

23, 24. XRF, XRD		
Table Name	Column Name	Column Comment
Sample	sample_id	
	location	Code that indicates the site where the Janus application is exercised. Values are SHI(ship), GCR (Gulf Coast Repository), ECR (East Coast Repository, WCR (West Coast Repository) and BRE (Bremen repository). Used primarily
	s_c_leg	Number identifying the cruise for which data was entered into the database. Defaults.leg is the current leg for the ship-based version of the Janus application, this value populates the read-only Leg field during the in
	s_c_sampling_code	Code used to identify the classify for whom the sample was taken.
	sam_archive_working	same as archive_working but allowed to be null for the sample application
	top_interval	
	bottom_interval	Distance in meters from the top of the section to the bottom of the sample. The value is stored in the database as meters, but usually appears in the Janus application as centimeters.
	piece	Additional identifier for hard rock samples. Each individual piece of rock within a section is numbered consecutively starting at the top of the section.
	sub_piece	Additional identifier for hard rock samples. When a piece is broken, the individual fragments are given consecutive letter designations. Note that subpiece assignments must be made in conjunction with piece numbers.
	beaker_id	The number on the moisture density beaker, such as "P267" or "A11344". This value is entered on the sample table and the beaker_id is associated to the sample.
	volume	Volume of sample
	entered_by	Indicates who entered the row into the database
	sample_depth	depth of the sample
	sample_comment	A comment about the sample
	sam_repository	Repository where sample is stored.
	sam_sample_code_lab	Code to indicate the shipboard lab that will perform the initial analysis.
	sam_section_id	Unique number generated by system to identify section. This is done because of the physical subsection/0 section problems. In adding new sections, deleting sections or changing sections don't want to have to ripple up
	timestamp	CHAR(18)
System_Type	system_id	identifier for a system of equipment on the ship
	system_comments	comments associated with a piece of analytical equipment
	system_commissioned	the date that a piece of equipment started to be used to collect scientific data for Janus
	system_decommissioned	the date that a piece of analytical equipment was no longer used by ODP to analyzed samples for scientific data.
	system_model_number	The model number of an piece of equipment used for scientific analysis
	system_name	The name for a piece of equipment used for analysis in Janus
XRD_DI_Data	xrd_run_id	a unique identifier for a XRD analysis
	xrd_angle	degrees 2-theta of a peak from a XRD diffractogram

	d_spacing_1	d-spacing associated with a mineral from an XRD analysis
	d_spacing_2	d-spacing associated with a mineral from an XRD analysis.
	peak_width	the width of the peak from a XRD diffractogram, in degrees 2-theta.
	peak_intensity	the intensity of a measured peak from a XRD diffractogram, in counts
	backgrd_intensity	the intensity of the background from a XRD sample
	rel_intensity	The intensity of a peak relative to the highest intensity peak for the scan in an XRD analysis.
XRD_File	xrd_run_id	a unique identifier for a XRD analysis
	line_number	the line number of the line being read from the XRD file
	line_text	the text contained in a line of header or data data from a XRD run
XRD_Hdr_Data	xrd_run_id	a unique identifier for a XRD analysis
	xrd_location	Code that indicates the site where the Janus application is exercised. Values are SHI(ship), GCR (Gulf Coast Repository), ECR (East Coast Repository, WCR (West Coast Repository) and BRE (Bremen repository). Used primari
	xrd_sample_id	
	run_type	Type of run - Sample, Control-1,Control-2 and Control-3 -- are current run types in system. New run types will be added.
	sample_prep	the type of preparation used for a sample - For XRF a fused glass disc (bead) or pressed pellet (pellet). For XRD bulk sample, clay separation, glycolated or heated.
	diffr_type	The type of diffractometer used for the XRD analysis, such as a Philips PW1710.
	diffr_number	The XRD can control multiple diffractometers. However, on the ship the XRD is configured to run only one diffractometer in the first position.
	anode	The anode of the XRD tube, such as Copper (Cu).
	labda_alpha1	wavelength associated with the XRD tube.
	labda_alpha2	
	ratio_alphas	the ratio of the alphas for an XRD tube.
	diverg_slit	The type of divergence slit used for an XRD analysis. If an automatic divergence slit is used, the irradiated length is listed in millimeters
	irrad_length	The irradiation length for the XRD in millimeters. (only applies if an automatic divergence slit is used)
	receiving_slit	receiving slit for the XRD, in millimeters
	mono_chrom_used	Monochromator used, yes or no
	gen_volt	Voltage applied to the XRD tube, in kv
	tube_current	current applied to the XRD tube in milliamps
	datetime	Generic date/time. Often used for keys when multiple comments, etc can be entered.
	angle_start	The angle of the XRD goniometer at the start of a analysis, in degrees.
	angle_stop	The angle of the XRD goniometer at the finish of an analysis, in degrees
	scan_step_size	The size of the steps of of the XRD goniometer during an analysis, in degrees 2 theta.
	scan_type	The type of scan used during an XRD analysis, either continuous or step.
	scan_step_time	the time spent counting on each step of an XRD run in seconds.
	xrd_comment	a comment related to a XRD sample
	filename	The filename of the XRD file generated from the Philips system. The filename is stored along with the header data for batch uploads because the barcode identifier for the sample may not be unique.

