on aer.ca under Mines and Minerals Act Forms.

**Program Application Details (*_det.*)**

Provide program application details for preliminary, amendment, and final plan applications. Values for all fields are not required for preliminary or amended applications.

Ensure each record in the file contains the data item name, followed by a comma, followed by the value(s) as specified in Appendix C. The application details file (det) should always be comma delimited and include a .csv extension in the file name.

**Program Plan (*_img.*)**

For preliminary, amendment, and final plan applications, include an image of the program in your digital submission package showing the intent of the application. It should contain information normally shown on a paper plan, such as the reference grid used, context information (topography, hydrography, forest cover polygons, existing cut lines, geo-administrative areas, etc.), and program information. Submit the file in image (.img) or PDF (.pdf) format.

**Geophysical Field Report (*_gfr.*)**

Complete a Geophysical Field Report for all preliminary applications and major amendments on public land. Provide a textual description of the program with more detail than is available from the raw data in a submission. Submit the document in Word (.docx) or PDF (.pdf) format. The Geophysical Field Report is located on aer.ca under Mines and Minerals Act Forms.

**Amendment Summary (*_ams.*)**

Provide a summary for all amendments explaining any changes or changes in line names. Begin by explaining the changes such as access changes, lines extended or relocated, energy changes, etc. List the new line names with corresponding old-line names (new, old). Describe the to-and-from examination where applicable. Information is not required on lines that have been shortened or deleted. Submit the document in Word (.docx) or PDF (.pdf) format.

**Program Lines(*_lin.*)**

Record program lines here. Values for all fields are not required for preliminary, amendment, or final plan applications. This file replaces the supplemental line width sheet for final plans. See Appendix D for field definitions and allowable values.

This is a spatial file and depending on the format chosen, the number of files required may vary. See Appendix B for a summary of technical specifications for ESRI shapefiles.

**Facilities Features (*_pnt.*)**

Record program facilities here. Creek crossings should coincide with lines but do not require explicit topological relationships. Values for all fields are not required for preliminary, amendment, or final plan applications. See Appendix D for field definitions and allowable values. This is a spatial file. See Appendix B for a summary of technical specifications for ESRI shapefiles.

**Shot Points Features (*_spf.*)**

Record shot point features here for all final plan applications. Shot points are source locations only as indicated in Appendix D. This is a spatial file. See Appendix B for a summary of technical specifications for ESRI shapefiles.

**Other Files**

- Proof that the Notice of Intent was submitted to counties, municipal districts, municipalities, improvement districts, and transportation (_int.): Include the letter and proof of submission in the file (i.e., email sent, notification or courier shipment slip, and the notice document), which is required for all preliminary applications.
- Timber Damage Assessment Form (_tda.): Submit the form in Word (.docx) or PDF (.pdf) format within 90 days of completion or with the final plan submission for all final applications on Green Area public lands.
- Interim Final Declaration Form (_dec.): Submit the form in Word (.docx) or PDF (.pdf) format for interim final declaration applications, which is required for time-lapse programs that have not been shot or amended for a given year.
- Other correspondence: Submit these files in Word (.docx) or PDF (.pdf) format. Name files according to the naming conventions outlined in this QRG. Names should suggest the content of each file. For example, CLR consents could be named as follows: p_9999_clr.doc, f_geo990099_clr.doc. Correspondences must only pertain to the submitted program and no other programs.

