Compilation of pre-competitive Northern Territory Geological Survey geochemistry

BATHURST ISLAND	MELVILLE ISLAND	COBOURG PENINSULA	JUNCTION BAY	WESSEL ISLANDS	TRUANT ISLAND
FOG BAY		ALLIGATOR	MILINGIMBI	ARNHEM BAY	GOVE
CAPE SCOTT		X MOUNT EVELYN X	MOUNT MARUMBA	× Blue≍m⊎d Bay ×	PORT LANGDON
PORT KEATS	× ⊗ PERGUSSON RIVER	× KATHERINE×		ROPER RIVER	CAPE BEATRICE
AUVERGNE	DELĂMERE ×	LARRIMAH $\stackrel{\times}{\times}$	HODGSON DOWNS	× MOUNT YOUNG × ⊗	PELLEW
× × × WATERLOO	VICTORIA RIVER DOWNS × ×	× DALY WATERS	× × ×	BAUHISKA DOWSS	ROBINSON RIVER
	WAVE HILL	NEWCASTLE > WATERS	BEETALOO	WALHALLOW	CALVERT HILLS
	WINNECKE CREEK	SOUTH LAKE WOODS		× BRUNETTE DOWNS	MOUNT DRUMMOND
	TANAMI EAST	GREEN ×× SWAMP WELL		× ALRO¥	RANKEN
THE GRANTES	× MOUNT SOLITAIRE× × × ×	LANDER RIVER	BONNEYWEL	FREW RIVER	AVON DOWNS
HIGHLAND [×] × ŘOCKS			××××××××××××××××××××××××××××××××××××××	× ×× × × elkedra ×	SANDOVER RIVER
LAKE MAČKAY	MOUNT DØREEN	NAPPERBY ×	ALCOOTA	× HUCKITTA	TOBERMOREY
MOUNT RENNIE	MOUNT LIEBIG	HERMANNSBURG	ALICE SPRINGS	× ILLOGWA CREEK	× HAY RIVER × [⊗]
BLOODS RANGE	× LAKE AMADEUS × &	⊗ ^{HENBURY} ×		HALE RIVER	SIMPSON DESERT NORTH
PETERMANN RANGES	AYERS ROCK	KULGERA	FINKE	McDILLS	SIMPSON © DESERT SOUTH

Digital Information Package DIP 042



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BIBLIOGRAPHIC REFERENCE: Northern Territory Geological Survey, 2024. Compilation of pre-competitive Northern Territory Geological Survey, Digital Information Package DIP 042.

(Digital Information Package / Northern Territory Geological Survey ISSN 1445-5358)

DATA FORMATS: Microsoft Excel, CSV

Keywords: geoscientific information, geology data, geochemistry.

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Cover image: NTGS 250 000 scale mapsheets showing location and density of geochemical data.



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SUMMARY

The Northern Territory Geological Survey (NTGS) geochemistry compilation includes all geochemistry analysis undertaken by the NTGS and partner organisations including Geoscience Australia (GA) and the Bureau of Mineral Resources, Geology and Geophysics (BMR), a predecessor organisation to GA. The dataset includes surface (whole rock, rock chip, soil and stream) and drillhole geochemistry analysis.

Surface and drilling geochemistry undertaken by industry, compiled from company reports, is distributed in the Northern Territory geochemical datasets in Digital Information Package 001 (**DIP001**).

The focus on NTGS geochemistry allows all results and additional attribution to be published.

Alongside the compiled output, the original laboratory analysis result files have been included for 151 datasets. It is not always possible to include the original results as earlier original source files have been lost; the current compilation comprises source data from around 2000.

As part of the work in compiling this data, a number of unloaded geochemistry data sets have been identified and will be attributed and loaded into the database for distribution going forward.

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NTGS internal standard sample numbers1

DIGITAL FILE CONTENT

- Data folder: containing all NTGS geochemical data and standards data combined in 2 datasets in xlsx and csv formats • (4 files).
- •
- Source Data folder: containing geochemistry data in 151 csv files. Data dictionary: NTGS-GIS-DataDictionary-NTGSGeochemistry.xlsx. •

STRUCTURE OF DATASETS

GEOCHEMISTRY DATA

All types (drilling, whole rock, rock chip, stream and soil) of NTGS geochemistry data have been combined into a single dataset. The NTGS geochemistry results have been extracted in their entirety. For this dataset, the sample attribution has been supplemented with lithology and stratigraphic unit where recorded. The data is provided in both Excel and CSV formats:

NTGSGeoChemEleUnitAttributed.csv NTGSGeoChemEleUnitAttributed.xlsx

To compliment the samples data, the laboratory standards and checks have been included. This additional data is only available for geochemistry data loaded in the past 18 months. Going forward, the original datasets will be reloaded into the database and at this time the standards and checks will also be loaded and included in future releases. The standards and checks can be joined to the sample data using the LAB_JOB_NO field. The data is provided in both Excel and CSV formats:

NTGSGeoChemEleUnitStandardsChecks.csv NTGSGeoChemEleUnitStandardsChecks.xlsx

The associated data dictionary is included in NTGS-GIS-DataDictionary-NTGSGeochemistry.xlsx

GEOCHEMISTRY SOURCE DATA

The Source Data directory contains 151 geochemistry source files, ie the original files received from the laboratory. These are provided wherever possible and the files are identified by the LAB_JOB_NO attribute. It is not always possible to include the original results as earlier original source files have been lost; those included herein start from around 2000.

NTGS INTERNAL STANDARD SAMPLE NUMBERS

Included in the NTGS geochemistry standards and checks are the NTGS internal standards, details for which are provided below:

Sample No	DW06LMG005	AS08JAW004	AS08JAW006
Project area name	Pine Creek Orogen	Arunta Region	Arunta Region
Sample method	Whole rock analysis	Whole rock analysis	Whole rock analysis
Survey method	GPS	GPS	GPS
Coordinate system	MGA52	MGA53	MGA53
Easting	781000	446938	398297
Northing	8578000	7408288	7380746
Longitude	131.5889198	134.4805562	134.0025578
Latitude	-12.8503569	-23.4344659	-23.6808996
Location accuracy	25m	25m	25m
Lithology description	syenite	pyroxenite	dolerite
Stratigraphic unit name	Mount Bundy Syenite	Mordor Igneous Complex	Stuart Pass Dolerite
Sampler	LMG	JAW	JAW
Mapsheet 100k	Mary River (5272)	Laughlen (5751)	Undoolya (5750)
Mapsheet 250k	DARWIN (SD5204)	ALICE SPRINGS (SF5314)	ALICE SPRINGS (SF5314)
Comments	NTGS internal standard	NTGS internal standard	NTGS internal standard