PetDB Tutorial

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Getting Started

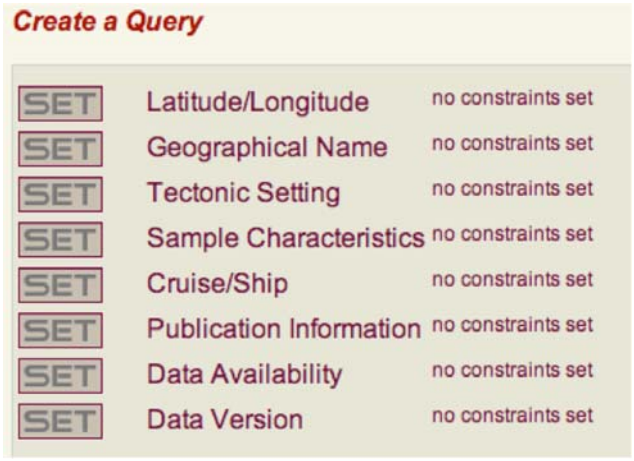
You can create a query in PetDB by specifying one or more parameters. With each additional parameter, PetDB will retrieve the number of samples that possess the attributes chosen. To begin a query, click on the Build Query button on the left-hand menu.

You can select samples using one or more query criteria. The more criteria you define, the more focused your sample selection will be.

Below is a description of each criterion you can define during sample selection and instructions on how to navigate the query interface. To learn how to download a dataset see the SELECTING CHEMICAL DATA AND DOWNLOADING OPTIONS chapter of in the Tutorial.

Querying by Location

To query by location, you may specify any combination of geospatial coordinates (latitude/longitude), geographic name of a feature, and tectonic setting. Constrain the dataset further using other query buttons or proceed to the Data Selection page.



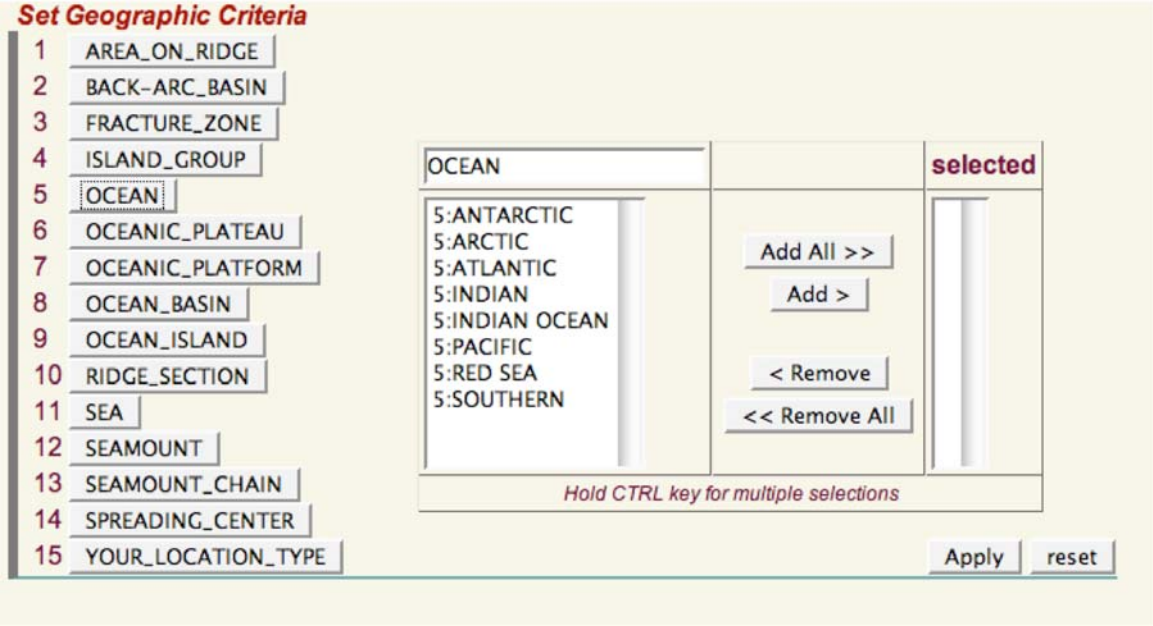
Latitude/Longitude

Enter latitude and/or longitude of the geographical area you are interested in. Enter the Northern and Southern bounding latitudes (latitudes on the southern hemisphere need to be entered as negative values, e.g. 9.6°S = -9.6) and the Western and Eastern longitudes (Western longitudes need to be entered as negative values, e.g. 112°W = -112). You can also select samples collected at a minimum or maximum depth or a specific depth range. All depths below sea level have to be entered as negative values.

Geographical Name

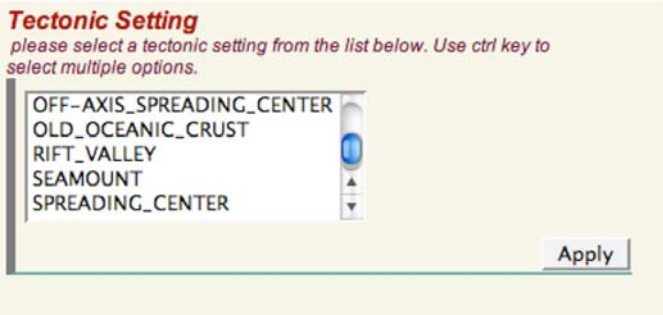
To query samples by the name of an area or by type of geographic feature, set the geographical name parameter. Geographical names are used on various regional scales ranging from names of oceans to the names of seamounts, platforms, and fracture zones.

- To highligh multiple names PC users must hold the CTRL key while clicking on the mouse button. Mac users can also make multiple selections by holding the command key.
- Click on 'Add' or 'Add All' to make your selection, then click 'Appy' to set the query parameter.



Tectonic Setting

Use this criterion if to query samples from sea floor tectonic features such as 'Fracture Zones', 'Back-arc Basins', or 'Seamounts'.



To select multiple tectonic settings, hold the ctrl key if you use a PC or the command key if you use a Mac, then click 'Apply'.

Sample Characteristics

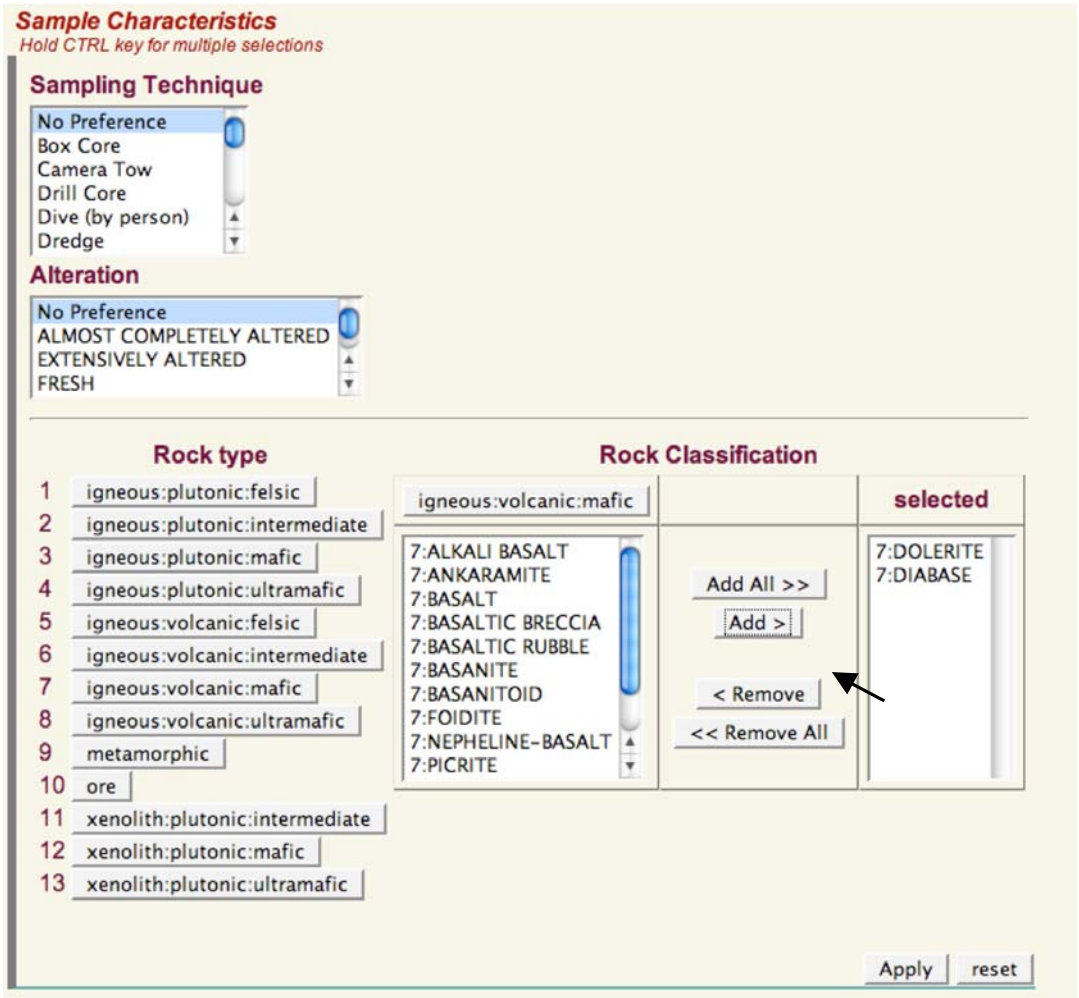
The 'Sample Characterstics' parameter allows the user to define sample selection by:

- Rock type (e.g. 'basaltic', 'ultramafic', 'mafic plutonic')
- Degree of alteration*
- Sampling technique (e.g. 'dive', 'dredge').
-

Clicking on a rock type will display a list rock classes in the selection box. Please note that "rock class" is based on classification information provided in the source publications and is NOT an interpretation of data by PetDB.

*Note: Degree of alteration is not widely reported in the literature and therefore exists only for a small number of samples in PetDB. Selecting only 'fresh' samples will guarantee retrieval of data from fresh samples, but you may exclude data from fresh samples for which no alteration information was reported.

Constrain the dataset further using other query buttons or proceed to the Data Selection page.



Querying by Data Sources, Availability, and Data Version

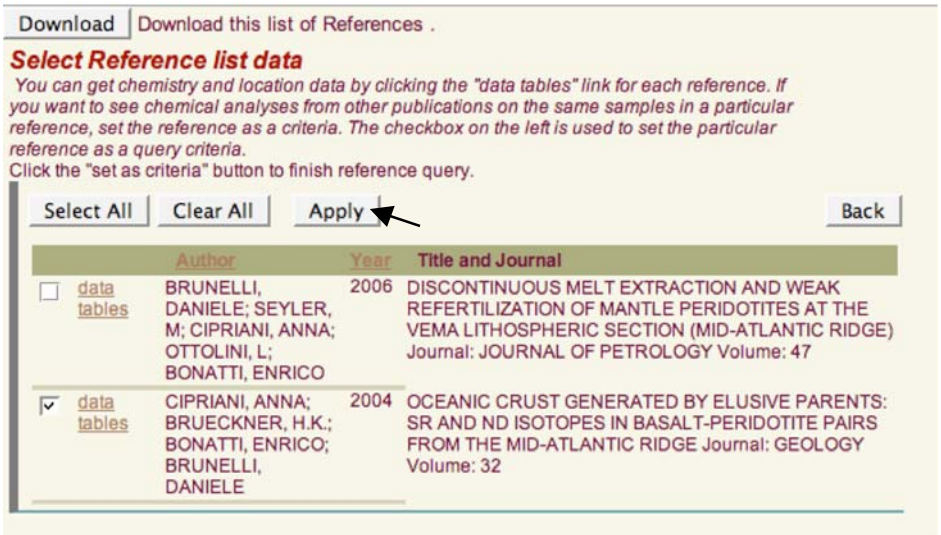
Publication Information

You can view and download data from a specific author and publication* using the Publication Information query.