# Appendix A – Required Files

**Table 1. Required Files for Zip File**

| Application Type | Files Required |
|---|---|
| Preliminary | Application Detail<br>Cover Letter<br>Program Plan<br>Geophysical Field Report<br>Notice of Intent<br>Program Line Shapefiles<br>Facility Shapefile |
| Amendment | Application Detail<br>Cover Letter<br>Program Plan<br>Geophysical Field Report<br>Amendment Summary<br>Program Line Shapefiles<br>Facility Shapefiles |
| Interim Final (time-lapse programs) | Application Detail<br>Cover Letter<br>Program Plan<br>Program Line Shapefiles<br>Facility Shapefiles<br>Shot Point Shapefiles |
| Interim Final Declaration (time-lapse programs) | Application Detail<br>Declaration Form |
| Final | Application Detail<br>Cover Letter<br>Program Plan<br>Program Line Shapefiles<br>Facility Shapefiles<br>Shot Point Shapefiles |

**Table 2. File Base Name Summary**

| Application Type | Submission File | Content |
|---|---|---|
| Preliminary | p_*.zip - where "_*" = license number of applicant (e.g., p_l234.zip) | p_1234_det.*<br>p_1234_covlet.*<br>p_1234_img.*<br>p_1234_gfr.*<br>p_1234_lin.*<br>p_1234_pnt.*<br>p_1234_int.* |
| Amendment | a_*.zip - where "_*" = complete file number of program (e.g., a_geo020468.zip) | a_geo020468_det.*<br>a_geo020468_covlet.*<br>a_geo020468_img.*<br>a_geo020468_gfr.*<br>a_geo020468_ams.*<br>a_geo020468_lin.*<br>a_geo020468_pnt.* |
| Interim Final (time-lapse programs) | i_*.zip – where "_*" = complete file number of program (e.g., f_geo020468.zip) | i_geo020468_det.*<br>i_geo020468_covlet.*<br>i_geo020468_img.*<br>i_geo020468_lin.*<br>i_geo020468_pnt.*<br>i_geo020468_spf.* |
| Interim Final Declaration (time-lapse programs) | d_*.zip – where "_*" = complete file number of program (e.g., d_geo020468.zip) | d_geo020468_det.*<br>d_geo020468_dec.* |
| Final Plan | f_*.zip – where "_*" = complete file number of program (e.g., f_geo020468.zip) | f_geo020468_det.*<br>f_geo020468_covlet.*<br>f_geo020468_img.*<br>f_geo020468_lin.*<br>f_geo020468_pnt.*<br>f_geo020468_spf.* |

## Submission Content: Application Types

### Preliminary Application

Add the prefix "p_" for files associated with preliminary applications. The Exploration Seismic License number of the applicant forms the basis of the file naming convention (e.g., p_9999.zip).

### Amendment Application

Add the prefix "a_" for files associated with an amendment application. The geophysical program activity number forms the basis of the file naming convention (e.g., a_geo0l0000.zip).

An amendment is any change to a program in terms of line relocations, extensions, or additions not covered by a field authorized Temporary Field Approval (TFA).

**Interim Final**

Add the prefix “i_” for files associated with an interim final application. The geophysical program activity number forms the basis of the file naming convention (e.g., i_geo010000.zip).

An interim final is short-term and submitted for time-lapse programs as they are shot or amended.

**Interim Final Declaration**

Add the prefix “d_” for files associated with an interim final declaration. The geophysical program activity number forms the basis of the file naming convention (e.g., d_geo0I0000.zip).

An interim final declaration submission is required for time-lapse programs not shot or amended for a given year.

**Final Plan**

Add the prefix “f_” for files associated with a final plan. The geophysical program activity number forms the basis of the file naming convention (e.g., f_geoOIOOOO.zip).

## Appendix B – Spatial Data Format/Shapefile Format

Submit all spatial data in the ESRI shapefile format:

- Alberta Township System (ATS) version 4.1
- Datum: D_North_American_1983/NAD83
- Projection: NAD_1983_10TM_AEP_Forest / NAD-1983CSRS_10TM_AEP_Forest
  - ExAS will reject shapefiles that contain unsupported projections. When projected to either of these two projections, file contents (.prj) must not contain any special characters. You may use the contents of the PRJ files included in the shapefile templates as a reference. These files may be opened using text editor software.

