

Western Australia Exploration Geochemistry Online (wamexgeochem.net.au)

A facility to search for and download open file surface and downhole geochemistry data from exploration company datasets in GSWA's Mineral Drillholes Database.

Data in the 'geochemistry tables' in the database have been harmonised by standardising company analyte names and units.

Use the "Downhole assay" and "Surface assay" pages to execute searches using various criteria. Results will be displayed for viewing on-line. You can also choose to download your search results in a .zip archive.

Retrieved data for download are provided as a set of 'flat' .csv files containing drillhole/sample and assay details (one record per assay with both source and harmonised fields) and as a pivoted table of samples in rows by harmonised analyte assay values in columns.

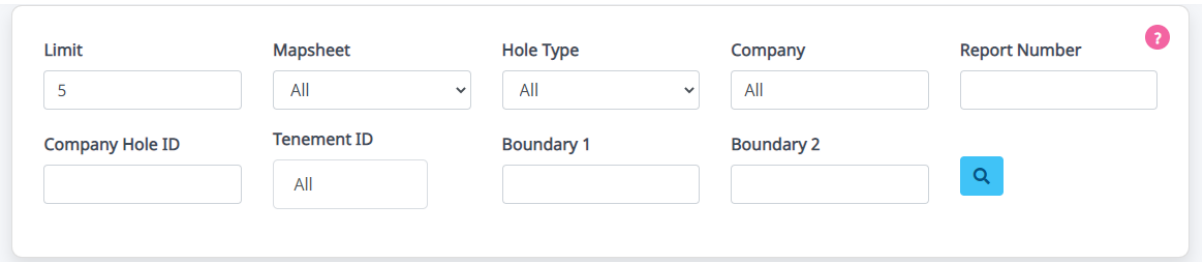
How to use the search/query/download features

The search pages allow you to query the data using specific selection criteria and then download the resulting dataset so that you can further examine the data using your software of choice.

This facility is intended to be used for specific enquiries (using the provided criteria and/or latitude and longitude boundaries). If you wish to work with the complete database, don't try and search/download via these pages – there are 2 'full database' packages (and pivoted versions of the data) available for download on the "Home" page of this website.

Both the Downhole (DH) and Surface Sample (SS) search pages have similar features.

These pages allow you to search the database using one or more of the search criteria displayed at the top of each page (DH shown in this example):



The screenshot shows a search form with the following fields and controls:

- Limit:** A text input field containing the number '5'.
- Mapsheet:** A dropdown menu with 'All' selected.
- Hole Type:** A dropdown menu with 'All' selected.
- Company:** A text input field containing 'All'.
- Report Number:** A text input field with a red question mark icon to its right.
- Company Hole ID:** A text input field.
- Tenement ID:** A text input field containing 'All'.
- Boundary 1:** A text input field.
- Boundary 2:** A text input field.
- Search:** A blue button with a magnifying glass icon.

The search fields work in various ways to filter your search results, as described below:

Limit:

This field is used to restrict the number of Collars/Samples returned by your query. A numeric value must be entered and we recommend that you start with a fairly small number (e.g. 500). This value can be increased and the search query re-submitted until you are confident that you have ALL the results to match your other selection criteria (the 'Collar/Sample' table in the displayed results will indicate when your query has returned less rows than your specified 'limit').

Mapsheets:

Dropdown list, from which you can choose a single (250k) Mapsheet.

Hole Type/Sample Type:

Dropdown list, from which you can choose a single Hole/Sample Type.

Company:

Free-text field. You can enter a partial or complete Company name here. The query will return records where the entered string/value is found. This field is case-insensitive.

Report Number:

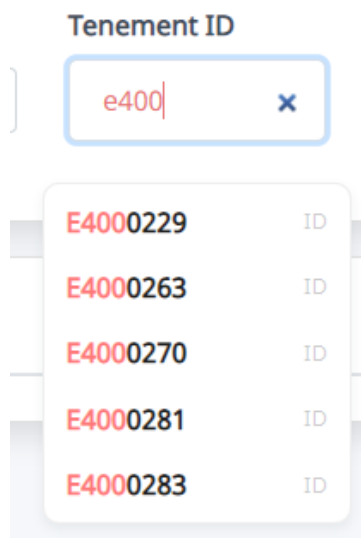
Free-text field. The 'ANumber' – or WAMEX Report id.

