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U.S. DEPARTMENT OF ENERGY

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YUCCA MOUNTAIN

YUCCA MOUNTAIN
SITE CHARACTERIZATION
PROJECT

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT

TECHNICAL DATA CATALOG
(QUARTERLY SUPPLEMENT)

102.8

MARCH 31, 1994

9407216128 300pp

UNITED STATES DEPARTMENT OF ENERGY

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INTRODUCTION

The March 21, 1993, Department of Energy (DOE)/Nuclear Regulatory Commission (NRC) Site-Specific Procedural Agreement for Geologic Repository Site Investigation and Characterization Program requires the DOE to develop and maintain a catalog of data which will be updated and provided to the NRC at least quarterly. This catalog is to include a description of the data; the time (date), place, and method of acquisition; and where it may be examined. The Yucca Mountain Site Characterization Project (YMP) Technical Data Catalog is published and distributed in accordance with the requirements of the Site-Specific Agreement.

The YMP Technical Data Catalog is a report based on reference information contained in the YMP Automated Technical Data Tracking System (ATDT). The reference information is provided by Participants for data acquired or developed in support of the YMP. The Technical Data Catalog is updated quarterly and published in the month following the end of each quarter. A complete revision to the Catalog is published at the end of each fiscal year. Supplements to the end-of-year edition are published each quarter. These supplements provide information related to new data items not included in previous quarterly updates and data items affected by changes to previously published reference information. The Technical Data Catalog, dated September 30, 1993, should be retained as the baseline document for the supplements until the end-of-year revision is published and distributed in October 1994.

Requests for technical data referenced in the Data Catalog must be submitted in writing to the YMP Project Manager, Robert M. Nelson, Jr., at the following address:

U.S. Department of Energy
Yucca Mountain Site Characterization
Project Office
P.O. Box 98608
Las Vegas, NV 89193-8608

Requests should reference the Data Tracking Number (DTN) used to identify each data item included in the Data Catalog and should include the following information: the requester's name, organization, address, and telephone number; the scope of the data requested; a description of the intended use of the data; and any special format preferences. In response to specific requests, the YMP will provide the solicited technical data or information regarding where the data may be examined.

The information contained in the Technical Data Catalog is organized by the governing plan under which the referenced technical data were acquired or developed. The applicable governing plans are identified in the Table of Contents. Site Characterization Program Baseline (SCPB) data items referenced in the Catalog are further grouped by SCPB Activity Number.

The Technical Data Catalog format includes the following information for each referenced data item:

(1) Data Tracking Number - Unique identifier for the referenced data item.

(2) Data Title/Description - A brief description of the referenced data item.

(3) Acquisition/Development Period - The date or range of dates during which the referenced data item was acquired or developed.

(4) Acquisition/Development Location - The field or laboratory location where the referenced data item was acquired or developed.

(NOTE: Locations are identified by unique names/identifiers or coordinates. Locations identified by coordinates may be expressed in geographic, Nevada state plane, or Universal Transverse Mercator (UTM). Nevada state plane coordinates are indicated by an "(N)" at the end of each coordinate; UTM coordinates are indicated by a "(U)".)

(5) Acquisition/Development Method - A brief description of the method used and/or the procedure followed to acquire or develop the referenced data item.

(6) Data Type - An "A" for acquired data or a "D" for developed data.

(7) Qualified - A "Y" for Yes or an "N" for No indicating whether or not the referenced data item was acquired or developed in accordance with an NRC accepted quality assurance program or qualified in accordance with appropriate YMP procedures.

(NOTE: Developed data items derived from other data sources are not classified as "Qualified" unless the data sources are also qualified.)

(8) Data Location - A "P" indicates that the data reside in, and may be examined only at, a Participant Data Archive. A "T" indicates that the data are in the Technical Data Base (TDB) and may be examined there or at the Central Records Facility (CRF). A "C" indicates that the data are in, and may be examined at, the CRF.

New data items, which were not included in a previous quarterly edition of the Technical Data Catalog, are identified by an asterisk (*) preceding the DTN. Changes to reference information published in a previous edition of the Catalog are identified by a double asterisk (**) preceding the DTN for each affected data item.

Appendix A of this document lists the activity numbers and titles of all SCPB related data items referenced in the Catalog. Appendix B is a data catalog for the Geologic and Engineering Materials Bibliography of Chemical Species (GEMBOCHS) component of the TDB. Appendix C identifies additions or modifications that were incorporated into the GEMBOCHS data base during the current quarter. Appendix D identifies additions or modifications that were incorporated into the Geographic Nodal Information Study and Evaluation System (GENISES) data base during the current quarter.

ENVIRONMENTAL MONITORING AND MITIGATION PLAN

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**GS930500121347.002	PRELIMINARY DATA ON WATER QUALITY COLLECTED AS PART OF THE WATER-RESOURCES MONITORING PROGRAM FOR THE PERIOD AUGUST '90 THROUGH AUGUST '92, PART 2: DATA COLLECTED UNDER APPROVED TECHNICAL PROCEDURES.	07/12/91-04/14/93	FIELD DATA COLLECTED ACCORDING TO METHODS DESCRIBED IN HP-225T,R0, COLLECTION, TREATMENT AND FIELD ANALYSIS OF WATER SAMPLES; HP-225,R0, METHOD USED TO COLLECT, ANALYZE, PRESERVE AND PROCESS SURFACE AND GROUND WATER SAMPLES, AND HP-225,R1, METHODS USED TO COLLECT AND ANALYZE GROUND WATER AND SURFACE WATER SAMPLES. FURTHER ANALYSIS BY USGS NAT'L WATER QUALITY LAB. (APPROVED VENDOR).	A	Y	C

ACQN/DEVL LOCATION : 36 35'30"N 116 02'14"W
36 29'29"N 116 08'57"W
36 22'29"N 116 16'25"W
36 25'32"N 116 17'27"W
36 27'55"N 116 19'04"W
36 25'13"N 116 19'27"W
36 29'26"N 116 20'28"W
36 25'55"N 116 20'53"W
36 45'28"N 116 23'22"W
36 45'54"N 116 23'24"W
36 38'35"N 116 23'40"W
36 48'28"N 116 23'40"W
36 34'28"N 116 23'47"W
36 38'25"N 116 24'33"W
36 28'48"N 116 26'46"W
36 48'21"N 116 34'37"W
36 55'20"N 116 37'03"W
36 22'52"N 116 42'53"W
36 27'28"N 116 50'11"W
USGS, NWQL, DENVER

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIF	QUALIFIED	LOCATION
**GS930500121347.003	PRELIMINARY DATA ON WATER QUALITY COLLECTED AS PART OF THE WATER-RESOURCES MONITORING PROGRAM FOR THE PERIOD AUGUST '90 THROUGH AUGUST '92, PART 1. ACQN/DEVL LOCATION : 36 35'30"N 116 02'14"W 36 29'29"N 116 08'57"W 36 22'29"N 116 16'25"W 36 25'32"N 116 17'27"W 36 27'55"N 116 19'04"W 36 25'13"N 116 19'27"W 36 29'26"N 116 20'28"W 36 25'55"N 116 20'53"W 36 45'28"N 116 23'22"W 36 45'54"N 116 23'24"W 36 38'35"N 116 23'40"W 36 48'28"N 116 23'40"W 36 34'28"N 116 23'47"W 36 38'25"N 116 24'33"W 36 28'48"N 116 26'46"W 36 48'21"N 116 34'37"W 36 55'20"N 116 37'03"W 36 22'52"N 116 42'53"W 36 27'28"N 116 50'11"W USGS NWQL, DENVER	08/25/90-07/11/91	FIELD DATA COLLECTED ACCORDING TO METHODS DESCRIBED IN HP-225T,R0, COLLECTION, TREATMENT AND FIELD ANALYSIS OF WATER SAMPLES. FURTHER ANALYSIS BY USGS NAT'L WATER QUALITY LAB.	A	N	C
*GS930500121347.004	QUARTERLY DATA REPORT ON PRELIMINARY DATA OF GROUND-WATER LEVELS AND SPRING FLOWS FROM JANUARY TO MARCH 1993. DATA COLLECTED IN COOPERATION WITH U.S. DEPT. OF ENERGY AND USGS WATER-RESOURCES MONITORING PROGRAM ACQN/DEVL LOCATION : 36 35'30"N 116 02'14"W 36 29'29"N 116 08'57"W	01/01/93-04/23/93	FIELD DATA COLLECTED ACCORDING TO HP-26, R1, METHOD FOR CALIBRATING WATER-LEVEL MEASUREMENT EQUIPMENT USING THE REFERENCE STEEL TAPES; HP-54,R1, WATER-FLOW MEASUREMENTS USING 90 V-NOTCH WEIRS, FLUMES AND BARRELS; HP-61,R0, USE OF HAND-HELD STEEL TAPES (IN VERTICAL BOREHOLES); HP-99,R1, INSTRUCTION FOR OPERATION OF A WELL SOUNDER FOR MEASURING WATER LEVELS; AND HP-166,R1, STREAM DISCHARGE MEASUREMENTS USING A PYGMY CURRENT METER.	A	Y	P

ENVIRONMENTAL MONITORING AND MITIGATION PLAN

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	36 32'13"N 116 13'38"W					
	36 20'14"N 116 13'39"W					
	36 22'29"N 116 16'25"W					
	36 24'11"N 116 16'33"W					
	36 24'32"N 116 16'57"W					
	36 47'06"N 116 17'06"W					
	36 25'29"N 116 17'11"W					
	36 25'32"N 116 17'27"W					
	36 38'15"N 116 17'59"W					
	36 19'54"N 116 18'12"W					
	36 27'55"N 116 19'04"W					
	36 25'13"N 116 19'27"W					
	36 28'58"N 116 19'53"W					
	36 29'26"N 116 20'28"W					
	36 25'55"N 116 20'53"W					
	36 45'28"N 116 23'22"W					
	36 45'54"N 116 23'24"W					
	36 51'16"N 116 23'38"W					
	36 38'35"N 116 23'40"W					
	36 48'28"N 116 23'40"W					
	36 34'28"N 116 23'47"W					
	36 49'43"N 116 23'51"W					
	36 34'28"N 116 24'03"W					
	36 38'25"N 116 24'33"W					
	36 18'17"N 116 24'47"W					
	36 49'38"N 116 25'21"W					
	36 28'48"N 116 26'46"W					
	36 25'25"N 116 27'43"W					
	36 33'10"N 116 29'40"W					
	36 30'09"N 116 30'27"W					
	36 17'24"N 116 32'42"W					
	36 47'32"N 116 33'07"W					
	36 34'56"N 116 35'25"W					
	36 55'20"N 116 37'03"W					
	36 54'45"N 116 38'39"W					
	36 22'30"N 116 39'29"W					
	36 41'30"N 116 41'12"W					
	36 22'52"N 116 42'53"W					
	36 27'28"N 116 50'11"W					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	DIF TYPE	QUALIFIED	LOCATION
*GS931100121347.007	SELECTED GROUND-WATER DATA FOR YUCCA MOUNTAIN REGION, SOUTHERN NEVADA AND EASTERN CALIFORNIA, THROUGH DECEMBER 1992, BY R.J. LACAMERA AND C.L. WESTENBURG. ACQN/DEVL LOCATION : USGS-WRD, LAS VEGAS, NV	06/01/93-09/30/93	DATA WAS CHECKED FOR ACCURACY AND REASONABLENESS AND DEVELOPED ACCORDING TO STANDARD USGS PROCEDURE.	D	N	P