## Appendix C – Program Application Details (*_det.*)

This file is required for preliminary, amendment, and final plan applications. The file should contain metadata for the entire submission. Values for all fields are not required for all application stages (preliminary, amendment, and final). Ensure each record in the file has the data item name followed by a comma, followed by the value(s) as specified in Table 3.

Enter field names in **uppercase letters**.

For entering an individual's name, start with the last name followed by a comma, space, and then the first name. When using spreadsheet software such as Microsoft Excel, place the last name in one column and the first name in the next column.

The details file should not contain any quotes. Extra commas that may occur when saving to a .csv format are acceptable.

**Table 3. Program Application Details**

| Field Name | Valid Values | Validation |
|---|---|---|
| PROSPECT | Free text | Required for preliminary, amendment, and final plan applications<br>Confirmation check |
| LICENSEE | Free text | Required for preliminary, amendment, and final plan applications |
| LICENSEE ID | ###-####-### | Required for preliminary, amendment, and final plan applications |
| LICENSE NO | Valid license #### | Must be a valid combination<br>Confirmation check * |
| PROGRAM | GEO###### | Required for amendment and final plan – Null otherwise |
| ENERGY SOURCES | D – Dynamite<br>V – Vibroseis<br>A – Air Gun<br>P – Pea Shooter<br>O – Other | Required for preliminary, amendment, and final plan applications<br>Confirmation check * |
| SHOT ON WATERBODY | Y – Yes<br>N – No | Required for preliminary, amendment, and final plan applications<br>Confirmation check * |
| EQUIPMENT | T – Tracked<br>W – Wheeled<br>H – Helicopter<br>M – Boat<br>B – Buggy<br>L – Low Ground Pressure (LGP)<br>O – Other | Required for preliminary, amendment, and final plan applications<br>Confirmation check * |
| PERMITTEE | Text | Required on final plan or as soon as known |
| PERMITTEE ID | ###-####-### | Required on final plan or as soon as known |
| PERMIT NO | Valid permit#### | Must be a valid combination<br>Confirmation check * |
| CONSULTANT NAME | Text | Required for preliminary, amendment, and final plan applications |
| CONSULTANT ID | ###-####-### | Required for preliminary, amendment, and final plan applications |
| NUMBER OF SITES | Integer | Required on final plan for programs using the heliportable method |
| AVG-SIZE-OF-SITES | Decimal | Required on final plan for programs using the heliportable method |
| UTM ZONE | 12 | Required for preliminary, amendment, and final plan applications |
| DATUM | 83 | Required for preliminary, amendment, and final plan applications |
| ATS VERSION | 4.1 | Required for preliminary, amendment, and final plan applications |
| PUR DATE | | Required when ATS_VERSION = M |

| Field Name | Valid Values | Validation |
|---|---|---|
| SURVEY METHODS | Text | Optional |
| HORIZONTAL TAKEOFF | Text | Optional |
| HORIZONTAL-TAKEOFF-DESCRIPTOR | Text | Optional |
| HORIZONTAL-TAKEOFF-NORTHING | Decimal | Optional |
| HORIZONTAL-TAKEOFF-EASTING | Decimal | Optional |
| COORDINATE_QUALITY | Integer | Optional |
| TIME LAPSE | Text: Y or N (for Yes or No) | Required for preliminary, amendment, interim final, and final plan applications |
| DECLARATION | Text: Y or N (for Yes or No) | Required for preliminary, amendment, interim final, and final plan applications |
| INTERIM FINAL | Text: Y or N (for Yes or No) | Required for preliminary, amendment, interim final, and final plan applications |

# Appendix D – Spatial Data Files

## Spatial Data Files

The positions of proposed seismic lines contained in preliminary or amended application submissions are approximate. Their final location in the field will be governed by actual positions of infrastructure, existing seismic lines, roads, and other features. To determine the usefulness of the spatial data for future purposes, the final horizontal coordinates for the spatial data contained in the vector file could be accompanied. This information identifies the origin and estimated reliability of the horizontal coordinates. Submit the data in NAD_1983_10TM_AEP_Forest / NAD-1983¬CSRS_10TM_AEP_Forest.