Company Hole/Sample ID:

Free-text field.


Tenement ID:

Start typing your desired Tenement ID in and you will see a list of Tenements matching that value - you can then select the Tenement you wish to search on. Note: Tenement ID's in the database have been standardised to the following format: E0401441 e.g.

**Boundary 1 & 2:**

The 'Boundary' fields work in a slightly different way to the other fields, which will be explained in the next section.

You can use the red 'Clear' button to reset your search criteria at any time.

Submit your search using the  button.

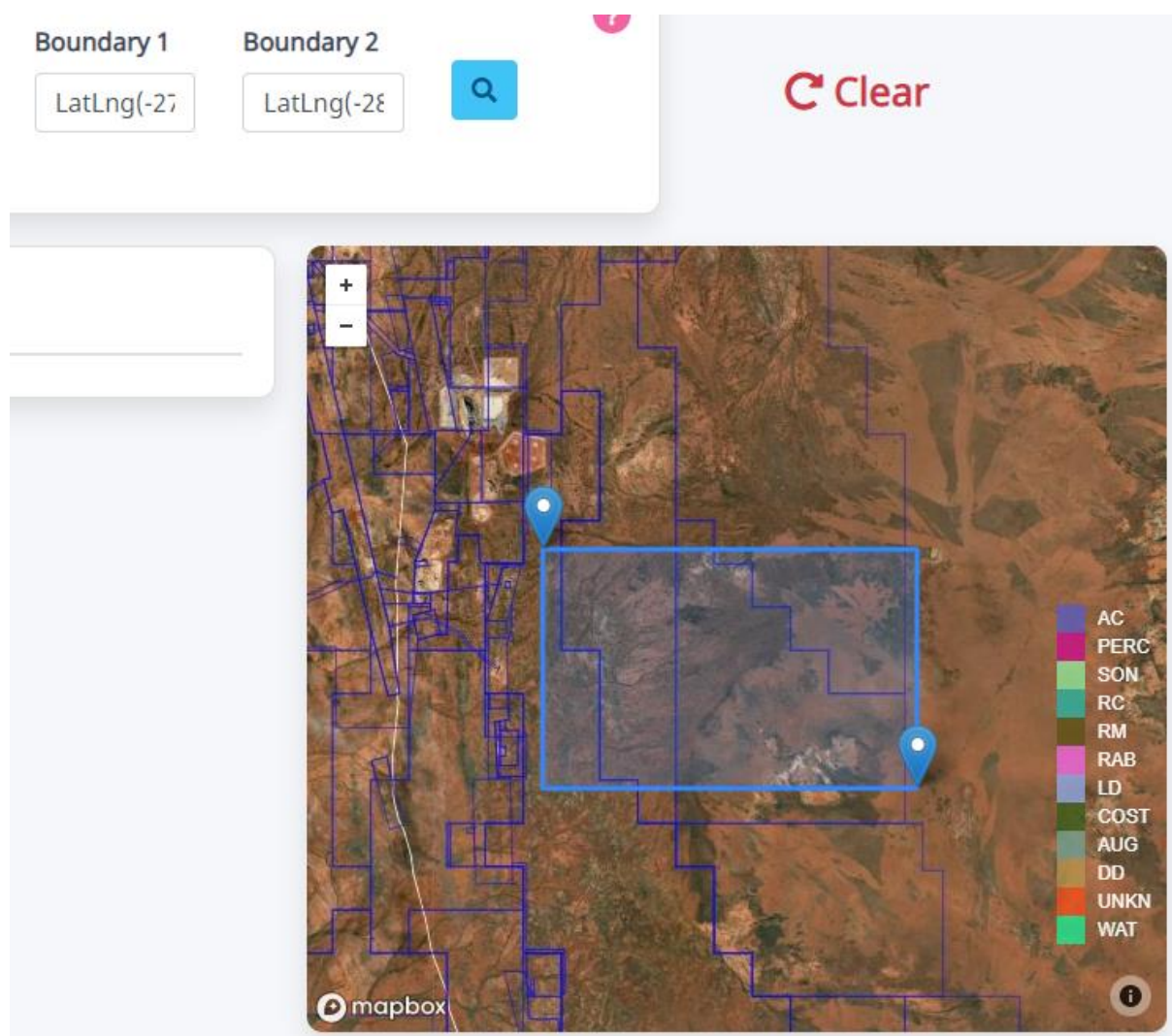
Searching via map bounds:

If you wish to search via certain geographic bounds, you can select the desired search area directly from the map.

