

**TABLE AND COLUMN DESCRIPTIONS  
FROM THE "TABLE\_DESC" TABLE  
IN THE SOUTHWESTERN NEVADA VOLCANIC FIELD DATABASE**

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
age_measure		Age date	This table provides age dates and their uncertainties, the minerals dated, and methods employed.
age_measure	age	Age date	This value provides the age date, in Ma.
age_measure	age_95ci	Uncertainty for age date	This value provides the uncertainty for age date at a confidence interval of 2 sigma, in Ma.
age_measure	date_method	Age dating method	This symbol represents the method used for age dating. Allowed symbols are defined in table split_type_list.
age_measure	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
age_measure	min_code	Mineral age dated	This symbol represents the mineral used for age dating. Allowed symbols are defined in table comp_list.
age_measure	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
age_measure	spl_id	Unique ID for age date split	This unique symbol represents a split of a sample for age dating. A split represents analysis for a single age date that is performed by a single laboratory from a few g split from the sample. A left parenthesis '(' designates each split from a single sample, such as 102887/3(A, split for a K/Ar age date from sample 102887/3. Multiple age dates of the same split by the same laboratory are considered to represent replicate analyses. To represent split analyses, replicate age dates are averaged according to procedures defined by the analyst. Individual replicate analyses are not stored within the database.
alt_int		Alteration intervals	This table provides the alteration and minor alteration for each successive interval within a drill hole. Important physical, relational, and other characteristics for successive intervals within drill holes are termed geologic intervals. Intervals are defined both by depths and elevations. Physical characteristics are lithology, alteration, minor alteration, fracture intensity, and lithophysal zones. Relational characteristics are stratigraphic assignment and stratigraphic assignments for bounding units.
alt_int	alt_code	Assignment for alteration interval	This symbol defines the mineral alteration for topic_code MA and mineral alteration - minor for topic_code MAM within the depth interval specified within the drill hole specified. Allowed symbols are defined in table alt_list.
alt_int	alt_rank	Alteration rank	This integer value ranks the importance of alteration or minor alteration within each alteration interval. The more important the alteration or minor alteration, the lower the integer value.
alt_int	depth_l	Lower depth of alteration interval	This value provides the lower depth in meters beneath the surface for the alteration interval.
alt_int	depth_u	Upper depth of alteration interval	This value provides the upper depth in meters beneath the surface for the alteration interval.
alt_int	elev_l	Lower elevation of alteration interval	This value provides the lower elevation of alteration interval in meters above mean sea level.
alt_int	elev_u	Upper elevation of alteration interval	This value provides the upper elevation of alteration interval in meters above mean sea level.
alt_int	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
alt_int	loc_id	Unique ID for drill hole	This symbol represents a drill hole. Names have been abbreviated in some cases, for example, PM1 is the unique ID for drill hole Pahute Mesa Exploratory well #1. If doubt exists regarding the true identity of a unique ID for any drill hole, then the coordinates provided in table location can be used to resolve the uncertainty.
alt_int	topic_code	Topic for alteration interval	This symbol identifies topic for alteration interval. Allowed symbols are limited to topics mineral alteration (MA) and mineral alteration - minor (MAM) within table topic_list.
alt_list		Alteration	This table defines symbols that describe alteration, alteration types and groups, and qualitatively indicate a progression of alteration intensity and temperature.
alt_list	alt_code	Symbol for sample alteration	This column provides symbols that represent a mineral or mineral assemblage and process that are dominant contributors to the observed mineralogy. The content of each mineral required to be considered dominant depends on the mineral; for example, zeolites and clays are considered dominant in concentrations of 20% or greater, calcite is considered dominant at 5% or greater, and kaolinite at 2% or greater.
alt_list	alt_group_code	Symbol for alteration group	This column provides symbols that define the alteration group for the subject alteration. Allowed symbols are defined by alt_code.
alt_list	alt_name	Sample alteration	This column represents a mineral or mineral assemblage and process that are dominant contributors to the observed mineralogy. The content of each mineral required to be considered dominant depends on the mineral; for example, zeolites and clays are considered dominant in concentrations of 20% or greater, calcite is considered dominant at 5% or greater, and kaolinite at 2% or greater.
alt_list	alt_rank	Alteration rank	This column provides integer values used to qualitatively rank alteration by increasing intensity, temperature of alteration, and crystallinity. The lowest alteration ranks have the lowest intensities and temperatures, and are the least crystalline.
alt_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ans_list		Answers	This table provides answers to questions regarding analyses, procedures, or definitions.
ans_list	ans_code	Name	This column defines symbols that provide answers to questions regarding analyses, procedures, or definitions.
ans_list	ans_name	Answers	This column provides answers to questions regarding analyses, procedures, or definitions.
ans_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
avail_list		Availability	This table provides symbols that describe the availability of samples, descriptions, or definitions.
avail_list	avail_code	Availability symbol	This column provides symbols that describe the availability of samples, descriptions, or definitions.
avail_list	avail_name	Availability	This column describes the availability of samples, descriptions, or definitions.
avail_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ca_compute_method		Computational method	This table defines the computational method used to reduce chemical analytical data into concentrations.
ca_compute_method	ca_comp_meth_code	Computational method symbol	This symbol defines the computational method used to reduce chemical analytical data into concentrations. Allowed symbols are defined in table ca_compute_method_list.
ca_compute_method	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ca_compute_method	oxide_code	Analyte symbol	This symbol provides standard chemical symbol for analyte. All analytes are represented by forms that dominate their occurrence within terrestrial rocks, mostly as oxides. Allowed analytes are defined in oxide_list, which also provides gravimetric factors to convert all oxide values to equivalent elemental values.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
ca_compute_method	spl_id	Unique ID for chemical split	This unique symbol represents a split of a sample for chemical analysis. A split represents chemical analysis for one or more element that is performed by a single laboratory. Usually, a few g is split from the sample and specially prepared for the analytical procedure. Each laboratory's chemical analysis represents a separate split, even if different analysts analyze different elements on widely separated dates. Each batch of sample pulverized for chemical analysis does not necessarily represent a split. A left parenthesis '(' designates each split from a single sample, such as 12/83/7/5(B, an XRF analysis for sample 12/83/7/5. Multiple chemical analyses of the same sample by the same laboratory represent replicate analyses. To represent split analyses, replicate chemical analyses are averaged, weighted by the inverse square of their analytical uncertainties. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
ca_compute_method_list		Computational method	This table defines symbols that describe computational methods used for specific types of chemical analysis to reduce the chemical analytical data into concentrations.
ca_compute_method_list	ca_compute_method_code	Computational method symbol	This column provides symbols that define the computational method used to reduce chemical analytical data into concentrations.
ca_compute_method_list	ca_compute_method_name	Computational method	This column describes the computational method used to reduce chemical analytical data into concentrations.
ca_compute_method_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ca_compute_method_list	split_type_code	Specific chemical analysis type	This column defines symbols that identify the specific type of chemical analysis for each split.
ca_measure		Chemical data	This table provides chemical data for each sample split. Chemical data included are analyte values or lower detection limits, and analytical uncertainties. Citations for these data are provided in this table, as well as the number of replicates analyzed for each element.
ca_measure	ca_subtype_code	Type of chemical analysis	This symbol identifies the specific type of chemical analysis for each split. Allowed symbols are defined in ca_subtype_list.
ca_measure	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ca_measure	n_rep	Replicate chemical analyses	This value represents the number of replicate chemical analyses for each analyte with a chemical split.
ca_measure	oxide_code	Analyte symbol	This symbol provides standard chemical symbol for analyte. All analytes are represented by forms that dominate their occurrence within terrestrial rocks, mostly as oxides. Allowed analytes are defined in table oxide_list, which also provides gravimetric factors to convert all oxide values to equivalent elemental values.
ca_measure	oxide_error	Analyte uncertainty	This value provides the analyte uncertainty.
ca_measure	oxide_error_meth_code	Method for analyte uncertainty	This symbol identifies the method used to define analyte uncertainty. Allowed symbols are defined in table error_meth_list.
ca_measure	oxide_ldl	Analyte LDL	This value provides the lower detection limit if the analyte is undetectable.
ca_measure	oxide_value	Analyte value	This value provides the analyte concentration, unless this value represents a lower detection limit; such values are represented as oxide_ldl.
ca_measure	ref_code	Citation for chemical data	This symbol provides source of chemical data. Allowed symbols are defined in table ref_list.
ca_measure	spl_id	Unique ID for chemical split	This unique symbol represents a split of a sample for chemical analysis. A split represents chemical analysis for one or more element that is performed by a single laboratory. Usually, a few g is split from the sample and specially prepared for the analytical procedure. Each laboratory's chemical analysis represents a separate split, even if different analysts analyze different elements on widely separated dates. Each batch of sample pulverized for chemical analysis does not necessarily represent a split. A left parenthesis '(' designates each split from a single sample, such as 12/83/7/5(B, an XRF analysis for sample 12/83/7/5. Multiple chemical analyses of the same sample by the same laboratory represent replicate analyses. To represent split analyses, replicate chemical analyses are averaged, weighted by the inverse square of their analytical uncertainties. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
ca_measure	units_code	Analyte concentration units	This value provides concentration units associated with analytical values. Concentration units are always provided on a weight basis for chemical analyses. Allowed symbols are defined in table units_list. The same concentration units are consistently used for each analyte.
ca_prep_list		Sample preparation	This table defines symbols that represent the method used to prepare a sample for chemical analysis.
ca_prep_list	ca_prep_code	Symbol for sample preparation	This column defines symbols that represent the method used to prepare a sample for chemical analysis.
ca_prep_list	ca_prep_name	Sample preparation	This column represents the method used to prepare a sample for chemical analysis.
ca_prep_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ca_prep_list	split_type_code	Specific chemical analysis type	This column defines symbols that identify the specific type of chemical analysis appropriate for the method of sample preparation.
ca_rep_oxide		Replicate ID	For each replicate, this table identifies analytes and assigns a unique ID.
ca_rep_oxide	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ca_rep_oxide	oxide_code	Analyte symbol	This symbol provides standard chemical symbol for analyte. All analytes are represented by forms that dominate their occurrence within terrestrial rocks, mostly as oxides. Allowed analytes are defined in table oxide_list, which also provides gravimetric factors to convert all oxide values to equivalent elemental values.
ca_rep_oxide	rep_id	Replicate ID	This symbol provides a unique laboratory ID for each replicate.
ca_rep_oxide	spl_id	Unique ID for chemical split	This unique symbol represents a split of a sample for chemical analysis. A split represents chemical analysis for one or more element that is performed by a single laboratory. Usually, a few g is split from the sample and specially prepared for the analytical procedure. Each laboratory's chemical analysis represents a separate split, even if different analysts analyze different elements on widely separated dates. Each batch of sample pulverized for chemical analysis does not necessarily represent a split. A left parenthesis '(' designates each split from a single sample, such as 12/83/7/5(B, an XRF analysis for sample 12/83/7/5. Multiple chemical analyses of the same sample by the same laboratory represent replicate analyses. To represent split analyses, replicate chemical analyses are averaged, weighted by the inverse square of their analytical uncertainties. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
ca_rep_prep		Sample preparation	This table represents the method used to prepare the sample for chemical analysis.
ca_rep_prep	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ca_rep_prep	prep_code	Symbol for sample preparation	This symbol represents the method used to prepare the sample for chemical analysis. Allowed sample preparations are defined in table ca_prep_list.
ca_rep_prep	rep_id	Replicate ID	This symbol provides a unique laboratory ID for each replicate of a split.
ca_rep_prep	spl_id	Unique ID for chemical split	This unique symbol represents a split of a sample for chemical analysis. A split represents chemical analysis for one or more element that is performed by a single laboratory. Usually, a few g is split from the sample and specially prepared for the analytical procedure. Each laboratory's chemical analysis represents a separate split, even if different analysts analyze different elements on widely separated dates. Each batch of sample pulverized for chemical analysis does not necessarily represent a split. A left parenthesis '(' designates each split from a single sample, such as 12/83/7/5(B, an XRF analysis for sample 12/83/7/5. Multiple chemical analyses of the same sample by the same laboratory represent replicate analyses. To represent split analyses, replicate chemical analyses are averaged, weighted by the inverse square of their analytical uncertainties. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
ca_rep_worker		Chemical analyst	This table defines the chemical analysts.
ca_rep_worker	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
ca_rep_worker	rep_id	Replicate ID	This symbol provides a unique laboratory ID for each replicate.
ca_rep_worker	spl_id	Unique ID for chemical split	This unique symbol represents a split of a sample for chemical analysis. A split represents chemical analysis for one or more element that is performed by a single laboratory. Usually, a few g is split from the sample and specially prepared for the analytical procedure. Each laboratory's chemical analysis represents a separate split, even if different analysts analyze different elements on widely separated dates. Each batch of sample pulverized for chemical analysis does not necessarily represent a split. A left parenthesis '(' designates each split from a single sample, such as 12/83/7/5(B, an XRF analysis for sample 12/83/7/5. Multiple chemical analyses of the same sample by the same laboratory represent replicate analyses. To represent split analyses, replicate chemical analyses are averaged, weighted by the inverse square of their analytical uncertainties. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
ca_rep_worker	work_date	Date of chemical analysis	Chemical analysis was performed on this date.
ca_rep_worker	worker_code	Chemical analyst	This symbol defines the chemical analysts. Allowed symbols, generally the worker's initials, are defined in table worker_list.
ca_spl_rep		Replicate ID	This table provides a unique laboratory ID for each replicate of a split.
ca_spl_rep	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ca_spl_rep	rep_id	Replicate ID	This symbol provides a unique laboratory ID for each replicate of a split.
ca_spl_rep	spl_id	Unique ID for chemical split	This unique symbol represents a split of a sample for chemical analysis. A split represents chemical analysis for one or more element that is performed by a single laboratory. Usually, a few g is split from the sample and specially prepared for the analytical procedure. Each laboratory's chemical analysis represents a separate split, even if different analysts analyze different elements on widely separated dates. Each batch of sample pulverized for chemical analysis does not necessarily represent a split. A left parenthesis '(' designates each split from a single sample, such as 12/83/7/5(B, an XRF analysis for sample 12/83/7/5. Multiple chemical analyses of the same sample by the same laboratory represent replicate analyses. To represent split analyses, replicate chemical analyses are averaged, weighted by the inverse square of their analytical uncertainties. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
ca_split		Chemical analysis type	This table provides the general type of chemical analysis for each split.
ca_split	ca_type_code	General type of chemical analysis	This symbol identifies the general type of chemical analysis for split. Allowed symbols are defined in table split_type_list.
ca_split	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ca_split	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
ca_split	spl_id	Unique ID for chemical split	This unique symbol represents a split of a sample for chemical analysis. A split represents chemical analysis for one or more element that is performed by a single laboratory. Usually, a few g is split from the sample and specially prepared for the analytical procedure. Each laboratory's chemical analysis represents a separate split, even if different analysts analyze different elements on widely separated dates. Each batch of sample pulverized for chemical analysis does not necessarily represent a split. A left parenthesis '(' designates each split from a single sample, such as 12/83/7/5(B, an XRF analysis for sample 12/83/7/5. Multiple chemical analyses of the same sample by the same laboratory represent replicate analyses. To represent split analyses, replicate chemical analyses are averaged, weighted by the inverse square of their analytical uncertainties. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
ca_subtype_list		Subtype of chemical analysis	This table defines symbols that identify subtypes of chemical analysis for each split.
ca_subtype_list	ca_subtype_code	Chemical analysis symbol	This column defines symbols that identify the subtype of chemical analysis for each split.
ca_subtype_list	ca_subtype_name	Subtype of chemical analysis	This column identifies subtypes of chemical analyses for each split.
ca_subtype_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ca_subtype_list	split_type_code	Specific chemical analysis type	This column defines symbols that identify the specific type of chemical analysis for each split.
casement_list		General nature of casement	This table defines symbols that describe the general nature of casement within each drill hole.
casement_list	casement_code	Symbols for general nature of casement	This column provides symbols that describe the general nature of casement within each drill hole.
casement_list	casement_name	General nature of casement	This column describes the general nature of casement within each drill hole.
casement_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
comp_alt_list		Component alteration	This table defines symbols that describe the general alteration of a mineral component. Alterations for individual grain components of the subject mineral are provided in table ma_gr_comp_texture.
comp_alt_list	comp_alt_code	Component alteration	This column provides symbols that describe the general alteration of a mineral component. Alterations for individual grain components of the subject mineral are provided in table ma_gr_comp_texture.
comp_alt_list	comp_alt_name	Component alteration	This column describes the general alteration of a mineral component. Alterations for individual grain components of the subject mineral are provided in table ma_gr_comp_texture.