## Program Lines (*_lin.*)

Record program lines here. Values for all fields are not required for all application stages (preliminary, amendment, and final plan). This file replaces the supplemental line width sheet for final plans. Enter field names in **uppercase letters**.

Ensure line IDs have a unique value. Lines are broken up by a unique set of attribute values. Each line object in the spatial data file is referenced by an ID to a record in the textual attribute file. The textual attribute records are defined in Table 4.

Also record seismic, access, and detour lines associated with a program here.

**Table 4. Program Lines**

| Field Name | Data Type | Valid Values | Validation |
|---|---|---|---|
| ID | Integer (10) | Any number | Required for all features |
| LINE_NAME | String (16) | Free text | Required for all seismic features<br>Optional for non-seismic features |
| LINE_TYPE | String (1) | S – Source<br>R – Receiver<br>C – Combination<br>D – Detour<br>B – Disposed Access<br>A – Additional Access | Required for all features |
| CLEARING | String(l) | N – New Clearing<br>E – Existing Clearing<br>X – No Clearing<br>Null for disposed access only | Required for all features<br>Disposed access is null |
| METHOD | String (1) | S – Survey Line of Sight<br>L – Low Impact<br>C – Conventional<br>Z – Minimal Impact<br>Null for disposed access only | Required for all features<br>Disposed access is null |
| CUT_TYPE | String (1) | H – Hand Cut<br>M – Mechanical Cut<br>Null for disposed access, existing clearings, and no clearings | Required for New clearing (N) features, disposed access<br>Existing clearings (E) and No Clearing (X) are null |
| WIDTH | Decimal (8,1) | Any number | Required for all features<br>Disposed access and minimal impact (Z) features are zero |
| OFFSET | Decimal (8, l) | Any number | Required on final plan for Low Impact Seismic (L) features – other features are zero. |
| RD_ALLCE | String (1) | R – Road Allowance<br>Null if not in road allowance | Required for seismic features within surveyed road allowance, not for road allowance crossings |
| HELI_DRILL | String(l) | H – Heliportable Drill Site<br>Null if no drill sites on the line | Required for seismic line which contain Heliportable drill sites |
| CHANGE | String (1) | N – New<br>E – Extension<br>M – Move<br>A – Attribute Change<br>Null if no change | Required for seismic features, which are new or have changed<br>Null when a feature has not changed<br>For preliminary all lines are new |
| COMMENTS | String (80) | Free text | Optional |

## Facility Features (* _pnt.*)

Record point features, other than shot points, here. Creek crossings should coincide with lines but do not require explicit topological relationships. Values for all fields are not required for all application stages (preliminary, amendment, and final).

Examples of facility features: Watercourse crossings, campsites, and other non-linear parts of a seismic program not connected to exploration activity.

**Table 5. Facility Features**

| Field Name | Data Type | Valid Values | Validation |
|---|---|---|---|
| ID | Integer (10) | Any number | Required for all features |
| FACILITY | String (1) | X – Watercourse Crossing<br>C – Campsite<br>S – Staging Area<br>H – Helipad | Required for all features |
| CLEARING | String (1) | N – New<br>E – Existing<br>X – No Clearing<br>Null for watercourse crossing | Required for campsite, staging area, and helipad<br>Null for watercourse crossing |
| CROSSING | String (1) | 1 – Snow and/or ice fill<br>2 – Strapped or cabled log fill<br>3 – Ford type crossing<br>4 – Log crossing<br>5 – Portable free span bridge<br>6 – Existing bridge<br>7 – Other<br>8 – Non-mechanical crossing<br>Null if not watercourse crossing | Required for watercourse crossing – Null otherwise |
| COMMENTS | String (80) | Free text | Optional |

## Program Shot Points (*_spf.*)

This file is required in the final plan submission. It contains the source locations of the shot points for the program area.