METEOROLOGICAL MONITORING PLAN

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*TM000000000001.037	METEOROLOGICAL MONITORING PROGRAM SUMMARY REPORT, DECEMBER 1985 THROUGH DECEMBER 1991 ACQN/DEVL LOCATION : YUCCA MOUNTAIN SITE AREA	12/01/85-12/31/91	REFORMATTING OF DATA ACQUIRED FROM DATALOGGERS	D	Y	T
*TM000000000001.040	PARTICULATE MATTER AMBIENT AIR QUALITY DATA REPORT FOR 1991 ACQN/DEVL LOCATION : YUCCA MOUNTAIN SITE AREA	01/01/91-12/31/91	COMPILATION OF DATA FROM PARTICULATE DATA FORMS	D	Y	P
*TM000000000001.041	PARTICULATE AIR QUALITY DATA FORMS, JANUARY THRU JUNE 1991, ACCESSION NO. NNA.930809.0006 "ORIGINAL SOURCE DATA" ACQN/DEVL LOCATION : YUCCA MOUNTAIN SITE AREA	01/01/91-06/30/91	ENTRY OF PARTICULATE DATA ON TO FILTER WEIGHT LOGBOOKS AND PARTICULATE SAMPLER DATA RECORDS	A	Y	P
*TM000000000001.042	PARTICULATE AIR QUALITY FORMS, JULY THRU SEPTEMBER 1991, ACCESSION NO. NNA.920131.0152 "ORIGINAL SOURCE DATA" ACQN/DEVL LOCATION : YUCCA MOUNTAIN SITE AREA	07/01/91-09/30/91	ENTRY OF PARTICULATE DATA ON TO FILTER WEIGHT LOGBOOKS AND PARTICULATE SAMPLER DATA RECORDS	A	Y	P
*TM000000000001.043	PARTICULATE AIR QUALITY FORMS, OCTOBER THRU DECEMBER 1991, ACCESSION NO. NNA.920331.0035 "ORIGINAL SOURCE DATA" ACQN/DEVL LOCATION : YUCCA MOUNTAIN SITE AREA	10/01/91-12/31/91	ENTRY OF PARTICULATE DATA ON TO FILTER WEIGHT LOGBOOKS AND PARTICULATE SAMPLER DATA RECORDS	A	Y	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*TM000000000001.048	METEOROLOGICAL MONITORING PROGRAM SUMMARY REPORT, JANUARY 1992 THROUGH DECEMBER 1992 ACQN/DEVL LOCATION : YUCCA MOUNTAIN SITE AREA	01/01/92-12/31/92	DATA ACQUIRED FROM ON-SITE DATALOGGERS	D	Y	C
*TM000000000001.049	ORIGINAL SOURCE DATA FOR: ATMOSPHERIC PRESSURE; PRECIPITATION QUANTITY; RELATIVE HUMIDITY; TEMPERATURE; WIND DIRECTION; AND WIND SPEED ACQN/DEVL LOCATION : YUCCA MOUNTAIN SITE AREA	01/01/92-12/31/92	DATA ACQUIRED FROM ON-SITE DATALOGGERS	A	Y	C
*TM000000000001.050	ORIGINAL SOURCE DATA FOR: ATMOSPHERIC PRESSURE; PRECIPITATION QUANTITY; RELATIVE HUMIDITY; TEMPERATURE; WIND DIRECTION; AND WIND SPEED ACQN/DEVL LOCATION : YUCCA MOUNTAIN SITE AREA	01/01/93-06/30/93	DATA ACQUIRED FROM ON-SITE DATALOGGERS	A	Y	P
*TM000000000001.051	ORIGINAL SOURCE DATA FOR: ATMOSPHERIC PRESSURE; PRECIPITATION QUANTITY; RELATIVE HUMIDITY; TEMPERATURE; WIND DIRECTION; AND WIND SPEED ACQN/DEVL LOCATION : YUCCA MOUNTAIN SITE AREA	07/01/93-09/30/93	DATA ACQUIRED FROM ON-SITE DATALOGGERS	A	Y	P
*TM000000000001.052	ORIGINAL SOURCE DATA FOR: ATMOSPHERIC PRESSURE; PRECIPITATION QUANTITY; RELATIVE HUMIDITY; TEMPERATURE; WIND DIRECTION; AND WIND SPEED ACQN/DEVL LOCATION : YUCCA MOUNTAIN SITE AREA	10/01/93-12/31/93	DATA ACQUIRED FROM ON-SITE DATALOGGERS	A	Y	P

METEOROLOGICAL MONITORING PLAN

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*TM000000000001.053	AMBIENT AIR MONITORING REPORT, OCTOBER - DECEMBER 1993 ACQN/DEVL LOCATION : YUCCA MOUNTAIN SITE AREA	10/01/93-12/31/93	REFORMATTING OF DATA FROM ON-SITE DATALOGGERS	D	Y	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940100012544.001	PHYSICAL PROPERTIES LABORATORY DATA OF CORE SAMPLES FROM OUTCROP ROCKS OF CALICO HILLS AND TOPOPAH SPRING GEOLOGIC FORMATIONS. INCLUDES BULK DENSITY, POROSITY, IMBIBITION, GRAIN DENSITY, AND PERMEABILITY. ACQN/DEVL LOCATION : USGS HRF, NTS, NV	03/10/92-10/28/92	USGS TECHNICAL PROCEDURE HP-229,R0, DETERMINATION OF WATER CONTENT AND PHYSICAL PROPERTIES FOR LABORATORY ROCK SAMPLES, WAS USED TO COLLECT THE DATA. IMBIBITION TABLE AND AIR AND WATER PERMEAMETER WERE USED TO COLLECT IMBIBITION AND PERMEABILITY DATA, RESPECTIVELY.	A	N	P
*GS940100012544.002	WATER RETENTION DATA FROM SAMPLES USED FOR HIGH TEMPERATURE STUDY. ACQN/DEVL LOCATION : USGS HRF, NTS, NV	04/06/93-05/30/93	WATER RETENTION CURVES WERE DETERMINED FOR SUBSAMPLES OF THE CALICO HILLS AND TOPOPAH SPRING SAMPLES THAT WERE PREVIOUSLY HEATED TO 60, 105, 200, 300 AND 400 DEGREES C. USGS TECHNICAL PROCEDURE HP-255 (THIS PROCEDURE WAS UNDER PREPARATION), DETERMINATION OF WATER POTENTIAL USING THE DECAGON CX-2 WATER ACTIVITY SYSTEM, WAS USED TO COLLECT THE DATA FOR WATER POTENTIAL.	A	N	P
*GS940100012544.003	HYDROLOGIC PROPERTY ALTERATIONS DUE TO ELEVATED TEMPERATURES AT YUCCA MOUNTAIN, BY A.L. FLINT, M.H. NASH AND M.S. NASH. ACQN/DEVL LOCATION : USGS HRF, NTS, NV	03/10/92-02/01/94	REPORTED RESULTS OF TESTS INDICATING THAT HYDROLOGIC AND PHYSICAL PROPERTIES OF THE VOLCANIC TUFF CHANGED WITH INCREASING TEMPERATURE. THIS PRELIMINARY STUDY SUGGESTS THAT ALTERED ROCK PROPERTIES NEED TO BE CONSIDERED WHEN DEVELOPING POST-CLOSURE PERFORMANCE ASSESSMENT MODELS.	D	N	P

PERFORMANCE ASSESSMENT MANAGEMENT PLAN

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940200012544.004	VERIFICATION OF A 1-DIMENSIONAL MODEL FOR PREDICTING SHALLOW INFILTRATION AT YUCCA MOUNTAIN, BY J.A. HEVESI, A.L. FLINT AND L.E. FLINT	01/01/90-12/31/93	VOLUMETRIC WATER CONTENT PROFILES WERE USED TO DEVELOP, CALIBRATE, AND VERIFY A NUMERICAL MODEL OF SHALLOW INFILTRATION IN ALLUVIUM MATERIAL, USING MEASURED PRECIPITATION AND ESTIMATED POTENTIAL EVAPOTRANSPORATION AS CLIMATIC INPUT	D	N	P

ACQN/DEVL LOCATION : USGS HYDROLOGIC RESEARCH FACILITY, NTS, NV

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIF	QUALIFIED	LOCATION
*TM000000001993.010	EPERM DATA FOR OCTOBER 1993	10/05/93-11/03/93	ACQUIRED PER WI-RM-770, REV. 4, ICN 0.	A		Y	C
	ACQN/DEVL LOCATION : NEAR FIELD SITES AND FF83.						
*TM000000001993.011	EPERM DATA FOR NOVEMBER 1993	11/03/93-12/03/93	ACQUIRED PER WI-RM-770, REV. 4, ICN 0.	A		Y	C
	ACQN/DEVL LOCATION : NEAR FIELD SITES AND FF83.						
*TM000000001993.012	EPERM DATA FOR DECEMBER 1993	12/03/93-01/05/94	ACQUIRED PER WI-RM-770, REV. 4, ICN 0.	A		Y	C
	ACQN/DEVL LOCATION : NEAR FIELD SITES AND FF83.						

