

## Appendix F. NTS USGS Databases, Nevada Test Site and Vicinity, Nye County, Nevada.

Most redundant data have been removed from the rock-sample, lithologic-description, rock-property, fracture-characteristic, and hydraulic-property tables and moved into a separate site-characteristic table. These data tables were developed in Microsoft® Excel as stand-alone databases and are offered in Microsoft® Access for quicker response time. The UnqNoUSGS field links the tables and the redundant SrtOrdUSGS field is retained in each table to maintain intended sort order. Furthermore, the redundant MapUntSym, LocIDLANL, SamIDLANL, and SplIDLANL fields are retained in the rock-sample, lithologic-description, and fracture-characteristic tables for both informational and linking purposes. The UnqNoUSGS field also is listed prior to the SrtOrdUSGS field in the hydraulic-property table for sorting purposes. Field contents are the same as described in tables A1-E1. However, the Site-Characteristic Database table includes additional fields described below. Appendix F data are available at URL: <http://pubs.usgs.gov/ds/2007/297/>.

**Table F1.** Description of Site-Characteristic Database field contents.

[Access field names longer than 8 characters indicated by **red** text because longer names may be incompatible with some database and Graphic Information System (GIS) applications. Blank field source indicates not applicable, not available online, or not accessible to the public. **Abbreviations:** DOD, U.S. Department of Defense; DOE, U.S. Department of Energy; NTS, Nevada Test Site; NWIS, National Water Information System; USGS, U.S. Geological Survey; ft, foot; –, not applicable]

Access field name	Excel field name	Field code	Field explanation	Field source
SrtOrdUSGS	USGS NTS sort order	–	Emplacement and exploratory holes typically are displayed together. Many sites also have multiple completion intervals within the same hole. Therefore, a sort order number is assigned to all USGS sites associated with DOE and/or DOD projects in Nevada. This field is modified as new sites are added.	
UnqNoUSGS	USGS NTS unique number	–	Spatial (X-Y) coordinates are unavailable at some locations. Therefore, USGS site identification numbers can not be established in the USGS NWIS database Sitefile for these sites. Because NWIS site identification numbers can not be assigned to all sites, it is necessary to assign a unique site number to all USGS sites associated with USGS DOE/DOD projects in Nevada. Although the unique numbers were initially assigned in the same order as the USGS NTS sort order, new sites are assigned the next available sequential number.	
DtUnqNoAsgn	Date unique number assigned	–	Date USGS NTS unique number assigned; as yyyyymmdd (4-digit year; 2-digit month; 2-digit day).	
NTSArea	NTS area	–	NTS Administrative Area number (see fig. 1). Entries are listed in <b>bold type</b> where sites are located in areas other than the hole name implies. For example, USGS hole name <b>U - 2ao</b> is actually located in NTS area <b>09</b> .	
HleNmeUSGS	USGS hole name	–	USGS hole name designation. Entries are listed in bold type where sites are located in areas other than the hole name implies.	
FmrOthHleNme	Former or other hole name	–	Former or other names utilized for holes.	
HstFleSmpSitNmeUSGS	USGS historical file sample site name	–	Name listed on original site record contained in historical files located in the USGS Mercury Core Library at the NTS or the USGS Office in Henderson, Nevada.	
SitSrc	Site source	–	Source of site data.	

90 Digitally Available Interval-Specific Rock-Sample Data Compiled from Historical Records, Nevada Test Site, Nevada

**Table F1.** Description of Site-Characteristic Database field contents.—Continued

[Access field names longer than 8 characters indicated by red text because longer names may be incompatible with some database and Graphic Information System (GIS) applications. Blank field source indicates not applicable, not available online, or not accessible to the public. **Abbreviations:** DOD, U.S. Department of Defense; DOE, U.S. Department of Energy; NTS, Nevada Test Site; NWIS, National Water Information System; USGS, U.S. Geological Survey; ft, foot; –, not applicable]