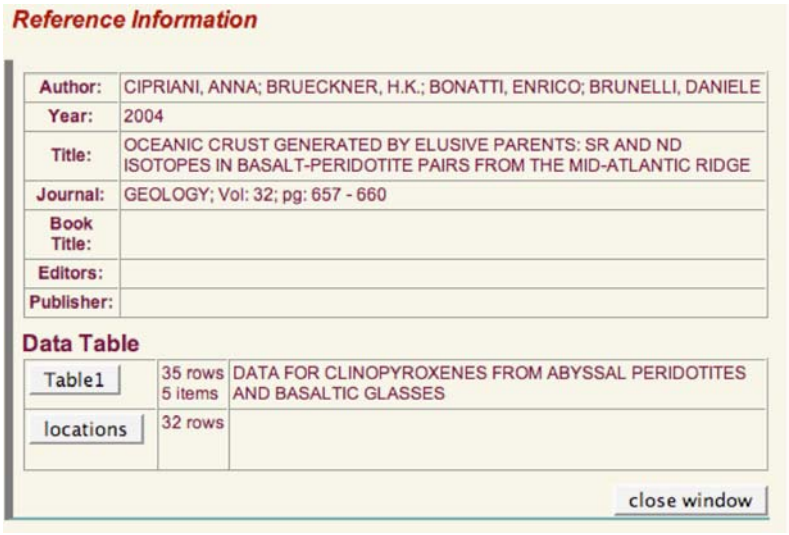
*Note: The data tables contain only values that are original to the reference publication and which have not been reported in other publications. Referenced values can be found in the original publications in which the data appeared.

- Enter author, year, keyword, or journal information to retrieve all original data related to a publication.
- To select multiple authors, hold the ctrl key if you use a PC or the command key if you use a Mac.
- Submitting your query will retrieve a reference list. Click on 'data tables' once you locate the publication of interest in the list of references to view data a it is organized in the publication.

Select any or all the references and click 'APPLY'. Constrain the dataset further using other query buttons or proceed to the Data Selection page.



To view a list of tables associated with a publication click on ‘data tables’.



Reference Information

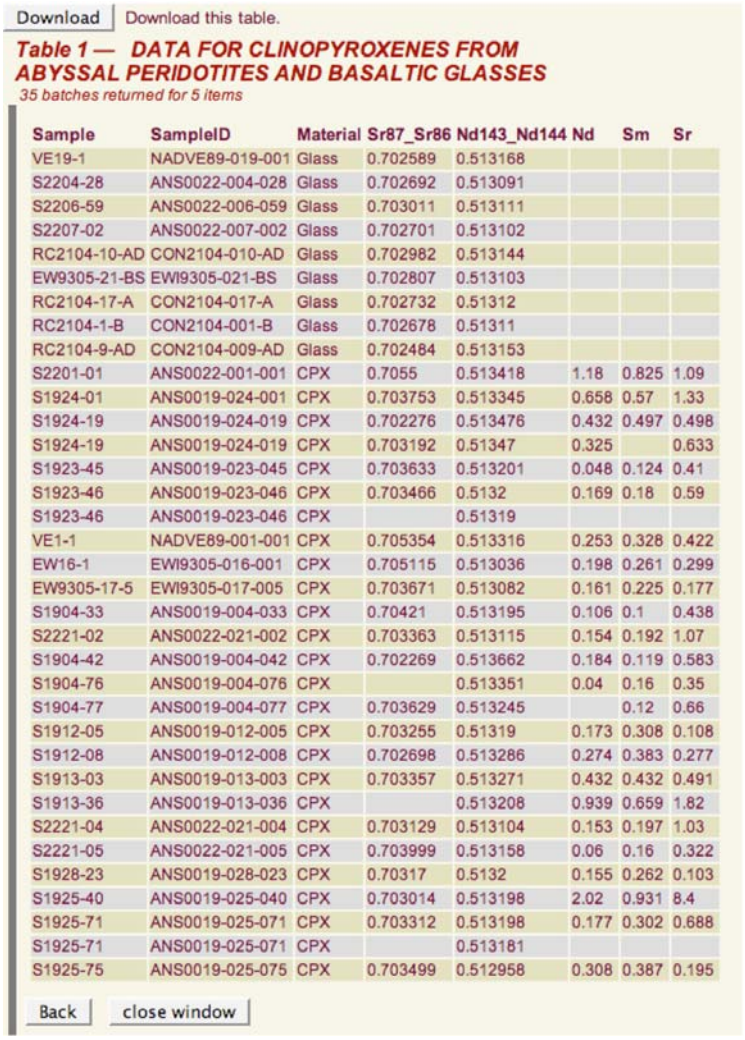
Author:	CIPRIANI, ANNA; BRUECKNER, H.K.; BONATTI, ENRICO; BRUNELLI, DANIELE
Year:	2004
Title:	OCEANIC CRUST GENERATED BY ELUSIVE PARENTS: SR AND ND ISOTOPES IN BASALT-PERIDOTITE PAIRS FROM THE MID-ATLANTIC RIDGE
Journal:	GEOLOGY; Vol: 32; pg: 657 - 660
Book Title:	
Editors:	
Publisher:	

Data Table

Table1	35 rows 5 items	DATA FOR CLINOPYROXENES FROM ABYSSAL PERIDOTITES AND BASALTIC GLASSES
locations	32 rows	

close window

Clicking on a specific table brings up a pop-up window containing data as they appear in the publication.



Download | Download this table.

Table 1 — DATA FOR CLINOPYROXENES FROM ABYSSAL PERIDOTITES AND BASALTIC GLASSES

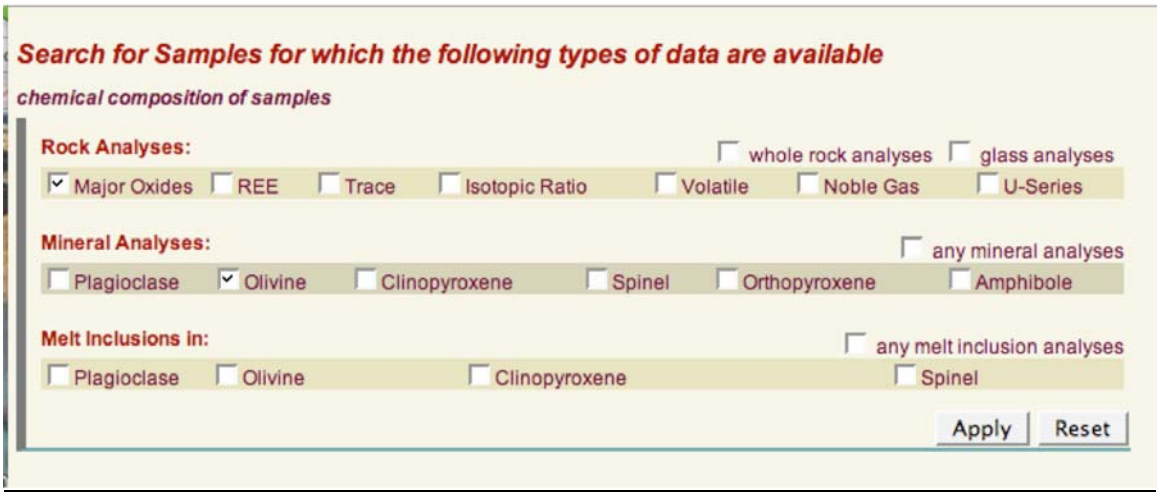
35 batches returned for 5 items

Sample	SampleID	Material	Sr87_Sr86	Nd143_Nd144	Nd	Sm	Sr
VE19-1	NADVE89-019-001	Glass	0.702589	0.513168			
S2204-28	ANS0022-004-028	Glass	0.702692	0.513091			
S2206-59	ANS0022-006-059	Glass	0.703011	0.513111			
S2207-02	ANS0022-007-002	Glass	0.702701	0.513102			
RC2104-10-AD	CON2104-010-AD	Glass	0.702982	0.513144			
EW9305-21-BS	EWI9305-021-BS	Glass	0.702807	0.513103			
RC2104-17-A	CON2104-017-A	Glass	0.702732	0.51312			
RC2104-1-B	CON2104-001-B	Glass	0.702678	0.51311			
RC2104-9-AD	CON2104-009-AD	Glass	0.702484	0.513153			
S2201-01	ANS0022-001-001	CPX	0.7055	0.513418	1.18	0.825	1.09
S1924-01	ANS0019-024-001	CPX	0.703753	0.513345	0.658	0.57	1.33
S1924-19	ANS0019-024-019	CPX	0.702276	0.513476	0.432	0.497	0.498
S1924-19	ANS0019-024-019	CPX	0.703192	0.51347	0.325		0.633
S1923-45	ANS0019-023-045	CPX	0.703633	0.513201	0.048	0.124	0.41
S1923-46	ANS0019-023-046	CPX	0.703466	0.5132	0.169	0.18	0.59
S1923-46	ANS0019-023-046	CPX		0.51319			
VE1-1	NADVE89-001-001	CPX	0.705354	0.513316	0.253	0.328	0.422
EW16-1	EWI9305-016-001	CPX	0.705115	0.513036	0.198	0.261	0.299
EW9305-17-5	EWI9305-017-005	CPX	0.703671	0.513082	0.161	0.225	0.177
S1904-33	ANS0019-004-033	CPX	0.70421	0.513195	0.106	0.1	0.438
S2221-02	ANS0022-021-002	CPX	0.703363	0.513115	0.154	0.192	1.07
S1904-42	ANS0019-004-042	CPX	0.702269	0.513662	0.184	0.119	0.583
S1904-76	ANS0019-004-076	CPX		0.513351	0.04	0.16	0.35
S1904-77	ANS0019-004-077	CPX	0.703629	0.513245		0.12	0.66
S1912-05	ANS0019-012-005	CPX	0.703255	0.51319	0.173	0.308	0.108
S1912-08	ANS0019-012-008	CPX	0.702698	0.513286	0.274	0.383	0.277
S1913-03	ANS0019-013-003	CPX	0.703357	0.513271	0.432	0.432	0.491
S1913-36	ANS0019-013-036	CPX		0.513208	0.939	0.659	1.82
S2221-04	ANS0022-021-004	CPX	0.703129	0.513104	0.153	0.197	1.03
S2221-05	ANS0022-021-005	CPX	0.703999	0.513158	0.06	0.16	0.322
S1928-23	ANS0019-028-023	CPX	0.70317	0.5132	0.155	0.262	0.103
S1925-40	ANS0019-025-040	CPX	0.703014	0.513198	2.02	0.931	8.4
S1925-71	ANS0019-025-071	CPX	0.703312	0.513198	0.177	0.302	0.688
S1925-71	ANS0019-025-071	CPX		0.513181			
S1925-75	ANS0019-025-075	CPX	0.703499	0.512958	0.308	0.387	0.195

Back | close window

Data Availability

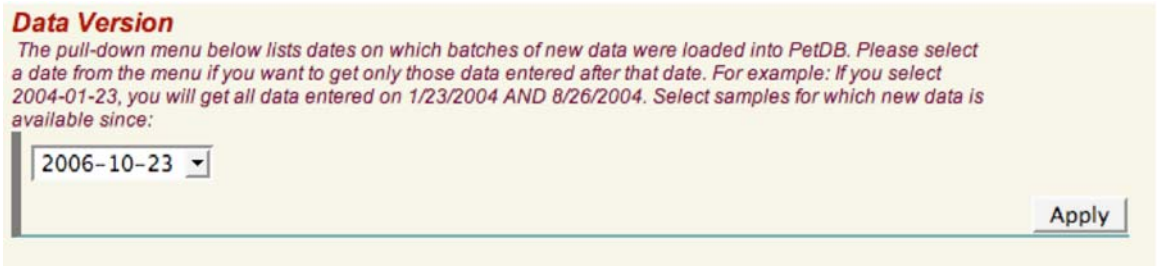
Use a query by data availability if you are looking for data from samples for which specific data types have been published. For example, you are interested in getting data only for samples for which major elements AND olivine analyses are available, select the appropriate boxes and click 'Apply' to proceed to the query interface where you can choose how to further constrain your dataset or continue to data selection.