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.2.1.1.1						
*GS940108312111.001	PRECIPITATION QUANTITY (DEPTH) IN INCHES, FOR STORM EVENTS BETWEEN 10/1/92 AND 9/30/93. AN EFFORT WAS MADE TO RECORD MEASUREMENTS AFTER EACH STORM EVENT AT YUCCA MOUNTAIN. HOWEVER, SOME EVENTS OVER A SEVERAL DAY PERIOD WERE CONSOLIDATED INTO ONE MEASUREMENT AT EACH GAGE SO AFFECTED.	10/08/92-09/30/93	PRECIPITATION MEASUREMENTS WERE MADE FROM A NETWORK OF COLLECTION TYPE, NON-RECORDING RAIN GAGES. THEY ARE NON-AUTOMATED. READINGS WERE TAKEN FROM A SCALE IMPRINTED ON THE PLASTIC GAGE OR FROM A DIP STICK MARKED WITH A SCALE. GAGES WERE A MIXTURE OF THREE TYPES; PLASTIC WEDGE-SHAPED GAGE WITH A SQUARE ORIFICE, 4-INCH DIAMETER PLASTIC CANISTER GAGE, AND 8-INCH DIAMETER METAL STORAGE GAGE. HP-43,R2, INSTALLATION, OPERATION, AND EXAMINATION OF TWO TYPES OF NON-RECORDING RAIN GAGES, HP-264,R0', FIELD MEASUREMENT OF PRECIPITATION USING NON-RECORDING RAIN GAGES.	A	Y	P
	ACQN/DEVL LOCATION : N730000(N) E550000(N) ;N770000(N) E610000(N)					
*GS940108312111.002	PRECIPITATION DATA. THE DATA IS ARCHIVED AS TIPS OF THE BUCKETS OF A GIVEN VOLUME WITHIN EACH OF SEVEN TIPPING-BUCKET PRECIPITATION GAGES. EACH TIP IS TIME-STAMPED.	10/01/92-09/30/93	DATA WERE GENERATED BY THE TIPPING OF BUCKETS WITH TIPPING-BUCKET TYPE PRECIPITATION GAGES AT SEVEN REMOTE LOCATIONS ON AND NEAR YUCCA MOUNTAIN. EACH TIP IS RECORDED BY A DATALOGGER WHICH TIME-STAMPS IT. THE DATA ARE EVENT-DRIVEN AND ARE STØRED IN DATALOGGER MEMORY AND ON AUDIO CASSETTE TAPE. THE DATA ARE DOWNLOADED INTO A COMPUTER DATABASE AND STORED ON REMOVABLE CARTRIDGE DISKS.	A	N	P
	ACQN/DEVL LOCATION : N782850(N) E554986(N) N757500(N) E555739(N) N751136(N) E560265(N) N768606(N) E566119(N) N759011(N) E567934(N) N754015(N) E573575(N) N742400(N) E576300(N)					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940108312111.003	METEOROLOGICAL DATA. CONSISTS OF WIND SPEED, WIND DIRECTION, AIR TEMPERATURE, RELATIVE HUMIDITY, SOLAR RADIATION FLUX, BAROMETRIC PRESSURE, AND PRECIPITATION. ALL PARAMETERS ARE TAKEN AT FIVE SITES EXCEPT BAROMETRIC PRESSURE WHICH IS TAKEN AT ONLY ONE SITE. PRECIPITATION DATA ARE RECORDED BY EVENT. ACQN/DEVL LOCATION : N782850(N) E554986(N) N757500(N) E555739(N) N771482(N) E560148(N) N759011(N) E567934(N) N743968(N) E610564(N)	10/01/92-09/30/93	HP-95,R0, MEASUREMENT OF WIND DIRECTION USING MET-1 MODEL 024A SENSOR; HP-96,R1, MEASUREMENT OF WIND SPEED USING MET-1 MODEL 014A SENSOR; HP-97,R1, MEASUREMENT OF TEMP & RH USING CAMPBELL 207 PROBE; HP-179,R2, FIELD MEASUREMENT OF PRECIPITATION USING TIPPING BUCKET GAGE; HP-168,R0, MEASUREMENT OF ENERGY FLUX DENSITY BY PYRANOMETER; HP-177,R1&2, OPERATION OF (SETRA 270) BAROMETRIC PRESSURE TRANSDUCER. DATA WERE GENERATED BY SENSORS MOUNTED ON AUTOMATED DATA COLLECTION PLATFORMS AT REMOTE SITES ON AND NEAR YUCCA MTN., RECORDED BY DATA LOGGERS, DOWNLOADED TO A DATABASE VIA RADIO TELEMETRY, AND ARCHIVED ON REMOVABLE DISK CARTRIDGES. RAW DATA ALSO STORED ON AUDIO CASSETTE TAPES. SENSORS ARE PULSED EVERY 10 SECONDS. TEN-SECOND DATA ARE AVERAGED OVER 15 MINUTES AND STORED IN DATALOGGER MEMORY. DAILY FILES OF 15-MIN. DATA ARE ARCHIVED IN ASCII FORMAT.	A	Y	C
*GS940208312111.004	A PRELIMINARY CHARACTERIZATION OF THE SPATIAL VARIABILITY OF PRECIPITATION AT YUCCA MOUNTAIN, NEVADA, BY J.A. HEVESI, D.S. AMBOS AND A.L. FLINT ACQN/DEVL LOCATION : USGS HYDROLOGIC RESEARCH FACILITY, NTS, NV	01/01/90-10/31/93	MEASURED ACCUMULATIONS OF PRECIPITATION AT YUCCA MT., OBTAINED USING THE NON-RECORDING GAGE NETWORK, WERE USED FOR A GEOSTATISTICAL ANALYSIS OF STORM EVENTS.	D	N	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.2.1.2.1						
**GS920708312121.001	SURFACE-WATER DISCHARGE DATA, INCLUDING COPIES OF RECORDER CHARTS AND DISCHARGE MEASUREMENTS NOTES, COLLECTED DURING WATER YEARS 1983-85 FOR YUCCA MOUNTAIN AND VICINITY, NYE COUNTY, NEVADA. ACQN/DEVL LOCATION : 36 00'N 117 00'W ;37 30'N 115 30'W	10/01/82-09/30/85	DATA WERE COLLECTED USING METHOD DESCRIBED IN USGS-TWRTI'S BOOK 3, CH. A1, A2, A3, A8, A13 AND A19; BOOK 4, CH. B1; BOOK 5, CH. A1; BOOK 8, CH. A2 AND B2; AND USGS WSP-2175.	A	N	P
*GS930408312121.002	STREAMFLOW AND SELECTED PRECIPITATION DATA FOR YUCCA MOUNTAIN AND VICINITY, NYE COUNTY, NEVADA, WATER YEARS 1983-85, BY M.E. PABST, D.A. BECK, P.A. GLANCY AND J.A. JOHNSON. ACQN/DEVL LOCATION : USGS, CARSON CITY, NV USGS, LAS VEGAS, NV	09/01/91-04/09/93	SOURCE DATA WERE COMPILED INTO AN OPEN-FILE REPORT USING GENERAL USGS REPORT GUIDELINES.	D	N	P
*GS930908312121.003	SURFACE-WATER DISCHARGE DATA, INCLUDING COPIES OF RECORDER CHARTS, DISCHARGE MEASUREMENT NOTES AND PRECIPITATION DATA, COLLECTED DURING WATER YEARS 1986-1990 FOR YUCCA MOUNTAIN AND VICINITY, NYE COUNTY, NEVADA: PART A, ENDING 5/2/89	10/01/85-05/02/89	METHODS DESC. IN USGS TWRI'S: BK.3: CH.A1, A2,A3&A8; BK 5: CH.A1; BK 8: CH.A2&B2; & USGS-WSP 2175. ALSO HP-40,R1, DETERM. PEAK DISCHARGE BY SLOPE-CONVEYANCE; HP-43,R1, INSTAL., OPER.& INSPECT. 2 TYPES NON-RECORDING RAIN GAGES; HP-44,R1, INSTAL., OPER.& INSPECT. CREST-STAGE STRMFLOW GAGES, HP-45,R1, INSTAL., OPER.& EXAM. RECORDING STRMFLOW GAGE USING BUBBLE-GAGE STACOM MANOMETER; HP-91,R0&R1, COLLECT.& FIELD ANALY. SURF. WATER SAMPLES, HP-100,R0, STREAM DISCHARGE MEAS. USING TYPE-AA PRICE CURRENT METER; HP-114, R0 EST. STRMFLOW DISCHARGE; HP-115,R0&R1, DETER. PEAK STRMFLOW DISCHARGE USING CULVERTS; HP-116,R0, INSTAL., OPER,& EXAM. REC.-STRMFLOW GAGE THAT USES STILLING WELL SYSTEM/ CONT. GRAPHIC RECORDER; HP-117,R0, INSTAL., INSPECT.& MAINT. SCOUR CHAINS AT STRMFLOW GAGING SITES; HP-166,R0, STRM. DISCHARGE MEAS USING PYGMY CURRENT METER; HP-169,R0, DETER. PEAK STRM. DISCHARGE BY	A	N	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
			SLOPE-AREA.			
	ACQN/DEVL LOCATION : 36 34'00"N 115 48'40"W 36 26'09"N 116 04'28"W 36 48'27"N 116 05'41"W 36 33'40"N 116 06'00"W 36 37'35"N 116 08'31"W 36 41'08"N 116 08'52"W 37 09'51"N 116 12'11"W 35 50'55"N 116 13'45"W 36 44'17"N 116 13'58"W 37 10'57"N 116 15'59"W 36 46'06"N 116 19'23"W 36 11'48"N 116 22'06"W 36 53'13"N 116 22'50"W 36 51'58"N 116 23'38"W 36 49'13"N 116 23'52"W 36 48'27"N 116 24'01"W 36 47'35"N 116 24'29"W 36 51'06"N 116 25'44"W 36 40'18"N 116 26'03"W 36 51'16"N 116 27'07"W 36 56'37"N 116 43'09"W 36 52'06"N 116 45'34"W					
*GS930908312121.004	SURFACE-WATER DISCHARGE DATA, INCLUDING COPIES OF RECORDER CHARTS, DISCHARGE MEASUREMENTS NOTES, AND PRECIPITATION DATA COLLECTED DURING WATER YEARS 1986-1990 FOR YUCCA MOUNTAIN AND VICINITY, NYE COUNTY, NEVADA: PART B, BEGINNING 5/3/89	05/03/89-09/30/90	METHODS DESCRIBED IN USGS TWRI'S: BK 3: CH A1,A2,A3&A8; BK 5: CH. A1; BK 8: CH.A2&B2; & USGS-WSP 2175. ALSO HP-40,R1, DETER PEAK DISCHARGE BY SLOPE-CONVEYANCE; HP-43,R1, INSTAL., OPER.& INSPECT. 2 TYPES OF NON-RECORD. RAIN GAGES; HP-44,R1, INSTAL., OPER.& INSPECT. CREST-STAGE STRMFLOW GAGES, HP-45, INSTAL., OPER.& EXAM. RECORDING STRMFLOW GAGE USING BUBBLE-GAGE STACOM MANOMETER; HP- 91, R0&R1, COLLECT.& FIELD ANALY. SURF.-WATER SAMPLES; HP-100,R0, STREAM DISCHARGE MEAS. USING TYPE-AA PRICE CURRENT METER; HP-114, R0, EST. STRMFLOW DISCHARGE, HP-115,R0&R1, DETERM. PEAK STRMFLOW DISCHARGE USING CULVERTS; HP-116,R0, METHOD TO INSTALL, OPER,& EXAM. REC.-STRMFLOW GAGE THAT USES A STILL-WELL SYSTEM/ CONT. GRAPHIC	A	Y	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIF	QUALIFIED	LOCATION
			RECORDER); HP-117,R0, INSTAL., INSPECT.& MAINT. OF SCOUR CHAINS AT STRMFLOW GAGING SITES, HP-166,R0, STRMFLOW DISCHARGE BY SLOPE-AREA METHOD.				
	ACQN/DEVL LOCATION : 36 34'00"N 115 48'40"W 36 26'09"N 116 04'28"W 36 48'27"N 116 05'41"W 36 33'40"N 116 06'00"W 36 37'35"N 116 08'31"W 36 41'08"N 116 08'52"W 37 09'51"N 116 12'11"W 35 50'55"N 116 13'45"W 36 44'17"N 116 13'58"W 37 10'57"N 116 15'59"W 36 46'06"N 116 19'23"W 36 11'48"N 116 22'06"W 36 53'13"N 116 22'50"W 36 51'58"N 116 23'38"W 36 49'13"N 116 23'52"W 36 48'27"N 116 24'01"W 36 47'35"N 116 24'29"W 36 51'06"N 116 25'44"W 36 40'18"N 116 26'03"W 36 51'16"N 116 27'07"W 36 56'37"N 116 43'09"W 36 52'06"N 116 45'34"W						
*GS930908312121.005	STREAMFLOW AND SELECTED PRECIPITATION DATA FOR YUCCA MOUNTAIN AND VICINITY, NYE COUNTY, NEVADA, WATER YEARS 1986-90, BY T.G. KANE, D.J. BAUER, AND C.M. MARTINEZ. ACQN/DEVL LOCATION : USGS, CARSON CITY, NV USGS, LAS VEGAS, NV	11/01/92-08/27/93	ACQUIRED DATA WERE COMPILED INTO AN OPEN FILE REPORT USING GENERAL USGS REPORT GUIDELINES.	D	N		P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS931108312121.006	SURFACE-WATER DISCHARGE DATA INCLUDING COPIES OF RECORDER CHARTS, DISCHARGE MEASUREMENT NOTES, LEVEL NOTES, PRECIPITATION AND WATER SAMPLE ANALYSIS FOR THE YUCCA MTN. AREA, SOUTHERN NEVADA AND SOUTHEASTERN CALIFORNIA, 1993 WATER YEAR.	10/01/92-09/30/93	USGS TWRI'S: BOOK 3: CH.A1,A2,A3,A4,A5,A8; BOOK 5: CH.A1; BOOK 8: CH.A2; AND USGS-WSP 2175. ALSO HP-40,R2, EST. PEAK-STREAMFLOW DISCHARGE BY SLOPE-CONVEYANCE; HP-43,R2, INSTAL.,OPER.&INSPECT. 2 TYPES NON-RECORDING RAIN GAGES; HP-44,R3, INSTAL.,OPER.&EXAM. CREST-STAGE STRMFLOW GAGES; HP-45,R3, INSTAL.OPER.&EXAM. RECORDING STRMFLOW GAGE USING BUBBLE-GAGE STACOM MANOMETER SYSTEM; HP-91,R3, COLLECT.& FIELD ANALY. SURFACE-WATER SAMPLES; HP-100,R1, STREAM DISCHG. MEAS. USING TYPE-AA PRICE CURRENT METER; HP-114, R1, EST. STRMFLOW DISCHG.; HP-115,R1, DETER. PEAK STRMFLOW DISCHG. USING CULVERTS; HP-116,R1&R2, INSTAL., OPER.&EXAM. RECORDING STRMFLOW GAGE THAT USES STILLING-WELL SYSTEM WITH CONT. GRAPHIC RECORDER; HP-117,R2, INSTAL., INSPECT.&MAINT. SCOUR CHAINS AT STRMFLOW GAGING SITES; HP-166,R1, STREAM DISCHG. MEAS. USING PYGMY CURRENT METER; HP-169, R2, DETER. PEAK STRMFLOW DISCHG. BY SLOPE-AREA.	A	Y	P

ACQN/DEVL LOCATION : 36 34'00"N 115 48'40"W
36 26'09"N 116 04'28"W
36 48'27"N 116 05'41"W
36 33'40"N 116 06'00"W
36 27'36"N 116 06'28"W
36 37'35"N 116 08'31"W
36 41'08"N 116 08'52"W
37 09'51"N 116 12'11"W
35 50'55"N 116 13'45"W
36 44'17"N 116 13'58"W
37 10'57"N 116 15'19"W
36 46'06"N 116 19'23"W
37 04'12"N 116 20'23"W
37 04'19"N 116 20'50"W
37 04'21"N 116 20'50"W
36 11'48"N 116 22'06"W
36 53'13"N 116 22'50"W
36 51'58"N 116 23'38"W