Access field name	Excel field name	Field code	Field explanation	Field source
SitSrc	Site source	BEIDMS	Bechtel Nevada Environmental Integrated Data Management System (BEIDMS) Oracle database record.	
SitSrc	Site source	BM	Binocular Microscope (BM) record.	
SitSrc	Site source	fct_chr	Fracture-characteristic (fct_chr) record.	
SitSrc	Site source	FN	Field notes (FN) record.	
SitSrc	Site source	hyd_pty	Hydraulic-property (hyd_pty) record.	
SitSrc	Site source	Implied	Implied by sequence or other indication of hole.	
SitSrc	Site source	LANL	Los Alamos National Laboratory (LANL) record.	
SitSrc	Site source	LLNL	Lawrence Livermore National Laboratory (LLNL) record.	
SitSrc	Site source	lth_dsc	Lithologic-description (lth_dsc) record.	
SitSrc	Site source	NWIS	USGS NWIS record.	
SitSrc	Site source	RB	Redbook (RB) sites listed in the Raytheon Services Nevada (RSN) NTS Drilling and Mining Summary (last updated 12-31-90) and previously in the Fenix and Scission of Nevada NTS Drilling and Mining Summary (last updated 6-30-89; formerly Fenix and Scisson, Inc.). Both summaries were referred to as the Redbook.	
SitSrc	Site source	rck_pty	Rock-property (rck_pty) record.	
SitSrc	Site source	rck_smp	Rock-sample (rck_smp) record.	
SitSrc	Site source	TS	Thin section (TS) record.	
Status	Status	–	Status of site data.	
Status	Status	A	Unique LANL site.	
Status	Status	B	Included in BEIDMS Database, but not listed in printed Redbook.	
Status	Status	C	Nevada State Plane or Universal Transverse Mercator Coordinates available.	
Status	Status	G	General (approximate) coordinates available.	
Status	Status	H	Hole name conflict.	
Status	Status	I	Implied by sequence or other indication of hole.	
Status	Status	L	Unique LLNL site.	
Status	Status	M	Multiple completion intervals exist for hole or duplicate site.	
Status	Status	N	Site established in USGS NWIS database.	
Status	Status	R	Listed in printed Redbook, but not included in BEIDMS Database.	
Status	Status	S	Hole segment.	
Status	Status	U	Spatial (x-y-z) coordinates unavailable for hole.	
NTSAreaNmeSrt	NTS area name sort	–	Number assigned to initially sort this data set.	

**Table F1.** Description of Site-Characteristic Database field contents.—Continued

[Access field names longer than 8 characters indicated by **red** text because longer names may be incompatible with some database and Graphic Information System (GIS) applications. Blank field source indicates not applicable, not available online, or not accessible to the public. **Abbreviations:** DOD, U.S. Department of Defense; DOE, U.S. Department of Energy; NTS, Nevada Test Site; NWIS, National Water Information System; USGS, U.S. Geological Survey; ft, foot; –, not applicable]

Access field name	Excel field name	Field code	Field explanation	Field source
CmbHINmeStrt	Combination hole name sort	–	Combined hole name field; necessary because not all sites have a USGS hole name designation. Entries are listed in <b>bold type</b> where sites are located in areas other than the hole name implies.	
BINUGTA	UGTA BIN	–	Underground Test Area (UGTA) Project Borehole Index Number (BIN) listed in the Borehole Site Atlas in the Central Data Repository (CDR) currently maintained by Stoller-Navarro Joint Venture (SNJV).	
MHNLANL	LANL master hole name	–	Los Alamos National Laboratory (LANL) hole name.	
OHNLANL	LANL other hole name	–	Former or other LANL hole names.	
MHNLLNL	LLNL master hole name	–	Lawrence Livermore National Laboratory hole name.	
OHNLLNL	LLNL other hole name	–	Former or other LLNL hole names.	
RedBkAreaPg	Printed Redbook AREA/PAGE	–	Area and page listed in most recent available printed edition (12/31/1990) of the RSN NTS Drilling and Mining Summary.	
RedBkOrd	Printed Redbook order	–	Order site listed in RSN NTS Drilling and Mining Summary.	
RedBkHleNo	Printed Redbook [Raytheon Services Nevada Nevada Test Site Drilling & Mining Summary HOLE NUMBER (12/31/1990)]	–	The Redbook hole number (HOLE NUMBER) exactly as listed in the RSN NTS Drilling and Mining Summary.	
ClntStaIdBEIDMS	Redbook subset [Bechtel Nevada BEIDMS database CLIENT STATION ID (02/15/2006)]	–	The case-sensitive hole number (Bechtel's CLIENT_STATION_ID) exactly as stored in the Redbook subset of the Bechtel Environmental Integrated Data Management System (BEIDMS) Oracle database.	
SegNmeBEIDMS	BEIDMS SEGMENT NAME	–	The hole segment name (SEGMENT_NAME), as stored in the Redbook subset of Bechtel's BEIDMS database.	
StaIdBEIDMS	BEIDMS STATION ID	–	The upper-cased hole number (STATION_ID) as stored in the Redbook subset of Bechtel's BEIDMS database.	
SrtOrdBEIDMS	BEIDMS SORT ORDER	–	The sort order (SORT_ORDER) number stored in the Redbook subset of Bechtel's BEIDMS database. This number sorts the data in the same order as the printed RSN Redbook.	
StaSeqBEIDMS	BEIDMS STATION SEQ	–	The unique number (STATION_SEQ) stored in the Redbook subset of Bechtel's BEIDMS database.	
RecOwnBEIDMS	BEIDMS RECORD OWNER	–	The record owner (RECORD_OWNER) stored in the Redbook subset of Bechtel's BEIDMS database. REDBOOK designates sites from the Redbook subset of BEIDMS.	