**Table 6. Program Shot Points**

| Field Name | Data Type | Valid Values | Validation |
|---|---|---|---|
| ID | Integer (10) | Any number | Required for all features |
| LINE_NAME | String (16) | Free text | Required for all features |
| SHOTPOINT | Integer (8) | Any number | Required for all features |

# Appendix E – Definitions

**Table 7. Definitions**

| Term | Definitions |
|---|---|
| ADDITIONAL ACCESS | Access on vacant public land usually existing (e.g., cutlines, trails), requires regulatory approval. This will be the only access that is approved with the plan. |
| AIR GUN | An instrument that generates seismic waves by forcing a blast of compressed air onto the ground surface or into a water body. The term is the same as mud gun. |
| ATS VERSION | The ATS version is used to compile submitted data. The only acceptable ATS version is 4.1. Supply the date purchased if it is available. |
| AVG SIZE OF SITES | The average diameter of landing sites. The size of an existing or natural opening is zero and is included in the average for TDA purposes. The number supplied should be to a maximum of three decimal places. |
| BOAT | A vessel for travel on water. |
| CAMPSITE | A location where a company proposed to bring in, construct temporary, or use existing accommodations to house crew members. |
| CHANGE | Description of the nature of change of a feature. |
| CLEARING | The state of a proposed line, which determines whether the vegetative cover must be removed. |
| COMBINATION | A line on which energy source points and geophone cables are located. |
| COMMENTS | Notes specific to the feature. |
| CONSULTANT ID | Land Status Automated System (LSAS)/Geographic Land Information Management Planning System (GLIMPS) client ID of the consulting organization. |
| CONSULTANT NAME | Name of consulting organization making the submission. |
| CONVENTIONAL | A conventional seismic line is a straight line that can either be hand or mechanically cut, and ranges in width from 1.0 to 6.0 m. The maximum width cannot exceed 6.0 m. A Survey Line of Sight is not considered a conventional line.<br><br>For wildlife purposes, the maximum line of sight must not exceed 200 min length. A mechanically cut conventional line provides little protection for timber and wildlife, so its use in the Green Area is restricted except for muskeg areas and dense cover types.<br><br>Note: Where possible, the same soil and ground cover protection used for Low Impact Seismic is to be used with conventional lines. |
| COORDINATE QUALITY | Absolute positional accuracy in meters. |
| CROSSING | Type of watercourse crossing. |
| CUT TYPE | An indication of how a new line will be cleared. |
| DATUM | Reference datum for all spatial files in the program. |
| DECLARATION | Document required for time-lapse programs that have not been shot or amended for a given year. |
| DETOUR | Any deviation from an approved program line for access purposes owing to terrain. When detours are used, the original line's continuation is approved as an approved line type (LIS or conventional) that is hand cut. |