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	34 49'13"N 116 23'52"W 36 48'27"N 116 24'01"W 36 47'35"N 116 24'29"W 36 23'12"N 116 25'22"W 36 51'06"N 116 25'44"W 36 40'18"N 116 26'03"W 36 51'39"N 116 26'08"W 36 50'36"N 116 26'26"W 36 50'57"N 116 27'07"W 36 51'16"N 116 27'07"W 36 57'37"N 116 43'09"W 36 52'06"N 116 45'04"W 36 52'06"N 116 45'34"W					
Activity - 8.3.1.2.1.3.2						
**GS930408312132.011	HYDROLOGY, BY W.E. WILSON -- FY 1980 REPORT	01/01/81-05/01/82	SUMMARIES/INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA AND PRELIMINARY RESULTS FROM GEOLOGICAL AND HYDROGEOLOGICAL STUDIES INCLUDING GROUNDWATER CHEMISTRY, MINERALOGY, X-RAY DIFFRACTION, TEMPERATURE AND CLIMATE.	D	N	C
	ACQN/DEVL LOCATION : USGS, DENVER, CO.					
*GS930908312132.018	WATER LEVEL MEASUREMENTS IN WELLS OF AMARGOSA DESERT PERFORMED BETWEEN 3/22/92 & 9/30/93. THE FOLLOWING LIST IDENTIFIES THE WELL, NUMBER OF MEASUREMENTS IN 1992, & NUMBER OF MEASUREMENTS IN 1993: GS-1,1,3; GS-3 STEEL,0,4; GS-3 PVC,0,5; GS-3 (FLP),1,0; GS-4,1,0; GS-5,1,0; GS-6,1,0; GS-7,1,0; GS-9,1,0; GS-10,1,0; GS-12,1,1; GS-13,1,1; GS-14,1,1; GS-16,2,6; GS-17 PVC,2,6; GS-18,1,2; GS-20(FLP),0,1; AM-1 STEEL,1,3; AM-1 PVC,1,2; AM-2 STEEL,1,4; AM-2 PVC,1,4; BJ,0,3; BT-4,1,1; N25 E5 15,3,3; JC-5,1,0; LC-262 PVC,1,3; LC-262 STEEL,1,3; NA-2,1,1; NA-4(BGWM-2),0,2; NA-6 STEEL,0,2; NA-6 PVC,0,3; NA-7 STEEL,5,4; NA-7 PVC,5,4; N-8,0,2; NA-9	03/22/92-09/30/93	HP-99,R1, INSTRUCTION FOR OPERATION OF A WELL SOUNDER FOR MEASURING WATER LEVELS.	A	Y	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	STEEL,1,3; NA-9 PVC,2,5; NA-10 STEEL,0,8; NA-10 PVC,0,8; S-1 STEEL,1,4; S-1 PVC,1,5; S-2,1,0; ST-1 STEEL,0,16; ST-2 STEEL,0,14, ST-2 PVC,0,25; WELL FL,0,8; WELL #5,0,2; WELL-13,1,0; CINDER LAKE B, 0,1.					
	ACQN/DEVL LOCATION : 36 00'00"N 117 00'00"W ;37 00'00"N 116 00'00"W					
**GS931008312132.003	HYDROCHEMICAL DATA OF SAMPLES COLLECTED FROM SMALL DIAMETER WELLS	04/15/92-09/29/93	STANDARD NWQL METHODS AND HP-23,R2, COLLECTION AND FIELD ANALYSIS OF GROUND-WATER SAMPLES FROM SATURATED ZONE.	A	Y	C
	ACQN/DEVL LOCATION : USGS NWQL, DENVER, CO					
**GS931108312132.019	SPREADSHEETS OF HYDROCHEMICAL ANALYSES, BY JOHN B. CZARNECKI: DATA FROM WELL USW UZ-14 AND NA-7, NEVADA.	08/21/93-11/15/93	PH AND SPECIFIC CONDUCTANCE DATA COMPILED, FORMATTED AS A SPREADSHEET AND PRESENTED AS POSTER.	D	Y	C
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
Activity - 8.3.1.2.1.3.3						
*GS931208312133.002	DEPTH-TO-WATER DATA FOR UE-29A #1 AND #2 AND UE-29 UZN #91 COLLECTED IN WATER YEAR 1992	10/01/91-09/30/92	DATA COLLECTED ACCORDING TO HP-99,R1, INSTRUCTION FOR OPERATION OF A WELL SOUNDER FOR MEASURING WATER LEVELS, AND HP-61,R0, USE OF HAND-HELD STEEL TAPES (IN VERTICAL BOREHOLES).	A	Y	C
	ACQN/DEVL LOCATION : UE-29 UZN #91 UE-29A #1 UE-29A #2					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS931208312133.003	DEPTH-TO-WATER DATA FOR UE-29A #1 AND #2 AND UE-29 UZN #91 COLLECTED IN WATER YEAR 1993 ACQN/DEVL LOCATION : UE-29 UZN #91 UE-29A #1 UE-29A #2	10/01/92-09/30/93	DATA COLLECTED ACCORDING TO HP-99,R1, INSTRUCTION FOR OPERATION OF A WELL SOUNDER FOR MEASURING WATER LEVELS, AND HP-61,R0, USE OF HAND-HELD STEEL TAPES (IN VERTICAL BOREHOLES).	A	Y	C
*GS940108312133.001	GROUND-WATER RECHARGE IN FORTYMILE WASH NEAR YUCCA MOUNTAIN, NEVADA, 1992-93, BY C.S. SAVARD ACQN/DEVL LOCATION : USGS, MERCURY, NEVADA	10/01/93-12/21/93	HP-61,R0, "USE OF HAND-HELD STEEL TAPES (IN VERTICAL BOREHOLES); HP-99,R1, "INSTRUCTION FOR OPERATION OF A WELL SOUNDER FOR MEASURING WATER LEVELS"; HP-62,R6, "METHOD FOR MEASURING SUB-SURFACE MOISTURE CONTENT USING A CAMPBELL SCIENTIFIC 21X MICROLOGGER"; HP-254,R0, "DEVELOPMENT AND USE OF A CALIBRATION EQUATION FOR A HAND HELD NEUTRON MOISTURE METER".	D	Y	P
*GS940308312133.002	WATER QUALITY DATA FOR SAMPLES TAKEN IN FORTYMILE WASH, NEVADA, DURING THE 1993 WATER YEAR. ACQN/DEVL LOCATION : 36 56'34"N 116 22'15"W 36 55'13"N 116 22'29"W UE-29A #1 USGS NAT'L WATER QUALITY LAB, DENVER, CO	10/01/92-02/07/94	DATA COLLECTED ACCORDING TO HP-23,R2 AND R3, "COLLECTION AND FIELD ANALYSIS OF GROUND-WATER SAMPLES FROM SATURATED ZONE"; HP-200,R0, "COLLECTION OF GROUND-WATER SAMPLES FROM WELLS" AND HP-91,R3, "COLLECTION AND FIELD ANALYSIS OF SURFACE-WATER SAMPLES"	A	Y	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.2.2.1.1						
**GS900908312211.001	GEOHYDROLOGIC AND DRILL-HOLE DATA FOR TEST WELL USW H-1, ADJACENT TO NEVADA TEST SITE, NYE COUNTY, NEVADA, BY F.E. RUSH, WILLIAM THORDARSON, AND LAURA BRUCKHEIMER ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/82-02/15/83	USGS STANDARD COLLECTION METHODS. THIS REPORT PRESENTS DATA COLLECTED TO DETERMINE THE HYDROLOGIC CHARACTERISTICS OF ROCKS PENETRATED IN TEST WELL USW H-1.	D	N	C
**GS900908312211.002	HYDROLOGIC, METEOROLOGICAL AND UNSATURATED-ZONE MOISTURE-CONTENT DATA, FRANKLIN LAKE PLAYA, INYO COUNTY, CALIFORNIA, BY J.B. CZARNECKI ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/86-11/13/89	USGS STANDARD COLLECTION METHODS.	D	N	C
*GS940108312211.001	CHARACTERIZATION OF A DESERT SOIL SEQUENCE AT YUCCA MTN, NEVADA, BY W.R. GUERTAL, A.L. FLINT AND L.L. HOFMANN ACQN/DEVL LOCATION : USGS HYDROLOGIC RESEARCH FACILITY, NTS, NV	09/01/93-01/10/94	REPORT COMPARING HORIZON DESCRIPTIONS BOREHOLE GEOPHYSICS, AND A PONDED INFILTRATION EXPERIMENT	D	N	P
*GS940108312213.002	VOLUMETRIC WATER CONTENTS FROM NEUTRON MOISTURE METER COUNTS FROM LOGS COLLECTED AT UE-25 UZN #85 AT YUCCA MOUNTAIN, NV ACQN/DEVL LOCATION : USGS HYDROLOGIC RESEARCH FACILITY, NTS, NV	03/09/93-08/30/93	NEUTRON LOGS WERE COLLECTED USING THE CPN 503 MOISTURE PROBE. LOGS WERE TAKEN AT SELECTED INTERVALS DURING THE N-85 PONDING/INFILTRATION EXPERIMENT.	D	N	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940108312213.003	SOIL DESCRIPTIONS, PARTICLE SIZE ANALYSIS, HYDRAULIC CONDUCTIVITY AND WATER RETENTION FOR PROFILE AT UE-25 UZN #85 YUCCA MOUNTAIN, NV	01/06/93-11/12/93	PROFILE DESCRIBED USING STANDARD MORPHOLOGICAL TECHNIQUES, PARTICLE SIZE WAS DETERMINED USING THE HYDROMETER METHOD AND SIEVING WATER RETENTION COLLECTED USING A STEPPED DRAINAGE PROCEDURE. HYDRAULIC CONDUCTIVITY WAS ESTIMATED FROM PARTICLE SIZE ANALYSIS	A	N	P
	ACQN/DEVL LOCATION : UE-25 UZN #85 USGS HYDROLOGIC RESEARCH FACILITY, NTS, NV					
*GS940308312211.003	SLOPE, ASPECT AND SURROUNDING TOPOGRAPHY ALONG THREE TRANSECTS AT WT-2 WASH (UN-NAMED WASH IN THE VICINITY OF USW WT-2)	03/01/93-09/30/93	BRONTON COMPASS WAS USED TO MEASURE SLOPE, ASPECT AND BLOCKING RIDGES AT EACH LOCATION ALONG THREE TRANSECTS.	A	N	P
	ACQN/DEVL LOCATION : N231,500(N) E171,000(N) ;N232,000(N) E172,000(N)					
*GS940308312211.004	TEMPORAL MEASUREMENTS OF GRAVIMETRIC WATER CONTENT AND WATER POTENTIAL AT EACH LOCATION ALONG THREE TRANSECTS AT (UN-NAMED) WT-2 WASH	03/01/93-09/29/93	GRAVIMETRIC WATER CONTENT AND WATER POTENTIAL WERE MEASURED USING USGS TECHNICAL PROCEDURES HP-229,R3, DETERMINATION OF WATER CONTENT AND PHYSICAL PROPERTIES FOR LABORATORY ROCK SAMPLES AND HP-255,R0, DETERMINATION OF WATER POTENTIAL USING THE DECAGON CX-2 WATER ACTIVITY SYSTEM.	A	N	P
	ACQN/DEVL LOCATION : USGS HYDROLOGIC RESEARCH FACILITY, NTS, NV					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940308312211.005	PHYSICAL PROPERTIES FOR THE TOP 30 CM OF THE UNCONSOLIDATED MATERIALS FOR (UN-NAMED) WT-2 WASH. THESE PROPERTIES WERE FROM THREE TRANSECTS ALONG THE WASH (UPPER WASH, MIDDLE WASH AND LOWER WASH) . ACQN/DEVL LOCATION : USGS HRF, NTS	03/01/93-09/30/93	PARTICLE SIZE PERCENTAGES WERE MEASURED USING USGS TECHNICAL PROCEDURE HP-259,R0, PARTICLE SIZE ANALYSIS	A	N	P
*GS940308312211.006	BULK DENSITY, MASS WETNESS, AND VOLUMETRIC WATER CONTENTS FROM PAGANY WASH AREA. ACQN/DEVL LOCATION : USGS HRF, NTS	06/10/93-10/01/93	BULK DENSITY WAS DETERMINED WITH PROTOTYPE PROCEDURE HP-259,R0, DETERMINATION OF BULK DENSITY USING AN IRREGULAR HOLE BULK DENSITY SAMPLER, WATER CONTENTS WERE DETERMINED USING HP-229,R3, DETERMINATION OF WATER CONTENT AND PHYSICAL PROPERTIES FOR LABORATORY ROCK SAMPLES.	A	N	P
Activity - 8.3.1.2.2.1.2						
*GS930108312212.006	USW UZN-53 CORE ANALYSIS: BULK DENSITY, POROSITY, PARTICLE DENSITY, & IN SITU SATURATION. ACQN/DEVL LOCATION : USGS HRF, NTS	06/01/92-10/31/92	BULK DENSITY USING ARCHIMEDES' METHOD, POROSITY USING SATURATED CORE, PARTICLE DENSITY CALCULATED FROM ABOVE, SATURATIONS DETERMINED GRAVIMETRICALLY FROM PRESERVED SAMPLES. USGS HP-229,R1, DETERMINATION OF WATER CONTENT AND PHYSICAL PROPERTIES FOR LABORATORY ROCK SAMPLES.	A	Y	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS940108312212.001	NEUTRON MOISTURE METER COUNTS COLLECTED FROM UE-29 UZN #91 AND UE-29 UZN #92 NEAR YUCCA MOUNTAIN, NEVADA, FROM 10/01/91 TO 09/30/93. ACQN/DEVL LOCATION : UE-29 UZN #91 UE-29 UZN #92 (AREA 25)	10/01/91-09/30/93	NEUTRON LOGS WERE COLLECTED USING THE CPN 503 MOISTURE PROBE USING USGS HP-62,R6, METHOD FOR MEASURING SUB-SURFACE MOISTURE CONTENT USING A NEUTRON MOISTURE METER.	A	Y	C
*GS940108312212.002	DIGITIZED DATA INDICATING SURFACE UNIT BOUNDARIES FOR SHALLOW FLUX ACQN/DEVL LOCATION : USGS HRF, NTS	12/01/93-01/10/94	ESTIMATES OF SURFACE UNIT BOUNDARIES DEFINING AREAS WITH SIMILAR PROPERTIES WERE DIGITIZED FROM A GEOLOGIC MAP AND INPUT INTO WORKSHEET FILES	D	N	P
*GS940108312212.003	NEUTRON MOISTURE METER COUNTS FROM LOGS COLLECTED FROM 99 BOREHOLES AT YUCCA MOUNTAIN FROM OCT. 1, 1991, OR FROM THE TIME THEY WERE DRILLED, UNTIL DEC. 31, 1993. ACQN/DEVL LOCATION : UE-25 UZN #1 UE-25 UZN #10 UE-25 UZN #12 UE-25 UZN #13 UE-25 UZN #14 UE-25 UZN #18 UE-25 UZN #19 UE-25 UZN #2 UE-25 UZN #20 UE-25 UZN #21 UE-25 UZN #22 UE-25 UZN #23 UE-25 UZN #28 UE-25 UZN #29 UE-25 UZN #3 UE-25 UZN #30 UE-25 UZN #4 UE-25 UZN #5 UE-25 UZN #56	10/01/91-12/30/93	NEUTRON LOGS WERE COLLECTED USING THE CPN 503 MOISTURE PROBE APPROXIMATELY EVERY 1-2 MONTHS USING USGS HP-62,R5 AND R6, METHOD FOR MEASURING SUB-SURFACE MOISTURE CONTENT USING A NEUTRON MOISTURE METER	A	Y	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	UE-25 UZN #6					
	UE-25 UZN #60					
	UE-25 UZN #7					
	UE-25 UZN #8					
	UE-25 UZN #85					
	UE-25 UZN #9					
	UE-25 UZN #97					
	UE-29 UZN #91					
	UE-29 UZN #92					
	USW UZ-N11					
	USW UZ-N15					
	USW UZ-N16					
	USW UZ-N17					
	USW UZ-N24					
	USW UZ-N25					
	USW UZ-N26					
	USW UZ-N27					
	USW UZ-N31					
	USW UZ-N32					
	USW UZ-N33					
	USW UZ-N34					
	USW UZ-N35					
	USW UZ-N36					
	USW UZ-N37					
	USW UZ-N38					
	USW UZ-N39					
	USW UZ-N40					
	USW UZ-N41					
	USW UZ-N42					
	USW UZ-N43					
	USW UZ-N44					
	USW UZ-N45					
	USW UZ-N46					
	USW UZ-N47					
	USW UZ-N48					
	USW UZ-N49					
	USW UZ-N50					
	USW UZ-N51					
	USW UZ-N52					
	USW UZ-N53					
	USW UZ-N54					
	USW UZ-N55					
	USW UZ-N57					
	USW UZ-N58					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	USW UZ-N59					
	USW UZ-N61					
	USW UZ-N62					
	USW UZ-N63					
	USW UZ-N64					
	USW UZ-N65					
	USW UZ-N66					
	USW UZ-N67					
	USW UZ-N68					
	USW UZ-N69					
	USW UZ-N70					
	USW UZ-N71					
	USW UZ-N72					
	USW UZ-N73					
	USW UZ-N74					
	USW UZ-N75					
	USW UZ-N76					
	USW UZ-N77					
	USW UZ-N78					
	USW UZ-N79					
	USW UZ-N80					
	USW UZ-N81					
	USW UZ-N82					
	USW UZ-N83					
	USW UZ-N84					
	USW UZ-N86					
	USW UZ-N87					
	USW UZ-N88					
	USW UZ-N89					
	USW UZ-N90					
	USW UZ-N93					
	USW UZ-N94					
	USW UZ-N95					
	USW UZ-N96					
	USW UZ-N98					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940108312212.004	VOLUMETRIC WATER CONTENT CALCULATED FROM PRELIMINARY FIELD CALIBRATION EQUATIONS USING NEUTRON COUNTS FOR 99 BOREHOLES FOR 1/1/90 - 12/31/93.	01/01/90-12/31/93	PRELIMINARY EQUATIONS DEVELOPED USING REGRESSION TECHNIQUES WITH NEUTRON COUNTS AND MEASURED FIELD VOLUMETRIC WATER CONTENTS FOR NEUTRON MOISTURE METERS 3, 5, 6, 7, AND 8, USED TO CALCULATE FIELD VOLUMETRIC WATER CONTENT IN BOREHOLES FOR DATA COLLECTED BETWEEN 1/1/90 - 8/30/93.	D	N	P
	ACQN/DEVL LOCATION : USGS HYDROLOGIC RESEARCH FACILITY, NTS, NV					
*GS940108312212.005	SPATIAL DISTRIBUTION OF A POTENTIAL MOISTURE FLUX OF THE NEAR SURFACE OF YUCCA MOUNTAIN, BY A.L. FLINT AND L.E. FLINT	10/01/93-01/14/94	ESTIMATES OF ZONES WITHIN SITE-SCALE MODEL BOUNDARIES THAT HAVE SIMILAR PROPERTIES AND CONTRIBUTE TO CALCULATED POTENTIAL AND ESTIMATED PRESENT-DAY SHALLOW FLUXES.	D	N	P
	ACQN/DEVL LOCATION : USGS HRF, NTS, NV					
*GS940108312212.006	SHALLOW INFILTRATION PROCESSES IN ARID WATERSHEDS AT YUCCA MOUNTAIN, NEVADA, BY L.E. FLINT, A.L. FLINT AND J.A. HEVESI	06/01/93-01/10/93	A CONCEPTUAL MODEL OF SHALLOW INFILTRATION PROCESSES WAS DEVELOPED USING NEUTRON LOGS AND RAINFALL DATA	D	N	P
	ACQN/DEVL LOCATION : USGS HYDROLOGIC RESEARCH FACILITY, NTS, NV					
*GS940308312213.007	WATER CONTENT AND WATER POTENTIAL FOR THE TOP FEW INCHES OF THE SURFICIAL MATERIALS AT A LOCATION CLOSE TO EACH OF 90 BOREHOLES IN THE YUCCA MOUNTAIN AREA. MEASUREMENTS WERE MADE ON A MONTHLY BASIS AT THE SAME TIME AS NEUTRON LOGGING.	10/01/92-08/31/93	GRAVIMETRIC WATER CONTENT AND WATER POTENTIAL WERE MEASURED USING USGS TECHNICAL PROCEDURES HP-229,R1,R1-M1 AND R2, DETERMINATION OF WATER CONTENT AND PHYSICAL PROPERTIES FOR LABORATORY ROCK SAMPLES; AND HP-255,R0, DETERMINATION OF WATER POTENTIAL USING THE DECAGON CX-2 WATER ACTIVITY SYSTEM.	A	N	P
	ACQN/DEVL LOCATION : USGS HYDROLOGIC RESEARCH FACILITY,NTS					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.2.2.1.3						
*GS940108312211.002	GEOPHYSICAL LOGS FROM UE-25 UZN #85 AT YUCCA MOUNTAIN, NV (WIRELINE LOGGING TOOL MEASUREMENTS) ACQN/DEVL LOCATION : UE-25 UZN #85	01/06/93-11/12/93	TRUCK MOUNTED GEOPHYSICAL TOOLS (NATURAL GAMMA, COMPENSATED NEUTRON POROSITY, AND GAMMA-GAMMA DENSITY) WERE USED TO IDENTIFY DISTINCT HORIZONS.	A	N	P
*GS940108312213.001	NEUTRON MOISTURE METER COUNTS FOR THE PONDING AND REDISTRIBUTION EXPERIMENTS FROM LOGS COLLECTED AT UE-25 UZN #85 AT YUCCA MOUNTAIN. ACQN/DEVL LOCATION : UE-25 UZN #85	03/09/93-08/30/93	NEUTRON LOGS WERE COLLECTED USING THE CPN 503 MOISTURE PROBE. LOGS WERE TAKEN AT SELECTED INTERVALS DURING THE N-85 PONDING/INFILTRATION EXPERIMENT. HP-62, R6, METHOD FOR MEASURING SUB-SURFACE MOISTURE CONTENT USING A NEUTRON MOISTURE METER.	A	N	P
*GS940108312213.002	VOLUMETRIC WATER CONTENTS FROM NEUTRON MOISTURE METER COUNTS FROM LOGS COLLECTED AT UE-25 UZN #85 AT YUCCA MOUNTAIN, NV ACQN/DEVL LOCATION : USGS HYDROLOGIC RESEARCH FACILITY, NTS, NV	03/09/93-08/30/93	NEUTRON LOGS WERE COLLECTED USING THE CPN 503 MOISTURE PROBE. LOGS WERE TAKEN AT SELECTED INTERVALS DURING THE N-85 PONDING/INFILTRATION EXPERIMENT.	D	N	P
*GS940108312213.003	SOIL DESCRIPTIONS, PARTICLE SIZE ANALYSIS, HYDRAULIC CONDUCTIVITY AND WATER RETENTION FOR PROFILE AT UE-25 UZN #85 YUCCA MOUNTAIN, NV ACQN/DEVL LOCATION : UE-25 UZN #85 USGS HYDROLOGIC RESEARCH FACILITY, NTS, NV	01/06/93-11/12/93	PROFILE DESCRIBED USING STANDARD MORPHOLOGICAL TECHNIQUES, PARTICLE SIZE WAS DETERMINED USING THE HYDROMETER METHOD AND SIEVING WATER RETENTION COLLECTED USING A STEPPED DRAINAGE PROCEDURE. HYDRAULIC CONDUCTIVITY WAS ESTIMATED FROM PARTICLE SIZE ANALYSIS	A	N	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940108312213.006	PULSE METER OUTFLOW MEASUREMENTS IN GALLONS AND LITERS OF WATER SUPPLIED TO A LARGE RING INFILTROMETER AT UE-25 UZN #85 AT YUCCA MOUNTAIN, NV	03/09/93-03/23/93	DATA WAS COLLECTED USING AN OMEGA PULSE METER WHICH WAS CONNECTED TO THE OUTFLOW VALVE OF A LARGE WATER SUPPLY TANK. DATA WAS COLLECTED AS PULSE PER MINUTE AND CONVERTED TO GALLONS OF WATER OVER TIME BY DIVIDING PULSE PER MINUTE BY 75.7 PULSES PER GALLON. GALLONS WERE CONVERTED TO LITERS BY USING A STANDARD CONVERSION FACTOR.	A	N	P
	ACQN/DEVL LOCATION : UE-25 UZN #85 USGS HYDROLOGIC RESEARCH FACILITY, NTS, NV					
*GS940108312213.007	VOLUME OUTFLOW MEASUREMENTS (IN CM/HR) FROM SUPPLY TANKS FOR RING INFILTROMETER	02/23/93-02/24/93	PRESSURE TRANSDUCER READINGS WERE TAKEN WITH A CS 21X DATALOGGER CORRESPONDING TO A CUMULATIVE VOLUME OF WATER DRAINED FROM SUPPLY TANKS USED IN PONDED INFILTRATION STUDIES. A CALIBRATION CURVE WAS OBTAINED BETWEEN CUMULATIVE VOLUME OUTFLOW VS. PRESSURE TRANSDUCER READING.	A	N	P
	ACQN/DEVL LOCATION : UE-25 UZN #14 UE-25 UZN #85 USGS HRF, NTS, NV					
*GS940108312213.008	CUMULATIVE INFILTRATION AND SURFACE FLUX VALUES CALCULATED AT SELECTED RING INFILTRATION EXPERIMENTAL LOCATIONS	03/09/93-04/30/93 06/08/93-07/06/93	PRESSURE TRANSDUCER CUMULATIVE INFILTRATION AND SURFACE FLUX MEASUREMENTS WERE CALCULATED IN CM AND CM/HOUR USING CALIBRATION EQUATIONS (FROM TRANSDUCER READINGS AND CUMULATIVE TIME MEASUREMENTS)	D	N	P
	ACQN/DEVL LOCATION : USGS HRF, NTS, NV					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940108312213.009	FIELD DETERMINATION OF HYDROLOGIC PARAMETERS OF YUCCA MOUNTAIN SURFICIAL MATERIALS, BY L.L. HOFMANN, A.L. FLINT, AND W.R. GUERTAL ACQN/DEVL LOCATION : USGS HRF, NTS, NV	09/10/93-12/22/93	FIELD MEASURED CUMULATIVE INFILTRATION AND SURFACE FLUX MEASUREMENTS WERE USED TO OBTAIN VALUES FOR HYDROLOGIC PARAMETERS	D	N	P
*GS940108312213.010	MODELING A PONDED INFILTRATION EXPERIMENT AT YUCCA MOUNTAIN, NEVADA, BY DAVID B. HUDSON, ALAN L. FLINT AND WILLAM R. GUERTAL ACQN/DEVL LOCATION : USGS HRF, NTS, NV	12/20/93-01/19/94	REPORT MODELING THE OBSERVED WATER CONTENT PROFILES FROM A PONDED INFILTRTAION EXPERIMENT AT UE-25 UZN #85	D	N	P
Activity - 8.3.1.2.2.3.1						
**GS920508312231.014	MOISTURE RETENTION CURVES AND PRESSURE MEASUREMENTS FOR TEST WELL USW H-1. ACQN/DEVL LOCATION : USW H-1	07/24/81-07/24/81	USGS STANDARD COLLECTION METHODS.	A	N	C
*GS930108312231.001	MOISTURE RETENTION DATA COLLECTED ON COMPOSITE TRANSECT DATASET USING CHILLED-MIRROR PSYCHROMETER. ACQN/DEVL LOCATION : USGS HRF, NTS, NV	10/01/92-01/12/93	MOISTURE RETENTION CURVES DETERMINED USING CHILLED MIRROR PSYCHROMETER TO MEASURE WATER POTENTIAL ON CORE SUBSAMPLES THAT HAVE BEEN SATURATED AND LET TO EVAPORATE TO VARIOUS WATER CONTENTS, COMPOSITE CORES WERE SLICED TO PRODUCE 1" X .25" CORES FOR MEASUREMENTS.	A	N	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIF	QUALIFIED	LOCATION
*GS940108312231.001	PHYSICAL AND HYDROLOGIC PROPERTIES OF 686 SURFACE OUTCROP SAMPLES FROM 8 TRANSECTS.	06/01/91-11/30/93	CORE SAMPLES COLLECTED IN THE FIELD, PROCESSED IN THE LAB FOLLOWING HP-229,R0 - R2, DETERMINATION OF WATER CONTENT AND PHYSICAL PROPERTIES FOR LABORATORY ROCK SAMPLES, TO DETERMINE BULK DENSITY, POROSITY, PARTICLE DENSITY. SORPTIVITY AND SATURATED HYDRAULIC CONDUCTIVITY WERE ALSO DETERMINED.	A	N	P
	ACQN/DEVL LOCATION : USGS HRF, NTS, NV						
*GS940108312231.002	CORE ANALYSIS OF BULK DENSITY, POROSITY, PARTICLE DENSITY AND IN SITU SATURATION FOR 17 NEUTRON BOREHOLES.	12/01/91-12/31/93	BULK DENSITY, POROSITY, AND PARTICLE DENSITY AND VOLUMETRIC WATER CONTENT DETERMINED USING HP-229,R0-R3, DETERMINATION OF WATER CONTENT AND PHYSICAL PROPERTIES FOR LABORATORY ROCK SAMPLES	A	Y	P
	ACQN/DEVL LOCATION : USW UZ-N11 USW UZ-N15 USW UZ-N16 USW UZ-N17 USW UZ-N27 USW UZ-N31 USW UZ-N32 USW UZ-N33 USW UZ-N34 USW UZ-N35 USW UZ-N36 USW UZ-N37 USW UZ-N38 USW UZ-N58 USW UZ-N59 USW UZ-N63 USW UZ-N64						

