



Australian Government

Geoscience Australia

Geochemistry and Geochronology Themes

Geochemical analyses – OZCHEM Last_updated: 07/06/2007

Name OZCHEM
Description Whole Rock Geochemistry analytical results with locational and lithological information.
Type Comma separated values (csv)

Note A number of analyte fields has units in ppb (parts per billion) rather than ppm (parts per million).

Object	Field Name	Case	Compulsory	Valid Values	Description of Field	Rules
Point	ufi	n/a	Yes		Unique feature identifier	This number may not refer to the same feature the next time the data are extracted.
	eno	n/a	Yes		Unique Geoscience Australia entity (location) identifier	Must be unique for a feature held in Geoscience Australia databases.
	siteid	mixed	Yes		A user-supplied number or ID for the site	Must be unique to the originator. There may be more than one sample collected from each site
	state	mixed	Yes	A.STATES authority table	State or Territory in which the site is located	
	country	mixed	No		Country in which the site is located	
	geogarea	mixed	No		Name of the geographic area (valley, plain, mountain range) where the site is	
	locdesc	mixed	No		Additional information relating to the site's location	
	hmapno	n/a	No		An identifier for the 1:100,000 map sheet-area on which the site falls	
	qmapid	upper	No		An identifier for the 1:250,000 map sheet-area on which the site falls	
	easting	n/a	Yes		Map grid easting	
	northing	n/a	Yes		Map grid northing	
	utm_zone	n/a	Yes		Universal Transverse Mercator projection zone	
	latitude	n/a	Yes	Decimal degrees	Latitude value	
	longitude	n/a	Yes	Decimal degrees	Longitude value	
	datum	upper	Yes		Geographic datum of location values	
	accuracy	n/a	Yes		Estimate of absolute accuracy of the given coordinates in metres on the ground	
	originator	mixed	Yes	A.V_ORIGINATORS authority table	Collector of sample, or organisation the collector is part of	
	sampleno	upper	Yes		Unique sample identifier from Geoscience Australia database	

	sampleid	upper	Yes		Sample ID label (Geoscience Australian number) defined by originator	The number must be unique to the originator
	fieldid	mixed	No		Alternative sample label defined by originator	
	region	mixed	No	PROVS.PROVINCES authority table	Geological region name – Region refers to the two-dimensional representation of geology of an area (vs province which is a three-dimensional representation)	
	province	mixed	No	PROVS.PROVINCES authority table	An extensive region characterized throughout by similar geological history or by similar structural, petrographic, or physiographic features.	
	stratno	n/a	Yes	GEODX.FLATSTRAT authority table	Stratigraphic index number	Must be unique for all rock units across Australia. Non-compulsory for Cainozoic units
	unitname	mixed	No	GEODX.FLATSTRAT authority table	The name of the stratigraphic unit	
	informal	mixed	No		Informal stratigraphic name	
	lith_group	lower	No	A.LITHOLOGY_GROUPS authority table	Dominant lithological grouping	
	qualifier	mixed	No	A.LITHOLOGY_TYPES authority table	A qualifying term, if any, before the lithology name field that follows	It is a concatenation of qualifier, qualifier2 and qualifier3 fields in the Geoscience Australia Field Geology database.
	lithname	lower	No	A.LITHOLOGY_TYPES authority table	Lithology name	
	grouping	mixed	No		User-defined classification used to classify suites of rocks from particular regions into classes other than those suggested by other attributes listed	The values entered here are chosen by the originator and have no global significance
	description	mixed	No		Description of the sample's lithology	used for additional descriptive information relating to the lithology beyond other attributes listed
	modeocc	lower	No	OEMD "occurrence mode" authority table	Mode of occurrence of the sample (xenolith, dyke, sill, pipe)	
	analytype	mixed	Yes		Analysis type	
	com_stat	upper	Yes	C, A, O	Commercial status of the analyses: Confidential (C), GA only (A); open file (O)	All instances of records where the value is not <i>M</i> must be deleted before the public release
	SiO2	n/a	No		Silica expressed as oxide (wt %)	
	TiO2	n/a	No		Titanium expressed as oxide (wt %)	
	Al2O3	n/a	No		Aluminium expressed as oxide (wt %)	
	Fe2O3tot	n/a	No		Total iron converted to tri-valent ion and expressed as oxide (wt %)	
	Fe2O3	n/a	No		Iron 3+ expressed as oxide (wt %)	
	FeO	n/a	No		Iron 2+ expressed as oxide (wt %)	
	MnO	n/a	No		Manganese expressed as oxide (wt %)	
	MgO	n/a	No		Magnesium expressed as oxide (wt %)	
	CaO	n/a	No		Calcium expressed as oxide (wt %)	
	Na2O	n/a	No		Sodium expressed as oxide (wt %)	
	K2O	n/a	No		Potassium expressed as oxide (wt %)	
	P2O5	n/a	No		Phosphorus expressed as oxide (wt %)	
	H2Oplus	n/a	No		Water plus (wt %)	
	H2Omin	n/a	No		Water minus (wt %)	
	CO2	n/a	No		Carbon dioxide (wt %)	
	loi	n/a	No		Loss on ignition - total volatiles in the rock (wt %)	
	rest	n/a	No		Total value of all trace elements converted to oxides (wt %)	Value is calculated by ROCKCHEM database
	total	n/a			Total sum of all oxides including rest (wt %)	
	Ag	n/a	No		Silver (ppm)	Negative values indicate levels below detection