92 Digitally Available Interval-Specific Rock-Sample Data Compiled from Historical Records, Nevada Test Site, Nevada

**Table F1.** Description of Site-Characteristic Database field contents.—Continued

[Access field names longer than 8 characters indicated by red text because longer names may be incompatible with some database and Graphic Information System (GIS) applications. Blank field source indicates not applicable, not available online, or not accessible to the public. **Abbreviations:** DOD, U.S. Department of Defense; DOE, U.S. Department of Energy; NTS, Nevada Test Site; NWIS, National Water Information System; USGS, U.S. Geological Survey; ft, foot; –, not applicable]

Access field name	Excel field name	Field code	Field explanation	Field source
NVLogNo	Nevada Log number	–	Well Driller's Report number assigned by the Nevada Division of Water Resources (State Engineer).	
NVPmtNo	Nevada Permit number	–	Water Use Permit number issued by the Nevada Division of Water Resources (State Engineer).	
HydArea	Hydrographic area	–	The first three characters represent the hydrographic area and the fourth character represents the hydrographic subarea. For example: [159 - Yucca Flat; 160 - Frenchman Flat; 227A - Fortymile Canyon, Jackass Flats; and 227B - Fortymile Canyon, Buckboard Mesa]. A complete list of codes is included in the dsc_hyd_areas table in the nts_usgs_dbs database (appendix F).	
LocalNo	Local number	–	Township, range, section, section quarters, and sequence number.	
TopoQuad	Topographic quadrangle	–	Name of topographic quadrangle.	
MapScl	Map scale	–	Scale of topographic quadrangle.	
MapScl	Map scale	24000	7.5-minute quadrangles [1:24,000].	
MapScl	Map scale	62500	15-minute quadrangles [1:62,500].	
MapScl	Map scale	100000	30- by 60-minute (or 1-degree) quadrangle [1:100,000].	
MapScl	Map scale	250000	1- by 2-degree {or AMS (U.S. Army Map Service)} quadrangles [1:250,000].	
HleTyp	Hole type	–	Type of vertical or horizontal drilling or excavation.	
HleTyp	Hole type	Borehole	Vertical surface location; includes wells and vertical test holes.	
HleTyp	Hole type	Crater	Vertical surface location.	
HleTyp	Hole type	Drift	Horizontal underground location; includes tunnels and horizontal test holes.	
HleTyp	Hole type	Multiple Wells	Multiple wells.	
HleTyp	Hole type	Outcrop	Surface location.	
HleTyp	Hole type	Shaft	Vertical surface location.	
HleTyp	Hole type	Spring	Spring.	
HleTyp	Hole type	Streambed	Streambed.	
HleTyp	Hole type	Surface	Surface location.	
HleTyp	Hole type	Trench	Horizontal surface location.	
HleTyp	Hole type	Unknown	Hole type not known.	
TnlDftConSta	Tunnel or drift construction station	–	Construction station at collar location (portal opening), for tunnels and drifts (i.e. - 9+17 is 917 feet; 10+72,195' is a 195 foot hole at the 1,072 feet station; etc.).	
ConStaRmk	Construction station remarks	–	Remarks concerning the portal opening (collar location), for tunnels and drifts (i.e. - In U-12e.14 main drift; Alcove; Face; Invert; Lft Rib; Rt Rib; etc.).	
NVSPE27	Nevada SPCS Easting NAD27	–	Nevada state plane coordinates (SPCS), Easting, central zone, in feet; North American Datum of 1927 (NAD27).	