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940108312231.003	PHYSICAL AND HYDROLOGIC PROPERTIES OF TOPOPAH SPRING TUFF USED FOR FRACTURE/MATRIX INTERACTION STUDY	10/01/93-12/31/93	10 CORE SAMPLES WERE MEASURED FOR POROSITY, BULK DENSITY (USING HP-229,R3, DETERMINATION OF WATER CONTENT AND PHYSICAL PROPERTIES FOR LABORATORY ROCK SAMPLES, SATURATED PERMEABILITY, SORPTIVITY AND HEIGHT OF THE WETTING FRONT. 10 SUBSAMPLES WERE MEASURED FOR POROSITY AND BULK DENSITY (USING HP-229, R3) AND FOR MOISTURE RETENTION USING HP-255,R0, DETERMINATION OF WATER POTENTIAL USING THE DECAGON CX-2 WATER ACTIVITY SYSTEM.	A	N	P
	ACQN/DEVL LOCATION : USGS HRF, NTS, NV					
Activity - 8.3.1.2.2.3.2						
**GS910808312232.002	BOREHOLE AND GEOHYDROLOGIC DATA FOR TEST HOLE USW UZ-6, YUCCA MOUNTAIN AREA, NYE COUNTY, NEVADA, BY MERRICK S. WHITFIELD, COLLEEN M. COPE, AND CAROLE L. LOSKOT.	07/01/84-12/27/91	COMPILED BOREHOLE DATA.	D	N	T
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
**GS920808312232.001	GEOHYDROLOGICAL DATA FROM DRILL-BIT CUTTINGS AND ROTARY CORES FROM TEST HOLE USW UZ-13, YUCCA MOUNTAIN AREA, NYE COUNTY, NEVADA, BY JACK KUME AND DALE P. HAMMERMEISTER.	01/24/85-04/18/85	THE REPORT DESCRIBES METHODS USED IN DRILLING AND CORING THE TEST HOLE, METHODS USED TO COLLECT, HANDLE AND TEST SAMPLES, AND TO DETERMINE LITHOLOGIC INFORMATION, WATER CONTENT AND POTENTIAL, BULK DENSITY AND GRAIN-DENSITY DATA FOR THE TEST HOLE.	D	N	C
	ACQN/DEVL LOCATION : HOLMES & NARVER, MERCURY, NV TEST CELL C USGS, NTS					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
**GS930608312232.013	MONITORING HYDROLOGIC CONDITIONS IN THE VADOSE ZONE IN FRACTURED ROCKS, YUCCA MOUNTAIN, NEVADA, BY PAVRIZ MONTAZER ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/87-06/01/87	MONITORING OF CONDITIONS IN BOREHOLE WAS DONE BY: 1) STEMMING TESTS, 2) MEASURING MATRIC POTENTIAL WITH HEAT DISSIPATION PROBES, 3) MEASURING VARIATIONS OF WATER POTENTIAL BY THERMOCOUPLE PSYCHROMETER, 4) TEMPERATURE RECORDS, 5) AND DATA FROM DOWNHOLE PRESSURE TRANSDUCERS.	D	N	C
**GS930608312232.016	DRILLING AND GEOHYDROLOGIC DATA FOR TEST HOLE USW UZ-1, YUCCA MOUNTAIN, NYE COUNTY, NEVADA, BY M.S. WHITFIELD, W. THORDARSON, AND D.P. HAMMERMEISTER. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/89-06/05/90	DESCRIPTION & INTERPRETATION OF GEOHYDROLOGIC DATA.	D	N	C
*GS940108312232.001	DATA COLLECTED FROM THE HRF TEST BOREHOLES INCLUDING PRESSURE, TEMPERATURE, AND WATER POTENTIAL ACQN/DEVL LOCATION : 36 47'N 116 17'W	10/01/91-01/18/94	AUTOMATED DATA COLLECTION SYSTEM	A	N	P
*GS940108312232.002	VERTICAL SEISMIC PROFILE DATA FROM UE-25 UZ #16 BOREHOLE ACQN/DEVL LOCATION : UE-25 UZ #16	08/01/93-08/30/93	3-COMPONENT WALL-LOCKING SEISMOMETER	A	N	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940108312232.003	PRESSURE, MASS FLOW MEASUREMENTS AND TEMPERATURE MEASUREMENTS FROM UE-25 UZ #16 BOREHOLE AIR INJECTION TESTING BETWEEN 11/3/93 AND 4/1/94. (SN-0033) ACQN/DEVL LOCATION : UE-25 UZ #16	11/03/93-04/01/94	DATA WERE ACQUIRED DURING AIR INJECTION TESTING IN UE-25 UZ #16, SN-0033 (HP-241, R0), AIR PERMEABILITY TESTING, AND REDUCED TO ENGINEERING UNITS OF PRESSURE AND TEMPERATURE USING QUATTRO PRO.	A	Y	P
*GS940108312232.005	RESULTS OF PROTOTYPE BOREHOLE INSTRUMENTATION AT THE HYDROLOGIC RESEARCH FACILITY, AREA 25, NEVADA TEST SITE, BY JOSEPH P. ROUSSEAU, MARK A. KURZMACK AND ALISON J. GREENGARD ACQN/DEVL LOCATION : USGS HRF, NTS, NV	10/01/91-01/18/94	DATA FROM THE HRF BOREHOLES WAS COLLECTED USING THE HRFDAS OR HDAS PROGRAMS AND EXTRACTED TO EITHER TIME SERIES FILES OR A BINARY FILE STRUCTURE FOR DISPLAY.	D	N	P
*GS940108312232.006	A BOREHOLE INSTRUMENTATION PROGRAM FOR CHARACTERIZATION OF UNSATURATED-ZONE PERCOLATION, BY JACK KUME AND JOSEPH P. ROUSSEAU ACQN/DEVL LOCATION : USGS HRF, NTS, NV	10/01/91-01/18/94	DATA FROM THE HRF BOREHOLES WAS COLLECTED USING THE HRFDAS OR HDAS PROGRAMS AND EXTRACTED TO EITHER TIME SERIES FILES OR A BINARY FILE STRUCTURE FOR DISPLAY	D	N	P
*GS940108312232.007	RESULTS OF AIR PERMEABILITY TESTING IN A VERTICAL BOREHOLE AT YUCCA MOUNTAIN, NEVADA, BY GARY D. LECAIN AND JERRY N. WALKER ACQN/DEVL LOCATION : USGS, DENVER, CO	12/01/93-01/18/94	ANALYSIS AND COMPILATION OF AIR INJECTION TESTING DATA	D	Y	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS940108312232.008	APPLICATIONS OF MULTI-MODE IMAGING TO MULTIPLE OFFSET VSP DATA, BY A.H. BALCH, CEMAL ERDEMIR AND JOSEPH P. ROUSSEAU	08/01/93-01/27/94	DATA WERE DEVELOPED THROUGH THE FOLLOWING SOFTWARE PRODUCTS: PROMAX/4.0; SU/YMP-2.0; RTM/2.0; WAVESEP2.0; MICROMAX/2.0; LANDMARK/1.0; RTMSGN/2.0; LOADVEL 2.0; RTRC/2.0; SEGYDECON/2.0; TOMO/2.0.	D	N	P
	ACQN/DEVL LOCATION : COLORADO SCHOOL OF MINES, GOLDEN, CO					
Activity - 8.3.1.2.2.4.2						
*GS940108312242.001	MEASUREMENTS OF WATER FLOW RATES THROUGH FRACTURED CORES AT DIFFERENT BOUNDARY PRESSURES.	08/01/93-11/30/93	MASS SCALES USED TO DETERMINE FLOW RATES	A	N	P
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
*GS940108312242.003	MEASUREMENTS OF WATER FLOW RATES THROUGH A BLOCK OF WELDED TUFF	10/01/91-12/30/93	MASS SCALES USED TO DETERMINE FLOW RATES. PRESSURE TRANSDUCERS USED FOR WATER PRESSURE AS WELL AS MANOMETERS, THERMOCOUPLE PSYCHROMETERS USED FOR MEASURING WATER POTENTIAL, ION CHROMOTOGRAPHY USED FOR DETERMINING META-TRIFLUOROMETHYL BENZOIC ACID CONCENTRATION.	A	N	P
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
*GS940108312242.004	OBSERVATIONS OF WATER MOVEMENT IN A BLOCK OF FRACTURED WELDED TUFF, BY FALAH THAMIR, DAVID HAMPSON AND STEVE ANDERTON	10/01/91-12/30/93	ANALYSIS OF WATER PRESSURE DISTRIBUTION AND INFLOW AND OUTFLOW WATER RATES.	D	N	P
	ACQN/DEVL LOCATION : USGS, DENVER, CO					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.2.2.4.8						
*GS921008312248.001	BULK DENSITY, SPECIFIC GRAVITY, MINERALOGY, CEC, BLAST ROUND DESIGN AND EFFECTIVENESS INFORMATION, BLAST RUBBLE SIZES, BLAST CHEMICALS, WATER CHEMISTRY AND ISOTOPY, GAS AND WATER VAPOR CHEMISTRY AND ISOTOPY, PHYSICAL RECORDS OF RUBBLE CORING AND ONE-DIMENSIONAL COMPRESSION FOR G-TUNNEL RUBBLE AND CORE SAMPLES.	04/04/89-07/01/92	PROTOTYPE TESTING FOR OPTIMAL RUBBLE AND DRY CORING PROJECTS. STANDARD USGS AND VENDOR LAB PROCEDURES.	A	N	P
	ACQN/DEVL LOCATION : G-TUNNEL HOLMES & NARVER MATERIALS TESTING LAB, MERCURY, NV HUFFMAN LABS, GOLDEN, CO ROCKY MOUNTAIN ANALYTICAL LABS, WHEATRIDGE, CO USBR CORING LAB, DENVER, CO USGS CHEMISTRY LAB, DENVER, CO USGS COMPRESSION LAB, DENVER, CO USGS ISOTOPE LABS, RESTON, VA					
*GS921008312248.002	ROCK PHYSICAL AND CHEMICAL DATA, GAS, WATER AND WATER VAPOR CHEMISTRY AND ISOTOPY, PHYSICAL RECORDS OF GAS, WATER VAPOR AND PORE WATER COLLECTION. (INCLUDES TESTING AT APACHE LEAP, ARIZONA).	10/01/88-10/01/92	TRACER PROTOTYPE TESTING. STANDARD USGS AND VENDOR LAB PROCEDURES. ALSO HP-160, R1, METHODS FOR ANALYSIS OF SAMPLES FOR GAS COMPOSITION BY GAS CHROMOTOGRAPHY, HP-56,R1, GAS AND WATER VAPOR SAMPLING FROM UNSATURATED-CORE TEST HOLES, HP-86, R0, METHOD FOR DEGASSING CO2 AND H2O VAPOR SAMPLES FROM UNSATURATED ZONE TEST HOLES, HP-223,R0, METHOD FOR PORE-WATER EXTRACTION USING ONE-DIMENSIONAL COMPRESSION, AND HP-204,R0, LIQUID SCINTILLATION SPECTROMETRY METHOD FOR TRITIUM MEASUREMENT OF WATER SAMPLES.	A	N	P
	ACQN/DEVL LOCATION : APACHE LEAP, AZ HUFFMAN LABS, GOLDEN, CO ROCKY MOUNTAIN ANALYTICAL LABS, WHEATRIDGE, CO USGS CHEMISTRY LAB, DENVER, CO USGS COMPRESSION LAB, DENVER, CO USGS ISOTOPE LABS, RESTON, VA					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.2.2.6.1						
*GS921208312261.001	CO2 AND CH4 DATA TAKEN AT TWO SURFACE LOCATIONS-WEST FACE OF YUCCA RIDGE-SOIL GAS PROFILES RANGING IN DEPTH FROM 1-21 CM. ACQN/DEVL LOCATION : N759961(N) E557908(N) N759871(N) E557918(N)	05/18/89-05/18/89	HP-160 AND HP-192 DESCRIBES METHODS.	A	N	P
*GS931008312261.001	CARBON DIOXIDE, METHANE, NITROGEN, OXYGEN, ARGON, HYDROGEN, SULFUR HEXAFLUORIDE, FREON 11, FREON 12, BCF, CARBON-14, CARBON 13/12 GAS RESULTS; TRITIUM, OXYGEN 18/16, AND DEUTERIUM/HYDROGEN WATER VAPOR RESULTS; @ USW UZ-6, USW UZ-6S, USW UZ-N71, USW UZ-N72, USW UZ-N73, USW UZ-N74, USW UZ-N75, USW UZ-N76, USW UZ-N93, USW UZ-N94, AND USW UZ-N95 FOR 9/86, 11/86, 12/86, 1/87, 3/87, 5/87, 6/87, 7/87, 8/87, 12/87, 3/88, 8/88, 1/89, 3/89, 8/89, 3/90, 11/90, AND 3/91 SAMPLING TRIPS. ACQN/DEVL LOCATION : KRUEGER GEOCHRON LABS, CAMBRIDGE, MA SO. METHODIST UNIV., DALLAS, TX USGS HRF, NTS, NV USGS NORTHEAST REGION RESEARCH LAB, RESTON, VA USGS STABLE ISOTOPE LAB, RESTON, VA USGS UZ HYDROCHEMISTRY LAB, DENVER, CO USGS, MOBILE LAB, AREA 25, NTS, NV	09/01/86-03/31/91	TECHNICAL PROCEDURES HP-56,R1 AND R2, GAS AND WATER VAPOR SAMPLING FROM UNSATURATED-ZONE TEST HOLES, HP-160,R0 AND R1, METHODS FOR ANALYSIS OF SAMPLES FOR GAS COMPOSITION BY GAS CHROMATOGRAPHY, HP-176,R0 AND R1, PROCEDURE TO COLLECT GAS COMPOSITION SAMPLES AT SELECTED DEPTH INTERVALS IN OPEN UNSATURATED ZONE BOREHOLES.	A	N	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS931008312261.002	CARBON DIOXIDE, METHANE, NITROGEN, OXYGEN, HYDROGEN, FREON 12, CARBON-14, AND CARBON 13/12 GAS RESULTS; TRITIUM, OXYGEN 18/16, DEUTERIUM/HYDROGEN WATER VAPOR RESULTS; @ USW UZ-6, USW UZ-6S, USW UZ-N71, USW UZ-N72, USW UZ-N73, USW UZ-N74, USW UZ-N75, USW UZ-N76, USW UZ-N93, USW UZ-N94, AND USW UZ-N95 FOR 3/17 - 3/25/93.	10/01/92-09/30/93	HP-56,R3, GAS AND WATER VAPOR SAMPLING FROM UNSATURATED-ZONE TEST HOLES, HP-160, R1-M1 AND R2, METHODS FOR ANALYSIS OF SAMPLES FOR GAS COMPOSITION BY GAS CHROMATOGRAPHY, HP-176,R1 AND R2, PROCEDURE TO COLLECT GAS SAMPLES AT SELECTED DEPTH INTERVALS IN OPEN UNSATURATED ZONE BOREHOLES, HP-204,R0, LIQUID SCINTILLATION SPECTROMETRY METHOD FOR TRITIUM MEASUREMENT OF WATER SAMPLES, AND HP-256,R0 AND R0-M1, METHOD FOR COLLECTING AND STORING CO2 GAS SAMPLES FROM BOREHOLE ATMOSPHERE OR FROM FREE AIR BY ABSORPTION IN A KOH SOLUTION.	A	Y	P
	ACQN/DEVL LOCATION : KRUEGER GEOCHRON LABS, CAMBRIDGE, MA SO. METHODIST UNIV., DALLAS, TX USGS HRF, NTS, NV USGS MOBILE LAB, AREA 25, NTS, NV USGS NORTHEAST REGION RESEARCH LAB, RESTON, VA USGS STABLE ISOTOPE LAB, RESTON, VA USGS UZ HYDROCHEMISTRY LAB, DENVER, CO					
*GS931008312261.003	1. TEMP. DATA, DOWNHOLE, WELL USW UZ-6S FROM JAN. 22, 1993 TO FEB. 15, 1993; 2. BOREHOLE FLOW, DIRECTION, TEMPERATURE AND RELATIVE HUMIDITY DATA FROM WELL USW UZ-6S FROM MAY 25, 1993 TO SEPT. 30, 1993; 3. SHUT-IN PRESSURE DATA @ WELL USW UZ-6S FROM DEC. 15, 1992 TO JAN. 22, 1993; 4. SHUT-IN PRESSURE DATA FROM WELL USW UZ-6 DEEP AND ANNULUS FROM JAN. 22, 1993 TO FEB. 22, 1993, AND AUG. 28, 1993 TO SEPT. 8, 1993; 5. SHUT-IN PRESSURE DATA FROM WELL USW UZ-16 FROM SEPT. 9, 1993 TO 9-22-93. 6. SUBSURFACE FLOW DATA @ WELL USW UZ-16 ON AUG. 14 AND 15, 1993.	10/01/92-09/30/93	TECHNICAL PROCEDURES: 1. HP-175,R2,R2-M1 AND R3, METHOD FOR SURFACE MEASUREMENTS OF VELOCITY, DIRECTION, TEMPERATURE AND HUMIDITY OF CONVECTIVE AIRFLOW IN TOPOGRAPHICALLY-AFFECTED (VARYING) WELLS, HP-177,R1 AND R2, OPERATION OF A (SETRA MODEL 270) BAROMETRIC PRESSURE TRANSDUCER, HP-178,R0,R1,R1-M1 AND R2, PROCEDURE TO MEASURE TEMPERATURE, HUMIDITY, DIFFERENTIAL PRESSURE AND AIRFLOW AT SELECTED DEPTHS IN UZ BOREHOLE, AND HP-257,R0, METHOD TO MEASURE SHUT-IN PRESSURE IN UNSATURATED ZONE BOREHOLES	A	Y	P
	ACQN/DEVL LOCATION : UE-25 UZ #16 USW UZ-6					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	USW UZ-6S					
Activity - 8.3.1.2.2.7.1						
*GS930908312271.022	TRACER INJECTION DATA FROM UE-25 UZ#16, UE-25 NRG#1, UE-25 NRG#3, UE-25 NRG#2, USW NRG-6, AND CORE SEALING DATA FROM UE-25 UZ#16, UE-25 NRG#1, AND USW NRG-6.	05/27/92-03/29/93	DATA WERE COLLECTED IN ACCORDANCE WITH METHODS DESCRIBED IN HP-07,R1 &R1-M1, USE OF A TRACE GAS FOR DETERMINING ATMOSPHERIC CONTAMINATION IN A DRY-DRILLED BOREHOLE; HP-160,R1 & R1-M1, METHODS FOR ANALYSIS OF SAMPLES FOR GAS COMPOSITION BY GAS CHROMOTOGRAPHY; HP-237T,R0, (SN-0030), METHODS FOR SEALING UNSATURATED ZONE BOREHOLE CORE SAMPLES TO PRESERVE MOISTURE CONTENT; AND HP-238T,R0, (SN-0031), INJECTION OF A TRACE GAS FOR DETERMINING ATMOSPHERIC CONTAMINATION IN A DRY-DRILLED BOREHOLE.	A	Y	P
	ACQN/DEVL LOCATION : UE-25 NRG#1 UE-25 NRG#2 UE-25 NRG#3 UE-25 UZ#16 USW NRG-6					
Activity - 8.3.1.2.2.7.2						
*GS920508312272.005	DATA FROM BOREHOLE UZ4 SAMPLE COLLECTION. INCLUDES RECORDS OF CORE SAMPLE PACKAGING AND TRANSPORT, AND WATER SAMPLE COLLECTIONS BY DISTILLATION, COMPRESSION OR CENTIFUGATION.	10/10/84-09/30/91	CORES WERE OBTAINED BY DRY-CORING; SAMPLES WERE SUBJECTED TO SCALING AND TEMPERATURE CONTROL IN TRANSPORT. TRIAXIAL COMPRESSION, CENTRIFUGATION, OR VACUUM DISTILLATION TO OBTAIN WATER FOR ANALYSES. DEVELOPMENT, DOCUMENTATION AND QUALIFICATION OF THE PROCEDURES ARE NOW IN PROCESS.	A	N	P
	ACQN/DEVL LOCATION : UE-25 UZ #4 USGS, DENVER, CO					