comp_alt_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
comp_list		Component list	This table defines symbols for components and component groups analyzed by petrography, age dating, and X-ray diffraction
comp_list	comp_code	Component code	This column provides symbols that define components, which include minerals, specified materials such as brown glass, and assemblages such as lithics.
comp_list	comp_group_code	Component group code	This column provides symbols that group components into common general classifications such as secondary minerals and pyroclasts.
comp_list	comp_name	Component	This column provides components analyzed, which include minerals, specified materials such as brown glass, and assemblages such as lithics.
comp_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
coord_source_list		Original source of coordinates	This table defines symbols that describe the original source of coordinates for each drill hole.
coord_source_list	coord_source_code	Symbols for original source of coordinates	This column provides symbols that describe the original source of coordinates for each drill hole.
coord_source_list	coord_source_name	Original source of coordinates	This column describes the original source of coordinates for each drill hole.
coord_source_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
dens_source_list		Sources for average rock densities	This table defines symbols that describe the sources used for average rock densities within each drill hole.
dens_source_list	dens_source_code	Symbols for source of average rock densities	This column provides symbols that describe the sources used for average rock densities within each drill hole.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
dens_source_list	dens_source_name	Sources for average rock densities	This column provides sources for average rock densities within each drill hole.
dens_source_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
drill_fluid		Drilling fluid	This table describes the fluid used to drill each hole.
drill_fluid	drfld_code	Drilling fluid	This symbol defines the fluid used to drill each hole. Allowed symbols are defined in table hole_fluid.list.
drill_fluid	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
drill_fluid	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols, defined in table drill_hole_list, are related to Hole IDs used in several published sources by table drill_hole_map.
drill_hole_data_source_list		Sources for drill hole IDs	This table defines the list of sources used to define drill hole names and coordinates.
drill_hole_data_source_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
drill_hole_data_source_list	source_code	Code for source of drill hole information	This primary key provides a symbol to represent a source of information used to define drill hole names and coordinates.
drill_hole_data_source_list	source_name	Name of source for drill hole information	This entry provides a widely recognizable name for the source of information used to define drill hole names and coordinates.
drill_hole_data_source_list	source_ref	Uncertainty for age date	This column provides symbols for a full citation of each source of information used to define drill hole names and coordinates. These symbols are explained within table ref_list.
drill_hole_info		Drill hole information	This table provides miscellaneous information for each drill hole or shaft, including hole history and construction, fluid levels, and suitability for testing.
drill_hole_info	atcd	Depth of alluvium/tuff contact	This value provides the depth in meters to the contact between alluvium and underlying Tertiary volcanic rocks, which are typically tuff.
drill_hole_info	bdsr_code	Source of bulk density averages	This symbol defines the data source for averages of bulk density. Allowed symbols are defined in table dens_source_list.
drill_hole_info	bfdiam	Diameter of blind flange	This value provides the diameter of a blind flange in meters.
drill_hole_info	bfpsi	PSI of blind flange	This value provides the pressure of a blind flange in pounds per square inch.
drill_hole_info	case_code	Nature of casing	This symbol describes the nature of casing within the subject hole. Allowed symbols are defined in table casement_list.
drill_hole_info	cepcat	CEP categorization	This value provides the measure of acceptability of this hole to the CEP panel.
drill_hole_info	cepdate	Date of CEP meeting	This dates the CEP meeting where this hole was presented for evaluation.
drill_hole_info	cepnum	CEP meeting number	This value defines the number of the CEP meeting where this hole was presented for evaluation. These numbers increase systematically from the initial CEP meeting in 1970.
drill_hole_info	comments	Notes from GEODES database	Notes from GEODES database.
drill_hole_info	complt	Final date for drilling	Drilling of the subject hole or tunnel ended on the completion date.
drill_hole_info	consci_code	Containment scientist	This symbol identifies the Containment scientist responsible for presenting the Prospectus for this drill hole to the CEP panel. Allowed symbols are defined in table worker_list.
drill_hole_info	crit_dist	Critical distance	This critical distance represents the distance in meters to the closest feature that provides immediate access from the subject hole or tunnel directly to the surface.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
drill_hole_info	db_code	Source database	An entry of G indicates that entries for this table originated from the GEODES database, and an entry of H indicates that entries originated from the companion HOLMAP database
drill_hole_info	diam	Hole diameter	This value represents the prominent drill hole diameter, in meters, and excludes the surface casing.
drill_hole_info	drim_code	Drilling method	This value describes the method used to drill the hole. Allowed symbols are defined in table drill_meth_list.
drill_hole_info	elev	Surface elevation	This value provides the surface elevation in feet above mean sea level.
drill_hole_info	enev	Easting	This value provides the east coordinate within the Nevada State Plane system, Central Zone, 1927 North American Datum, Clarke Geoid.
drill_hole_info	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
drill_hole_info	fldl	Depth of measured fluid level	This value provides the measured depth in meters to the fluid level.
drill_hole_info	h2osrc_code	Source of water content averages	This symbol defines the data source for averages of water content. Allowed symbols are defined in table water_source_list.
drill_hole_info	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols, defined in table drill_hole_list, are related to Hole IDs used in several published sources by table drill_hole_map.
drill_hole_info	holtype_code	Type of drill hole	This symbol indicates the purpose of the drill hole. Allowed symbols are defined in table hole_type_list.
drill_hole_info	idate	Update for inventory list	The subject hole or tunnel was originally added to the inventory list of drill holes on this date.
drill_hole_info	ldate	Update for Los Alamos list	The subject hole or tunnel was originally added to the Los Alamos list of drill holes on this date.
drill_hole_info	mdate	Update for master list	The subject hole or tunnel was originally added to the master list of drill holes on this date.
drill_hole_info	nnev	Northing	This value provides the north coordinate within the Nevada State Plane system, Central Zone, 1927 North American Datum, Clarke Geoid.
drill_hole_info	note	Comment from HOLMAP database	Comment from HOLMAP database.
drill_hole_info	note2	Comment for plug or flange	Comment for plug or flange.
drill_hole_info	NTS_area	Use Area within NTS	This value specifies the Use Area where the drill hole or tunnel is located within the Nevada Test Site.
drill_hole_info	overbd	Bulk density of overburden	This value provides the average bulk density in mega grams per cubic meter from the surface to the working point.
drill_hole_info	overvel	Sonic velocity of overburden	This value provides the average sonic velocity in meters per second from the surface to the working point.
drill_hole_info	parent_hole_ID	Parent hole ID	This symbol defines the parent hole that a satellite or other ancillary hole is associated with. Allowed symbols, defined in table drill_hole_list, are related to Hole IDs used in several published sources by table drill_hole_map.
drill_hole_info	plugbot	Depth for bottom of plugs	This value provides the depth in meters to the bottom of the deepest plug within the subject hole.
drill_hole_info	plugtop	Depth for top of plugs	This value provides the depth in meters to the top of the shallowest plug within the subject hole.
drill_hole_info	postat_code	Original quality of location coordinates	This symbol describes the quality of location coordinates as originally applied from the HOLMAP database. Allowed symbols are defined in table coord_source_list.
drill_hole_info	prepar	Site preparation date	Preparation of the site initiated for the subject hole or tunnel on the site preparation date.
drill_hole_info	qstat_code	Is drill hole in question?	This symbol indicates a questionable hole as originally entered into the HOLMAP database. Allowed symbols are defined in table ans_list.
drill_hole_info	shaftd	Shaft diameter	If the hole is a shaft rather than drill hole, this value represents the shaft diameter in meters.



<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
drill_hole_info	shaftl	Shaft length	If the hole is a shaft rather than drill hole, this value represents the shaft length in meters.
drill_hole_info	spud	Initial date for drilling	Drilling of the subject hole or tunnel initiated on the spud date.
drill_hole_info	stak	Date staked	The subject hole or tunnel was staked in preparation for drilling on the date staked.
drill_hole_info	swl	Depth of static water level	This value provides the depth in meters to the static water level.
drill_hole_info	td	Total depth	This value provides the maximum depth penetrated by the drill hole, in meters.
drill_hole_info	temp	Maximum temperature	This value provides the maximum temperature observed within the drill hole, in degrees Celsius.
drill_hole_info	tempd	Depth of maximum temperature	This value provides the depth in meters where the maximum temperature was observed.
drill_hole_info	tpcd	Depth of tuff/Paleozoic rock contact	This value provides the depth in meters to the contact between Tertiary volcanic rocks, typically tuff, and underlying pre-Tertiary rocks, typically Paleozoic sediments.
drill_hole_info	velsrc_code	Source of sonic velocity averages	This symbol defines the data source for averages of sonic. Allowed symbols are defined in table vel_source_list.
drill_hole_info	wp	Working point depth	This value provides the working point depth in meters.
drill_hole_info	wp_alt_code	Alteration at working point	This symbol represents the alteration of highest rank at the working point, or minor alteration of highest rank if alteration is undefined. Allowed symbols are defined in table alt_list.
drill_hole_info	wp_lith_code	Lithology at working point	This symbol represents the lithology of the working point. Allowed symbols are defined in table lith_list.
drill_hole_info	wp_strat_code	Stratigraphic unit at working point	This symbol represents the stratigraphic unit present at the working point. Allowed symbols are defined in table strat.
drill_hole_location		Drill holes and coordinates	This table provides the master list of drill hole names as used in the database and their coordinates.
drill_hole_location	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
drill_hole_location	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols are related to Hole IDs used in several published sources by table drill_hole_map.
drill_hole_location	surf_elev	Elevation at surface in meters	This value is the elevation above mean sea level in meters at surface or within tunnel at location.
drill_hole_location	utm_e	UTM easting, 1927 NAD	This value is the Easting for location in Zone 11 of Universal Transverse Mercator projection, 1927 North American datum.
drill_hole_location	utm_n	UTM northing, 1927 NAD	This value is the Northing for location in Zone 11 of Universal Transverse Mercator projection, 1927 North American datum.
drill_hole_map		Names and coordinates for drill holes in original sources.	This table relates the names and coordinates for drill holes as provided within the original sources to those used in this database.
drill_hole_map	data_source	Source of original data for drill hole	This column provides a symbol to represent the source of original information for drill hole names and coordinates. Allowed symbols are defined in table drill_hole_data_source_list.
drill_hole_map	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
drill_hole_map	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols are defined in table drill_hole_list.
drill_hole_map	hole_name	Names for drill hole in original sources	This column provides the names for each drill hole as provided within an original source.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
drill_hole_map	hole_surf_elev	Original elevation at surface in meters	This value is the elevation above mean sea level in meters at surface or within tunnel at location, as provided within the original source.
drill_hole_map	hole_utm_e	Original UTM easting, 1927 NAD	This value is the Easting provided by the original source for location. Generally, the value has been transformed into Zone 11 of Universal Transverse Mercator projection, 1927 North American datum.
drill_hole_map	hole_utm_n	Original UTM northing, 1927 NAD	This value is the Northing provided by the original source for location. Generally, the value has been transformed into Zone 11 of Universal Transverse Mercator projection, 1927 North American datum.
drill_meth_list		Method used to drill hole	This table defines symbols that describe the method used to drill each hole.
drill_meth_list	drill_meth_code	Symbols for method used to drill hole	This column provides symbols that describe the method used to drill each hole.
drill_meth_list	drill_meth_name	Method used to drill hole	This column describes the method used to drill each hole.
drill_meth_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
end_member_list		Mineral end members	This table defines symbols for end members of selected minerals. Values for these end members have been calculated from analyte concentrations determined by microprobe analysis.
end_member_list	end_member_code	Symbol for mineral end member	This column provides symbols for end members of selected minerals.
end_member_list	end_member_desc	Description for mineral end member	This column provides briefly described computational methods for end members.
end_member_list	end_member_name	Name for mineral end member	This column provides names for end members of selected minerals.
end_member_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
error_meth_list		List of methods for analyte uncertainty	This table defines symbols that identify the method used to define analyte uncertainty.
error_meth_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
error_meth_list	error_meth_code	Method for analyte uncertainty	This column provides symbols that identify the method used to define analyte uncertainty.
error_meth_list	error_meth_name	Method for analyte uncertainty	This column describes methods used to define analyte uncertainty.
format_list		Original Format of data geophysical logs	This table defines symbols that describe the original format of geophysical logs.
format_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
format_list	format_code	Symbols for original format of geophysical logs	This column provides symbols that describe the original format of geophysical logs.
format_list	format_name	Original Format of data geophysical logs	This column describes the electronic original format of geophysical logs.
frac_physae_int		Fracture and lithophysal intervals	This table defines fractures and lithophysae within each successive interval within a drill hole. Important physical, relational, and other characteristics for successive intervals within drill holes are termed geologic intervals. Intervals are defined both by depths and elevations. Physical characteristics are lithology, alteration, minor alteration, fracture intensity, and lithophysal zones. Relational characteristics are stratigraphic assignment and stratigraphic assignments for bounding units.
frac_physae_int	depth_l	Lower depth of fracture and lithophysal interval	This value provides the lower depth in meters beneath the surface for the fracture and lithophysal interval.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
frac_physae_int	depth_u	Upper depth of fracture and lithophysal interval	This value provides the upper depth in meters beneath the surface for the fracture and lithophysal interval.
frac_physae_int	elev_l	Lower elevation of fracture and lithophysal interval	This value provides the lower elevation of fracture and lithophysal interval in meters above mean sea level.
frac_physae_int	elev_u	Upper elevation of fracture and lithophysal interval	This value provides the upper elevation of fracture and lithophysal interval in meters above mean sea level.
frac_physae_int	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
frac_physae_int	frac_physae_code	Assignment for fracture and lithophysal interval	This symbol defines the nature of fractures and lithophysae within the depth interval specified within the drill hole specified. Allowed symbols are defined in table frac_physae_list.
frac_physae_int	loc_id	Unique ID for drill hole	This symbol represents a drill hole. Names have been abbreviated in some cases, for example, PM1 is the unique ID for drill hole Pahute Mesa Exploratory well #1. If doubt exists regarding the true identity of a unique ID for any drill hole, then the coordinates provided in table location can be used to resolve the uncertainty.
frac_physae_int	topic_code	Topic for fracture and lithophysal interval	This symbol identifies topic for fracture and lithophysal interval. Allowed symbols are limited to topics that describe fractures and lithophysae within table topic_list.
frac_physae_list		Fracture/lithophysae intensity	This table defines symbols that describe the general intensity of fracturing and development of lithophysal zones within rock.
frac_physae_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
frac_physae_list	frac_physae_code	Fracture/lithophysae code	This column defines symbols that describe the general intensity of fracturing and development of lithophysal zones within rock.
frac_physae_list	frac_physae_name	Fracture/lithophysae intensity	This column describes the general intensity of fracturing and development of lithophysal zones within rock.
geol_int_ref		Citations for geologic interval characteristics	This table provides citations for sources of information that describe the physical and relational character of each geologic interval.
geol_int_ref	elev_l	Lower elevation of geologic interval	This value provides the lower elevation of geologic interval in meters above mean sea level.
geol_int_ref	elev_u	Upper elevation of geologic interval	This value provides the upper elevation of geologic interval in meters above mean sea level.
geol_int_ref	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
geol_int_ref	loc_id	Unique ID for drill hole	This symbol represents a drill hole. Names have been abbreviated in some cases, for example, PM1 is the unique ID for drill hole Pahute Mesa Exploratory well #1. If doubt exists regarding the true identity of a unique ID for any drill hole, then the coordinates provided in table location can be used to resolve the uncertainty.
geol_int_ref	ref_code	Citation for geologic interval	This symbol provides source of data for geologic interval specified by topic. Allowed symbols are defined in table ref_list.
geol_int_ref	topic_code	Topic for citation supporting geologic interval	This symbol identifies topic that citation supports for geologic interval. Allowed symbols are defined in table topic_list.
geophys_int		Geophysical logs	This table provides geophysical logs.
geophys_int	depth	Depth for measurement value	This column provides the depth in meters for each measured value within the run of the geophysical log.
geophys_int	depth_l	Lower depth for measurement value	This column provides the lower depth of the measurement interval, centered on the depth measurement.
geophys_int	depth_u	Upper depth for measurement value	This column provides the upper depth of the measurement interval, centered on the depth measurement.
geophys_int	elev	Elevation for measurement value	This column provides the elevation in meters for each measured value within the run of the geophysical log.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
geophys_int	elev_l	Lower elevation for measurement value	This column provides the lower elevation of the measurement interval, centered on the depth measurement.
geophys_int	elev_u	Upper elevation for measurement value	This column provides the upper elevation of the measurement interval, centered on the depth measurement.