**Table F1.** Description of Site-Characteristic Database field contents.—Continued

[Access field names longer than 8 characters indicated by red text because longer names may be incompatible with some database and Graphic Information System (GIS) applications. Blank field source indicates not applicable, not available online, or not accessible to the public. **Abbreviations:** DOD, U.S. Department of Defense; DOE, U.S. Department of Energy; NTS, Nevada Test Site; NWIS, National Water Information System; USGS, U.S. Geological Survey; ft, foot; –, not applicable]

Access field name	Excel field name	Field code	Field explanation	Field source
NVSPN27	Nevada SPCS Northing NAD27	–	Nevada state plane coordinates (SPCS), Northing, central zone, in feet; North American Datum of 1927 (NAD27).	
NVSPErr	SPCS error	–	SPCS error, in feet. Blank if unknown.	
AltPorOpn29ft	Altitude at portal opening NGVD29 (ft)	–	Altitude at the collar location of the portal opening, for tunnels and drifts; in feet above mean sea level; National Geodetic Vertical Datum of 1929 (NGVD29).	
BngPorOpnDeg	Bearing from portal opening (degrees)	–	Bearing from the portal opening, for tunnels and drifts; in degrees, minutes, and seconds or decimal degrees (i.e. - S0720958W is South, 72 degrees, 9 minutes, 58 seconds West; N0325529E is North, 32 degrees, 55 minutes, 29 seconds East; N052.75W is North 52 and three-quarter degrees West; etc.)	
IncPorOpnDeg	Inclination from portal opening (degrees)	–	Inclination from the portal opening, for tunnels and drifts; in degrees, minutes, and seconds or decimal degrees (i.e. - 0045825 is a hole 4 degrees, 58 minutes, 25 seconds above horizontal; 2700000 is a vertical hole below horizontal; 0900000 is a vertical hole above horizontal; 0000000 and 1800000 are horizontal holes; 0150000 and 1650000 are holes 15 degrees up (above horizontal); 3150000 and 2250000 are holes 45 degrees down (below horizontal); 356.5 is a hole 3 and one-half degrees below horizontal; 170.25 is 9 and three-quarter degrees above horizontal; etc.). Inclinations are linked to bearings, so values near horizontal for holes bearing north or east would be added to zero for holes inclined above horizontal and subtracted from 360 for holes below horizontal; conversely, values near horizontal for holes bearing south or west would be subtracted from 180 for holes inclined above horizontal and added to 180 for holes below horizontal.	
AltLndSur29ft	Altitude of land surface NGVD29 (ft)	–	Altitude of land surface within a reasonable proximity of the site; in feet above mean sea level; National Geodetic Vertical Datum of 1929 (NGVD29). This is an average of the surrounding ground-surface elevation. If the original surface has been altered, estimate the altitude based on nearby unaltered terrain.	
AltMth	Altitude method	–	Method used to determine altitude of land surface.	
AltMth	Altitude method	A	Altimeter.	
AltMth	Altitude method	D	Differentially-corrected Global Positioning System (DGPS).	
AltMth	Altitude method	G	Global Positioning System (GPS).	
AltMth	Altitude method	I	Interferometric Synthetic Aperture Radar (IfSAR), airplane.	
AltMth	Altitude method	J	Light Detection And Ranging (LiDAR), airplane.	
AltMth	Altitude method	L	Level or other surveying method.	
AltMth	Altitude method	M	Interpolated from topographic map [report accuracy as +/- one-half the contour interval (or supplementary contour interval) specified on the quadrangle].	
AltMth	Altitude method	N	Interpolated from digital elevation model (DEM).	
AltMth	Altitude method	R	Reported.	

**Table F1.** Description of Site-Characteristic Database field contents.—Continued

[Access field names longer than 8 characters indicated by **red** text because longer names may be incompatible with some database and Graphic Information System (GIS) applications. Blank field source indicates not applicable, not available online, or not accessible to the public. **Abbreviations:** DOD, U.S. Department of Defense; DOE, U.S. Department of Energy; NTS, Nevada Test Site; NWIS, National Water Information System; USGS, U.S. Geological Survey; ft, foot; –, not applicable]

