

# Project deliverables

## Final report and data format requirements for the Geophysics and Drilling Collaborations program

The final report must address all content points as listed in the **Final Report Template** available under 'Guidelines and templates' on [Resourcing the Territory](#). Submit under reporting requirement 'performance report' through [GrantsNT](#).

The **data submission** must comply with any relevant parts of the [Guideline 7: Reporting on Mineral Titles: Mineral Titles Act 2010 and Regulations](#) that is produced by the Department to assist explorers with their statutory reporting requirements in regards to mineral titles. Submit under reporting requirements 'delivery materials' through [GrantsNT](#).

For drill programs, sample core and/or cuttings/chips must be provided to the NT Geological Survey as per the [Geological Sample Submission Procedure \(Drill Core and Cuttings\)](#)<sup>3</sup> using [Approved Form 20: Geological Sample Submission \(Drill Core and Cuttings\) Form](#).

Excerpts that are particularly relevant from [Guideline 7: Reporting on Mineral Titles: Mineral Titles Act 2010 and Regulations](#) are included below.

For reporting under petroleum titles see [Guidelines for NT Onshore Petroleum Reporting and Data Submission](#).

## Section 7.0: Report formats

### 7.1 File naming convention

File names should conform to the following file naming convention:

**Title id\_YYYY\_C\_##\_ {data**

**type}.eee Where:**

- **Title id** is the tenement number; there is no space between the title type/prefix and the number ie EL12345.
- **YYYY** is a four-digit report date representing year in which the report is due (not the year of submission).
- **C** is representative of a Collaborations report.
- **##** is a two digit sequential integer for each file submitted as part of the report.
- **{data type}** either denotes the data type contained in the file corresponding to one of the abbreviations in Table 7 or for documents appended to the report, the appendix number e.g. appendix4,
- **.eee** is the file suffix as shown in Table 5.

For example, the file EL22222\_2010\_04\_drillcollars.txt would be the fourth file of the 2010 report for Exploration Licence 22222 and would contain tabular data in ASCII text format. A large document included in the report as an appendix and that has been split in two would be named EL22222\_2010\_03\_appendix2.pdf and EL7766\_200004\_04\_appendix2.pdf.

## Section 8.0: Acceptable media and labelling

The department will accept the report and data via:

- Email, the total report and data not to exceed 10 MB
- CD-ROM, no multisession, read only
- DVD\_ROM, no multisession, read only
- Portable hard drive, non-returnable
- USB flash drives, non-returnable
- 3592 tape cartridges for larger volume data sets, specifically seismic field data

Discs must be read-only, full-sized discs; all media must be compatible with Windows Operating System and must be supplied in a hard protective cover.

Files may be submitted in compressed form. Acceptable formats are ZIP, RAR and ECW. Self-extracting executable files are not acceptable because of potential problems with virus detection software.

All media must be individually labelled with the company name, title number(s), report type and period, and numbered if there is multiple media, for example 1/5. A list of all the files is to be included with the report.

## Section 13.0: Data formats and specifications

This section specifies acceptable data formats for the different types of data. The table below provides a summary and further explanation is available under the appropriate headings following the table.

Text documents should be a text (not image) PDF (portable document format) with thumbnails. Do not embed any files as attachments within the .pdf. All associated files must be separate. Security should be set to allow copying from, but not editing of the document. Individual PDF files should not exceed 10 MB.

Numerical and tabular data must be submitted in ASCII format with a suffix of .txt. They should be tab, not comma, delimited. All units should follow the SI system or an accepted industry standard if SI is not applicable. Mixed units such as ounces or lb per metric tonne are not acceptable. Ensure that any ASCII analytic data has headers that include the units of measure for each column.

All reports should contain a scaled location map showing sample points or surveys in relation to title boundaries and eastings and northings. The use of outcrop and core photographs in reports is encouraged. Stand-alone images can be in PDF, GEOTIFF, TIFF, JPEG (Q $\geq$ 95), GIF, PNG or EPS formats. Images should be reproducible at the original size with a minimum of 300 dpi. A geo-locatable image must be accompanied by the datum and projection.

The table below provides a list of suitable formats for a range of data:

Data Type	Description	Format	Parameter	Suffix
<b>Tabular data*</b>	Point locations, geochemistry, heavy mineral, diamond indicator and drilling data	Tab Delimited ASCII	Standard as described in <i>Sections 13.1 and 14.0</i>	.txt