geophys_int	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
geophys_int	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols, defined in table drill_hole_list, are related to Hole IDs used in several published sources by table drill_hole_map.
geophys_int	log_type_code	Geophysical log represented	This symbol identifies the geophysical log represented. Allowed symbols are defined in table log_type_list.
geophys_int	run	Number that defines conditions for each geophysical log	The Run Number, unique in combination with the Hole ID and type of Geophysical log, defines unique conditions for the generation of each geophysical log. Multiple Run Numbers for the same log type in the same hole distinguish different sets of operating conditions, which are described by other columns within this table immediately below. In many cases, such multiple runs are undertaken to evaluate a log of questionable quality. Portions of runs or entire runs considered unacceptable in quality are eliminated from the table geophys_int, but preserved in the table xx_geophys_int.
geophys_int	value	Single measurement value	This column provides each measured value for the run of the geophysical log. Values of unacceptable quality are preserved in the table xx_geophys_int.
hole_fluid_list		Fluid used to drill hole	This table defines symbols that describe the fluid used to drill each hole.
hole_fluid_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
hole_fluid_list	hole_fluid_code	Symbols for fluid used to drill hole	This column provides symbols that describe the fluid used to drill each hole.
hole_fluid_list	hole_fluid_name	Fluid used to drill hole	This column describes the fluid used to drill each hole.
hole_gen_info		Miscellaneous information for drill holes	This table describes miscellaneous information for each drill hole.
hole_gen_info	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
hole_gen_info	geninfo_code	Miscellaneous information on drill holes	This symbol describes miscellaneous information for each drill hole. Allowed symbols are defined in table hole_gen_info_list.
hole_gen_info	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols, defined in table drill_hole_list, are related to Hole IDs used in several published sources by table drill_hole_map.
hole_gen_info_list		Miscellaneous information for drill holes	This table defines symbols that describe miscellaneous information for each drill hole.
hole_gen_info_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
hole_gen_info_list	hole_gen_info_code	Symbols for miscellaneous information on drill holes	This column provides symbols that describe miscellaneous information for each drill hole.
hole_gen_info_list	hole_gen_info_name	Miscellaneous information on drill holes	This column describes miscellaneous information for each drill hole.
hole_log_info		Description of each geophysical log	This table describes conditions that governed the generation of each geophysical log.
hole_log_info	calc_date	Date of calculation	This geophysical log was reduced to the proper measurement units from the raw data on this date.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
hole_log_info	clogger	Depth to base of casing measured by logger	This column provides the depth to base of casing, measured in meters below ground surface by the geophysical logger, in conjunction with the run.
hole_log_info	company_code	Geophysical log operator	This symbol identifies the geophysical logger responsible for obtaining the raw data, and his employer. Allowed symbols, generally the worker's initials, are defined in table worker_list.
hole_log_info	dlogger	Total depth of hole measured by logger	This column provides the total depth of drill hole, measured in meters below ground surface by the geophysical logger, in conjunction with the run.
hole_log_info	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
hole_log_info	fdepth	Final or top depth	Acquisition of raw data for the geophysical log ended at this depth, nearest the top of the hole, in meters below ground surface.
hole_log_info	fluidlvl	Fluid level during run	During this run, the fluid level was assumed to lie at this depth, in meters below ground surface. The fluid level was usually determined shortly before the run from a simple tag measurement.
hole_log_info	format_code	Symbols for original format of geophysical logs	This column provides symbols that describe the original format of geophysical logs. Allowed symbols are defined in table format_list.
hole_log_info	ftime	Time when logging ended	This four-digit number represents the local time when logging ended. The first two digits designate the hour within a 24-hour clock, and the final two digits designate the minutes. For example, an entry of 2237 indicates that logging ended at 10:37 pm, local time.
hole_log_info	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols, defined in table drill_hole_list, are related to Hole IDs used in several published sources by table drill_hole_map.
hole_log_info	log_date	Date of run	The specified run was executed on this date.
hole_log_info	log_type_code	Geophysical log represented	This symbol identifies the geophysical log represented. Allowed symbols are defined in table log_type_list.
hole_log_info	maxtemp	Maximum temperature in drill hole	This value indicates the maximum temperature measured within the drill hole, in degrees Celsius.
hole_log_info	note	Comments from run	Comments amplify information and provide additional information not otherwise represented in the database.
hole_log_info	ordernum	Service order number	Service order number
hole_log_info	run	Number that defines conditions for each geophysical log	The Run Number, unique in combination with the Hole ID and type of Geophysical log, defines unique conditions for the generation of each geophysical log. Multiple Run Numbers for the same log type in the same hole distinguish different sets of operating conditions, which are described by other columns within this table immediately below. In many cases, such multiple runs are undertaken to evaluate a log of questionable quality. Portions of runs or entire runs considered unacceptable in quality are eliminated from the table geophys_int, but preserved in the table xx_geophys_int.
hole_log_info	sdepth	Starting or bottom depth	Acquisition of raw data for the geophysical log began at this depth, nearest the bottom of the hole, in meters below ground surface.
hole_log_info	service	Service label	Service label
hole_log_info	shield	Shield for source	If a radioactive source is used with the geophysical logging tool, this column describes the shielding.
hole_log_info	speed	Logging speed	This column indicates the rate at which the raw data were collected, in meters of depth per minute, generally ascending.
hole_log_info	src_log	Source log	This column defines the type of geophysical log that was processed to yield the subject log.
hole_log_info	src_run	Source run	This column defines the run number of the geophysical log that was processed to yield the subject log.
hole_log_info	sserial	Serial number of source	If a radioactive source is used with the geophysical logging tool, this column provides the serial number.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
hole_log_info	stime	Time when logging began	This four-digit number represents the local time when logging began. The first two digits designate the hour within a 24-hour clock, and the final two digits designate the minutes. For example, an entry of 2237 indicates that logging began at 10:37 pm, local time.
hole_log_info	tdiam	Diameter of logging tool	This column provides the diameter of the geophysical logging tool, in meters.
hole_log_info	tmodel	Model or series number of logging tool	This column provides the model or series number of the geophysical logging tool.
hole_log_info	tserial	Serial number of logging tool	This column provides the serial number of the geophysical logging tool.
hole_status_list		Certainty of status for drill hole	This table identifies drill holes with uncertain operational status.
hole_status_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
hole_status_list	hole_status_code	Symbol for drill hole status	This column provides a symbol that defines drill holes with uncertain operational status.
hole_status_list	hole_status_name	Description for drill hole status	This column provides a description to define drill holes with uncertain operational status.
hole_type_list		Purpose for drill hole	This table defines symbols that describe the purpose for each drill hole.
hole_type_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
hole_type_list	hole_type_code	Symbols for purpose of drill hole	This column provides symbols that describe the purpose to drill each hole.
hole_type_list	hole_type_name	Purpose for drill hole	This column describes the purpose of each drill hole.
hue_list		Component hue	This table provides the hue of the component described. Hues are those defined by the widely used rock color chart published by the Geological Society of America.
hue_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
hue_list	hue_code	Component hue symbol	This column defines symbols that provide the hue of the component described. Hues are those defined by the widely used rock color chart published by the Geological Society of America.
hue_list	hue_name	Component hue	This column provides the hue of the component described. Hues are those defined by the widely used rock color chart published by the Geological Society of America.
light_type_list		Point count light source	This table defines symbols that provide the least effective light source used for any petrographic analyses by point count. The most effective use of light source is a point count performed in reflected light but with transmitted light available to aid identifications.
light_type_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
light_type_list	light_type_code	Point count light source	This column defines symbols that provide the least effective light source used for any petrographic analyses by point count. The most effective use of light source is a point count performed in reflected light but with transmitted light available to aid identifications.
light_type_list	light_type_name	Point count light source	This column provides the least effective light source used for any petrographic analyses by point count. The most effective use of light source is a point count performed in reflected light but with transmitted light available to aid identifications.
lith_group_map		Lithologic group	This table defines general lithologic groups.
lith_group_map	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
lith_group_map	lith_code	Lithology symbol	This column defines symbols that describe the lithology of sample, defined in table lith_list.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
lith_group_map	lith_group_code	Symbol for lithologic group	This column defines general lithologic groups. Allowed symbols are defined by lith_code.
lith_int		Lithologic intervals	This table provides the lithology for each successive interval within a drill hole. Important physical, relational, and other characteristics for successive intervals within drill holes are termed geologic intervals. Intervals are defined both by depths and elevations. Physical characteristics are lithology, alteration, minor alteration, fracture intensity, and lithophysal zones. Relational characteristics are stratigraphic assignment and stratigraphic assignments for bounding units.
lith_int	depth_l	Lower depth of lithologic interval	This value provides the lower depth in meters beneath the surface for the lithologic interval.
lith_int	depth_u	Upper depth of lithologic interval	This value provides the upper depth in meters beneath the surface for the lithologic interval.
lith_int	elev_l	Lower elevation of lithologic interval	This value provides the lower elevation of lithologic interval in meters above mean sea level.
lith_int	elev_u	Upper elevation of lithologic interval	This value provides the upper elevation of lithologic interval in meters above mean sea level.
lith_int	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
lith_int	lith_code	Assignment for lithologic interval	This symbol defines the lithology for the depth interval specified within the drill hole specified. Allowed symbols are defined in table lith_list.
lith_int	loc_id	Unique ID for drill hole	This symbol represents a drill hole. Names have been abbreviated in some cases, for example, PM1 is the unique ID for drill hole Pahute Mesa Exploratory well #1. If doubt exists regarding the true identity of a unique ID for any drill hole, then the coordinates provided in table location can be used to resolve the uncertainty.
lith_list		Lithology	This table defines symbols for lithologies of the southwestern Nevada volcanic field. Groups of lithologies are defined by table lith_group_map.
lith_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
lith_list	lith_code	Lithology symbol	This column defines symbols that describe the lithology of sample.
lith_list	lith_name	Lithology	This column defines lithologies observed for samples from the southwestern Nevada volcanic field.
loc_qa_list		Method to define coordinates	This table defines symbols that describe the method used to determine X, Y coordinates for a sample location. The table also includes measures of the quality of these coordinates.
loc_qa_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
loc_qa_list	loc_qa_95ci	Uncertainty for coordinates	This column provides uncertainties in meters for sample locations, at a two sigma confidence interval.
loc_qa_list	loc_qa_code	Method to define coordinates	This column defines symbols that provide the method used to determine X, Y coordinates for a sample location.
loc_qa_list	loc_qa_name	Method to define coordinates	This column describes the method used to determine X, Y coordinates for a sample location.
loc_qa_list	loc_qa_rank	Rank of quality for coordinates	This column provides integer values used to rank the quality of X, Y coordinates for sample locations. The lowest ranks have the lowest quality.
loc_sam_split		Split type	This table provides the type of analysis for each split, and its location and sample ID's.
loc_sam_split	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
loc_sam_split	loc_id	Unique ID for specific location on surface	This unique symbol represents a specific, usually unique location on the surface, or a specific, usually unique location within a tunnel. The dash character (-) is reserved for sample IDs and therefore dashes in published locations are converted to a foreslash (/). Thus 11/102/7A is the loc_id for a sample identified by its collector as 11-102-7-A.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
loc_sam_split	meas_type_code	General type of analysis	This symbol identifies the general type of analysis, such as chemical, petrographic, or mineralogic. Allowed symbols are defined in table meas_type_list.
loc_sam_split	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
loc_sam_split	spl_id	Unique ID for split	This unique symbol represents a split of a sample for analysis. A split represents analysis for one or more element or component that is performed by a single laboratory. Usually, a few g is split from the sample and specially prepared for the analytical procedure, such as a glass-covered thin section for petrographic analysis or pulverized rock for chemical analysis. Each thin section and each laboratory's chemical analysis represents a separate split, even if the analyses are performed by different analysts on widely separated dates. Each thin section represents a split, but each batch of sample pulverized for chemical analysis does not. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple chemical analyses of the same sample by the same laboratory and multiple analyses of the same thin section are considered to represent replicate analyses. To represent split analyses, replicate chemical analyses are averaged, weighted by the inverse square of their analytical uncertainties. Replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
loc_sam_split	split_type_code	Specific type of analysis	This symbol identifies the specific type of analysis.
location		Describes sample locations	This table provides coordinates and elevations, and their uncertainties. Table also identifies the topographic quadrangle from which the sample was collected and the symbol for the map unit on a geologic map. Sources of information are identified in table location_ref.
location	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
location	loc_id	Unique ID for specific location on surface	This unique symbol represents a specific, usually unique location on the surface, or a specific, usually unique location within a tunnel. The dash character (-) is reserved for sample IDs and therefore dashes in published locations are converted to a foreslash (/). Thus 11/102/7A is the loc_id for a sample identified by its collector as 11-102-7-A.
location	loc_qa_code	Method to define coordinates	This symbol provides the method used to determine X, Y coordinates for a sample location. Allowed symbols are defined by table loc_qa_list.
location	map_unit_code	Geologic map symbol	This is the symbol used in geologic map for geologic unit mapped at location. The symbol is honored exactly as shown at location on the geologic map.
location	quad_code	USGS quad symbol	This symbol defines the U.S. Geological Survey topographic quadrangle for location. Allowed symbols are defined by table quad_list.
location	surf_elev	Elevation at surface in meters	This value is the elevation above mean sea level in meters at surface or within tunnel at location.
location	surf_elev_error	Surface elevation uncertainty in meters	This value is the uncertainty in elevation above mean sea level for surface or within tunnel at location.
location	utm_e	UTM easting, 1927 NAD	This value is the Easting for location in Zone 11 of Universal Transverse Mercator projection, 1927 North American datum.
location	utm_error	Total uncertainty in meters for location	This value is the combined uncertainty in meters for easting and northing.
location	utm_n	UTM northing, 1927 NAD	This value is the Northing for location in Zone 11 of Universal Transverse Mercator projection, 1927 North American datum.
location_ref		Sources of information for location	This table identifies sources of information for sample coordinates and elevations, and their uncertainties, and for the unit mapped at the sample location.



<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
location_ref	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
location_ref	loc_id	Unique ID for specific location on surface	This unique symbol represents a specific, usually unique location on the surface, or a specific, usually unique location within a tunnel. The dash character (-) is reserved for sample IDs and therefore dashes in published locations are converted to a foreslash (/). Thus 11/102/7A is the loc_id for a sample identified by its collector as 11-102-7-A.
location_ref	loc_ref_code	Citation for location topic	This symbol identifies source of data specified by loc_ref_type_code. Allowed symbols are defined in table ref_list.
location_ref	loc_ref_type_code	Topic for location data referenced	This symbol identifies topic for location data referenced. Allowed symbols are defined in table topic_list.
log_calib_constants		Constants used to compute geophysical log	This table provides the constants used to calibrate the geophysical log.
log_calib_constants	calib_constant_code	Code for constant used to compute geophysical log	This symbol defines the constant within a polynomial equation that is applied to calibrate the geophysical log.
log_calib_constants	calib_constant_pos	Position for constant used to compute geophysical log	This integer indicates the power associated with the constant within a polynomial equation that is applied to calibrate the geophysical log.
log_calib_constants	calib_constant_value	Value for constant used to compute geophysical log	This value provides the constant within a polynomial equation that is applied to calibrate the geophysical log.
log_calib_constants	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
log_calib_constants	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols, defined in table drill_hole_list, are related to Hole IDs used in several published sources by table drill_hole_map.
log_calib_constants	log_type_code	Geophysical log represented	This symbol identifies the geophysical log represented. Allowed symbols are defined in table log_type_list.
log_calib_constants	run	Number that defines conditions for each geophysical log	The Run Number, unique in combination with the Hole ID and type of Geophysical log, defines unique conditions for the generation of each geophysical log. Multiple Run Numbers for the same log type in the same hole distinguish different sets of operating conditions, which are described by other columns within this table immediately below. In many cases, such multiple runs are undertaken to evaluate a log of questionable quality. Portions of runs or entire runs considered unacceptable in quality are eliminated from the table geophys_int, but preserved in the table xx_geophys_int.
log_constant_list		Constants used to compute geophysical logs	This table defines symbols for constants used to compute geophysical logs.
log_constant_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
log_constant_list	log_constant_code	Symbols for constants used to compute geophysical logs	This column provides symbols for constants used to compute geophysical logs.
log_constant_list	log_constant_name	Constants used to compute geophysical logs	This column describes constants used to compute geophysical logs.
log_constants		Constants used to compute geophysical log	This table provides the constants used to transform raw data into the geophysical log.