Zoom the map in to your approximate area of interest.

Then click once on the top left corner of your desired area. This will place a marker on the map.

Click again in the bottom right of your desired area. This will place a second marker and show the rectangular bounds. It will also populate the Boundary 1 and 2 fields in the search bar with the correct latitude and longitude values.



If you know the location co-ordinates you are interested in, you could also enter the top-left and bottom-right corners directly into the Boundary 1 and 2 search fields, using the following format: LatLng(-27.96105, 122.391985)

Search results:

Once you submit your search query, the results will be displayed on-screen. Depending on the nature of your search this may take anywhere from 2-3 seconds to a minute.

The initial results are shown as a 'summary' table of Collars/Samples together with their locations on the adjoining map – see the example below:

The screenshot shows a search interface with the following elements:

- Search filters: Limit (50), Mapsheet (All), Hole Type (All), Company (empty), Tenement ID (E4000229), Boundary 1 (empty), Boundary 2 (empty).
- Buttons: Clear, Download All.
- Table titled "Collars / Sites" with 5 entries:

number	companyholeid	company	latitude	longitude	holetype
57431	KR280	Kookynie Resources NI	-29.211863468346195	121.41704097136835	RAB
57431	ERRB54	Kookynie Resources NI	-29.21313495710684	121.41356105985986	RAB
57431	ERRB53	Kookynie Resources NI	-29.21356773223435	121.4134163693988	RAB
57431	ERRB52	Kookynie Resources NI	-29.21400049800283	121.41327166735452	RAB
57431	ERRB51	Kookynie Resources NI	-29.214433272700706	121.41312697401588	RAB

Showing 1 to 5 of 50 entries. Navigation: Previous, 1, 2, 3, 4, 5, ..., 10, Next. Action buttons: PDF, Excel, CSV, Get Assays.

The map view shows a satellite image with a blue tenement boundary and several purple circular markers representing collars/samples. A legend on the right lists various hole types: AC, PERC, SON, RC, RM, RAB, LD, COST, AUG, DD, LNKN, WAT.

You can see that basic Collar/Sample results are shown in the table. If you search via Tenement ID, the tenement outline is also shown on the map (tenement outlines will also be shown at certain map zoom levels).

In the example above, you can see that we have set a limit of 50 and that 50 Collars have been returned. You could then increase the 'limit' value and re-submit your search until you can see that all records matching your other criteria have been returned.

In the map display, if you hover the "cursor" over a single Hole/Sample, the cursor changes to a "Pointing Finger". Click to see more information about that Hole/Sample – you can also then click on the 'View Assays' button to display more results for that item.

The popup window displays the following information:

- RC drill
- 99296Combined Annual Report Evolution Mining 2013PRC035
- Max depth: 84.0m
- Lat: -31.28428
- Long: 118.63585
- View assays button

Processing the search results:

From here, you can choose to download the whole of your selected dataset to a local file for further detailed investigation, using the green 'Download All' button.

This will return a zip archive consisting of csv files for your selected Collars/Samples and the associated Assays plus a pivoted assay dataset. The csv files contain more data than what is displayed on the screen.

Note: Creating and downloading the zip archive may take some time. You will be shown a 'downloading' message while this takes place.

However – you may wish just to examine the data further online without or before downloading.

You can click on an individual Collar/Sample row. This will highlight the row and the 'Get Assays' button beneath the table.

Clicking on 'Get Assays' populates and displays 2 further tables – these are:

The 'harmonised/standardised' Assay results for the selected Collar/Sample, in a one line per assay/analyte basis. This can return many rows for a deep hole and/or where there are many analyte results (some holes may have thousands of entries here, so returning them may take a few seconds).