Constrain the dataset further using other query buttons or proceed to the Data Selection page.

Data Version

The query by data version allows you to get only those data that were added during a specific update of the database. This is helpful if for example you are working with a large spreadsheet generated through a PetDB query adjusted and edited to fit your needs. You do not have to re-generate the entire spreadsheet! Just append data that were added to PetDB after your last download.

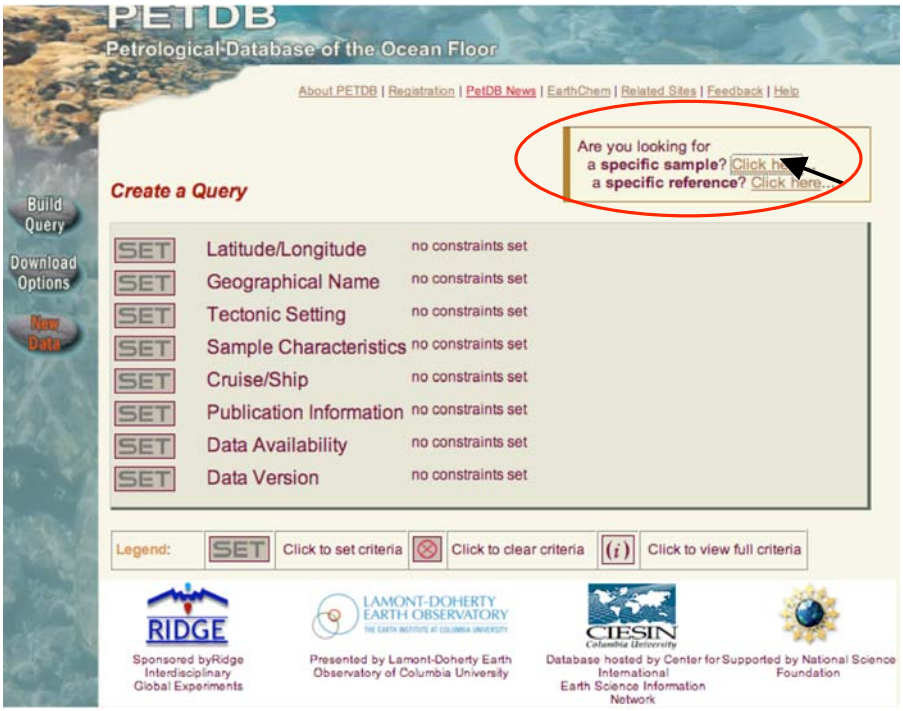


Constrain the dataset further using other query buttons or proceed to the Data Selection page.

Data from a Specific Sample, Site, Hole, or Core

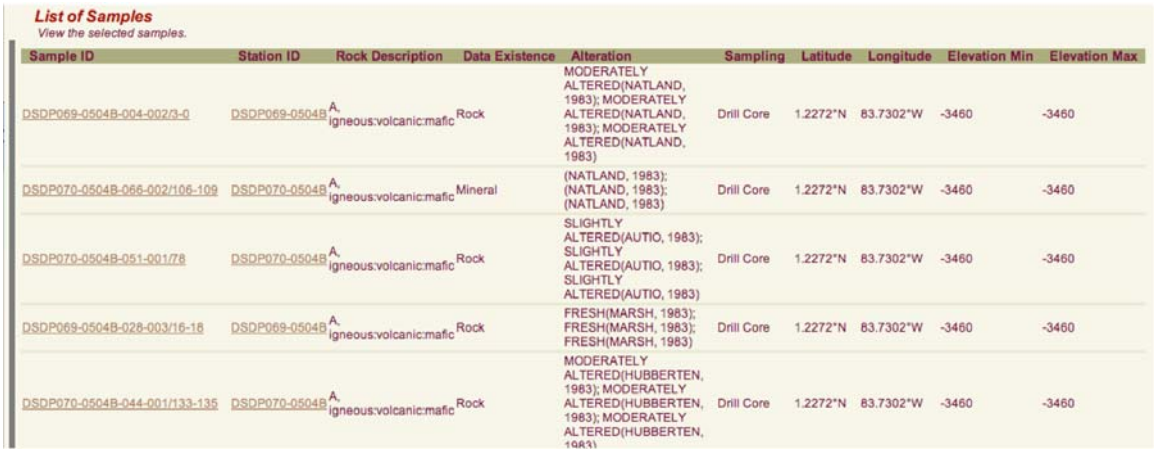
Search for a Specific Sample, Hole or Core

You can search for samples by the name reported in the publication ('ALIAS'), or by the PetDB unique sample identifier. PetDB sample IDs contain core, leg, and sample name embedded in an alphanumeric structure. Many sample aliases used in publications are non-unique (e.g. D5-1), so you will often get multiple results. You must check sample information (metadata) by clicking on the sample identifier to decide which sample is the one you're looking for.



Enter the name or name fragment of the sample and click on the search button.

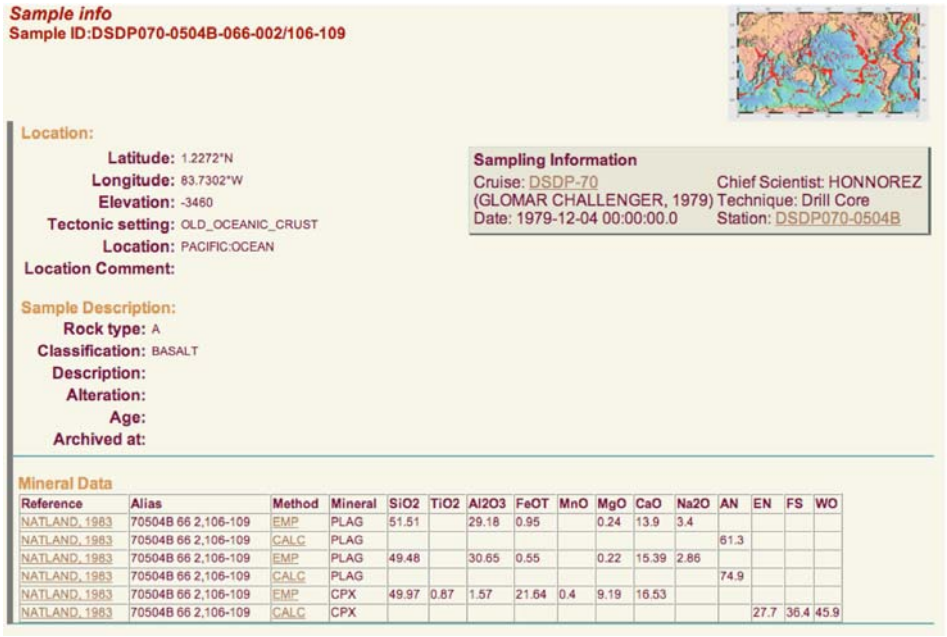
All samples containing '504B' in the alphanumeric Sample ID will appear in another window.



List of Samples
View the selected samples.

Sample ID	Station ID	Rock Description	Data Existence	Alteration	Sampling	Latitude	Longitude	Elevation Min	Elevation Max
DSDP069-0504B-004-002/3-0	DSDP069-0504B	A. igneous:volcanic:mafic	Rock	MODERATELY ALTERED(NATLAND, 1983); MODERATELY ALTERED(NATLAND, 1983); MODERATELY ALTERED(NATLAND, 1983)	Drill Core	1.2272°N	83.7302°W	-3460	-3460
DSDP070-0504B-066-002/106-109	DSDP070-0504B	A. igneous:volcanic:mafic	Mineral	(NATLAND, 1983); (NATLAND, 1983); (NATLAND, 1983)	Drill Core	1.2272°N	83.7302°W	-3460	-3460
DSDP070-0504B-051-001/78	DSDP070-0504B	A. igneous:volcanic:mafic	Rock	SLIGHTLY ALTERED(AUTIO, 1983); SLIGHTLY ALTERED(AUTIO, 1983); SLIGHTLY ALTERED(AUTIO, 1983)	Drill Core	1.2272°N	83.7302°W	-3460	-3460
DSDP069-0504B-028-003/16-18	DSDP069-0504B	A. igneous:volcanic:mafic	Rock	FRESH(MARSH, 1983); FRESH(MARSH, 1983); FRESH(MARSH, 1983)	Drill Core	1.2272°N	83.7302°W	-3460	-3460
DSDP070-0504B-044-001/133-135	DSDP070-0504B	A. igneous:volcanic:mafic	Rock	MODERATELY ALTERED(HUBBERTEN, 1983); MODERATELY ALTERED(HUBBERTEN, 1983); MODERATELY ALTERED(HUBBERTEN, 1983)	Drill Core	1.2272°N	83.7302°W	-3460	-3460

View all data available for a specific sample by clicking on the Sample ID.



Sample info
Sample ID:DSDP070-0504B-066-002/106-109

Location:
Latitude: 1.2272°N
Longitude: 83.7302°W
Elevation: -3460
Tectonic setting: OLD_OCEANIC_CRUST
Location: PACIFIC:OCEAN
Location Comment:

Sampling Information
Cruise: DSDP-70 (GLOMAR CHALLENGER, 1979)
Date: 1979-12-04 00:00:00.0
Chief Scientist: HONNOREZ
Technique: Drill Core
Station: DSDP070-0504B

Sample Description:
Rock type: A
Classification: BASALT
Description:
Alteration:
Age:
Archived at:

Mineral Data

Reference	Alias	Method	Mineral	SiO2	TiO2	Al2O3	FeOT	MnO	MgO	CaO	Na2O	AN	EN	FS	WO
NATLAND, 1983	70504B 66 2,106-109	EMP	PLAG	51.51		29.18	0.95		0.24	13.9	3.4				
NATLAND, 1983	70504B 66 2,106-109	CALC	PLAG									61.3			
NATLAND, 1983	70504B 66 2,106-109	EMP	PLAG	49.48		30.65	0.55		0.22	15.39	2.86				
NATLAND, 1983	70504B 66 2,106-109	CALC	PLAG									74.9			
NATLAND, 1983	70504B 66 2,106-109	EMP	CPX	49.97	0.87	1.57	21.64	0.4	9.19	16.53					
NATLAND, 1983	70504B 66 2,106-109	CALC	CPX										27.7	36.4	45.9

Cruise/Ship

This option allows you to get data for samples that have been collected on a specific cruise/expedition. Use a cruise name to select the samples collected on the cruise.