log_constants	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
log_constants	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols, defined in table drill_hole_list, are related to Hole IDs used in several published sources by table drill_hole_map.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
log_constants	log_constant_code	Code for constant used to compute geophysical log	This symbol defines the constant within a polynomial equation that is applied to compute the geophysical log.
log_constants	log_constant_pos	Position for constant used to compute geophysical log	This integer indicates the power associated with the constant within a polynomial equation that is applied to compute the geophysical log.
log_constants	log_constant_value	Value for constant used to compute geophysical log	This value provides the constant within a polynomial equation that is applied to compute the geophysical log.
log_constants	log_type_code	Geophysical log represented	This symbol identifies the geophysical log represented. Allowed symbols are defined in table log_type_list.
log_constants	run	Number that defines conditions for each geophysical log	The Run Number, unique in combination with the Hole ID and type of Geophysical log, defines unique conditions for the generation of each geophysical log. Multiple Run Numbers for the same log type in the same hole distinguish different sets of operating conditions, which are described by other columns within this table immediately below. In many cases, such multiple runs are undertaken to evaluate a log of questionable quality. Portions of runs or entire runs considered unacceptable in quality are eliminated from the table geophys_int, but preserved in the table xx_geophys_int.
log_fluid		Fluids within hole during geophysical logging	This table describes the fluids present within each drill hole during geophysical logging.
log_fluid	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
log_fluid	fluidtyp_code	Symbol for fluids within hole during geophysical logging	This column provides symbols that describe the fluids present within each drill hole during geophysical logging.
log_fluid	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols, defined in table drill_hole_list, are related to Hole IDs used in several published sources by table drill_hole_map.
log_fluid	log_type_code	Geophysical log represented	This symbol identifies the geophysical log represented. Allowed symbols are defined in table log_type_list.
log_fluid	run	Number that defines conditions for each geophysical log	The Run Number, unique in combination with the Hole ID and type of Geophysical log, defines unique conditions for the generation of each geophysical log. Multiple Run Numbers for the same log type in the same hole distinguish different sets of operating conditions, which are described by other columns within this table immediately below. In many cases, such multiple runs are undertaken to evaluate a log of questionable quality. Portions of runs or entire runs considered unacceptable in quality are eliminated from the table geophys_int, but preserved in the table xx_geophys_int.
log_type_list		Geophysical logs represented	This table describes geophysical logs represented within the database.
log_type_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
log_type_list	log_type_code	Symbols for geophysical logs represented	These symbols define geophysical logs represented within the database.
log_type_list	log_type_name	Geophysical logs represented	This column defines geophysical logs represented within the database.
log_type_list	measure_frequency	Spacing of measurements	This column describes the typical spacing between successive measurements for each geophysical log.
log_type_list	measure_unit1	Units for measurements	This column defines the units of measurement used for each geophysical log.
log_type_list	measure_unit2	Alternative units for measurements	This column provides alternative units of measurement commonly used for each geophysical log. Although logs are not represented within the database in these units, they can be converted by application of a constant.
log_worker		Geophysical logger	This table indicates the workers responsible for fielding the geophysical log and their tasks.
log_worker	comments	Poorly defined geophysical loggers	This column describes workers who were poorly identified within the GEODES database, and their responsibilities.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
log_worker	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
log_worker	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols, defined in table drill_hole_list, are related to Hole IDs used in several published sources by table drill_hole_map.
log_worker	log_type_code	Geophysical log represented	This symbol identifies the geophysical log represented. Allowed symbols are defined in table log_type_list.
log_worker	run	Number that defines conditions for each geophysical log	The Run Number, unique in combination with the Hole ID and type of Geophysical log, defines unique conditions for the generation of each geophysical log. Multiple Run Numbers for the same log type in the same hole distinguish different sets of operating conditions, which are described by other columns within this table immediately below. In many cases, such multiple runs are undertaken to evaluate a log of questionable quality. Portions of runs or entire runs considered unacceptable in quality are eliminated from the table geophys_int, but preserved in the table xx_geophys_int.
log_worker	work_date	Date of geophysical logging	The run number specified for this geophysical log was fielded on this date.
log_worker	work_type_code	Responsibility of geophysical logger	This symbol represents the responsibility of geophysical logger. Allowed symbols are defined in table topic_list.
log_worker	worker_code	Geophysical logger	This symbol defines the geophysical logger. Allowed symbols are defined in table worker_list.
ma_clast_alt		Clast alteration	This table describes a mineral or mineral assemblage and process that are dominant contributors to the observed mineralogy of the subject clast. The content of each mineral required to be considered dominant depends on the mineral; for example, zeolites and clays are considered dominant in concentrations of 20% or greater, calcite is considered dominant at 5% or greater, and kaolinite at 2% or greater. A mineral or mineral assemblage and process that are minor contributors to the observed mineralogy of the subject clast are described in table ma_clast_malt.
ma_clast_alt	clast_alt_code	Clast alteration	This symbol represents a mineral or mineral assemblage and process that are dominant contributors to the observed mineralogy of the subject clast. The content of each mineral required to be considered dominant depends on the mineral; for example, zeolites and clays are considered dominant in concentrations of 20% or greater, calcite is considered dominant at 5% or greater, and kaolinite at 2% or greater. Allowed symbols are defined in table alt_list.
ma_clast_alt	clast_alt_rank	Rank for clast alteration	This column provides integer values used to qualitatively rank the relative importance of multiple alterations. The lowest ranks have the highest importance. Importance is generally equivalent to concentration, but may relate to mineral type, as explained in this table for clast_alt_code.
ma_clast_alt	clast_id	Clast ID	This symbol uniquely identifies a clast within a petrographic split.
ma_clast_alt	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ma_clast_alt	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A petrographic split represents analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
ma_clast_malt		Clast minor alteration	This table describes a mineral or mineral assemblage and process that are minor contributors to the observed mineralogy of the subject clast. The content of each mineral required to be considered dominant depends on the mineral; for example, zeolites and clays are considered dominant in concentrations of 20% or greater, calcite is considered dominant at 5% or greater, and kaolinite at 2% or greater. A mineral or mineral assemblage and process that are dominant contributors to the observed mineralogy of the subject clast are described in table ma_clast_alt.
ma_clast_malt	clast_id	Clast ID	This symbol uniquely identifies a clast within a petrographic split.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
ma_clast_malt	clast_malt_code	Clast minor alteration	This symbol represents a mineral and process that are minor contributors to the observed mineralogy of the subject clast. Alteration is considered minor for a mineral in any concentration less than that which is considered to be part of a dominant assemblage. The content of each mineral required to be considered dominant depends on the mineral; for example, zeolites and clays are considered dominant in concentrations of 20% or greater, calcite is considered dominant at 5% or greater, and kaolinite at 2% or greater. Allowed symbols are defined in table alt_list.
ma_clast_malt	clast_malt_rank	Rank for clast minor alteration	This column provides integer values used to qualitatively rank the relative importance of multiple minor alterations. The lowest ranks have the highest importance. Importance is generally equivalent to concentration, but may relate to mineral type, as explained in this table for clast_malt_code.
ma_clast_malt	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ma_clast_malt	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A petrographic split represents analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
ma_clast_measure		Individual clast analyses	This table provides a variety of information for each clast that includes its stratigraphic assignment, lithology, and alteration, its type, and area in thin section. This table includes only data with the best precision. Table xx_ma_clast_measure contains less precise, superceded, and erroneous data.
ma_clast_measure	clast_area	Clast area	This value is the area of the clast in mm2.
ma_clast_measure	clast_area_meth_code	Clast area method	This symbol defines the method used to determine the area of the subject clast. Allowed symbols are defined in table pa_meth_list.
ma_clast_measure	clast_code	Clast type	This symbol identifies the clast type for the subject clast. Allowed symbols are defined in table comp_list as daughters of the component "pyroclast".
ma_clast_measure	clast_counts	Points counted on clast	This value provides the number of points counted on the subject clast; the total number of points is that represented for the same clast type in table pa_count. Points counted for any component within the clast, as represented in table ma_gr_comp, are included in the number of points counted on the subject clast. The only exception is for hosted clasts of the same type, for example, lithics in a clast of tuff. Counts on such hosted clasts are not included in the number of points counted for the host clast. Hosted clasts are identified with a character appended to the clast_id of the host clast; for example, LI2A is a lithic hosted by lithic LI2.
ma_clast_measure	clast_id	Clast ID	This symbol uniquely identifies a clast within a petrographic split.
ma_clast_measure	clast_lith_code	Clast lithology	This symbol describes the lithology of the clast. Allowed symbols are defined in table lith_list.
ma_clast_measure	clast_pa_meth_code	Clast petrographic method	This symbol defines the method used to determine the suite of phenocrysts absent from the subject clast. Allowed symbols are defined in table pa_meth_list. Methods for phenocrysts (and groundmass and secondary minerals) that are nonzero are defined in table ma_gr_comp. The set of phenocrysts absent from the subject clast consists of all phenocrysts in table comp_code, minus those listed for the subject clast in table ma_gr_comp.
ma_clast_measure	clast_qa_code	QA level for clast analysis	This value defines the quality of multiple petrographic analyses for the same clast, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
ma_clast_measure	clast_strat_code	Clast stratigraphic unit	This symbol represents the stratigraphic unit of the southwestern Nevada volcanic field assigned to the clast. Allowed symbols are defined in table strat.
ma_clast_measure	clast_unk_strat_id	Unknown stratigraphic unit	This character string is used to indicate that 2 or more clasts within a split represent the same unit of unknown stratigraphic assignment.
ma_clast_measure	clast_void_percent	Clast void content	This value provides the void content in percent for each clast. This value is generally provided only for vitric pyroclasts, and not for lithics.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
ma_clast_measure	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ma_clast_measure	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A petrographic split represents analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
ma_clast_measure	work_date	Date of clast analysis	All petrographic data for clast specified was initiated on this date.
ma_clast_measure	worker_code	Clast analyst	This symbol defines the clast analyst. Allowed symbols, generally the worker's initials, are defined in table worker_list.
ma_gr_comp_texture		Grain component textures	This table describes textural features observed for each grain component.
ma_gr_comp_texture	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ma_gr_comp_texture	gr_comp_code	Grain component code	This symbol defines the grain component analyzed. Grain components include minerals and amorphous materials such as glass. Allowed symbols are defined in table comp_list.
ma_gr_comp_texture	gr_comp_id	Grain component ID	This unique integer identifies a single mineral that occurs alone or within an assemblage of minerals that constitute a grain. All distinctly individual grains of apatite and zircon within a single grain are assigned different grain component IDs, but multiple grains of all other minerals that occur within a single grain may be assigned a single or several grain component IDs, dependent on the variety of textures and paragenetic features evident for this set of grains.
ma_gr_comp_texture	gr_comp_texture	Grain component texture	This symbol describes textural features observed for each grain component. Allowed symbols are defined in table texture_list.
ma_gr_measure		Grain component petrographic analyses	This table provides a variety of information for each grain component that includes its grain ID, unique grain component ID, area in thin section, mineral identity, and identifies any host clasts or minerals. This table also provides the number of points counted for the grain component, whether it is suitable for microprobe analysis, and the number of several different types of microprobe analyses that were performed. The table also identifies the petrographic analyst and date for analysis of the grain component, and the quality level of the analysis. This table includes only data with the best precision. Table xx_gr_measure contains less precise, superceded, and erroneous data.
ma_gr_measure	clast_code	Host clast type	This symbol identifies a clast type within a petrographic split that hosts the grain component.
ma_gr_measure	clast_comp_pa_meth_code	Method for grain component in clast	This symbol defines the method used to determine the concentration of the subject mineral within the subject clast ID. These concentrations are not provided within the database but can be easily determined. Allowed symbols are defined in table pa_meth_list.
ma_gr_measure	clast_id	Host clast ID	This symbol identifies a unique clast within a petrographic split that hosts the grain component.
ma_gr_measure	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ma_gr_measure	gr_comp_area	Grain component area	This value is the area in mm <sup>2</sup> for the subject grain component, almost always determined by a counting points in reflected light on a calibrated, gridded reticule mounted within the objective lens that is superimposed over the grain component. Except for the smallest grain components, an objective power is selected to provide at least 15 counts.
ma_gr_measure	gr_comp_code	Grain component code	This symbol defines the grain component analyzed. Grain components include minerals and amorphous materials such as glass. Allowed symbols are defined in table comp_list.
ma_gr_measure	gr_comp_counts	Points counted for grain component	This value represents the number of points counted for the grain component. Because individual counts are assigned to primary mineral groups (felsics, mafics, etc) for each grain ID, fractional counts result when the subject primary mineral group consists of more than one mineral of the group. Fractional counts are apportioned to individual members of a group (for example, plagioclase and sanidine within a single grain) according to their areas.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
ma_gr_measure	gr_comp_host_code	Mineral host for grain component	This symbol identifies a mineral that clearly surrounds the subject grain component on at least 3 sides. The host mineral can be either primary or secondary, but always has the same grain ID. Allowed symbols are defined in table comp_list.
ma_gr_measure	gr_comp_id	Grain component ID	This unique integer identifies a single mineral that occurs alone or within an assemblage of minerals that constitute a grain. All distinctly individual grains of apatite and zircon within a single grain are assigned different grain component IDs, but multiple grains of all other minerals that occur within a single grain may be assigned a single or several grain component IDs, dependent on the variety of textures and paragenetic features evident for this set of grains.
ma_gr_measure	gr_comp_qa_code	QA level for grain component	This value defines the quality of multiple petrographic analyses for the same grain component. The lowest values for QA level indicate the highest quality analyses. Only grain component analyses with a QA level of 1 should be used except to evaluate the accuracy of petrographic analysis. Allowed values are defined in table qa_list.
ma_gr_measure	gr_id	Grain ID	This symbol identifies a unique grain within a petrographic split. This grain consists of an assemblage of minerals that are intergrown or appear to be so.
ma_gr_measure	n_probe_bad_rep	Unacceptable quantitative microprobe analyses	This integer value represents the number of unacceptable quantitative microprobe analyses by Wavelength Dispersive Spectroscopy (WDS) for the subject grain component. For each mineral type, unacceptable analyses fail to satisfy one or more of the strict ranges for analytical totals, mineral structural balance, and for monitor elements such as Al in olivine. Unacceptable analyses reside in the database primarily because they document mineral identities and may provide quantitative information useful for some applications.
ma_gr_measure	n_probe_qual_rep	EDS analyses	This integer value represents the number of qualitative microprobe analyses by Energy Dispersive Spectroscopy (EDS) for the subject grain component. A display of counts (spectrum) was visually analyzed to assess the mineral identity of the subject grain component; this display was repeated at different points on the subject grain component for the number of times indicated. The counts generated by the EDS analysis are not preserved.
ma_gr_measure	n_probe QUAN_rep	Acceptable quantitative microprobe analyses	This integer value represents the number of acceptable quantitative microprobe analyses by Wavelength Dispersive Spectroscopy (WDS) for the subject grain component. For each mineral type, acceptable analyses must satisfy strict ranges for analytical totals, mineral structural balance, and for monitor elements such as Al in olivine.
ma_gr_measure	n_probe SEMI QUAN_rep	Semiquantitative EDS analyses	This integer value represents the number of qualitative microprobe analyses by Energy Dispersive Spectroscopy (EDS) for the subject grain component. A display of counts (spectrum) was visually analyzed to assess the mineral identity of the subject grain component; this display was repeated at different points on the subject grain component for the number of times indicated. The counts generated by the EDS analysis are preserved on the original petrographic work sheet but not in the database.
ma_gr_measure	probe_suitable	Suitability for probe analysis	This symbol indicates the suitability of the grain component for quantitative analysis by electron microprobe. The suitability is determined by inspection in both transmitted and reflected light at a magnification of at least 400. Allowed symbols are defined in table ans_list.
ma_gr_measure	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A petrographic split represents analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
ma_gr_measure	work_date	Date of grain component analysis	All petrographic data for grain component specified was reduced on this date.
ma_gr_measure	worker_code	Grain analyst	This symbol defines the grain analyst. Allowed symbols, generally the worker's initials, are defined in table worker_list.
meas_type_list		Measurement type	This table defines symbols for measurement types, such as chemical, petrographic, and mineralogic.
meas_type_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
meas_type_list	meas_type_code	General type of analysis	This symbol identifies the general type of analysis, such as chemical, petrographic, or mineralogic.
meas_type_list	meas_type_name	General type of analysis	This column describes the general type of analysis, such as chemical, petrographic, or mineralogic.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
oxide_list		Analytes	This table defines the list of chemical analytes as forms that dominate their occurrence within terrestrial rocks, mostly oxides. This table also provides gravimetric factors to convert all oxide values to equivalent elemental values.