| Term | Definitions |
|---|---|
| DISPOSED ACCESS | Access that is under the care and control of a third party – Examples: Access under a disposition (e.g., License of Occupation), a public road, a surveyed road allowance, or a portion that may cross private land. In some cases, consent is required and/or a road use agreement – Example: Consent is required for private land, and consent and/or a road use agreement are required from the disposition holder. |
| DYNAMITE | Any use of nitroglycerine-based compounds to generate seismic sound waves. The dynamite may be buried in drilled shot holes or laid out on the surface. |
| ENERGY SOURCES | Any force, equipment, or motion, used to generate seismic sound waves to determine subsurface geology. |
| EQUIPMENT | The classification of vehicles used to transport energy generation instruments, equipment, or personnel on a program. The vehicles are categorized as to what ground contact they are mounted on and/or special mechanical features. |
| EXISTING BRIDGE | Any bridge which is presently constructed and able to be used for vehicular crossing of a watercourse. |
| EXISTING CLEARING | The removal of any forest growth less than two meters in height or where there is a visible linear disturbance pattern (e.g., cutline or trail). Changes in clearing that are less than 100 m are not required for this submission. |
| FACILITY | The non-linear parts of a seismic program are not connected to exploration activity. |
| FORD TYPE CROSSING | A crossing location on a watercourse where vehicles are driven through the watercourse with no crossing structure being required. |
| HAND CUT | No mechanical equipment, other than a chainsaw, may be used to cut the line. |
| HELI DRILL | The objective of heliportable seismic is to use hand cut lines only for geophone placement, hand drills/heli-drills for shot holes, with helicopters to transport men, drills, recorders (where necessary) and cables to required locations. Both natural and hand cut helipads are used. Heliportable seismic is not a substitute mitigation for continuing activity in wildlife areas where timing restrictions may apply. |
| HELICOPTER | An aircraft whose lift is derived from the aerodynamic forces acting on one or more powered rotors turning about the vertical axes. |
| HELIPAD | A new clearing or an existing clearing where a helicopter will be landed. |
| HORIZONTAL TAKEOFF | Type of entity used as origin of coordinates.<br>May be Alberta Survey Control Markers (ASCM), cadastral mapping point, Differential Global Positioning System (DGPS) correction provider, ATS comer, existing shot point identifier, wellsite corner, and topographic map feature. |
| HORIZONTAL TAKEOFF EASTING | Universal Transverse Mercator (UTM) northing for horizontal takeoff. |
| HORIZONTAL TAKEOFF NORTHING | UTM northing for horizontal takeoff. |
| ID | Unique record identifier that is usually system generated. |
| INTERIM FINAL | Specify whether your submission is an interim final submission (associated with time-lapse programs) or not. The “Y” value indicates a time-lapse program interim final application. An “N” value indicates all other cases: a time-lapse application, a time lapse final, as well as a non-time-lapse program in any part of its cycle, etc. |
| LICENSE NO | Unique number assigned to the program licensee. |
| LICENSEE | Name of the program licensee. |

| Term | Definitions |
|---|---|
| LICENSEE ID | LSAS client ID of the program licensee. |
| LINE NAME | An alphanumeric string assigned by the company, which uniquely identifies each seismic line in a program. |
| LINE TYPE | Describes the function or purpose of a feature. |
| LOG CROSSING | A lightweight span bridge made to carry all-terrain vehicles (ATVs) or pedestrian traffic only. Heavy logs are laid down parallel to the stream and lighter logs are placed across them to span the creek. |
| LOW GROUND PRESSURE (LGP) | Any wheel mounted or track mounted vehicle where the tracks or tires are made extra wide or in a specific manner to minimize the pounds per square inch (psi) ground pressure exerted by the vehicle. |
| LOW IMPACT SEISMIC (LIS) | The objective of minimal impact seismic (also referred to as the “path of least resistance”) is to create a narrow, continuously meandering line. This method reduces the line of sight to less than 200 m, avoids larger standing trees (meandering avoidance), and leaves the soil and ground cover undisturbed. The line width can range from 1.0 to 4.5 m and be a hand or mechanically cut line.<br><br>Note: Conventional (straight) lines with a 200 m line-of-sight pattern are not LIS lines.<br><br>Line cutting will vary with forest cover and density, terrain, line requirements and other factors. The average line width cannot exceed 4.5 m, and maximum line width cannot exceed 5 m. Line cutting will include several of the following:<br><br>• Average line construction width of 4.5 m (meandering) or less, depending on the width applied for<br><br>• 200 m maximum line of sight for wildlife reasons (see section 3.11.3). Avoidance of standing timber<br><br>• Minimal disturbance of ground cover<br><br>Note: In dense timber stands where LIS is not possible, conventional line types are permitted providing line of sight blockage is in place every 200 m. |
| MECHANICAL CUT | The line has been or will be cut by some type of mechanical equipment (e.g., dozer and a hydro-axe). |
| METHOD | Technique used on the line. |
| MINIMAL IMPACT | Lines where no forest growth is cut other than to create a walking trail for foot access. There is no cutting of standing trees and little if any cutting of shrubs and may include existing lines. |
| NEW CLEARING | The removal of any forest growth two metres or greater in height and/or any reforested or regenerated areas. |
| NO CLEARING | Where there is no surface disturbance or “minimal impact” as defined in the Exploration Regulation, on the land such are native prairies, range land, cultivated land, or water bodies. Changes in clearing that are less than 100 m are not required for this submission. |
| NON-MECHANICAL CROSSING | A crossing on foot by individuals. No vehicle or equipment of any type can be used (e.g., ATVs). |
| NUMBER OF SITES | Total number of landing sites in a program, used by the heliportable method. These do not include helipads identified in point features. |