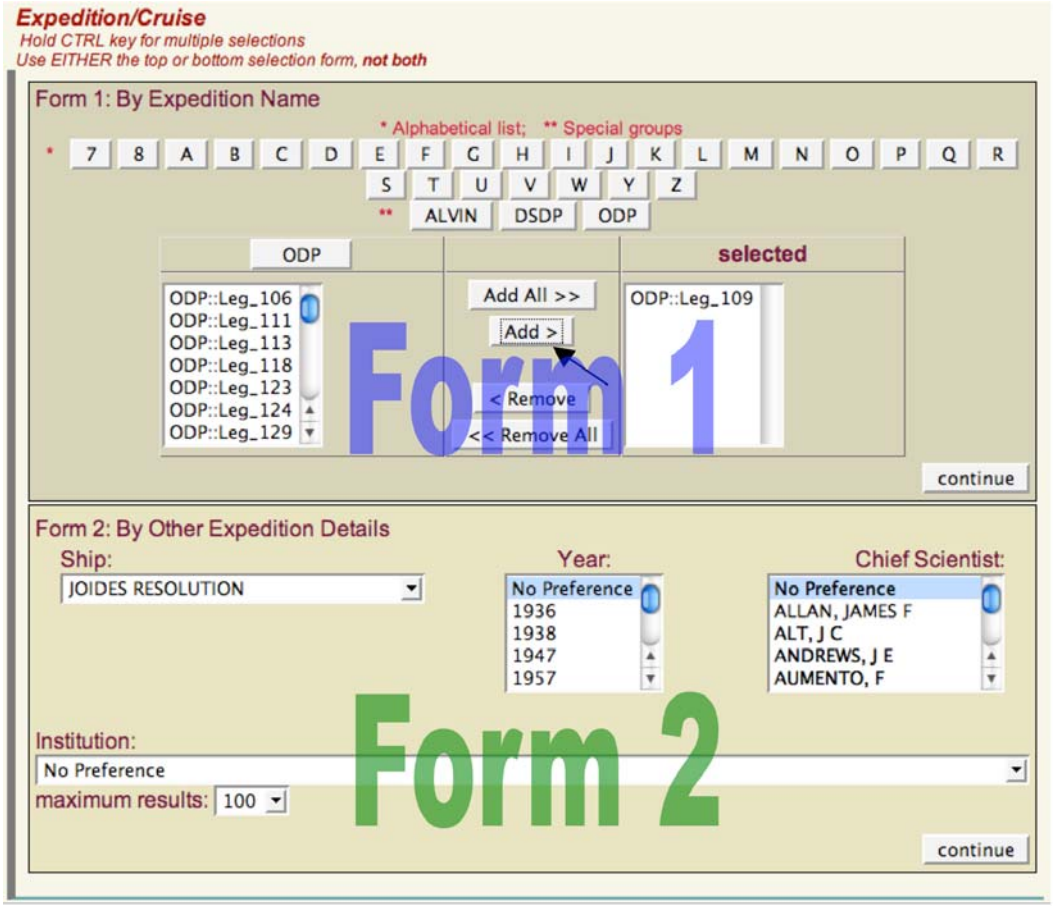
Use **Form 1** to query by expedition name. If you know the prefix corresponding to an expedition you may choose the first number or letter from the alphanumeric buttons at

the top of the form. For ALVIN, Deep Sea Drilling Project (DSDP), or Ocean Drilling Project (ODP), use the "special group" buttons.

Example:
To obtain information on Hole 670A of Leg 109 of ODP JOIDES Resolution cruise; click on the ODP special group and select Leg 109.

If you don't know the name of the cruise, you can also search by ship name and the cruise year using **Form 2**. You may also query by the name of the chief scientist or organizing institution*.

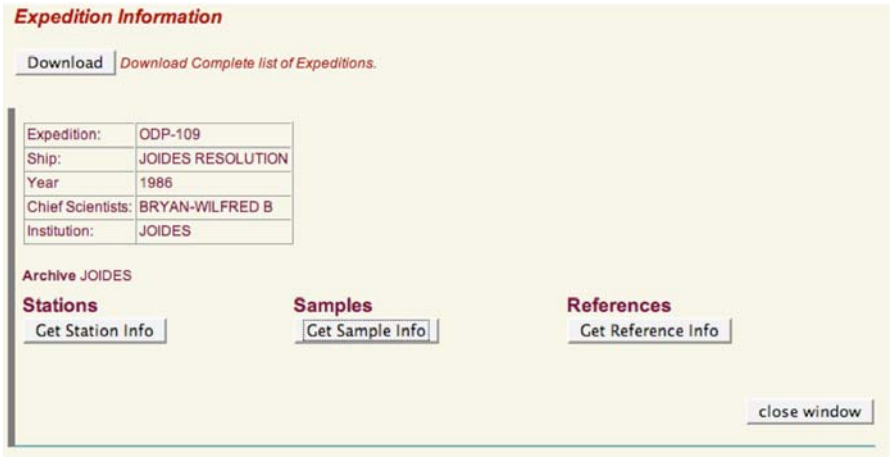
*Note: Publications do not specify chief scientist or organizing institution. As a result, many cruises in PetDB are listed without this information. Therefore, few records may be returned when you use these criteria.



Click 'continue' to choose the leg, cruise or expedition of interest.

Name/Leg	Ship	Year	Chief scientist	Institution
ODP-106	JOIDES RESOLUTION	1985	DETRICK, R S; HONNOREZ, J	JOIDES
ODP-109	JOIDES RESOLUTION	1986	BRYAN, WILFRED B; JUTEAU, T	JOIDES
ODP-111	JOIDES RESOLUTION	1986	BECKER, K	JOIDES
ODP-113	JOIDES RESOLUTION	1986	BARKER, P F; KENNETT, J P	JOIDES
ODP-118	JOIDES RESOLUTION	1987	ROBINSON, P T; VON HERZEN, R P	JOIDES
ODP-123	JOIDES RESOLUTION	UNKNOWN		JOIDES
ODP-124	JOIDES RESOLUTION	1988	RANGIN, C; SILVER, E A	JOIDES
ODP-129	JOIDES RESOLUTION	1989	LANCELOT, Y P; LARSON, R	JOIDES
ODP-135	JOIDES RESOLUTION	1990	HAWKINS, J W; PARSON, L M	JOIDES
ODP-137	JOIDES RESOLUTION	1991	BECKER, K	JOIDES
ODP-139	JOIDES RESOLUTION	1991	DAVIS, E E; MOTTL, M	JOIDES
ODP-140	JOIDES RESOLUTION	1991	DICK, H J B; ERZINGER, J	JOIDES
ODP-141	JOIDES RESOLUTION	1991	BEHRMANN, J H; LEWIS, S D	JOIDES
ODP-142	JOIDES RESOLUTION	1992	BATIZA, RODEY	JOIDES
ODP-143	JOIDES RESOLUTION	1992		JOIDES
ODP-144	JOIDES RESOLUTION	1992		JOIDES
ODP-147	JOIDES RESOLUTION	1993	GILLIS, K M; MEVEL, C	JOIDES
ODP-148	JOIDES RESOLUTION	1993	ALT, J C; KINOSHITA, H	JOIDES
ODP-152	JOIDES RESOLUTION	1993	LARSEN, H C; SAUNDERS, A D	JOIDES
ODP-153	JOIDES RESOLUTION	1993		JOIDES
ODP-158	JOIDES RESOLUTION	1994	HERZIG, P M; HUMPHRIS, S E	JOIDES
ODP-163	JOIDES RESOLUTION	1995	DUNCAN, R A; LARSEN, H C	JOIDES

Select expedition legs, in this case, ODP-109 to get more sample and station information or to download the list of expeditions, stations, and references.



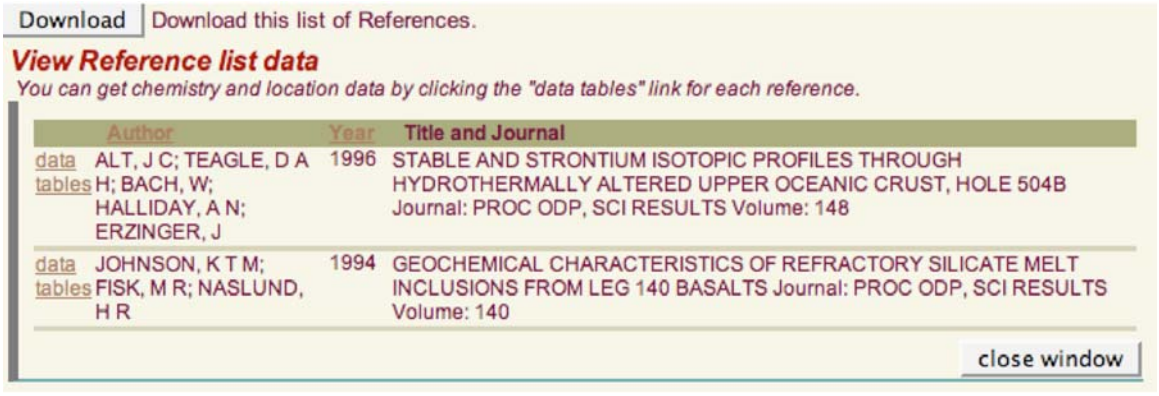
To continue to data selection, close the Expedition Information window. Click 'Apply' in the 'Select Expedition/Cruise data' window to set your query.

Constrain the dataset further using other query buttons or proceed to the Data Selection page.

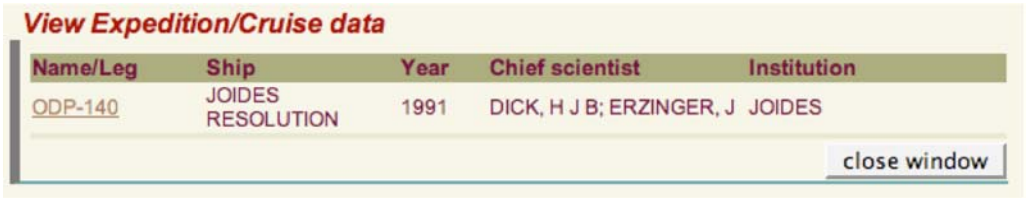
Accessing Metadata

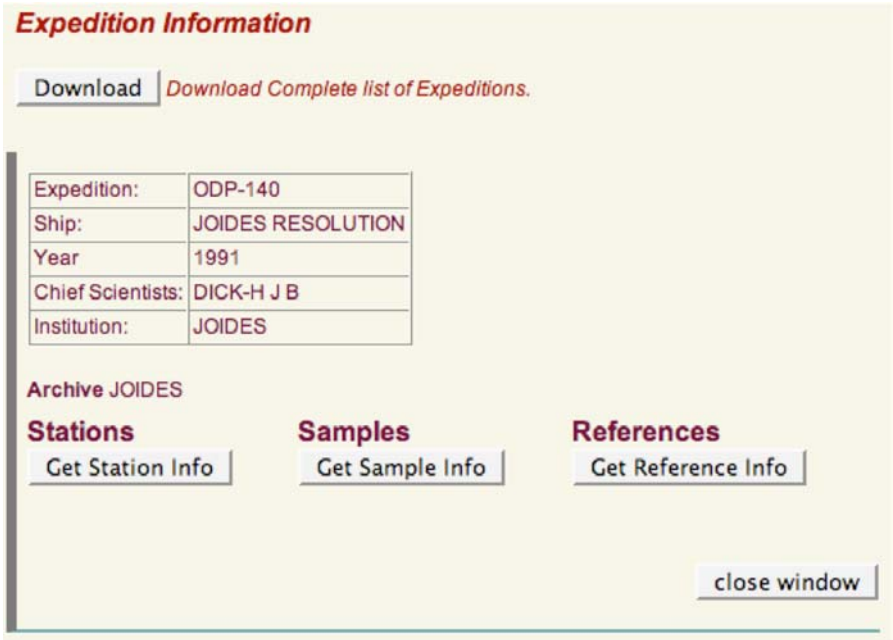
Sample metadata can be accessed several different ways after setting a query. Click on 'View Reference', 'View Expedition' or 'View/Pick Samples' to access lists of the relevant information.

You can access reference information by clicking on the 'View References' button. The reference list provides access to tables with data organized as they appear in the publication.



The 'View Expeditions' button provides information on the expeditions relevant to your query. Clicking on the name of the expedition or leg of a cruise provides information on the year of the expedition, name of the ship, and chief scientist (when available).