oxide_list	element_code	Element symbols	This column provides standard chemical symbols for the element of each analyte. All analytes are represented by forms that dominate their occurrence within terrestrial rocks, mostly as oxides.
oxide_list	element_name	Elements	This column provides standard chemical names for the element of each analyte. All analytes are represented by forms that dominate their occurrence within terrestrial rocks, mostly as oxides.
oxide_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
oxide_list	ox_el_wt_ratio	Gravimetric factors	This column provides gravimetric factors that represent weight ratios between forms represented by oxide_name, generally oxides that dominate within terrestrial rocks, and the element.
oxide_list	oxide_code	Analyte symbols	This column provides standard chemical symbols for each analyte. All analytes are represented by forms that dominate their occurrence within terrestrial rocks, mostly oxides.
oxide_list	oxide_name	Analytes	This column provides standard chemical names for each analyte. All analytes are represented by forms that dominate their occurrence within terrestrial rocks, mostly oxides.
pa_count		Points counted for petrographic analysis	This table provides the number of counts for one or more point counts for petrographic analysis, as well as the quality level for each count. This table includes only data with the best precision. Table xx_pa_count contains less precise, superceded, and erroneous data.
pa_count	count	Points counted for petrographic analysis	This value is the number of counts for each of one or more point counts for petrographic analysis.
pa_count	count_type_code	Type of point count	This symbol defines the type of each point count for petrographic analysis from among several types. Allowed symbols are defined in table pa_meth_list.
pa_count	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
pa_count	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A split represents petrographic analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
pa_count	split_qa_code	QA level for point count	This value defines the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
pa_meas_type_list		Miscellaneous petrographic information	This table defines symbols that provide information occasionally obtained for petrographic analyses, mostly from analysis of grain mounts or mineral separates.
pa_meas_type_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
pa_meas_type_list	pa_meas_type_code	Symbol for miscellaneous petrographic information	This column defines symbols that provide information occasionally obtained for petrographic analyses, mostly from analysis of grain mounts or mineral separates.
pa_meas_type_list	pa_meas_type_name	Miscellaneous petrographic information	This column provides information occasionally obtained for petrographic analyses, mostly from analysis of grain mounts or mineral separates.
pa_measure		Petrographic analyses	This table provides a petrographic analysis for each component, describes its alteration if the component is a mineral, the method used for its analysis, a citation for the source of the analysis, and the quality level of the analysis. This table includes only data with the best precision. Table xx_pa_measure contains less precise, superceded, and erroneous data.
pa_measure	comp_alt_code	Component alteration	This symbol describes the general alteration of a mineral component. Alterations for individual grain components of the subject mineral are provided in table ma_gr_comp_texture. Allowed symbols are defined in table comp_alt_list.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
pa_measure	comp_code	Component code	This symbol defines the component analyzed. Components include minerals, specified materials such as brown glass, and assemblages such as lithics. Allowed symbols are defined in table comp_list.
pa_measure	comp_value	Component concentration	This value provides the measured concentration of the subject component on a volume basis.
pa_measure	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
pa_measure	pa_meth_code	Symbol for petrographic method	This symbol defines the method used for petrographic analysis. Allowed symbols are defined in table pa_meth_list.
pa_measure	ref_code	Citation for petrographic data	This symbol provides source of petrographic data. Allowed symbols are defined in table ref_list.
pa_measure	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A petrographic split represents analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
pa_measure	split_qa_code	QA level for petrographic analysis	This value defines the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
pa_measure	units_code	Component concentration units	This symbol defines the concentration units associated with petrographic analysis. Concentration units are always provided on a volume basis for quantitative petrographic analyses. Allowed symbols are defined in table units_list. The same concentration units are consistently used for each component.
pa_meth_list		Petrographic method	This table defines symbols that represent methods used for petrographic analysis.
pa_meth_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
pa_meth_list	pa_meth_code	Symbol for petrographic method	This column defines symbols that represent methods used for petrographic analysis.
pa_meth_list	pa_meth_desc	Description of petrographic method	This column describes methods used for petrographic analysis.
pa_meth_list	pa_meth_name	Petrographic method	This column names methods used for petrographic analysis.
pa_misc		Miscellaneous petrographic information	This table provides information occasionally obtained for petrographic analyses, mostly from analysis of grain mounts or mineral separates. Information allowed in this table is defined in table pa_meas_type_list. This table includes only data with the best precision. Table xx_pa_misc contains less precise, superceded, and erroneous data.
pa_misc	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
pa_misc	pa_meas_type_code	Symbol for miscellaneous petrographic information	This symbol provides information occasionally obtained for petrographic analyses, mostly from analysis of grain mounts or mineral separates. Allowed symbols are defined in table pa_meas_type_list.
pa_misc	pa_meas_value	Miscellaneous petrographic information	This value provides information occasionally obtained for petrographic analyses, mostly from analysis of grain mounts or mineral separates.
pa_misc	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A split represents petrographic analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.



<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
pa_misc	split_qa_code	QA level for petrographic analysis	This value defines the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
pa_split		General petrographic information	This table provides general information usually obtained for most petrographic analyses, including the type and area of the thin section and method used to determine the area, the magnification and light sources used in the point count, and quality level for the analysis. If the thin section split represents a mineral separate, this table provides the type of mineral separated and method used for the separation. This table includes only data with the best precision. Table xx_pa_split contains less precise, superceded, and erroneous data.
pa_split	comments	Comments from petrographic analysis	Comments amplify information from a petrographic analysis and provide additional information not otherwise represented in the database.
pa_split	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
pa_split	light_type_code	Point count light source	This symbol provides the least effective light source used for any petrographic analyses by point count. The most effective light source is a point count performed in reflected light but with transmitted light available to aid identifications. Allowed symbols are defined in table light_type_list.
pa_split	magnif	Point count magnification	This value provides the lowest magnification used for any petrographic analyses by point count. The highest magnifications provide the most accurate analyses.
pa_split	min_sep	Symbol for separated mineral	This symbol identifies the primary or target mineral of a split of a mineral separate. Allowed symbols are defined in table comp_list.
pa_split	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
pa_split	sep_meth_code	Method for mineral separation	This symbol describes the method used to prepare a split of a mineral separate. Allowed symbols are defined in table sep_meth_list.
pa_split	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A split represents petrographic analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
pa_split	split_qa_code	QA level for petrographic analysis	This value defines the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
pa_split	split_type_code	Analysis type for sample split	This symbol identifies the type of sample split analyzed. Almost all petrographic analyses employ a glass-covered or a polished thin section. Allowed symbols are defined in table split_type_list.
pa_split	ts_area	Thin section area	This value provides the thin section area in mm <sup>2</sup> . The method used to determine this area is provided by table pa_meth_list.
pa_split	ts_area_meth_code	Thin section area method	This symbol provides the method used to determine the thin section area. Allowed symbols are defined in table pa_meth_list.
pa_TS_narrative		Narrative descriptions from thin section	This table provides narrative petrographic descriptions for each thin section.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
pa_TS_narrative	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
pa_TS_narrative	narrative	Narrative description of thin section	Narrative description. Original sample narratives are almost always abridged for clarity, conciseness, and correctness.
pa_TS_narrative	narrative_date	Date of thin section narrative	Date when thin section narrative was made or last modified.
pa_TS_narrative	narrator	Thin section narrator	Symbol that defines the worker responsible for narrative description. Allowed symbols, generally the worker's initials, are defined in table worker_list.
pa_TS_narrative	spl_id	Unique ID for split	This unique symbol represents a split of a sample for petrographic analysis. Each thin section represents a separate split, even if the analyses are performed by different analysts on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section are considered to represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
pa_worker		Petrographic analyst	This table identifies the analyst, analysis date, and quality level for each component. This table includes only references for data with the best precision. Table xx_pa_worker contains references for less precise, superceded, and erroneous data.
pa_worker	comp_code	Component code	This symbol defines the component analyzed. Components include minerals, specified materials such as brown glass, and assemblages such as lithics. Allowed symbols are defined in table comp_list.
pa_worker	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
pa_worker	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A petrographic split represents analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
pa_worker	split_qa_code	QA level for petrographic analysis	This value defines the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
pa_worker	units_code	Component concentration units	This symbol defines the concentration units associated with petrographic analysis. Concentration units are always provided on a volume basis for quantitative petrographic analyses. Allowed symbols are defined in table units_list. The same concentration units are consistently used for each component, but both quantitative and qualitative (grain count) petrographic analyses may be provided for some accessory minerals.
pa_worker	work_date	Date of petrographic analysis	All petrographic data by worker indicated was reduced on this date.
pa_worker	worker_code	Petrographic analyst	This symbol defines the petrographic analyst. Allowed symbols, generally the worker's initials, are defined in table worker_list.
prev_strat_code_ref		References for previously used stratigraphic symbols	This table provides reference codes for previously used symbols of stratigraphic units.
prev_strat_code_ref	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
prev_strat_code_ref	prev_strat_code_ref_code	Reference code for previously used stratigraphic symbols	This column provides reference codes for previously used symbols of stratigraphic units.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
prev_strat_code_ref	strat_code	Stratigraphic unit	This column provides symbols that currently represent stratigraphic units of the southwestern Nevada volcanic field.
prev_strat_name_ref		Reference codes for previously used stratigraphic names	This table provides reference codes for previously used names of stratigraphic units.
prev_strat_name_ref	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
prev_strat_name_ref	prev_strat_name_ref_code	Citations for reference stratigraphic name	This column provides symbols for citations for names previously used for stratigraphic units.
prev_strat_name_ref	strat_code	Stratigraphic unit	This column provides symbols that currently represent stratigraphic units of the southwestern Nevada volcanic field.
probe_end_members		Mineral end members	This table provides end member contents for selected minerals. These values have been calculated from analyte concentrations determined by microprobe analysis. This table includes only data with the best precision. Table xx_probe_end_members contains less precise, superceded, and erroneous data.
probe_end_members	end_member_code	Symbol for mineral end member	This column provides symbols for end members of selected minerals.
probe_end_members	end_member_value	Value for mineral end member	This column provides end member contents for selected minerals. These values have been calculated from analyte concentrations determined by microprobe analysis.
probe_end_members	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
probe_end_members	gr_comp_id	Grain component ID	This unique integer identifies a single mineral that occurs alone or within an assemblage of minerals that constitute a grain. All distinctly individual grains of apatite and zircon within a single grain are assigned different grain component IDs, but multiple grains of all other minerals that occur within a single grain may be assigned a single or several grain component IDs, dependent on the variety of textures and paragenetic features evident for this set of grains.
probe_end_members	rep_id	Microprobe replicate ID	This character string uniquely identifies each microprobe analytical point for a particular grain component. This table includes only data with the best precision. Table xx_end_members contains less precise, superceded, and erroneous data.
probe_loc_list		Microprobe analysis location	This table defines symbols that describe the general location for each microprobe analytical point within a particular grain component.
probe_loc_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
probe_loc_list	probe_loc_code	Microprobe analysis location	This column defines symbols that describe the general location for each microprobe analytical point within a particular grain component.
probe_loc_list	probe_loc_name	Microprobe analysis location	This column describes the general location for each microprobe analytical point within a particular grain component.
probe_measure		Microprobe analyses	This table provides microprobe analyses in weight percent. This table includes only data with the best precision. Table xx_probe_measure contains less precise, superceded, and erroneous data.
probe_measure	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
probe_measure	gr_comp_id	Grain component ID	This unique integer identifies a single mineral that occurs alone or within an assemblage of minerals that constitute a grain. All distinctly individual grains of apatite and zircon within a single grain are assigned different grain component IDs, but multiple grains of all other minerals that occur within a single grain may be assigned a single or several grain component IDs, dependent on the variety of textures and paragenetic features evident for this set of grains.
probe_measure	oxide_code	Microprobe analyte	This symbol provides standard chemical symbol for analyte. All analytes are represented by forms that dominate their occurrence within terrestrial rocks, mostly as oxides. Allowed analytes are defined in table oxide_list, which also provides gravimetric factors to convert all oxide values to equivalent elemental values.
probe_measure	oxide_value	Microprobe analysis	This value provides microprobe analyses in weight percent.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
probe_measure	rep_id	Microprobe replicate ID	This character string uniquely identifies each microprobe analytical point for a particular grain component. This table includes only data with the best precision. Table xx_probe_measure contains less precise, superceded, and erroneous data.
probe_measure	standard_set_code	Microprobe standard set	This symbol identifies the set of microprobe standards used to provide reference intensities for each analyte in the analysis, as well as the spectrometer used for that analyte. Allowed symbols are defined in table probe_standard_set_list.
probe_rep		Microprobe analysis description	This table provides quality measures for each analysis by electron microprobe and also describes the location of the analytical point relative to the boundaries of the grain component analyzed. This table includes only data with the best precision. Table xx_probe_rep contains less precise, superceded, and erroneous data.
probe_rep	comments	Comments from microprobe analysis	Comments amplify information from a microprobe analysis and provide additional information not otherwise represented in the database.
probe_rep	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
probe_rep	gr_comp_id	Grain component ID	This unique integer identifies a single mineral that occurs alone or within an assemblage of minerals that constitute a grain. All distinctly individual grains of apatite and zircon within a single grain are assigned different grain component IDs, but multiple grains of all other minerals that occur within a single grain may be assigned a single or several grain component IDs, dependent on the variety of textures and paragenetic features evident for this set of grains.
probe_rep	probe_loc_code	Microprobe analysis location	This symbol describes the general location for each microprobe analytical point within a particular grain component. Allowed symbols are defined in table probe_loc_list.
probe_rep	probe_qa_code	QA level for microprobe analysis	This value defines the quality of each replicate microprobe analysis. The lowest values for QA level indicate the highest quality analyses. Only microprobe analyses with a QA level of 1 should be used except to evaluate the accuracy of petrographic analysis. Allowed values are defined in table qa_list.
probe_rep	ref_code	Citation for microprobe data	This symbol provides source of microprobe data. Allowed symbols are defined in table ref_list.
probe_rep	rep_id	Microprobe replicate ID	This character string uniquely identifies each microprobe analytical point for a particular grain component.
probe_rep	work_date	Date of microprobe analysis	Microprobe analysis for this replicate was performed on this date.
probe_rep	work_type_code	Type of microprobe analysis	This symbol identifies the type of microprobe analysis, which include qualitative, semiquantitative, and quantitative. Allowed symbols are defined in table topic_list.
probe_rep	worker_code	Microprobe analyst	This symbol defines the microprobe analyst. Allowed symbols, generally the worker's initials, are defined in table worker_list.
probe_spec_list		Analyte spectrometer	This table defines symbols that describe the spectrometer used for microprobe analysis of a particular analyte.
probe_spec_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
probe_spec_list	probe_spec_code	Analyte spectrometer	This column defines symbols that describe the spectrometer used for microprobe analysis of a particular analyte.
probe_spec_list	probe_spec_name	Analyte spectrometer	This column describes the spectrometer used for microprobe analysis of a particular analyte.
probe_standard_list		Microprobe standard descriptions	This table relates probe standard IDs used internally by each microprobe laboratory to more widely used names, and provides descriptions and citations for the source of reference analyte values for each standard.
probe_standard_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
probe_standard_list	standard_desc	Microprobe standard description	This column provides descriptions for each microprobe standard.
probe_standard_list	standard_id	Microprobe standard ID	This column provides symbols uniformly used for the standard in the microprobe laboratory. Almost all analyses were obtained in the microprobe laboratory of EES-1, Los Alamos National Laboratory, with the assistance of Ronald Gooley, Roland C. Hagen, and Margaret G. (Peggy) Snow. Allowed symbols for microprobe standard IDs are defined in this table, which also identifies and describes each standard.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
probe_standard_set_list		Microprobe standard set	This table defines symbols that identify the set of microprobe standards used to provide reference intensities for each analyte in the analysis, as well as the spectrometer used for that analyte.
probe_standard_set_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
probe_standard_set_list	oxide_code	Microprobe standard analyte	This column provides symbols for analytes that constitute the subject microprobe standard set. Allowed symbols are defined in table oxide_list and oxide values used for each standard are provided in table probe_standard_value_list.
probe_standard_set_list	probe_spec_code	Analyte spectrometer	This column provides the spectrometer used for the subject analyte within the subject microprobe standard set. Allowed symbols are defined in table probe_spec_list.
probe_standard_set_list	standard_id	Microprobe standard ID	This column provides symbols uniformly used for the standard in the microprobe laboratory. Almost all analyses were obtained in the microprobe laboratory of EES-1, Los Alamos National Laboratory, with the assistance of Ronald Gooley, Roland C. Hagen, and Margaret G. (Peggy) Snow. Allowed symbols for probe standard IDs are defined in table probe_standard_list, which also identifies and describes each standard.