						limits e.g. -1 for below 1 ppm
	As	n/a	No		Arsenic (ppm)	This field may be named "As_" in some data formats
	Au	n/a	No		Gold (ppb)	
	B	n/a	No		Boron (ppm)	
	Ba	n/a	No		Barium (ppm)	
	Be	n/a	No		Beryllium (ppm)	
	Bi	n/a	No		Bismuth (ppm)	
	Cd	n/a	No		Cadmium (ppm)	
	Ce	n/a	No		Cerium (ppm)	
	Cl	n/a	No		Chlorine (ppm)	
	Co	n/a	No		Cobalt (ppm)	
	Cr	n/a	No		Chromium (ppm)	
	Cs	n/a	No		Caesium (ppm)	
	Cu	n/a	No		Copper (ppm)	
	Dy	n/a	No		Dysprosium (ppm)	
	Er	n/a	No		Erbium (ppm)	
	Eu	n/a	No		Europium (ppm)	
	F	n/a	No		Fluorine (ppm)	
	Ga	n/a	No		Gallium (ppm)	
	Gd	n/a	No		Germanium (ppm)	
	Ge	n/a	No		Gadolinium (ppm)	
	Hf	n/a	No		Hafnium (ppm)	
	Hg	n/a	No		Mercury (ppm)	
	Ho	n/a	No		Holmium (ppm)	
	In	n/a	No		Indium (ppm)	
	Ir	n/a	No		Iridium (ppb)	
	La	n/a	No		Lanthanum (ppm)	
	Li	n/a	No		Lithium (ppm)	
	Lu	n/a	No		Lutetium (ppm)	
	Mo	n/a	No		Molybdenum (ppm)	
	Nb	n/a	No		Niobium (ppm)	
	Nd	n/a	No		Neodymium (ppm)	
	Ni	n/a	No		Nickel (ppm)	
	Os	n/a	No		Osmium (ppb)	
	P	n/a	No		Phosphorus (ppm)	
	Pb	n/a	No		Lead (ppm)	
	Pd	n/a	No		Palladium (ppb)	
	Pr	n/a	No		Praseodymium (ppm)	
	Pt	n/a	No		Platinum (ppb)	
	Rh	n/a	No		Rhenium (ppb)	
	Ru	n/a	No		Ruthenium (ppb)	
	Rb	n/a	No		Rubidium (ppm)	
	S	n/a	No		Sulphur (ppm)	
	Sb	n/a	No		Antimony (ppm)	
	Sc	n/a	No		Scandium (ppm)	
	Se	n/a	No		Selenium (ppm)	
	Sm	n/a	No		Samarium (ppm)	
	Sn	n/a	No		Tin (ppm)	
	Sr	n/a	No		Strontium (ppm)	

	Ta	n/a	No		Tantalum (ppm)	
	Tb	n/a	No		Terbium (ppm)	
	Te	n/a	No		Tellurium (ppm)	
	Th	n/a	No		Thorium (ppm)	
	Tl	n/a	No		Thallium (ppm)	
	Tm	n/a	No		Thulium (ppm)	
	U	n/a	No		Uranium (ppm)	
	V	n/a	No		Vanadium (ppm)	
	W	n/a	No		Tungsten (ppm)	
	Y	n/a	No		Yttrium (ppm)	
	Yb	n/a	No		Ytterbium (ppm)	
	Zn	n/a	No		Zinc (ppm)	
	Zr	n/a	No		Zirconium (ppm)	