+	MWAC0535	ME02811ME	39	40	Ag_ppm_BESTEL	-0.1	ppm
+	MWAC0535	ME02811ME	39	40	Al_ppm_BESTEL	65675	ppm
+	MWAC0535	ME02811ME	39	40	As_ppm_BESTEL	3	ppm
+	MWAC0535	ME02811ME	39	40	Ba_ppm_BESTEL	171	ppm
+	MWAC0535	ME02811ME	39	40	Be_ppm_BESTEL	0.7	ppm
+	MWAC0535	ME02811ME	39	40	Bi_ppm_BESTEL	0.11	ppm
+	MWAC0535	ME02811ME	39	40	Ca_ppm_BESTEL	37643	ppm
+	MWAC0535	ME02811ME	39	40	Cd_ppm_BESTEL	0.17	ppm
+	MWAC0535	ME02811ME	39	40	Co_ppm_BESTEL	61.8	ppm
+	MWAC0535	ME02811MF	39	40	Cr_ppm_BESTEL	-5	ppm

The Assay data is also shown in a 'Pivoted' form – i.e. Assays/Intervals are shown as a single row with all recorded analyte results shown *across* the page. In the event of multiple assay results for the same analyte for an interval/sample, the highest value will be shown in the pivot table.

companyholeid	companysampleid	fromdepth	todepth	Au_PPM	K_PPM	P_PPM	S_PPM	U_PPM	V_PPM	W_PPM	Y_PPM	
+	MWAC0535	RAB18056	0	4	0.01	-1	-1	-1	-1	-1	-1	-1
+	MWAC0535	RAB18057	4	8	0.005	-1	-1	-1	-1	-1	-1	-1
+	MWAC0535	RAB18058	8	12	0.002	-1	-1	-1	-1	-1	-1	-1
+	MWAC0535	RAB18059	12	16	0.003	-1	-1	-1	-1	-1	-1	-1
+	MWAC0535	RAB18060	16	20	0.002	-1	-1	-1	-1	-1	-1	-1
+	MWAC0535	RAB18061	20	24	0.006	-1	-1	-1	-1	-1	-1	-1
+	MWAC0535	RAB18062	24	28	0.002	-1	-1	-1	-1	-1	-1	-1
+	MWAC0535	RAB18063	28	32	0.001	-1	-1	-1	-1	-1	-1	-1
+	MWAC0535	RAB18064	32	36	0.002	-1	-1	-1	-1	-1	-1	-1
+	MWAC0535	RAB18065	36	40	0.014	-1	-1	-1	-1	-1	-1	-1

These tables allow you to perform basic analysis before you decide/refine a dataset to download for further investigation.

Analyte names have been standardised to account for the many variances within the original data, and the displayed results have been standardised to 'PPM'.

No Assay results?

There may be occasions when you select a Collar/Sample and click 'Get Assays', but no assay results are found. The 2 most common reasons for this are:

- The selected Collar/Sample appears in multiple 'aNumber' reports, and not all of them have assays. In such cases, there may be multiple entries for the same Collar/Sample in your search results – one (or more) of which will have assays associated with them.
- There is no assay data in the database as collar locations have been extracted manually from PDF copies of older reports. The data assay may be found by looking at the original report.

Data Harmonisation Process:

Company analyte column headings as supplied in submitted datasets were programmatically matched to standard analyte names in a 'match table' (available for download from this website). The 'type' of match for each original value is shown in the table.

Scripts were run on the original database to harmonise the company analyte names to the matched standard analyte names, and to recalculate assay values in the company-supplied units of measure as ppm. Locations are in Lat/Long GDA94.

Important Note

The data in the tables have been extracted from the Mineral Drillholes Database which stores the assay data **as supplied** by mining and exploration companies. There has been no quality control carried out on the actual results.

It is incumbent on the user to check the original reports if there is any doubt about the validity of the harmonised data.

In carrying out this exercise a number of potential data errors have been identified. The most common is with the units of measure that have been supplied by the company. Any suspicious units of measure should be checked and disregarded if found to be outside normally expected values.

No corrections have been made to suspicious units of measure values at this time. It would be appreciated if any suspicious data could be reported to wamexenquiries@dmirs.wa.gov.au

Other Downloads

Also available for download from this website:

- Complete "Open File MDHDB" database (Microsoft SQL Server 2016 .bak format) as supplied by GSWA (current release).
- An "All of WA harmonised & pivoted Assays" dataset (Microsoft SQL Server 2019 .bak format). This dataset provides harmonised and pivoted data (all analytes) for all of WA Downhole (DH) and Surface (SS) assays derived from the current release of the GSWA MDHDB database.