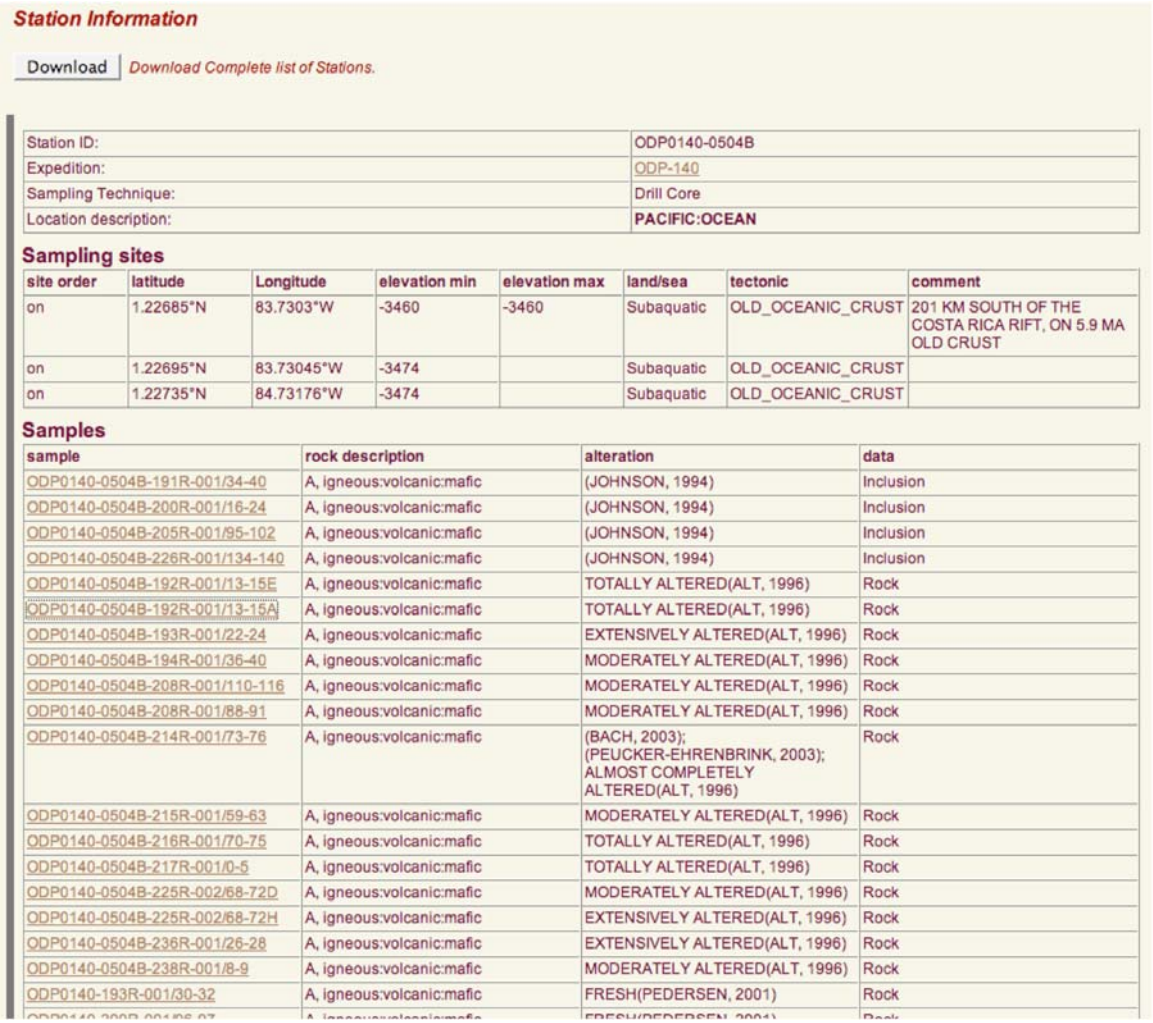
Clicking on the 'View Stations' button provides information on the locations of sampling stations, the sampling method, geospatial coordinates, depth, and tectonic setting at which the samples where taken.

View Station data

Station ID	Sampling Method	Latitude	Longitude	Elevation Minimum	Elevation Maximum	Expedition	Tectonic
ODP0140-0504B	Drill Core	1.22685°N	83.7303°W	-3460	-3460	ODP	OLD_OCEANIC_CRUST
ODP0140-0504B	Drill Core	1.22695°N	83.73045°W		-3474	ODP	OLD_OCEANIC_CRUST
ODP0140-0504B	Drill Core	1.22735°N	84.73176°W		-3474	ODP	OLD_OCEANIC_CRUST

close window

Clicking on the individual Station ID provides access to more metadata. Additional comments are available on the sampling location, what are the individual samples obtained at the location, type of sample, degree of alteration of the sample, and source reference for the metadata.



Station Information

Download *Download Complete list of Stations.*

Station ID:	ODP0140-0504B
Expedition:	ODP-140
Sampling Technique:	Drill Core
Location description:	PACIFIC:OCEAN

Sampling sites

site order	latitude	Longitude	elevation min	elevation max	land/sea	tectonic	comment
on	1.22685°N	83.7303°W	-3460	-3460	Subaquatic	OLD_OCEANIC_CRUST	201 KM SOUTH OF THE COSTA RICA RIFT, ON 5.9 MA OLD CRUST
on	1.22695°N	83.73045°W	-3474		Subaquatic	OLD_OCEANIC_CRUST	
on	1.22735°N	84.73176°W	-3474		Subaquatic	OLD_OCEANIC_CRUST	

Samples

sample	rock description	alteration	data
ODP0140-0504B-191R-001/34-40	A, igneous:volcanic:mafic	(JOHNSON, 1994)	Inclusion
ODP0140-0504B-200R-001/16-24	A, igneous:volcanic:mafic	(JOHNSON, 1994)	Inclusion
ODP0140-0504B-205R-001/95-102	A, igneous:volcanic:mafic	(JOHNSON, 1994)	Inclusion
ODP0140-0504B-226R-001/134-140	A, igneous:volcanic:mafic	(JOHNSON, 1994)	Inclusion
ODP0140-0504B-192R-001/13-15E	A, igneous:volcanic:mafic	TOTALLY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-192R-001/13-15A	A, igneous:volcanic:mafic	TOTALLY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-193R-001/22-24	A, igneous:volcanic:mafic	EXTENSIVELY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-194R-001/36-40	A, igneous:volcanic:mafic	MODERATELY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-208R-001/110-116	A, igneous:volcanic:mafic	MODERATELY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-208R-001/88-91	A, igneous:volcanic:mafic	MODERATELY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-214R-001/73-76	A, igneous:volcanic:mafic	(BACH, 2003); (PEUCKER-EHRENBRINK, 2003); ALMOST COMPLETELY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-215R-001/59-63	A, igneous:volcanic:mafic	MODERATELY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-216R-001/70-75	A, igneous:volcanic:mafic	TOTALLY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-217R-001/0-5	A, igneous:volcanic:mafic	TOTALLY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-225R-002/68-72D	A, igneous:volcanic:mafic	MODERATELY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-225R-002/68-72H	A, igneous:volcanic:mafic	EXTENSIVELY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-236R-001/26-28	A, igneous:volcanic:mafic	EXTENSIVELY ALTERED(ALT, 1996)	Rock
ODP0140-0504B-238R-001/8-9	A, igneous:volcanic:mafic	MODERATELY ALTERED(ALT, 1996)	Rock
ODP0140-193R-001/30-32	A, igneous:volcanic:mafic	FRESH(PEDERSEN, 2001)	Rock

To obtain information on what data are available for a sample, click on the Sample ID. A new window with all the sample metadata will appear including rock type and geographic name of the location where the sample was obtained. Additionally, the sample information window provides a table with all chemical data available in PetDB for that particular sample.

Sample info
Sample ID:ODP0140-193R-001/30-32

Location:
Latitude: 1.22685°N
Longitude: 83.7303°W
Elevation: -3460
Tectonic setting: OLD_OCEANIC_CRUST
Location: PACIFIC:OCEAN
Location Comment:

Sampling Information
Cruise: ODP-140 (JOIDES RESOLUTION, 1991)
Chief Scientist: DICK
Technique: Drill Core
Date:
Station: ODP0140-0504B

Sample Description:
Rock type: A
Classification: BASALT
Description:
Alteration: FRESH
Age:
Archived at:

Rock Data

Reference	Alias	Method	Material	SiO2	TiO2	Al2O3	FeO	MnO	MgO	CaO	Na2O	K2O	P2O5	Nd143_Nd144	Sm147_Nd144	E_Nd	Pb206_Pb204	Pb207_Pb204	Pb208_Pb204	Nd	Sm	Cr	Ni	Sr	Y	Zr
PEDERSEN, 2001	193R-1,30-32	XRF	Whole rock	50.45	0.43	15.61	8.06	0.15	9.12	12.5	2.06	0.02	0.02									402.0	113.0	51.0	13.0	18.0
PEDERSEN, 2001	193R-1,30-32	MS-ID	Whole rock																	2.45	1.1					
PEDERSEN, 2001	193R-1,30-32	MS	Whole rock											0.513132	0.273		18.434	15.532	38.171							
PEDERSEN, 2001	193R-1,30-32	CALC	Whole rock													9.63										

To obtain information about a method used to obtain the analytical data, click on the method to access a table with standards, normalization and laboratory information (when available in the original publication).

Data Quality Information

Method:

Code:	MS(3452)
Name:	MASS SPECTROMETRY
Location:	UNIVERSITY OF BERGEN
Provided by:	PEDERSEN, 2001
Comment:	
Items measured:	Nd143_Nd144,Sm147_Nd144,Pb206_Pb204,Pb207_Pb204,Pb208_Pb204

Precision:

Item	Precision type	Minimum	Maximum

Standard sample measurement:

Item	sample name	value	stdev	stdev type	Unit
Nd143_Nd144	JOHNSON AND MATTHEY S819093A	.511115	.000013		
Nd143_Nd144	BCR-1	.512652	.000015		
Pb206_Pb204	NBS 981	16.902	.005		
Pb207_Pb204	NBS 981	15.443	.006		
Pb208_Pb204	NBS 981	36.549	.021		

Measured values have been normalized to:

Item	Standard	value
Pb206_Pb204	NBS 981	16.9322
Pb207_Pb204	NBS 981	15.4855
Pb208_Pb204	NBS 981	36.6856

close window

Selecting Chemical Data and Downloading Options

There are many ways in which you can view and download data and metadata. You may:

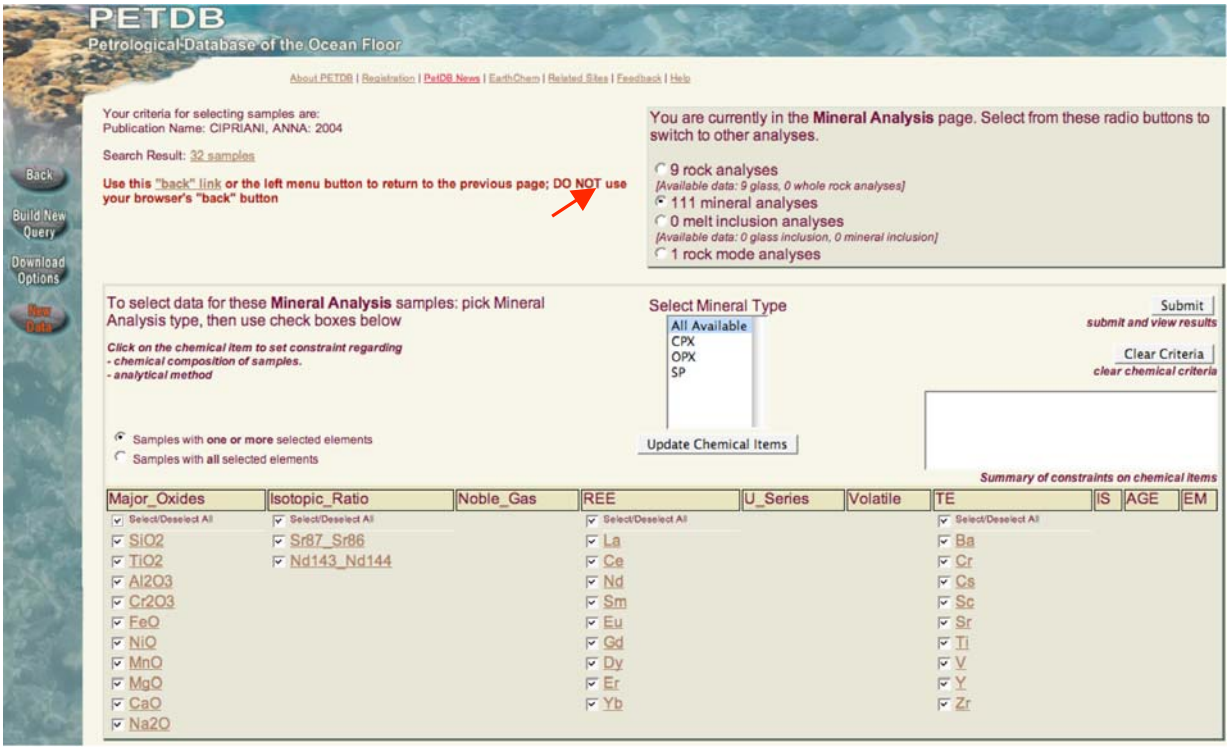
- View the references and proceed to download tables as they appear in the publication
- View Expeditions to access metadata related to the queried dataset
- View/Pick Samples to further refine the dataset by sample name, then click 'Apply'
- Or, simply continue to Data Selection.

Select Material and Chemical Analyses

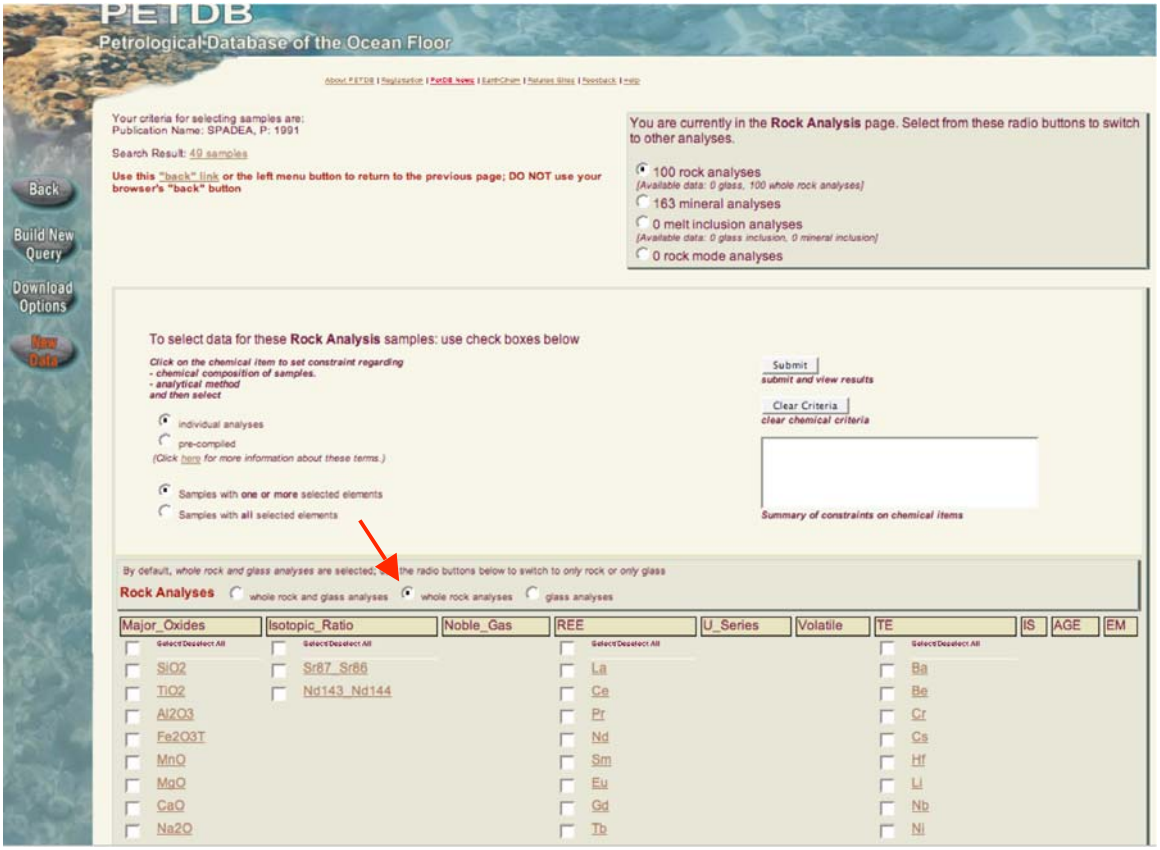
The Data Selection window allows you to choose the materials for which you want to download data. Clicking on the radio buttons dynamically changes the chemistry tables to display only the chemical items available for that particular material.

In the example below, the 'Mineral Analyses' button retrieves from the database major oxide, isotope, trace element and REE. A list of minerals analyzed is displayed in the menu below the materials radio buttons.

To constrain analyses to a particular mineral, select from the list and click 'Update Chemical Items' to update the table of available chemical items.



Clicking on the 'Rock Analyses' button will retrieve from the database those chemical items for which whole rock, glass, or unspecified bulk rock analyses are available in your query. The radio buttons above the chemistry table allow the user to choose only the material of interest.



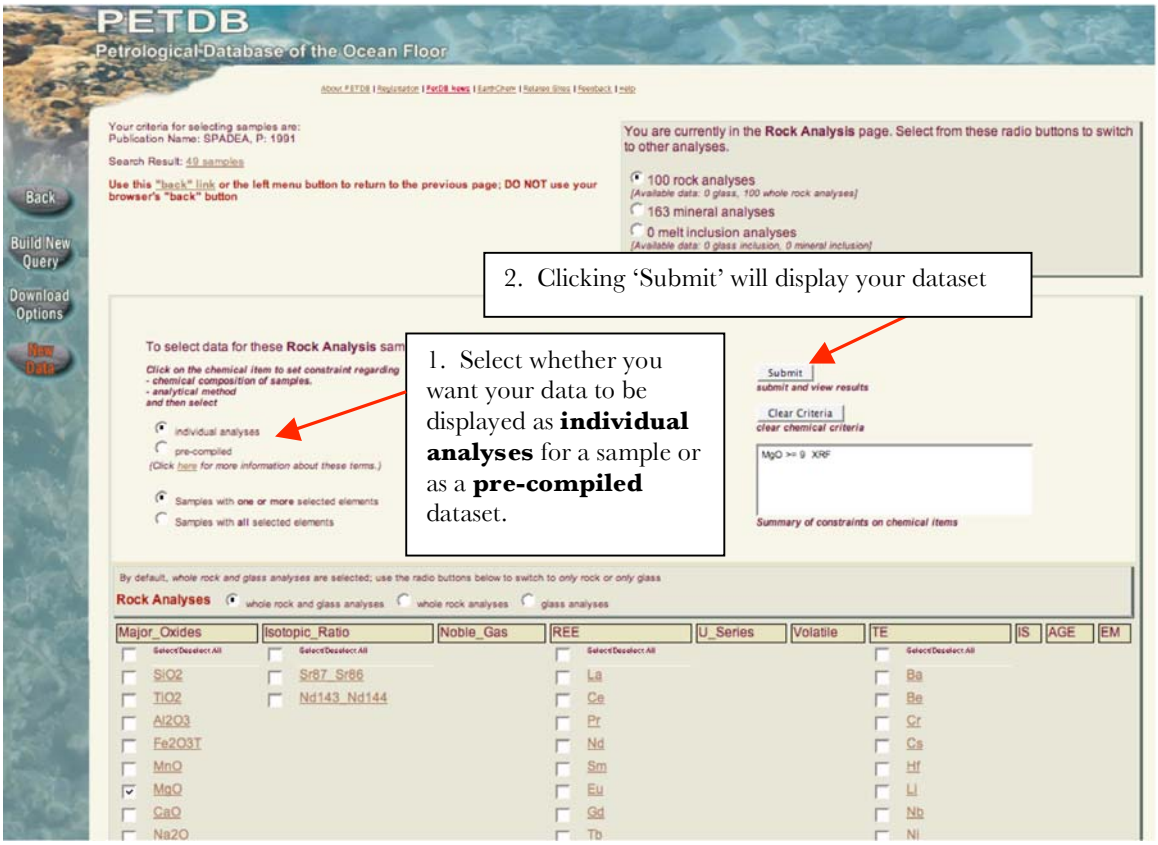
You can constrain chemical concentration by clicking on a chemical item and method.

Chemical constraints set wil appear in the Chemical Criteria window on the right. When you are ready to download your results click Submit.

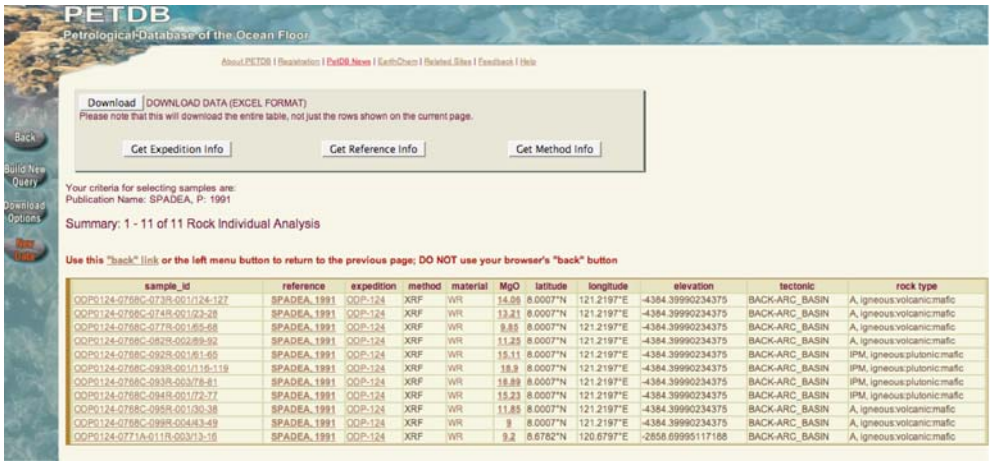
Downloading Datasets

You may download data as individual analyses or in **pre-compiled** format. Pre-compiled datasets arrange all data for a sample based on your query selections by Sample ID in a single line, even when the data is sourced from multiple publications. If there is more than one value for a particular chemical item, the pre-compiled algorithm selects the most recent analysis and most precise method available. To obtain more metadata on the chemical value selected by the precompiled algorithm click on the value listed.

Some users prefer to examine the data and collate analyses of interest by their own criteria. To download individual analyses listed by sample select the **individual analyses** radio button.



The data you queried will appear in an html table for inspection. Metadata can be accessed by clicking on any of the highlighted parameters on the table. To download an Excel file with your data click on the Download button.