| Term | Definitions |
|---|---|
| OFFSET | Average offset, in meters, from the centerline of an approved program line to the centerline of the cleared line. |
| OTHER CROSSING | Any crossing type that cannot be categorized as belonging to defined crossing types. |
| OTHER ENERGY SOURCE | Any method of generating seismic waves that does not fit into any of the above categories. |
| OTHER EQUIPMENT | Types of equipment that do not fit into any of the above categories. |
| PEASHOOTER | Any instrument used to generate seismic waves by repetitively dropping heavy weights onto the surface. |
| PERMIT NO | Unique number assigned to the program permittee. |
| PERMITTEE | Principal holder of the program permit who operates or authorizes the operation of exploration equipment used in the conduct of the program's exploration. |
| PERMITTEE ID | LSAS client ID of the program permittee. |
| PORTABLE/FREE SPAN BRIDGE | A crossing constructed of wood or steel consists of a stringer running from one side of the watercourse to the other, which may or may not have support structures constructed to carry weight. This includes native timber bridges, bailey bridges, etc. |
| PROGRAM | Number assigned upon receipt of an application for an exploration program (activity number). |
| PROSPECT | Name designated by the company that is unique for the fiscal year. |
| PUR DATE | Date that the ATS master file was purchased. |
| ROAD ALLOWANCE (RD_ALLCE) | The right-of-way of a highway or public road and any other right-of-way established or surveyed under the *Surveys Act*. |
| RECEIVER | A line used in a program solely for stringing geophones. No source points are permitted on the line. |
| SHOT ON WATERBODY | An indication of whether all or part of the program will be or has been shot on a water body. |
| SHOTPOINT | The unique number of shot points. |
| SNOW AND/OR ICE FILL | A crossing constructed across a watercourse to provide vehicular access. The crossing is constructed primarily of snow and ice material and must be free of any dirt or dirt cap. Logs may be used for load bearing purposes, but these logs should be free of any branches or roots. |
| SOURCE | A line on which energy source points are established to generate seismic waves. No geophones are placed along the line. |
| STAGING AREA | A site where a company will use as a jumping-off point to pick up crew members and equipment from where they will be transported to the job site. |
| STRAPPED OR CABLED LOG FILL | A crossing constructed to provide vehicular access across a watercourse. The crossing consists of logs strapped together, either by chains or straps, and placed in the watercourse so that vehicles can travel across them. |
| SURVEY LINE OF SIGHT | A requirement for industry to locate shot points, etc. Its use is widespread and associated in some manner with most lines cut. It primarily provides a line of sight between stations, and should be kept to a minimum width of 0.5 m. |
| SURVEY METHODS | Survey methods used. |

| Term | Definitions |
|---|---|
| TRACKED | A vehicle mounted on a continuous belt that supports the vehicle's weight and causes it to be propelled along the ground. |
| UTM ZONE | UTM zone number for all spatial files in the program. |
| VIBROSEIS | Any instrument that vibrates along the surface to generate seismic waves. |
| WATERCOURSE CROSSING | Any point where a seismic line or access trail crosses a watercourse where it is proposed that vehicles will be allowed to cross. |
| WHEELED | A vehicle mounted on wheels. |
| WIDTH | Width of line in meters. |