Access field name	Excel field name	Field code	Field explanation	Field source
AltMth	Altitude method	U	Unknown.	
AltAcc	Altitude accuracy	–	Altitude accuracy; in feet (decimal values for accuracies less than 1 foot).	
AltAcc	Altitude accuracy	U	Unknown.	
SitCmpDt	Site completion date	–	Date hole construction completed.	
HleDthft	Hole depth (ft)	–	Hole depth; in feet below land surface for boreholes and shafts; in feet from portal opening for tunnels and drifts.	
AgyCdUSGSNWIS	NWIS agency code	USGS	USGS NWIS code to indicate the reporting agency. Most sites currently populated in the site-characteristic database are assigned as USGS. A complete list of codes is included in the dsc_agency_codes_all_st table (appendix F).	
SitIDNoUSGSNWIS	NWIS site identification number	–	USGS NWIS site identification number.	
SitIDNoUSGSNWIS	NWIS site identification number	–	Downstream order numbers are assigned for surface-water, on-stream, sites. The first two digits of the station number indicate the part or major drainage system formerly used for USGS Water-Supply Papers entitled "Surface Water Supply of the United States" and the remaining digits indicate the downstream order within the part. This site number is left-justified. Although downstream identification numbers have been converted to a variable length format, with up to 14 digits available, 8 digits are normally assigned.	
SitIDNoUSGSNWIS	NWIS site identification number	–	Numbering system for sites on open water bodies, off-channel sites, wells, springs, etc., is based on the grid system of latitude and longitude. Although this number is initially determined from the best known latitude/longitude location, plus a 2-digit sequence number for the number of sites located at those coordinates, it retains no locational relevance once the site is created in the database. The overall designation consists of 15 digits. The values of latitude and longitude are updated as better coordinates become available, and should always be used for locating sites or plotting locations.	
CreateDtUSGSNWIS	Date site created in USGS NWIS Sitefile	–	Date site established in the shared Sitefile of the USGS NWIS database; as yyyyymmddhhmmss (4-digit year; 2-digit month; 2-digit day; 2-digit hour; 2-digit minute; 2-digit second).	
Lat27	Latitude NAD27	–	Latitude; in degrees, minutes, and seconds [two digits are available for decimal seconds]; North American Datum of 1927 (NAD27).	
Lng27	Longitude NAD27	–	Longitude; in degrees, minutes, and seconds [two digits are available for decimal seconds]; North American Datum of 1927 (NAD27).	
LocMth	Location method	–	Method used to determine latitude and longitude coordinates.	
LocMth	Location method	C	Calculated from land net.	
LocMth	Location method	D	Differentially-corrected Global Positioning System (DGPS).	

**Table F1.** Description of Site-Characteristic Database field contents.—Continued

[Access field names longer than 8 characters indicated by **red** text because longer names may be incompatible with some database and Graphic Information System (GIS) applications. Blank field source indicates not applicable, not available online, or not accessible to the public. **Abbreviations:** DOD, U.S. Department of Defense; DOE, U.S. Department of Energy; NTS, Nevada Test Site; NWIS, National Water Information System; USGS, U.S. Geological Survey; ft, foot; –, not applicable]

Access field name	Excel field name	Field code	Field explanation	Field source
LocMth	Location method	G	Global positioning system (GPS), uncorrected [Standard Positioning Service (SPS) and Precise Positioning Service (PPS)].	
LocMth	Location method	L	Long-range navigation (Loran) system.	
LocMth	Location method	M	Interpolated from map.	
LocMth	Location method	N	Interpolated from digital map.	
LocMth	Location method	R	Reported.	
LocMth	Location method	S	Transit, theodolite, or other surveying method.	
LocMth	Location method	U	Unknown.	
LocAcc	Location accuracy	–	Accuracy of latitude and longitude coordinates.	
LocAcc	Location accuracy	H	Hundredth second.	
LocAcc	Location accuracy	1	Tenth second.	
LocAcc	Location accuracy	5	Half second.	
LocAcc	Location accuracy	S	Second.	
LocAcc	Location accuracy	R	Three seconds.	
LocAcc	Location accuracy	F	Five seconds.	
LocAcc	Location accuracy	T	Ten seconds.	
LocAcc	Location accuracy	M	Minute.	
LocAcc	Location accuracy	U	Unknown.	
DecLat83	Decimal latitude NAD83	–	Latitude, in decimal degrees [automatically generated by the NWIS system software]; North American Datum of 1983 (NAD83).	
DecLng83	Decimal longitude NAD83	–	Longitude, in decimal degrees [automatically generated by NWIS system software]; North American Datum of 1983 (NAD83).	
UTME27m	UTM Easting NAD27 (meters)	–	Universal Transverse Mercator coordinates, Easting, zone 11, in meters; North American Datum of 1927 (NAD27).	
UTMN27m	UTM Northing NAD27 (meters)	–	Universal Transverse Mercator coordinates, Northing, zone 11, in meters; North American Datum of 1927 (NAD27).	
UTMErr	UTM error	–	UTM error, in meters. Blank if unknown.	
Rmk	Remarks	–	Pertinent remarks pertaining to the site characteristics.	
DtRcdLstUpd	Date record last updated	–	Date of data entry (compiled into electronic format) is listed if a row of record has not been modified. The date of last (most recent) update is listed if a row of record has been modified. This date does not indicate which columns of data have been modified; only that records have been updated within a particular row. Dates are listed as yyyyymmdd (4-digit year; 2-digit month; 2-digit day).	
URLAdr	URL address	–	Link to online website and database.	

This page left intentionally blank