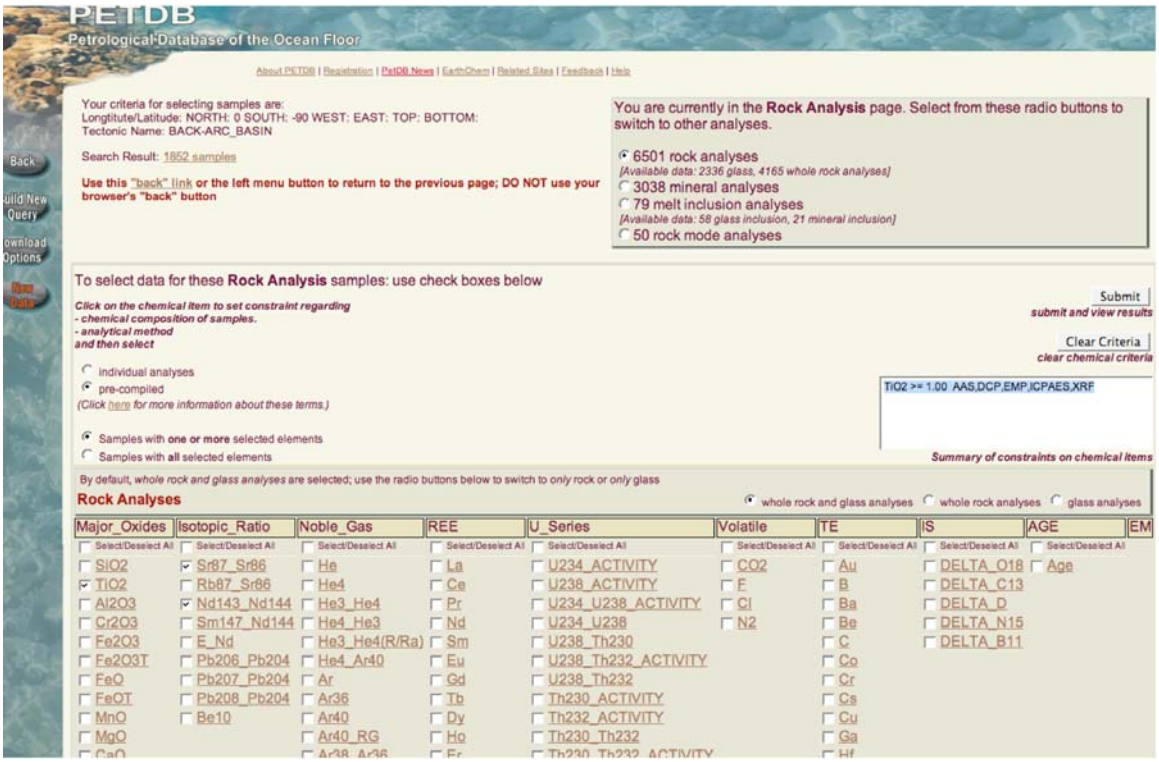
sample_id	reference	expedition	method	material	MgO	latitude	longitude	elevation	tectonic	rock type
ODP0124-0768C-073R-001/124-127	SPADEA, 1991	ODP-124	XRF	WR	14.06	8.0007°N	121.2197°E	-4384.39990234375	BACK-ARC_BASIN	A, igneous:volcanic:mafic
ODP0124-0768C-074R-001/23-26	SPADEA, 1991	ODP-124	XRF	WR	13.21	8.0007°N	121.2197°E	-4384.39990234375	BACK-ARC_BASIN	A, igneous:volcanic:mafic
ODP0124-0768C-077R-001/65-68	SPADEA, 1991	ODP-124	XRF	WR	9.85	8.0007°N	121.2197°E	-4384.39990234375	BACK-ARC_BASIN	A, igneous:volcanic:mafic
ODP0124-0768C-082R-002/89-92	SPADEA, 1991	ODP-124	XRF	WR	11.25	8.0007°N	121.2197°E	-4384.39990234375	BACK-ARC_BASIN	A, igneous:volcanic:mafic
ODP0124-0768C-092R-001/61-65	SPADEA, 1991	ODP-124	XRF	WR	15.11	8.0007°N	121.2197°E	-4384.39990234375	BACK-ARC_BASIN	IPM, igneous:plutonic:mafic
ODP0124-0768C-093R-001/116-119	SPADEA, 1991	ODP-124	XRF	WR	18.9	8.0007°N	121.2197°E	-4384.39990234375	BACK-ARC_BASIN	IPM, igneous:plutonic:mafic
ODP0124-0768C-093R-003/78-81	SPADEA, 1991	ODP-124	XRF	WR	18.89	8.0007°N	121.2197°E	-4384.39990234375	BACK-ARC_BASIN	IPM, igneous:plutonic:mafic
ODP0124-0768C-094R-001/72-77	SPADEA, 1991	ODP-124	XRF	WR	15.23	8.0007°N	121.2197°E	-4384.39990234375	BACK-ARC_BASIN	IPM, igneous:plutonic:mafic
ODP0124-0768C-095R-001/30-38	SPADEA, 1991	ODP-124	XRF	WR	11.85	8.0007°N	121.2197°E	-4384.39990234375	BACK-ARC_BASIN	A, igneous:volcanic:mafic
ODP0124-0768C-099R-004/43-49	SPADEA, 1991	ODP-124	XRF	WR	9	8.0007°N	121.2197°E	-4384.39990234375	BACK-ARC_BASIN	A, igneous:volcanic:mafic
ODP0124-0771A-011R-003/13-16	SPADEA, 1991	ODP-124	XRF	WR	9.2	8.6782°N	120.6797°E	-2858.69995117188	BACK-ARC_BASIN	A, igneous:volcanic:mafic

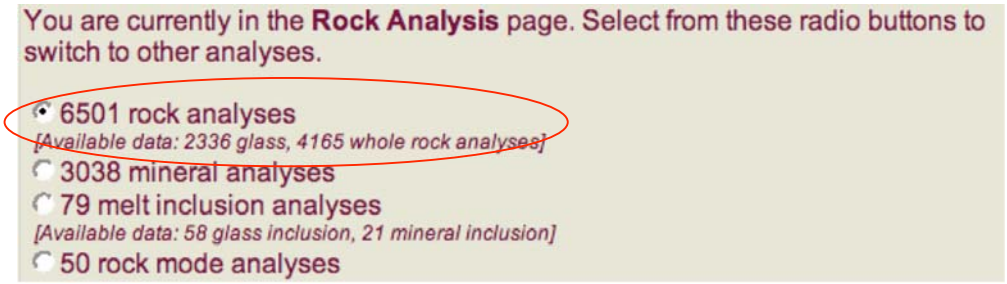
Obtaining Chemical Data in a Specific Range of Concentrations

Begin your search by setting query parameters. In the example below, the database will be queried for samples from back-arc basins south of the equator.

Click on Continue to Data Selection

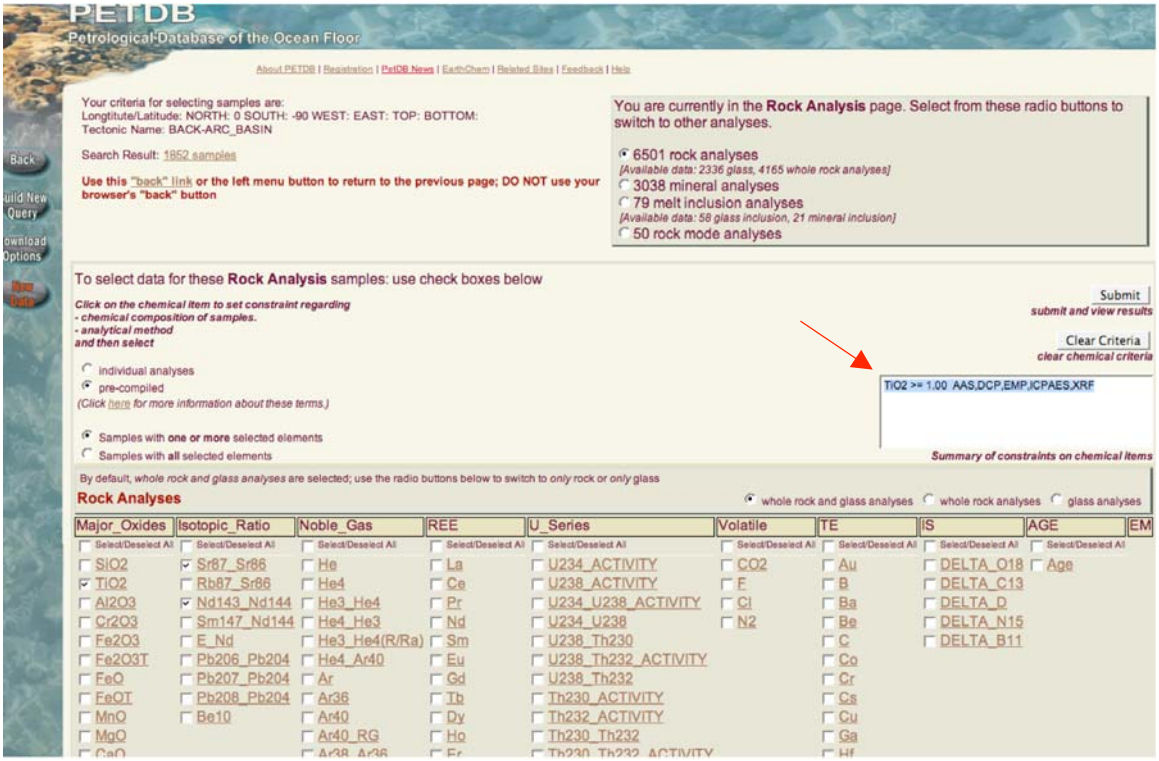
The Data Selection screen will display all data available for samples meeting your chosen criteria. Select Rock Analyses by clicking on the radio button.



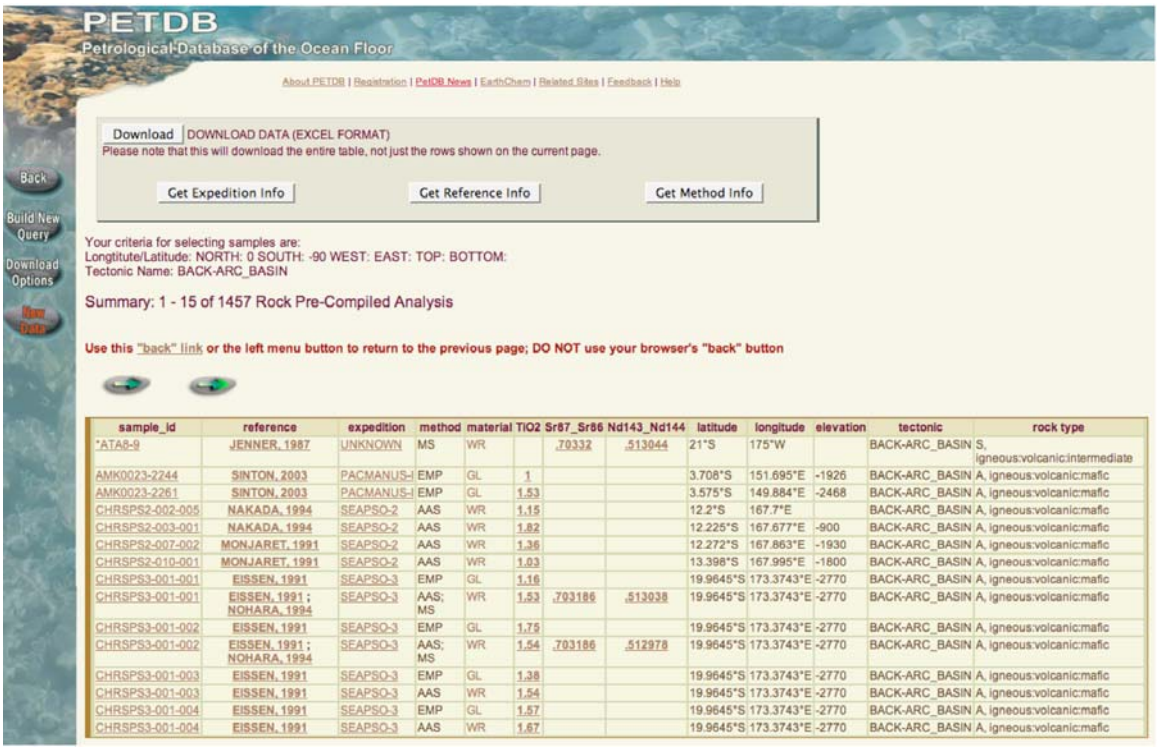


To constrain chemical values, for example, TiO_2 click on the chemical item. A concentration and method constraint window will appear. Enter a range of concentrations and click 'Apply'.