probe_standard_set_list	standard_set_code	Microprobe standard set	This column defines symbols that identify the set of microprobe standards used to provide reference intensities for each analyte in the analysis, as well as the spectrometer used for that analyte.
probe_standard_value_list		Microprobe standard analyses	This table provides analyses for microprobe standards used in this database, listed in table probe_standard_set_list.
probe_standard_value_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
probe_standard_value_list	oxide_code	Analyte for microprobe standard	This column provides standard chemical symbols for each analyte. All analytes are represented by forms that dominate their occurrence within terrestrial rocks, mostly oxides. Allowed symbols are defined in table oxide_list.
probe_standard_value_list	oxide_ldl	Analyte LDL for microprobe standard	This value provides the lower detection limit for microprobe standard if the analyte is undetectable.
probe_standard_value_list	oxide_value	Analyte value for microprobe standard	This value provides the analyte concentration for microprobe standard, unless this value represents a lower detection limit; such values are represented as oxide_ldl.
probe_standard_value_list	probe_ref_code	Citation for microprobe standard	This column identifies a citation that provides the basis for the analyte concentration used for the microprobe standard. Allowed symbols are defined in table ref_list.
probe_standard_value_list	standard_id	Microprobe standard ID	This column provides symbols uniformly used for the standard in the microprobe laboratory. Almost all analyses were obtained in the microprobe laboratory of EES-1, Los Alamos National Laboratory, with the assistance of Ronald Gooley, Roland C. Hagen, and Margaret G. (Peggy) Snow. Allowed symbols for microprobe standard IDs are defined in table probe_standard_list, which also identifies and describes each standard.
qa_list		QA level for petrographic analysis	This table defines values that represent the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods.
qa_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
qa_list	qa_code	QA level for petrographic analysis	This column defines values that represent the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods.
qa_list	qa_name	QA level for petrographic analysis	This column describes the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods.
quad_list		USGS quad	This table defines symbols for U.S. Geological Survey topographic quadrangles for locations in the database.
quad_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
quad_list	quad_code	USGS quad symbol	This column provides symbols that define U.S. Geological Survey topographic quadrangles for locations in the database.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
quad_list	quad_name	USGS quad	This column lists U.S. Geological Survey topographic quadrangles for locations in the database.
ref_list		Citations	This table defines symbols for full citations of data and methods reported in the database.
ref_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
ref_list	ref_code	Symbol for citation	This column provides symbols for citations of data and methods.
ref_list	ref_name	Citations	This column provides full citations for data and methods.
sam_desc_type_list		Type of sample description	This table defines symbols that identify a sample description as either field or binocular microscope description.
sam_desc_type_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
sam_desc_type_list	sam_desc_type_code	Type of sample description	This column provides symbols that identify a sample description as either field or binocular microscope description.
sam_desc_type_list	sam_desc_type_name	Type of sample description	This column identifies a sample description as either field or binocular microscope description.
sam_type_list		Sample type	This table defines symbols for the types of samples collected from the southwestern Nevada volcanic field, and defines groups of sample types.
sam_type_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
sam_type_list	sam_type_code	Sample type symbol	This column provides symbols that define the type of sample. Sample types are grouped into general sample types in sam_type_group_code.
sam_type_list	sam_type_group_code	Sample type group symbol	This column provides symbols that define general sample types, which include whole rock versus separated components (minerals, pumice, etc.), outcrop versus subsurface, representative versus nonrepresentative. Nonrepresentative samples are generally those that have been modified by the process of drilling a well. Allowed symbols are defined by sam_type_code.
sam_type_list	sam_type_name	Sample type	This column defines the type of samples collected from the southwestern Nevada volcanic field.
sample		Sample characteristics	This table provides important physical, relational, and other characteristics of the sample. Physical characteristics are sample type and lithology. Relational characteristics are stratigraphic assignment, stratigraphic assignments for bounding units, and depths (if appropriate) and elevations for the sample and its bounding unit. This table also provides the date of sample collection.
sample	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
sample	lith_code	Lithology symbol	This symbol describes the lithology of sample. Allowed symbols are defined in table lith_list.
sample	loc_id	Unique ID for specific location on surface	This unique symbol represents a specific, usually unique location on the surface, or a specific, usually unique location within a tunnel. The dash character (-) is reserved for sample IDs and therefore dashes in published locations are converted to a foreslash (/). Thus 11/102/7A is the loc_id for a sample identified by its collector as 11-102-7-A.
sample	sam_depth_l	Lower bound for sample depth	This value provides the lowermost bound on the sample depth in meters beneath the surface. This value is applicable only to samples from vertical drill holes, trenches, or pits.
sample	sam_depth_u	Upper bound for sample depth	This value provides the uppermost bound on the sample depth in meters beneath the surface. This value is applicable only to samples from vertical drill holes, trenches, or pits.
sample	sam_elev_av	Sample elevation	This value provides the sample elevation in meters above mean sea level, or the average from uppermost and lowermost bounds, if available.
sample	sam_elev_l	Lower bound for sample elevation	This value provides the lowermost bound on the sample in meters above mean sea level.
sample	sam_elev_u	Upper bound for sample elevation	This value provides the uppermost bound on the sample in meters above mean sea level.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
sample	sam_elev_unc	Uncertainty in sample elevation	This value provides the uncertainty in meters for sample elevation, or half the difference between uppermost and lowermost bounds, if available.
sample	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
sample	sam_type_code	Sample type	This symbol defines the type of sample. General sample types are whole rock versus separated components (minerals, pumice, etc.), outcrop versus subsurface, representative versus nonrepresentative. Nonrepresentative samples are generally those that have been modified by the process of drilling a well. Allowed symbols are defined in table sam_type_list.
sample	strat_above_code	Stratigraphic unit above sample	This symbol identifies the stratigraphic unit above unit sampled. Allowed symbols are defined in table strat.
sample	strat_b_elev	Elevation for base of stratigraphic unit	This value represents the elevation in meters for base of stratigraphic unit.
sample	strat_below_code	Stratigraphic unit below sample	This symbol identifies the stratigraphic unit below unit sampled. Allowed symbols are defined in table strat.
sample	strat_code	Stratigraphic unit symbol	This symbol represents the assigned stratigraphic unit of the southwestern Nevada volcanic field. Allowed symbols are defined in table strat.
sample	strat_t_elev	Elevation for top of stratigraphic unit	This value represents the elevation in meters for top of stratigraphic unit.
sample_alt		Alteration of sample	This table describes the alteration of each sample. Alteration reflects both the bulk mineralogy of a sample and the dominant process that yielded the observed mineral assemblage.
sample_alt	alt_code	Symbol for ample alteration	This symbol represents a mineral or mineral assemblage and process that are dominant contributors to the observed mineralogy. The content of each mineral required to be considered dominant depends on the mineral; for example, zeolites and clays are considered dominant in concentrations of 20% or greater, calcite is considered dominant at 5% or greater, and kaolinite at 2% or greater. Allowed symbols are defined in table alt_list.
sample_alt	alt_rank	Alteration rank	This column provides integer values used to qualitatively rank the relative importance of multiple alterations. The lowest ranks have the highest importance. Importance is generally equivalent to concentration, but may relate to mineral type, as explained in this table for alt_code.
sample_alt	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
sample_alt	sam_id	Unique ID for sample	Unique symbol that represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
sample_avail		Sample availability	This table provides storage locations and amounts available for original samples, prepared specialized splits of these samples, and availability of original, unabridged field notes within files of the senior author.
sample_avail	coarse_pwt	Weight of coarsely crushed sample	This value is the weight in g of coarsely crushed sample.
sample_avail	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
sample_avail	field_note_info	Availability of field notes	This symbol defines the availability of original, unabridged field notes within files of the senior author. Allowed symbols are defined in table avail_list.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
sample_avail	fine_pwt	Weight of finely pulverized sample	This value is the weight in g of finely pulverized sample, suitable for most types of chemical analysis. Most samples have been pulverized via shatterbox.
sample_avail	num_fd	Number of XRF disks	This value represents the number of fused disks for X-ray fluorescence analysis stored.
sample_avail	num_ps	Number of polished thin sections	This value represents the number of polished thin sections stored.
sample_avail	num_ts	Number of glass-covered thin sections	This value represents the number of glass-covered thin sections stored.
sample_avail	num_tsb	Number of thin section butts	This value represents the number of thin section butts stored.
sample_avail	num_us	Number of unpolished, uncovered thin sections	This value represents the number of unpolished, uncovered thin sections stored.
sample_avail	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
sample_avail	stor_loc	Storage location	This symbol marks the storage bin where sample is located at building TA-3, SM-40, Los Alamos National Laboratory, Los Alamos, NM, USA.
sample_avail	stor_wt	Weight of stored sample	This value is the weight in g that remains of unprepared, stored sample.
sample_avail	xrd_pwt	Weight of XRD powder	This value is the weight in g of powder prepared for X-ray diffraction analysis by internal standard method. This powder contains added amounts of mineral added for reference, usually corundum.
sample_color		Sample colors	This table describes colors for components recognized in the binocular microscope description of each sample.
sample_color	chroma	Component chroma	This symbol provides the chroma of the component described. Chromas are those defined by the widely used rock color chart published by the Geological Society of America.
sample_color	color_type	Color type	This symbol defines the nature of the sample described. Allowed codes are {wet, dry}.
sample_color	comp_code	Component code	This symbol defines the component described. Allowed symbols are defined in table comp_list.
sample_color	comp_rank	Component rank	This integer value defines the prominence of each component. Lower values indicate higher prominence.
sample_color	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
sample_color	hue_code	Component hue code	This symbol provides the hue of the component described. Hues are defined in table hue_list and conform to those of the widely used rock color chart published by the Geological Society of America.
sample_color	lightness	Component lightness	This symbol provides the lightness of the component described. Lightnesses are those defined by the widely used rock color chart published by the Geological Society of America.
sample_color	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
sample_desc		Sample descriptions	This table provides original field and later binocular microscope descriptions for each sample.
sample_desc	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.



<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
sample_desc	sam_desc	Sample description	Sample description. Original sample descriptions are almost always abridged for clarity, conciseness, and correctness. The availability of original descriptions is provided in table sample_avail.
sample_desc	sam_desc_date	Date of sample description	Date when sample description was made or last modified.
sample_desc	sam_desc_type_code	Type of sample description	This symbol defines a sample description as either field or binocular microscope description. Allowed symbols are defined in sam_desc_type_list.
sample_desc	sam_describer	Sample describer	Symbol that defines the worker responsible for sample description. Allowed symbols, generally the worker's initials, are defined in table worker_list.
sample_desc	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
sample_malt		Minor alteration of sample	This table describes the minor alteration of each sample. Alteration is considered minor for a mineral in any concentration less than that which is considered to be part of a dominant assemblage.
sample_malt	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
sample_malt	malt_code	Sample minor alteration	This symbol represents a mineral and process that are minor contributors to the observed mineralogy. Alteration is considered minor for a mineral in any concentration less than that which is considered to be part of a dominant assemblage. The content of each mineral required to be considered dominant depends on the mineral; for example, zeolites and clays are considered dominant in concentrations of 20% or greater, calcite is considered dominant at 5% or greater, and kaolinite at 2% or greater. Allowed symbols are defined in table alt_list.
sample_malt	malt_rank	Alteration rank	This column provides integer values used to qualitatively rank the relative importance of multiple minor alterations. The lowest ranks have the highest importance. Importance is generally equivalent to concentration, but may relate to mineral type, as explained in this table for malt_code.
sample_malt	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
sample_ref		Citations for sample characteristics	This table provides citations for sources of information that describe the physical and relational character of each sample.
sample_ref	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
sample_ref	ref_code	Citation for sample topic	This symbol provides source of data specified by topic. Allowed symbols are defined in table ref_list.
sample_ref	ref_type_code	Topic for sample data referenced	This symbol identifies topic for sample data referenced. Allowed symbols are defined in table topic_list.
sample_ref	sam_id	Unique ID for sample	This unique symbol that represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
sample_worker		Sample workers	This table identifies those who have described the physical and relational characteristics of samples or collected the sample.
sample_worker	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
sample_worker	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
sample_worker	work_date	Date of sample description	Sample characteristics were described on this date.
sample_worker	work_type_code	Topic for sample data referenced	This symbol identifies topic for sample data referenced. Allowed symbols are defined in table topic_list.
sample_worker	worker_code	Sample characteristic descriptor	This symbol defines the worker responsible for sample description topic. Allowed symbols, generally the worker's initials, are defined in worker_list.
sep_meth_list		Method for mineral separation	This table defines symbols that describe the method used to prepare a split of a mineral separate.
sep_meth_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
sep_meth_list	sep_meth_code	Method for mineral separation	This column defines symbols that describe the method used to prepare a split of a mineral separate.
sep_meth_list	sep_meth_name	Method for mineral separation	This column describes the method used to prepare a split of a mineral separate.
split_ref		Citations for analytical methods and procedures	This table provides citations for analytical methods and procedures.
split_ref	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
split_ref	ref_code	Citation for split topic	This symbol provides source of data specified by topic. Allowed symbols are defined in table ref_list.
split_ref	ref_type_code	Specific type of analysis	This symbol identifies the specific type of analysis. Allowed symbols are defined in table topic_list.
split_ref	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
split_ref	spl_id	Unique ID for split	This unique symbol represents a split of a sample for analysis. A split represents analysis for one or more element or component that is performed by a single laboratory. Usually, a few g is split from the sample and specially prepared for the analytical procedure, such as a glass-covered thin section for petrographic analysis or pulverized rock for chemical analysis. Each thin section and each laboratory's chemical analysis represents a separate split, even if the analyses are performed by different analysts on widely separated dates. Each thin section represents a split, but each batch of sample pulverized for chemical analysis does not. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple chemical analyses of the same sample by the same laboratory and multiple analyses of the same thin section are considered to represent replicate analyses. To represent split analyses, replicate chemical analyses are averaged, weighted by the inverse square of their analytical uncertainties. Replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
split_type_list		Analysis type for sample split	This table defines symbols that identify the specific analytical type for each split.
split_type_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
split_type_list	meas_type_code	General type of analysis	This symbol identifies the general type of analysis, such as chemical, petrographic, or mineralogic. Allowed symbols are defined in table meas_type_list.
split_type_list	split_type_code	Analysis type for sample split	This column defines symbols that identify the specific analytical type for each split.
split_type_list	split_type_name	Analysis type for sample split	This column identifies the specific analytical type for each split.
split_worker		Analysts	This table provides analysts and dates of analysis.
split_worker	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
split_worker	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
split_worker	spl_id	Unique ID for split	This unique symbol represents a split of a sample for analysis. A split represents analysis for one or more element or component that is performed by a single laboratory. Usually, a few g is split from the sample and specially prepared for the analytical procedure, such as a glass-covered thin section for petrographic analysis or pulverized rock for chemical analysis. Each thin section and each laboratory's chemical analysis represents a separate split, even if the analyses are performed by different analysts on widely separated dates. Each thin section represents a split, but each batch of sample pulverized for chemical analysis does not. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple chemical analyses of the same sample by the same laboratory and multiple analyses of the same thin section are considered to represent replicate analyses. To represent split analyses, replicate chemical analyses are averaged, weighted by the inverse square of their analytical uncertainties. Replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
split_worker	work_date	Date of split analysis	Split was analyzed on this date.
split_worker	work_type_code	Specific type of analysis	This symbol identifies the specific type of analysis. Allowed symbols are defined in table topic_list.
split_worker	worker_code	Split worker	This symbol defines the worker responsible for analysis. Allowed symbols, generally the worker's initials, are defined in table worker_list.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
strat		Stratigraphic units	This table defines symbols for stratigraphic units of the southwestern Nevada volcanic field., their model ages, and names and symbols for previous definitions of stratigraphic units. The table also contains columns useful for listing stratigraphic units in several orders.
strat	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
strat	lower_model_age	Lower model age	This age provides the best estimate for the beginning of emplacement of a stratigraphic unit. The estimate is based primarily on ages in this database for the subject unit and those immediately underlying.
strat	prev_strat_code	Previous symbol for stratigraphic unit	This column provides the most commonly used symbol(s) previously used for the subject stratigraphic unit. Citations for symbols are found in table prev_strat_code_ref.
strat	prev_strat_name	Previous name for stratigraphic unit	This column provides the most commonly used name(s) previously used for the subject stratigraphic unit. Citations for names are found in table prev_strat_name_ref.