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS920708312272.013	DATA FROM BOREHOLE UZ4 CORE. DATA FROM ANALYSES OF WATER SAMPLES OBTAINED BY DISTILLATION, COMPRESSION, OR CENTRIFUGATION, INCLUDING ANION/CATION, BICARBONATE, PH, CARBON-14, CARBON 13/12 TRITIUM, OXYGEN-18, DEUTERIUM, HYDROGEN.	10/10/84-09/30/91	CHEMICAL ANALYSES OF WATER SAMPLES BY VENDOR LABORATORY METHODS. THESE DATA WERE IN THE NATURE OF PROTOTYPE DEVELOPMENT. FURTHER DEVELOPMENT AND DOCUMENTATION OF THE PROCEDURES ARE NOW IN PROCESS.	A	N	P
	ACQN/DEVL LOCATION : HUFFMAN LABS, GOLDEN, CO ROCKY MOUNTAIN ANALYTICAL LABS, WHEATRIDGE, CO					
*GS921208312272.015	EFFECTS OF CORE SEALING METHODS ON THE PRESERVATION OF PORE WATER, BY PETE STRIFFLER AND CHARLES A. PETERS	10/01/90-12/01/92	CORES REMOVED FROM BOREHOLES WERE SUBJECTED TO EXPERIMENTAL SEALING METHODS USING WAX, PROTECORE, LEXAN, ETC. TO DETERMINE HOW BEST TO PRESERVE IN-SITU MOISTURE. DATA (PRIMARILY WEIGHT MEASUREMENTS) WERE ANALYZED TO DETERMINE WHICH SEALING METHOD WAS MOST EFFECTIVE, USING TABLES, GRAPHS AND STATISTICS.	D	N	P
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
Activity - 8.3.1.2.2.9.1						
**GS930408312132.011	HYDROLOGY, BY W.E. WILSON -- FY 1980 REPORT	01/01/81-05/01/82	SUMMARIES/INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA AND PRELIMINARY RESULTS FROM GEOLOGICAL AND HYDROGEOLOGICAL STUDIES INCLUDING GROUNDWATER CHEMISTRY, MINERALOGY, X-RAY DIFFRACTION, TEMPERATURE AND CLIMATE.	D	N	C
	ACQN/DEVL LOCATION : USGS, DENVER, CO.					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS940208312291.001	SIMULATION OF FLOW IN THE UNSATURATED ZONE BENEATH PAGANY WASH, YUCCA MOUNTAIN, BY E.M. KWICKLIS, A.L. FLINT AND R.W. HEALEY ACQN/DEVL LOCATION : USGS, DENVER, CO	06/01/93-09/30/93	LIQUID FLUX DATA WERE GENERATED BY NUMERICAL MODELING. SITE DATA WERE TAKEN FROM THE CITED SOURCES AS FOLLOWS: SATURATION, WATER POTENTIALS AND POROSITY FROM LOSKOT & HAMMERMEISTER, HYDRAULIC PROPERTY DATA FROM KWICKLIS, FLINT & HEALY, ISOTOPE DATA FROM YANG.	D	N	P
Activity - 8.3.1.2.3.1.2						
**GS900908312312.002	GEOHYDROLOGIC AND DRILL HOLE DATA FOR TEST WELL USW H-4, YUCCA MOUNTAIN, NYE COUNTY, NEVADA, BY M.S. WHITFIELD, JR., WM. THORDARSON AND E.P. ESSHOM. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/83-05/10/84	COMPILATION OF DATA ON DRILLING LOGS, SIDEWALL CORE SAMPLES, WATER-LEVEL MONITORING, PUMPING TESTS, INJECTIONS TESTS, RADIOACTIVE-TRACER BOREHOLE FLOW SURVEY, AND WATER CHEMISTRY.	D	N	C
**GS910208312312.003	RAW DATA FROM THE CONTINUOUS WATER-LEVEL MEASUREMENT NETWORK, 1990. THE RAW DATA IS IN THE FORM OF LOGBOOKS AND MAGNETIC CASSETTE TAPES. ACQN/DEVL LOCATION : UE-25 WT #13 UE-25 WT #16 UE-25 WT #3 UE-25 WT #6 UE-25B #1 UE-25C #1 UE-25C #2	01/01/90-01/04/91	COLLECTION PROCESSES DETAILED IN TECHNICAL PROCEDURES HP-25,R1, METHOD FOR MEASURING WATER LEVEL USING A PORTABLE MULTICONDUCTOR; HP-60,R1, METHOD FOR MONITORING WATER-LEVEL CHANGES USING PRESSURE TRANSDUCERS; HP-71,R0, METHOD FOR MONITORING WATER-LEVEL CHANGES USING A CAMPBELL SCIENTIFIC 21X MICROLOGGER; HP-75,R1, METHOD FOR MEASURING WATER LEVELS IN WELLS USING REELED (2600-FOOT AND 2800-FOOT) STEEL TAPES; AND HP-93,R0, METHOD FOR PROCESSING ELECTRONIC DATA FROM CAMPBELL SCIENTIFIC 21X MICROLOGGER INTO WATER LEVELS.	A	Y	P