<b>Report text</b>	Documents, figures etc. previously provided only in hardcopy	Adobe Acrobat PDF	See <i>Section 13.2</i>	.pdf
<b>Maps, plans, figures and photographs not embodied in report text</b>	Files of maps, plans, figures, core photographs, aerial photographs etc.	Adobe Acrobat PDF	See <i>Section 13.2</i>	.pdf
		GEOTIFF/TIFF (colour)	Reproducible at 300 dpi, 24 bit	.tif
		JPEG	Q>95, reproducible at 300 dpi	.jpg
		GIF	8 bit	.gif
		PNG		.png
<b>GIS data</b>	Data in GIS format	MapInfo Tab		.tab
		ESRI Shape		.shp
<b>Video clips</b>	Fly-throughs etc.	MPEG		.mpg
		Avi		.avi
<b>3D mine models and resource estimation</b>	3D mine model data, resource/reserve models	See Table 6	See <i>Section 13.10</i>	
<b>3D modelling</b>	3D models	As appropriate to fulfil requirements in <i>Section 13.10</i>	See <i>Section 13.10</i>	
		ASCII .dxf files		.dxf .txt
<b>Geophysics (other than seismic)</b>	Raw and processed located data and gridded data. For example magnetics, radiometrics, EM, DTM and gravity data	ASEG GDF2		.dfn .dat .des
		ASEG GXF		.gxf
		ER Mapper grid		.grd, .ers
		XML (including schema)		.xml, .xsd
<b>Geophysical and other remotely sensed images</b>	Images derived from geophysical / remote sensing surveys, e.g. TMI, Bouguer, radiometrics, Landsat 5 or 7	GEOTIFF/TIFF (colour)	Reproducible at 300 dpi, 24 bit	.tif
		TIFF (greyscale)	Reproducible at 300 dpi, 8 bit	.tif
		Compressed ER	Best quality (least loss)	.ecw
		JPEG	Quality as above 8 bit See <i>Section 13.2</i>	.jpg
		GIF		.gif
		PDF		.pdf
		PNG		.png
<b>Geophysical Inversion and Numerical Modelling</b>	Models	Points (DXF or ASCII)		.dxf .txt
		Images	See <i>Section 13.2</i> See <i>parameters above for Geophysical Images</i>	.pdf .tif .jpg .gif .png
		Surfaces	.dxf	

		3D grids (UBC Grid or GoCAD Voxet)		See Table 6
<b>Seismic data</b>	Raw and processed data	SEG Y, preferably Rev. 1		.sgy
		SEG D		.sgd
	Navigation data	UKOOA P1/90		.uka
	Processed sections (refer to Petroleum data submission guidelines for further information, <a href="http://www.ga.gov.au">www.ga.gov.au</a> )	CGM+ format with metadata (line number, shotpoint number, ...)		.cgm
		Images	See <i>parameters above for Geophysical Images</i>	.tif, .jpg, .gif, .pdf, .png
<b>Petrophysical and geophysical log data</b>	Raw and processed wireline and MWD data (refer to Petroleum data submission guidelines for further information, <a href="http://www.ga.gov.au">www.ga.gov.au</a> )	DLIS and LIS LAS	As defined by latest Industry Standard	.lis .las
		Delimited ASCII (format must be explained)		asc
		WELLOGML (POSC standard)	Include schema	.xml, .xsd
	Log plots	Adobe Acrobat PDF	See Section 13.2 See <i>parameters above for Geophysical Images</i> 8 bit	.pdf
		TIFF (colour)		.tif
		TIFF (greyscale)		.tif
		JPEG		.jpg
		GIF		.gif
		PNG		.png
	Processed down-hole velocity data	SEG Y, preferably Rev. 1		.sgy

## 13.1 Tabular data

These data include point locations, geochemistry, diamond indicator observations and drilling data. Data will be submitted as TAB delimited ASCII files with a suffix of .txt. File format details are provided in Section

### 14.0 Data standard specification – tabular data, metadata and templates and Appendix 1.

The required file format for tabular data is a "flat file" rather than a "relational" file system. This allows more flexibility in the format and also reduces the need for relational keys between files. However, some datasets, particularly drill logs incorporating lithological, geochemical, structural and other data, including authority / lookup tables, may have to be submitted as a series of "linked" flat files, appropriately documented.

The Mineral Reporting Template or MRT software creates the metadata headers required for compliant tabular files. Compliant files of tabular data can be modified manually using any text editor. The MRT software is available for download from the [Commonwealth Government's Australia Minerals website](#).

See the remaining sections in [Guideline 7: Reporting on Mineral Titles: Mineral Titles Act 2010 and Regulations](#) for further detail:

- 13.2 Report text

- 13.3 Maps, plans, figures, images and photographs
- 13.4 GIS data
- 13.5 Geophysical data other than
- 13.6 Seismic
- 13.7 Petrophysical and downhole geophysical
- 13.8 Spectral and alteration logs
- 13.9 Aerial hyperspectral data

## Section 14.0 Metadata

All data must be accompanied by metadata; presented in a file header at the top of the file of related tabular data (preferred) or as a separate file.

Metadata should include:

- location of the data
- date the data were produced
- data the data were altered
- parameters controlling the data acquisition
- parameters controlling the data's alteration
- name of the company for whom the data was produced
- title(s) under which the data was produced
- activity which produced the data e.g. Drilling
- name of the contractor producing the data
- any translation parameters required for conversion of the data (especially location data)