strat	strat_age_pos	Age position in stratigraphic column	This column provides integer values that order the list of stratigraphic units of the southwestern Nevada volcanic field by age.
strat	strat_code	Stratigraphic unit symbol	This column defines symbols that represent stratigraphic units of the southwestern Nevada volcanic field. Allowable symbols are those defined in strat_list.
strat	strat_col_pos	Standard position in stratigraphic column	This column provides integer values that order the list of stratigraphic units of the southwestern Nevada volcanic field in standard geologic fashion.
strat	strat_group_code	Stratigraphic group symbol	This column defines symbols for the stratigraphic group to which the unit belongs. Symbols for a stratigraphic group are generally two-letter symbols, such as Tm, Timber Mountain Group. Allowable symbols are those defined in strat_list.
strat	strat_name	Stratigraphic unit	This column provides stratigraphic units of the southwestern Nevada volcanic field.
strat	upper_model_age	Upper model age	This age provides the best estimate for the cessation of emplacement of a stratigraphic unit. The estimate is based primarily on ages in this database for the subject unit and those immediately overlying.
strat	upper_strat_code	Upper stratigraphic unit	This column defines the symbol for the unit that is positioned above the subject unit within a standard list of stratigraphic units. The upper stratigraphic unit may actually lie beneath the subject unit when laterally equivalent groups are represented sequentially within a standard list of stratigraphic units.
strat	younger_strat_code	Younger stratigraphic unit	This column defines the symbol for the stratigraphic unit that is younger than the subject stratigraphic unit. The younger stratigraphic unit may actually be listed below the subject unit when laterally equivalent groups are represented sequentially within a standard list of stratigraphic units.
strat_int		Stratigraphic intervals	This table provides the stratigraphic assignment for each successive interval within a drill hole. Important physical, relational, and other characteristics for successive intervals within drill holes are termed geologic intervals. Intervals are defined both by depths and elevations. Physical characteristics are lithology, alteration, minor alteration, fracture intensity, and lithophysal zones. Relational characteristics are stratigraphic assignment and stratigraphic assignments for bounding units.
strat_int	depth_l	Lower depth of stratigraphic interval	This value provides the lower depth in meters beneath the surface for the stratigraphic interval.
strat_int	depth_u	Upper depth of stratigraphic interval	This value provides the upper depth in meters beneath the surface for the stratigraphic interval.
strat_int	elev_l	Lower elevation of stratigraphic interval	This value provides the lower elevation of stratigraphic interval in meters above mean sea level.
strat_int	elev_u	Upper elevation of stratigraphic interval	This value provides the upper elevation of stratigraphic interval in meters above mean sea level.
strat_int	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
strat_int	loc_id	Unique ID for drill hole	This symbol represents a drill hole. Names have been abbreviated in some cases, for example, PM1 is the unique ID for drill hole Pahute Mesa Exploratory well #1. If doubt exists regarding the true identity of a unique ID for any drill hole, then the coordinates provided in table location can be used to resolve the uncertainty.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
strat_int	strat_code	Assignment for stratigraphic interval	This symbol defines the stratigraphic unit for the depth interval specified within the drill hole specified. Allowed symbols are defined in table strat.
strat_int	strat_code_l	Stratigraphic unit below stratigraphic interval	This symbol identifies the stratigraphic unit below stratigraphic interval. Allowed symbols are defined in table strat.
strat_int	strat_code_u	Stratigraphic unit above stratigraphic interval	This symbol identifies the stratigraphic unit above stratigraphic interval. Allowed symbols are defined in table strat.
strat_list		Stratigraphic units	This table defines symbols for stratigraphic units of the southwestern Nevada volcanic field, and also includes terms to represent stratigraphic constraints, such as unknown and unconstrained. Table strat provides model ages, and names and symbols for previous definitions of stratigraphic units, as well as columns useful for listing stratigraphic units in several orders.
strat_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
strat_list	strat_code	Stratigraphic unit symbol	This column defines symbols that represent stratigraphic units of the southwestern Nevada volcanic field, and also defines terms to represent stratigraphic constraints, such as unknown and unconstrained.
strat_list	strat_name	Stratigraphic unit	This column provides stratigraphic units of the southwestern Nevada volcanic field, and also provides terms to represent stratigraphic constraints, such as unknown and unconstrained.
table_desc		Descriptions of table and column names	This table provides descriptions of table and column names in the database.
table_desc	column_name	Name of column in table	This column identifies the name of the column for which the description is provided.
table_desc	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
table_desc	long_desc	Long/detailed description	This column provides a detailed description of the table or column.
table_desc	short_desc	Short description	This column provides a short description (< 60 characters) of the table or column.
table_desc	table_name	Name of table	This column identified the name of the table for which the description is provided.
texture_list		Grain component texture	This table defines symbols that describe textural features observed for each grain component.
texture_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
texture_list	texture_code	Grain component texture	This column defines symbols that describe textural features observed for each grain component.
texture_list	texture_name	Grain component texture	This column describes textural features observed for each grain component.
topic_list		Topic for citation	This table defines symbols used to identify topics for citations of data, descriptions, or definitions.
topic_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
topic_list	topic_code	Topic for citation	This column provides symbols that identify topics for citations of data, descriptions, or definitions.
topic_list	topic_name	Topic for citation	This column defines topics for citations of data, descriptions, or definitions.
units_list		Concentration units	This table defines symbols and descriptions for concentration units associated with analytical values. Concentration units are always provided on a weight basis except for petrographic analyses, which are provided on a volume basis. The same concentration units are consistently used for each chemical analyte or petrographic component.
units_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
units_list	units_code	Concentration units	This column provides symbols for concentration units associated with analytical values. Concentration units are always provided on a weight basis except for petrographic analyses, which are provided on a volume basis when quantitative. The same concentration units are consistently used for each chemical analyte or petrographic component.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
units_list	units_desc	Concentration units	This column provides a description for concentration units associated with analytical values. Concentration units are always provided on a weight basis except for petrographic analyses, which are provided on a volume basis when quantitative. The same concentration units are consistently used for each chemical analyte or petrographic component.
units_list	units_name	Concentration units	This column provides concentration units associated with analytical values. Concentration units are always provided on a weight basis except for petrographic analyses, which are provided on a volume basis when quantitative. The same concentration units are consistently used for each chemical analyte or petrographic component.
vel_source_list		Sources for average p-wave velocities	This table defines symbols that describe the sources used for average p-wave velocities of rocks within each drill hole.
vel_source_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
vel_source_list	vel_source_code	Symbols for source of average p-wave velocities	This column provides symbols that describe the sources used for average p-wave velocities of rocks within each drill hole.
vel_source_list	vel_source_name	Sources for average p-wave velocities	This column provides sources for average p-wave velocities of rocks within each drill hole.
water_source_list		Sources for average water content of rocks	This table defines symbols that describe the sources used for average water content of rocks within each drill hole.
water_source_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
water_source_list	water_source_code	Symbols for source of average water content of rocks	This column provides symbols that describe the sources used for average water content of rocks within each drill hole.
water_source_list	water_source_name	Sources for average water content of rocks	This column provides sources for average water content of rocks within each drill hole.
worker_list		Workers	This table defines symbols for workers who have contributed analyses, descriptions, or definitions to the database, and also provides their organization and its location.
worker_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
worker_list	worker_city	City of worker's organization	City of worker's organization
worker_list	worker_code	Worker symbol	This column provides symbols that define workers.
worker_list	worker_name	Worker	This column provides workers who have contributed analyses, descriptions, or definitions to the database.
worker_list	worker_org	Worker's organization	Worker's organization
worker_list	worker_state	State of worker's organization	State of worker's organization
xrd_measure		XRD analyses	This table provides mineralogic analyses and their uncertainties for each XRD split.
xrd_measure	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xrd_measure	min_code	Mineral analyzed by XRD	This symbol identifies the mineral analyzed by X-ray diffraction analysis (XRD). Allowed symbols are defined in table comp_list.
xrd_measure	min_error	Mineral concentration uncertainty	This value is uncertainty in the subject mineral concentration in weight percent.
xrd_measure	min_value	Mineral concentration	This value is the subject mineral concentration in weight percent.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
xrd_measure	spl_id	Unique ID for split	This unique symbol represents a split of a sample for analysis. A split represents X-ray diffraction (XRD) analysis for one or more mineral component that is performed by a single laboratory from a few g split from the sample, pulverized and specially prepared for the analysis. A left parenthesis '(' designates each split from a single sample, such as 3/15/82/1(B, a split of sample 3/15/82/1 analyzed by XRD. Multiple XRD analyses of the same sample by the same laboratory represent replicate analyses. Individual replicate analyses are not stored within the database.
xrd_meth_list		Method for XRD analysis	This table defines symbols that describe the method used for X-ray diffraction (XRD) analysis.
xrd_meth_list	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xrd_meth_list	xrd_meth_code	Method for XRD analysis	This column provides symbols that define the method used for X-ray diffraction (XRD) analysis.
xrd_meth_list	xrd_meth_name	Method for XRD analysis	This column provides the method used for X-ray diffraction (XRD) analysis.
xrd_split		Method for XRD analysis	This table provides the method used for X-ray diffraction (XRD) analysis, the analyst, and the date of analysis. This table also provides other information such as reflection intensities when only these qualitative data are reported. Citations for these data are provided in this table.
xrd_split	comments	Comments from XRD analysis	Comments amplify information for an X-ray diffraction (XRD) analysis and provide additional information not otherwise represented in the database, such as reflection intensities provided as comments when only these qualitative data are reported.
xrd_split	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xrd_split	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
xrd_split	spl_id	Unique ID for XRD split	This unique symbol represents a split of a sample for X-ray diffraction (XRD) analysis. A split represents XRD analysis for one or more mineral component that is performed by a single laboratory from a few g split from the sample, pulverized and specially prepared for the analysis. A left parenthesis '(' designates each split from a single sample, such as 3/15/82/1(B, a split of sample 3/15/82/1 analyzed by XRD. Multiple XRD analyses of the same sample by the same laboratory represent replicate analyses. Individual replicate analyses are not stored within the database.
xrd_split	xrd_meth_code	Method for XRD analysis	This symbol provides the method used for X-ray diffraction (XRD) analysis. Allowed symbols are defined in table xrd_meth_list.
xx_geophys_int		Geophysical logs of unacceptable quality	This table provides geophysical logs of unacceptable quality.
xx_geophys_int	depth	Depth for measurement value	This column provides the depth in meters for each measured value within the run of the geophysical log.
xx_geophys_int	depth_l	Lower depth for measurement value	This column provides the lower depth of the measurement interval, centered on the depth measurement.
xx_geophys_int	depth_u	Upper depth for measurement value	This column provides the upper depth of the measurement interval, centered on the depth measurement.
xx_geophys_int	elev	Elevation for measurement value	This column provides the elevation in meters for each measured value within the run of the geophysical log.
xx_geophys_int	elev_l	Lower elevation for measurement value	This column provides the lower elevation of the measurement interval, centered on the depth measurement.
xx_geophys_int	elev_u	Upper elevation for measurement value	This column provides the upper elevation of the measurement interval, centered on the depth measurement.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
xx_geophys_int	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xx_geophys_int	hole_id	Hole ID	This unique symbol represents a specific, usually unique location on the surface, and includes vertical and nonvertical drill holes and tunnels. The dash character (-) is reserved for sample IDs and therefore dashes in published Hole IDs are converted to a foreslash (/). Allowed symbols, defined in table drill_hole_list, are related to Hole IDs used in several published sources by table drill_hole_map.
xx_geophys_int	log_type_code	Geophysical log represented	This symbol identifies the geophysical log represented. Allowed symbols are defined in table log_type_list.
xx_geophys_int	run	Number that defines conditions for each geophysical log	The Run Number, unique in combination with the Hole ID and type of Geophysical log, defines unique conditions for the generation of each geophysical log. Multiple Run Numbers for the same log type in the same hole distinguish different sets of operating conditions, which are described by other columns within this table immediately below. In many cases, such multiple runs are undertaken to evaluate a log of questionable quality. Portions of runs or entire runs considered unacceptable in quality are eliminated from the table geophys_int, but preserved in the table xx_geophys_int.
xx_geophys_int	value	Single measurement value	This column provides each measured unacceptable value for the run of the geophysical log. Values of acceptable quality are preserved in the table geophys_int.
xx_ma_clast_measure		Individual clast analyses	This table provides a variety of information for each clast that includes its stratigraphic assignment, lithology, and alteration, its type, and area in thin section. Table ma_clast_measure includes only data with the best precision. This table contains less precise, superceded, and erroneous data.
xx_ma_clast_measure	clast_area	Clast area	This value is the area of the clast in mm <sup>2</sup> .
xx_ma_clast_measure	clast_area_meth_code	Clast area method	This symbol defines the method used to determine the area of the subject clast. Allowed symbols are defined in table pa_meth_list.
xx_ma_clast_measure	clast_code	Clast type	This symbol identifies the clast type for the subject clast. Allowed symbols are defined in table comp_list as daughters of the component "clast".
xx_ma_clast_measure	clast_counts	Points counted on clast	This value provides the number of points counted on the subject clast; the total number of points is that represented for the same clast type in table pa_count. Points counted for any component within the clast, as represented in table ma_gr_comp, are included in the number of points counted on the subject clast. The only exception is for hosted clasts of the same type, for example, lithics in a clast of tuff. Counts on such hosted clasts are not included in the number of points counted for the host clast. Hosted clasts are identified with a character appended to the clast_id of the host clast; for example, LI2A is a lithic hosted by lithic LI2.
xx_ma_clast_measure	clast_id	Clast ID	This symbol uniquely identifies a clast within a petrographic split.
xx_ma_clast_measure	clast_lith_code	Clast lithology	This symbol describes the lithology of the clast. Allowed symbols are defined in table lith_list.
xx_ma_clast_measure	clast_pa_meth_code	Clast petrographic method	This symbol defines the method used to determine the suite of phenocrysts absent from the subject clast. Allowed symbols are defined in table pa_meth_list. Methods for phenocrysts (and groundmass and secondary minerals) that are nonzero are defined in table ma_gr_comp. The set of phenocrysts absent from the subject clast consists of all phenocrysts in table comp_code, minus those listed for the subject clast in table ma_gr_comp.
xx_ma_clast_measure	clast_qa_code	QA level for clast analysis	This value defines the quality of multiple petrographic analyses for the same clast, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
xx_ma_clast_measure	clast_strat_code	Clast stratigraphic unit	This symbol represents the stratigraphic unit of the southwestern Nevada volcanic field assigned to the clast. Allowed symbols are defined in table strat.
xx_ma_clast_measure	clast_unk_strat_id	Unknown stratigraphic unit	This character string is used to indicate that 2 or more clasts within a split represent the same unit of unknown stratigraphic assignment.
xx_ma_clast_measure	clast_void_percent	Clast void content	This value provides the void content in percent for each clast. This value is generally provided only for vitric pyroclasts, and not for lithics.
xx_ma_clast_measure	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.