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	UE-25C #3 UE-25P #1 USW G-3 USW H-1 USW H-3 USW H-4 USW H-5 USW H-6 USW WT-11 USW WT-2					
**GS910508312312.005	RAW MANUAL WATER-LEVEL MEASUREMENT DATA FROM THE PERIODIC WATER-LEVEL MEASUREMENT NETWORK. ACQN/DEVL LOCATION : UE-25 WT #12 UE-25 WT #14 UE-25 WT #15 UE-25 WT #17 UE-25 WT #3 UE-25 WT #4 USW VH-1 USW WT-1 USW WT-10 USW WT-7 WATER WELL J-13	05/07/89-12/31/89	MANUAL WATER LEVEL MEASUREMENTS MADE FOLLOWING PROCEDURES HP-25,R1, METHOD FOR MEASURING WATER-LEVEL USING A PORTABLE MULTICONDUCTOR CABLE UNIT, AND HP-75,R0, METHOD FOR MEASURING WATER-LEVELS IN WELLS USING REELED (2600-FOOT AND 2800 FOOT) STEEL TAPES.	A	Y	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**GS910508312312.006	RAW DATA COLLECTED FROM THE CONTINOUS WATER-LEVEL MONITORING NETWORK 1985-1988. DATA IN THE FORM OF LOGBOOKS CONTAINING RAW DATA, CASSETTE TAPES CONTAINING RAW TRANSDUCER OUTPUT DATA, AND SUPPORTING DATA. ACQN/DEVL LOCATION : UE-25 WT #13 UE-25 WT #16 UE-25 WT #6 UE-25B #1 UE-25C #2 UE-25C #3 UE-25P #1 USW G-3 USW H-1 USW H-3 USW H-4 USW H-5 USW H-6 USW WT-11 USW WT-2	01/01/85-12/31/88	TRANSDUCER AND RELATED DATA COLLECTED USING THE PROCEDURES OUTLINED IN HP-60,R0, METHOD FOR MONITORING WATER LEVEL CHANGES USING PRESSURE TRANSDUCERS; AND HP-71,R0, METHOD FOR MONITORING WATER-LEVEL CHANGES USING A CAMPBELL SCIENTIFIC 21X MICROLOGGER.	A	N	C
*GS920608312312.009	WATER LEVELS IN PERIODICALLY MEASURED WELLS IN THE YUCCA MOUNTAIN AREA, NEVADA, 1988, BY JAMES M. GEMMELL ACQN/DEVL LOCATION : USGS, DENVER	01/01/89-05/18/90	RAW WATER-LEVEL MEASUREMENTS CORRECTED FOR STRETCH, THERMAL EXPANSION, PROBE LENGTH, BOREHOLE DEVIATION AND ALTITUDE OF A REFERENCE POINT, AS NECESSARY, AND ALTITUDE OF THE WATER LEVEL ABOVE SEA LEVEL IS CALCULATED.	D	N	C