A summary of constraints appears in a window to display the range of concentrations you selected.

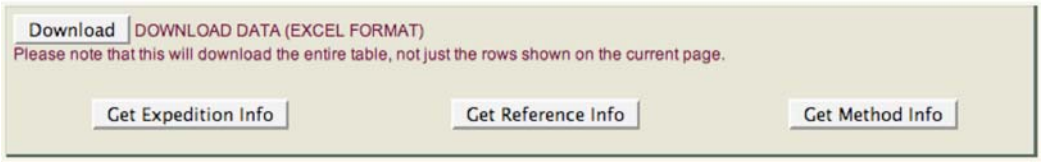


Once your have selected chemical items and set constraints, click 'Submit' to obtain data. To download your dataset as an Excel spreadsheet click Download.



sample_id	reference	expedition	method	material	TiO2	Sr87_Sr86	Nd143_Nd144	latitude	longitude	elevation	tectonic	rock type
*ATA8-9	JENNER, 1987	UNKNOWN	MS	WR		.70332	.513044	21°S	175°W		BACK-ARC_BASIN	S, igneous:volcanic:intermediate
AMK0023-2244	SINTON, 2003	PACMANUS-I	EMP	GL	1			3.708°S	151.695°E	-1926	BACK-ARC_BASIN	A, igneous:volcanic:mafic
AMK0023-2261	SINTON, 2003	PACMANUS-I	EMP	GL	1.53			3.575°S	149.884°E	-2468	BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS2-002-005	NAKADA, 1994	SEAPSO-2	AAS	WR	1.15			12.2°S	167.7°E		BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS2-003-001	NAKADA, 1994	SEAPSO-2	AAS	WR	1.82			12.225°S	167.677°E	-900	BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS2-007-002	MONJARET, 1991	SEAPSO-2	AAS	WR	1.36			12.272°S	167.863°E	-1930	BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS2-010-001	MONJARET, 1991	SEAPSO-2	AAS	WR	1.03			13.398°S	167.995°E	-1800	BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS3-001-001	EISSEN, 1991	SEAPSO-3	EMP	GL	1.16			19.9645°S	173.3743°E	-2770	BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS3-001-001	EISSEN, 1991 ; NOHARA, 1994	SEAPSO-3	AAS; MS	WR	1.53	.703186	.513038	19.9645°S	173.3743°E	-2770	BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS3-001-002	EISSEN, 1991	SEAPSO-3	EMP	GL	1.75			19.9645°S	173.3743°E	-2770	BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS3-001-002	EISSEN, 1991 ; NOHARA, 1994	SEAPSO-3	AAS; MS	WR	1.54	.703186	.512978	19.9645°S	173.3743°E	-2770	BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS3-001-003	EISSEN, 1991	SEAPSO-3	EMP	GL	1.38			19.9645°S	173.3743°E	-2770	BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS3-001-003	EISSEN, 1991	SEAPSO-3	AAS	WR	1.54			19.9645°S	173.3743°E	-2770	BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS3-001-004	EISSEN, 1991	SEAPSO-3	EMP	GL	1.57			19.9645°S	173.3743°E	-2770	BACK-ARC_BASIN	A, igneous:volcanic:mafic
CHRSPS3-001-004	EISSEN, 1991	SEAPSO-3	AAS	WR	1.67			19.9645°S	173.3743°E	-2770	BACK-ARC_BASIN	A, igneous:volcanic:mafic

To view associated metadata on expeditions, references, or methods, click the corresponding button above the html data table.



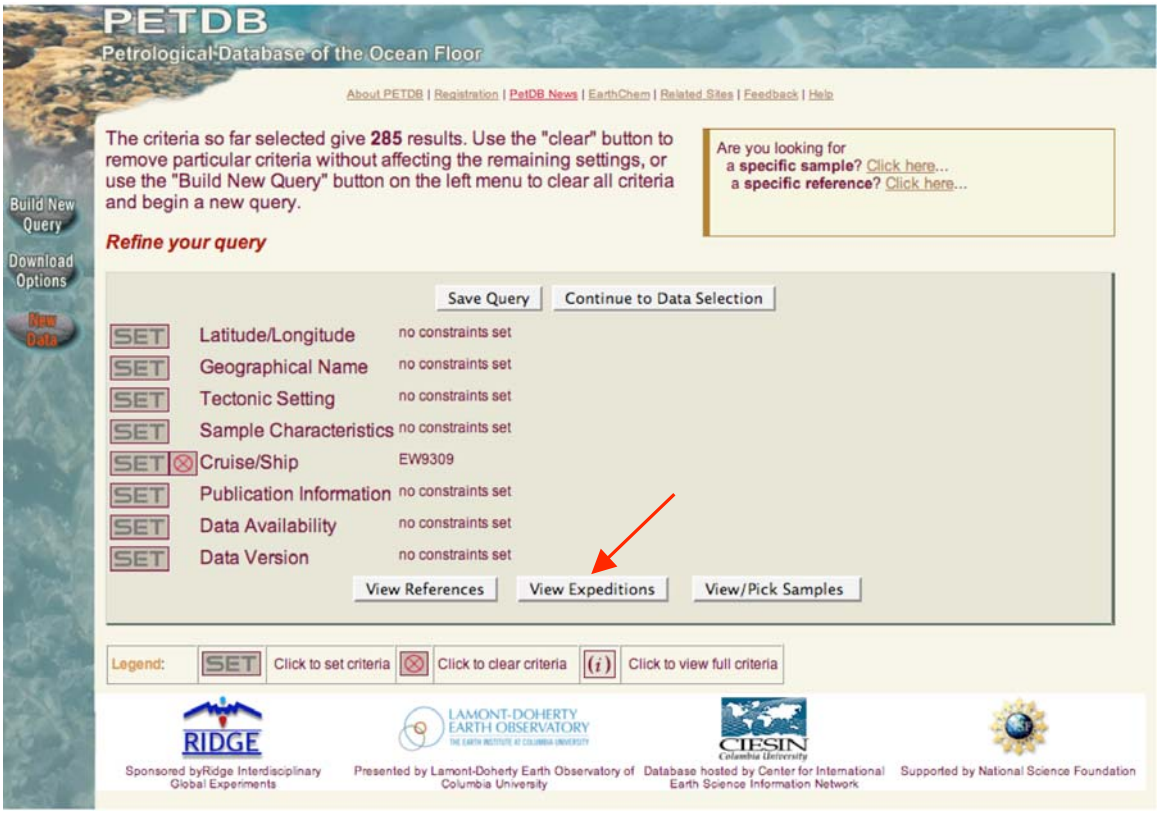
Other Features

Accessing MGDS (Marine Geoscience Data System) data through PetDB

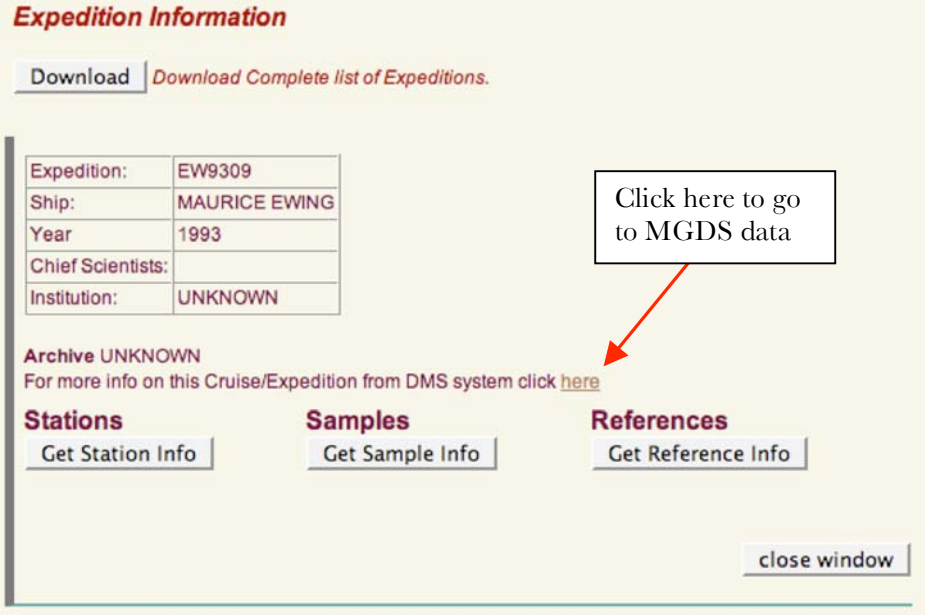
The Marine Geoscience Data System provides access to bathymetry, navigation, multi-beam and sidescan sonar information for cruises and expeditions. Complementary chemical information may be available through PetDB*.

*Note that geophysical and navigation data may not be available for all expeditions in PetDB.

To access MGDS data through PetDB, create a query and click on the 'View Expeditions' button.



If data is available through MGDS a link will be available to retrieve the relevant information.



The MGDS window displays the various datasets available for the queried expedition.

Data Link Entry : EW9309

Click on active links to access data or information.

Map View

Platform: Maurice Ewing
Operator: LDEO:Office_of_Marine_Operations

Chief_Scientist : Schilling, Jean-Guy *(NSF OCE90-11741)*
Scientist:Geochemistry: Fontignie, Denis
Scientist:Geochemistry: Sarda, Philippe
Scientist:Geophysics: Chen, John
Scientist:Geophysics: Small, Christopher
Scientist:Marine_Research_Specialist: Kingsley, Richard
Student:Graduate : Carruthers, Margaret
Student:Graduate : Doulgass, Jim
Student:Graduate : Martinez, Luma
Student:Graduate : Moreira, Manuel
Student:Graduate : Spath, Andreas
Computer_Systems_Manager: Robinson, William, J.
Core_Bosun : QaliMaiwiriwiri, Ropate
Science_Officer : Stennett, Joseph
Technician:Electronics: Pitman, Walter
Technician:Hydrosweep: Bissell, Daniel
Technician:Hydrosweep: Chayes, Dale

Port: 1993-11-20 Cape Town, South Africa
Port: 1993-12-27 Montevideo, Uruguay

West: -56.14180
East: 18.43900
South: -52.47230
North: -33.86290

Survey Locations and Navigation:

EW9309 Primary Navigation

Field Data Inventory:

Dive Type	Line Platform Type	Station Type	Data Type	Device Type	Device Info	Investigator or Contact
			Bathymetry:Singlebeam	Sonar Multibeam		Schilling_Jean-Guy
			Bathymetry:Swath	Sonar Multibeam	Atlas:Hydrosweep-DS	Schilling_Jean-Guy
			Chemistry:Rock		PetDB:	Schilling_Jean-Guy
			Gravity:Field	Gravimeter	Bodenseewerk:KSS-30	Schilling_Jean-Guy
			Magnetic:Field	Magnetometer	Varian:V75	Schilling_Jean-Guy
			Navigation	Navigation Primary		Schilling_Jean-Guy

The process works in reverse too! You can also browse MGDS files and access PetDB data when available.