<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
xx_ma_clast_measure	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A petrographic split represents analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
xx_ma_clast_measure	work_date	Date of clast analysis	All petrographic data for clast specified was initiated on this date.
xx_ma_clast_measure	worker_code	Clast analyst	This symbol defines the clast analyst. Allowed symbols, generally the worker's initials, are defined in table worker_list.
xx_ma_gr_measure		Grain component petrographic analyses	This table provides a variety of information for each grain component that includes its grain ID, unique grain component ID, area in thin section, mineral identity, and identifies any host clasts or minerals. This table also provides the number of points counted for the grain component, whether it is suitable for microprobe analysis, and the number of several different types of microprobe analyses that were performed. The table also identifies the petrographic analyst and date for analysis of the grain component, and the quality level of the analysis. Table ma_gr_measure includes only data with the best precision. This table contains less precise, superceded, and erroneous data.
xx_ma_gr_measure	clast_code	Host clast type	This symbol identifies a clast type within a petrographic split that hosts the grain component.
xx_ma_gr_measure	clast_comp_pa_meth_code	Method for grain component in clast	This symbol defines the method used to determine the concentration of the subject mineral within the subject clast ID. These concentrations are not provided within the database but can be easily determined. Allowed symbols are defined in table pa_meth_list.
xx_ma_gr_measure	clast_id	Host clast ID	This symbol identifies a unique clast within a petrographic split that hosts the grain component.
xx_ma_gr_measure	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xx_ma_gr_measure	gr_comp_area	Grain component area	This value is the area in mm <sup>2</sup> for the subject grain component, almost always determined by a counting points in reflected light on a calibrated, gridded reticule mounted within the objective lens that is superimposed over the grain component. Except for the smallest grain components, an objective power is selected to provide at least 15 counts.
xx_ma_gr_measure	gr_comp_code	Grain component code	This symbol defines the grain component analyzed. Grain components include minerals and amorphous materials such as glass. Allowed symbols are defined in table comp_list.
xx_ma_gr_measure	gr_comp_counts	Points counted for grain component	This value represents the number of points counted for the grain component. Because individual counts are assigned to primary mineral groups (felsics, mafics, etc) for each grain ID, fractional counts result when the subject primary mineral group consists of more than one mineral of the group. Fractional counts are apportioned to individual members of a group (for example, plagioclase and sanidine within a single grain) according to their areas.
xx_ma_gr_measure	gr_comp_host_code	Mineral host for grain component	This symbol identifies a mineral that clearly surrounds the subject grain component on at least 3 sides. The host mineral can be either primary or secondary, but always has the same grain ID. Allowed symbols are defined in table comp_list.
xx_ma_gr_measure	gr_comp_id	Grain component ID	This unique integer identifies a single mineral that occurs alone or within an assemblage of minerals that constitute a grain. All distinctly individual grains of apatite and zircon within a single grain are assigned different grain component IDs, but multiple grains of all other minerals that occur within a single grain may be assigned a single or several grain component IDs, dependent on the variety of textures and paragenetic features evident for this set of grains.
xx_ma_gr_measure	gr_comp_qa_code	QA level for grain component	This value defines the quality of multiple petrographic analyses for the same grain component. The lowest values for QA level indicate the highest quality analyses. Only grain component analyses with a QA level of 1 should be used except to evaluate the accuracy of petrographic analysis. Allowed values are defined in table qa_list.
xx_ma_gr_measure	gr_id	Grain ID	This symbol identifies a unique grain within a petrographic split. This grain consists of an assemblage of minerals that are intergrown or appear to be so.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
xx_ma_gr_measure	n_probe_bad_rep	Unacceptable quantitative microprobe analyses	This integer value represents the number of unacceptable quantitative microprobe analyses by Wavelength Dispersive Spectroscopy (WDS) for the subject grain component. For each mineral type, unacceptable analyses fail to satisfy one or more of the strict ranges for analytical totals, mineral structural balance, and for monitor elements such as Al in olivine. Unacceptable analyses reside in the database primarily because they document mineral identities and may provide quantitative information useful for some applications.
xx_ma_gr_measure	n_probe_qual_rep	EDS analyses	This integer value represents the number of qualitative microprobe analyses by Energy Dispersive Spectroscopy (EDS) for the subject grain component. A display of counts (spectrum) was visually analyzed to assess the mineral identity of the subject grain component; this display was repeated at different points on the subject grain component for the number of times indicated. The counts generated by the EDS analysis are not preserved.
xx_ma_gr_measure	n_probe QUAN_rep	Acceptable quantitative microprobe analyses	This integer value represents the number of acceptable quantitative microprobe analyses by Wavelength Dispersive Spectroscopy (WDS) for the subject grain component. For each mineral type, acceptable analyses must satisfy strict ranges for analytical totals, mineral structural balance, and for monitor elements such as Al in olivine.
xx_ma_gr_measure	n_probe_semi QUAN_rep	Semiquantitative EDS analyses	This integer value represents the number of qualitative microprobe analyses by Energy Dispersive Spectroscopy (EDS) for the subject grain component. A display of counts (spectrum) was visually analyzed to assess the mineral identity of the subject grain component; this display was repeated at different points on the subject grain component for the number of times indicated. The counts generated by the EDS analysis are preserved on the original petrographic work sheet but not in the database.
xx_ma_gr_measure	probe_suitable	Suitability for probe analysis	This symbol indicates the suitability of the grain component for quantitative analysis by electron microprobe. The suitability is determined by inspection in both transmitted and reflected light at a magnification of at least 400. Allowed symbols are defined in table ans_list.
xx_ma_gr_measure	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A petrographic split represents analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
xx_ma_gr_measure	work_date	Date of grain component analysis	All petrographic data for grain component specified was reduced on this date.
xx_ma_gr_measure	worker_code	Grain analyst	This symbol defines the grain analyst. Allowed symbols, generally the worker's initials, are defined in table worker_list.
xx_pa_count		Points counted for petrographic analysis	This table provides the number of counts for one or more point counts for petrographic analysis, as well as the quality level for each count. Table pa_count includes only data with the best precision. This table contains less precise, superceded, and erroneous data.
xx_pa_count	count	Points counted for petrographic analysis	This value is the number of counts for each of one or more point counts for petrographic analysis.
xx_pa_count	count_type_code	Type of point count	This symbol defines the type of each point count for petrographic analysis from among several types. Allowed symbols are defined in table pa_meth_list.
xx_pa_count	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xx_pa_count	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A split represents petrographic analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
xx_pa_count	split_qa_code	QA level for point count	This value defines the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
xx_pa_measure		Petrographic analyses	This table provides a petrographic analysis for each component, describes its alteration if the component is a mineral, the method used for its analysis, a citation for the source of the analysis, and the quality level of the analysis. Table pa_measure includes only data with the best precision. This table contains less precise, superceded, and erroneous data.
xx_pa_measure	comp_alt_code	Component alteration	This symbol describes the general alteration of a mineral component. Alterations for individual grain components of the subject mineral are provided in table ma_gr_comp_texture. Allowed symbols are defined in table comp_alt_list.
xx_pa_measure	comp_code	Component code	This symbol defines the component analyzed. Components include minerals, specified materials such as brown glass, and assemblages such as lithics. Allowed symbols are defined in table comp_list.
xx_pa_measure	comp_value	Component concentration	This value provides the measured concentration of the subject component on a volume basis.
xx_pa_measure	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xx_pa_measure	pa_meth_code	Symbol for petrographic method	This symbol defines the method used for petrographic analysis. Allowed symbols are defined in table pa_meth_list.
xx_pa_measure	ref_code	Citation for petrographic data	This symbol provides source of petrographic data. Allowed symbols are defined in table ref_list.
xx_pa_measure	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A petrographic split represents analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
xx_pa_measure	split_qa_code	QA level for petrographic analysis	This value defines the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
xx_pa_measure	units_code	Component concentration units	This symbol defines the concentration units associated with petrographic analysis. Concentration units are always provided on a volume basis for quantitative petrographic analyses. Allowed symbols are defined in table units_list. The same concentration units are consistently used for each component.
xx_pa_misc		Miscellaneous petrographic information	This table provides information occasionally obtained for petrographic analyses, mostly from analysis of grain mounts or mineral separates. Information allowed in this table is defined in table pa_meas_type_list. Table pa_misc includes only data with the best precision. This table contains less precise, superceded, and erroneous data.
xx_pa_misc	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xx_pa_misc	pa_meas_type_code	Symbol for miscellaneous petrographic information	This symbol provides information occasionally obtained for petrographic analyses, mostly from analysis of grain mounts or mineral separates. Allowed symbols are defined in table pa_meas_type_list.
xx_pa_misc	pa_meas_value	Miscellaneous petrographic information	This value provides information occasionally obtained for petrographic analyses, mostly from analysis of grain mounts or mineral separates.
xx_pa_misc	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A split represents petrographic analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
xx_pa_misc	split_qa_code	QA level for petrographic analysis	This value defines the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
xx_pa_split	sep_meth_code	Method for mineral separation	This symbol describes the method used to prepare a split of a mineral separate. Allowed symbols are defined in table sep_meth_list.
xx_pa_split	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A split represents petrographic analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
xx_pa_split	split_qa_code	QA level for petrographic analysis	This value defines the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
xx_pa_split	split_type_code	Analysis type for sample split	This symbol identifies the type of sample split analyzed. Almost all petrographic analyses employ a glass-covered or a polished thin section. Allowed symbols are defined in table split_type_list.
xx_pa_split	ts_area	Thin section area	This value provides the thin section area in mm <sup>2</sup> . The method used to determine this area is provided by table pa_meth_list.
xx_pa_split	ts_area_meth_code	Thin section area method	This symbol provides the method used to determine the thin section area. Allowed symbols are defined in table pa_meth_list.
xx_pa_split		General petrographic information	This table provides general information usually obtained for most petrographic analyses, including the type and area of the thin section and method used to determine the area, the magnification and light sources used in the point count, and quality level for the analysis. If the thin section split represents a mineral separate, this table provides the type of mineral separated and method used for the separation. Table pa_split includes only data with the best precision. This table contains less precise, superceded, and erroneous data.
xx_pa_split	comments	Comments from petrographic analysis	Comments amplify information from a petrographic analysis and provide additional information not otherwise represented in the database.
xx_pa_split	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xx_pa_split	light_type_code	Point count light source	This symbol provides the least effective light source used for any petrographic analyses by point count. The most effective light source is a point count performed in reflected light but with transmitted light available to aid identifications. Allowed symbols are defined in table light_type_list.
xx_pa_split	magnif	Point count magnification	This value provides the lowest magnification used for any petrographic analyses by point count. The highest magnifications provide the most accurate analyses.
xx_pa_split	min_sep	Symbol for separated mineral	This symbol identifies the primary or target mineral of a split of a mineral separate. Allowed symbols are defined in table comp_list.
xx_pa_split	sam_id	Unique ID for sample	This unique symbol represents up to a few kg of contiguous material from the surface or subsurface. The dash special character (-) designates multiple samples from a single location, and a left parenthesis '(' designates multiple splits from a single sample. Samples from vertical drill holes will always have sam_id's represented by the location, which is the drill hole name, followed by a dash (-) and the sample depth in feet, for example, USWG2-770. Sample depths in meters attach "M" following the metric depth, for example, USWG2-506.65M. Multiple samples from the same location, for example a whole-rock sample and several lithic and pumice separates, will always have sam_id's represented by the location followed by a dash (-) and a character string, for example RW18B3-WR, RW18B3-PU1, and RW18B3-PU2.
xx_pa_worker		Petrographic analyst	This table identifies the analyst, analysis date, and quality level for each component. Table pa_worker includes only references for data with the best precision. This table contains references for less precise, superceded, and erroneous data.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
xx_pa_worker	comp_code	Component code	This symbol defines the component analyzed. Components include minerals, specified materials such as brown glass, and assemblages such as lithics. Allowed symbols are defined in table comp_list.
xx_pa_worker	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xx_pa_worker	spl_id	Unique ID for petrographic split	This unique symbol represents a split of a sample for petrographic analysis. A petrographic split represents analysis for one or more component. All petrographic splits are individual thin sections, even if different analysts performed analyses on widely separated dates. A left parenthesis '(' designates each split from a single sample, such as BH86N/33(B, a polished thin section for sample BH86N/33. Multiple analyses of the same thin section represent replicate analyses. To represent split analyses, replicate petrographic analyses are ranked; analyses of the same rank are averaged, weighted by the number of point counted. Individual replicate analyses are not stored within the database, but analysts and analytical dates and other information are provided with the analytical data.
xx_pa_worker	split_qa_code	QA level for petrographic analysis	This value defines the quality of multiple petrographic analyses for the same component, irrespective of method used in the analysis. The lowest values for QA level indicate the highest quality analyses. Only petrographic analyses with a QA level of 1 should be used except to compare petrographic data obtained by different methods. Allowed values are defined in table qa_list.
xx_pa_worker	units_code	Component concentration units	This symbol defines the concentration units associated with petrographic analysis. Concentration units are always provided on a volume basis for quantitative petrographic analyses. Allowed symbols are defined in table units_list. The same concentration units are consistently used for each component, but both quantitative and qualitative (grain count) petrographic analyses may be provided for some accessory minerals.
xx_pa_worker	work_date	Date of petrographic analysis	All petrographic data by worker indicated was reduced on this date.
xx_pa_worker	worker_code	Petrographic analyst	This symbol defines the petrographic analyst. Allowed symbols, generally the worker's initials, are defined in table worker_list.
xx_probe_end_members		Mineral end members	This table provides end member contents for selected minerals. These values have been calculated from analyte concentrations determined by microprobe analysis. Table probe_end_members includes only data with the best precision. This table contains less precise, superceded, and erroneous data.
xx_probe_end_members	end_member_code	Symbol for mineral end member	This column provides symbols for end members of selected minerals.
xx_probe_end_members	end_member_value	Value for mineral end member	This column provides end member contents for selected minerals. These values have been calculated from analyte concentrations determined by microprobe analysis.
xx_probe_end_members	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xx_probe_end_members	gr_comp_id	Grain component ID	This unique integer identifies a single mineral that occurs alone or within an assemblage of minerals that constitute a grain. All distinctly individual grains of apatite and zircon within a single grain are assigned different grain component IDs, but multiple grains of all other minerals that occur within a single grain may be assigned a single or several grain component IDs, dependent on the variety of textures and paragenetic features evident for this set of grains.
xx_probe_end_members	rep_id	Microprobe replicate ID	This character string uniquely identifies each microprobe analytical point for a particular grain component.
xx_probe_measure		Microprobe analyses	This table provides microprobe analyses in weight percent. Table probe_measure includes only data with the best precision. This table contains less precise, superceded, and erroneous data.
xx_probe_measure	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xx_probe_measure	gr_comp_id	Grain component ID	This unique integer identifies a single mineral that occurs alone or within an assemblage of minerals that constitute a grain. All distinctly individual grains of apatite and zircon within a single grain are assigned different grain component IDs, but multiple grains of all other minerals that occur within a single grain may be assigned a single or several grain component IDs, dependent on the variety of textures and paragenetic features evident for this set of grains.
xx_probe_measure	oxide_code	Microprobe analyte	This symbol provides standard chemical symbol for analyte. All analytes are represented by forms that dominate their occurrence within terrestrial rocks, mostly as oxides. Allowed analytes are defined in table oxide_list, which also provides gravimetric factors to convert all oxide values to equivalent elemental values.

<b>TABLE NAME</b>	<b>COLUMN NAME</b>	<b>SHORT DESC</b>	<b>LONG DESC</b>
xx_probe_measure	oxide_value	Microprobe analysis	This value provides microprobe analyses in weight percent.
xx_probe_measure	rep_id	Microprobe replicate ID	This character string uniquely identifies each microprobe analytical point for a particular grain component.
xx_probe_measure	standard_set_code	Microprobe standard set	This symbol identifies the set of microprobe standards used to provide reference intensities for each analyte in the analysis, as well as the spectrometer used for that analyte. Allowed symbols are defined in table probe_standard_set_list.
xx_probe_rep		Microprobe analysis description	This table provides quality measures for each analysis by electron microprobe and also describes the location of the analytical point relative to the boundaries of the grain component analyzed. Table probe_rep includes only data with the best precision. This table contains less precise, superceded, and erroneous data.
xx_probe_rep	comments	Comments from microprobe analysis	Comments amplify information from a microprobe analysis and provide additional information not otherwise represented in the database.
xx_probe_rep	entry_date	Data entry date	This date indicates the day in which the data entry was created for loading into the Oracle database. This entry requires a four-digit year specifier; e.g., 05-JUN-1998.
xx_probe_rep	gr_comp_id	Grain component ID	This unique integer identifies a single mineral that occurs alone or within an assemblage of minerals that constitute a grain. All distinctly individual grains of apatite and zircon within a single grain are assigned different grain component IDs, but multiple grains of all other minerals that occur within a single grain may be assigned a single or several grain component IDs, dependent on the variety of textures and paragenetic features evident for this set of grains.
xx_probe_rep	probe_loc_code	Microprobe analysis location	This symbol describes the general location for each microprobe analytical point within a particular grain component. Allowed symbols are defined in table probe_loc_list.
xx_probe_rep	probe_qa_code	QA level for microprobe analysis	This value defines the quality of each replicate microprobe analysis. The lowest values for QA level indicate the highest quality analyses. Only microprobe analyses with a QA level of 1 should be used except to evaluate the accuracy of petrographic analysis. Allowed values are defined in table qa_list.
xx_probe_rep	ref_code	Citation for microprobe data	This symbol provides source of microprobe data. Allowed symbols are defined in table ref_list.
xx_probe_rep	rep_id	Microprobe replicate ID	This character string uniquely identifies each microprobe analytical point for a particular grain component.
xx_probe_rep	work_date	Date of microprobe analysis	Microprobe analysis for this replicate was performed on this date.
xx_probe_rep	work_type_code	Type of microprobe analysis	This symbol identifies the type of microprobe analysis, which include qualitative, semiquantitative, and quantitative. Allowed symbols are defined in table topic_list.
xx_probe_rep	worker_code	Microprobe analyst	This symbol defines the microprobe analyst. Allowed symbols, generally the worker's initials, are defined in table worker_list.