XRF_Analysis_Type	xrf_analysis_code	A code for the element or oxide being analyzed
	analysis_code_order	used to determine the order that analysis codes will appear on a spreadsheet or report.
XRF_Calibration	xrf_analysis_code	A code for the element or oxide being analyzed
	datetime	Generic date/time. Often used for keys when multiple comments, etc can be entered.
	XRF_Analysis_Type	The type of analysis performed on a xrf sample -- major element analysis, trace element analysis or other.
	xrf_std_name	The name of a XRF standard
	xrf_replicate	identifier that will be used when an analysis for replicates of a sample all need to be entered into the database.
	xrf_std_value	The expected results for a element in a XRF standard
	xrf_calib_name	identifies the name associated with a particular calibration, since the XRF may run multiple calibrations at any time.
XRF_Chk_Result	xrf_run_identifier	user identified run identifier which increases from one run to next. Must be unique during a leg, but can be repeated on different legs.
	leg	Number identifying the cruise for which data was entered into the database. Defaults.leg is the current leg for the ship-based version of the Janus application, this value populates the read-only Leg field during the in
	xrf_std_name	The name of a XRF standard
	xrf_replicate	identifier that will be used when an analysis for replicates of a sample all need to be entered into the database.
	xrf_analysis_code	A code for the element or oxide being analyzed
	XRF_Analysis_Type	The type of analysis performed on a xrf sample -- major element analysis, trace element analysis or other.
	analysis_units	the measurement units used for an analysis, such as grams or milliliters, etc.
	xrf_analysis_result	the result of an analysis of a XRF sample for a particular analysis code.
XRF_Sample	sample_id	
	location	Code that indicates the site where the Janus application is exercised. Values are SHI(ship), GCR (Gulf Coast Repository), ECR (East Coast Repository, WCR (West Coast Repository) and BRE (Bremen repository). Used primari
	xrf_replicate	identifier that will be used when an analysis for replicates of a sample all need to be entered into the database.
	xrf_run_identifier	user identified run identifier which increases from one run to next. Must be unique during a leg, but can be repeated on different legs.
	leg	Number identifying the cruise for which data was entered into the database. Defaults.leg is the current leg for the ship-based version of the Janus application, this value populates the read-only Leg field during the in
	xrf_analysis_type	The type of analysis performed on a xrf sample -- major element analysis, trace element analysis or other.
	system_id	identifier for a system of equipment on the ship
	sample_prep	the type of preparation used for a sample - For XRF a fused glass disc (bead) or pressed pellet (pellet). For XRD bulk sample, clay separation, glycolated or heated.

	bead_loi	Loss on Ignition. The percentage of weight lost after igniting the XRF sample ($((\text{post_ign_sample_wt}/\text{pre_ign_sample_wt})-1)*(-100)$)
	xrf_comment	A comment associated with a sample analyzed by the XRD or XRF
	sample_type_id	
XRF_Sample_Analysis	sample_id	
	location	Code that indicates the site where the Janus application is exercised. Values are SHI(ship), GCR (Gulf Coast Repository), ECR (East Coast Repository), WCR (West Coast Repository) and BRE (Bremen repository). Used primarily
	xrf_replicate	identifier that will be used when an analysis for replicates of a sample all need to be entered into the database.
	xrf_run_identifier	user identified run identifier which increases from one run to next. Must be unique during a leg, but can be repeated on different legs.
	leg	Number identifying the cruise for which data was entered into the database. Defaults.leg is the current leg for the ship-based version of the Janus application, this value populates the read-only Leg field during the in
	xrf_analysis_type	The type of analysis performed on a xrf sample -- major element analysis, trace element analysis or other.
	xrf_analysis_code	A code for the element or oxide being analyzed
	xrf_analysis_result	the result of an analysis of a XRF sample for a particular analysis code.
	analysis_units	the measurement units used for an analysis, such as grams or milliliters, etc.
	xrf_cal_name	The same description as the attribute xrf_calib_name, but allowed to be null.
XRF_Sample_Type	sample_type_id	
	sample_type	
XRF_Standard	xrf_std_name	The name of a XRF standard
	xrf_replicate	identifier that will be used when an analysis for replicates of a sample all need to be entered into the database.
	rock_type	The type of rock being analyzed, for example, basalt or limestone.
	xrf_std_comment	a comment concerning an XRF standard