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS930308312312.008	WATER LEVELS IN CONTINUOUSLY MONITORED WELLS IN THE YUCCA MOUNTAIN AREA, NEVADA, 1985-88, BY R. LUCKEY, D. LOBMEYER, AND D. BURKHARDT ACQN/DEVL LOCATION : USGS, DENVER	01/01/89-05/06/91	RAW TRANSDUCER OUTPUT DATA CONVERTED TO WATER-LEVEL ALTITUDE ABOVE SEA LEVEL USING STANDARD STATISTICAL METHODS OUTLINED IN THE REPORT.	D	N	C
**GS930308312312.009	"WATER LEVELS IN PERIODICALLY MEASURED WELLS IN THE YUCCA MOUNTAIN AREA, NEVADA, 1989" BY G.M. O'BRIEN ACQN/DEVL LOCATION : USGS, DENVER	01/01/90-05/08/91	RAW WATER LEVEL MEASUREMENTS CORRECTED FOR STRETCH, THERMAL EXPANSION, AND BOREHOLE DEVIATION, AND ALTITUDE OF THE WATER TABLE ABOVE SEA LEVEL CALCULATED.	D	N	C
*GS930308312312.010	"WATER LEVELS IN PERIODICALLY MEASURED WELLS IN THE YUCCA MOUNTAIN AREA, NEVADA, 1988" BY J.M. GEMMELL ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/89-06/30/90	RAW WATER LEVEL MEASUREMENTS CORRECTED FOR STRETCH, THERMAL EXPANSION AND BOREHOLE DEVIATION, AND AN ALTITUDE OF THE WATER LEVEL ABOVE SEA LEVEL IS CALCULATED.	D	N	P
**GS930308312312.011	RAW MANUAL WATER-LEVEL MEASUREMENT DATA FROM THE PERIODIC MEASUREMENT NETWORK. ACQN/DEVL LOCATION : UE-25 WT #12 UE-25 WT #14 UE-25 WT #15 UE-25 WT #17 UE-25 WT #3 UE-25 WT #4 USW VH-1 USW WT-1 USW WT-10 USW WT-7	01/01/89-05/06/89	MANUAL WATER-LEVEL MEASUREMENTS ARE MADE FOLLOWING THE PROCEDURES OUTLINED IN HP-25,R1, METHOD FOR MEASURING WATER-LEVEL USING A PORTABLE MULTICONDUCTOR CABLE, AND HP-75,R0, METHOD FOR MEASURING WATER-LEVELS IN WELLS USING REELED (2600-FOOT AND 2800-FOOT) STEEL TAPES.	A	N	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	DATA TYPE	QUALIFIED	LOCATION
	WATER WELL J-13					
*GS930408312312.015	WATER LEVELS IN THE YUCCA MOUNTAIN AREA, NEVADA, 1990-91, BY P.TUCCI, G.M. O'BRIEN AND D.J. BURKHARDT ACQN/DEVL LOCATION : USGS, DENVER, CO	06/01/92-06/01/93	RAW WATER LEVEL DATA CONVERTED TO WATER-LEVEL ALTITUDE DATA USING STANDARD STATISTICAL TECHNIQUES.	D	N	P
**GS930508312312.016	RAW TRANSDUCER OUTPUT DATA FROM DATA COLLECTION PLATFORMS, 21X DATALOGGERS AND STRIPCHART RECORDERS, AND CALIBRATION DATA. DATA FROM WELLS USW H-5 AND USW H-6, 5/17 - 5/19, 1993. ACQN/DEVL LOCATION : USW H-5 USW H-6	03/02/93-05/19/93	TRANSDUCER OUTPUT DATA COLLECTED USING HP-60,R2, METHOD FOR MONITORING WATER LEVEL CHANGES USING PRESSURE TRANSDUCERS AND PRESSURE TRANSMITTERS, AND HP-221T,R0, MONITORING THE WELL WATER-LEVEL OR FLUID PRESSURE RESPONSE TO UNDERGROUND NUCLEAR EXPLOSIONS OR EARTHQUAKES.	A	Y	C
**GS930508312312.017	WATER-LEVEL AND FLUID-PRESSURE RESPONSE TO EARTHQUAKES OBSERVED IN WELLS USW H-5 AND USW H-6, 5/17 - 5/19, 1993. ACQN/DEVL LOCATION : USGS, DENVER, CO	05/20/93-05/25/93	RAW TRANSDUCER OUTPUT CONVERTED TO WATER-LEVEL ALTITUDE IN FEET AND FLUID-PRESSURE RESPONSE IN FEET USING COMMON STATISTICAL METHODS.	D	Y	C
*GS931108312312.026	SCIENTIFIC NOTEBOOK SN-0049, SPECIFIC CAPACITY TESTS AT WELL USW UZ-14. THE SCIENTIFIC NOTEBOOK CONTAINS RAW CHEMICAL ANALYSIS DATA AND WATER-LEVEL DATA. ACQN/DEVL LOCATION : USW UZ-14	08/09/93-08/20/93	DATA COLLECTED ACCORDING TO THE PROCEDURES OUTLINED IN THE SCIENTIFIC NOTEBOOK: SN-0049,R0, SPECIFIC CAPACITY TESTS AT WELL UZ-14.	A	Y	C

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS940108312312.001	"WATER LEVELS AT WELLS J-11 AND J-12, 1989-91, YUCCA MOUNTAIN AREA, NEVADA", BY M.S. BOUCHER ACQN/DEVL LOCATION : USGS, DENVER, CO	04/01/93-10/01/93	MANUAL WATER-LEVEL MEASUREMENT DATA CONVERTED TO WATER-LEVEL-ALTITUDE-ABOVE-SEA-LEVEL DATA USING SIMPLE MATHEMATIC CONVERSIONS.	D	N	P
*GS940108312312.003	TRANSDUCER AND RELATED DATA COLLECTED BY DATA COLLECTION PLATFORMS, 1990-1991. PART OF THE 1991 CONTINUOUS WATER-LEVEL NETWORK DATA PACKAGE. ACQN/DEVL LOCATION : UE-25 WT#6 USW G-3 USW H-4 USW H-5 USW H-6 USW WT-11	09/26/90-12/31/91	HP-196T,RO METHOD FOR COLLECTING WATER LEVEL DATA USING DATA COLLECTION PLATFORMS.	A	Y	P
*GS940108312312.004	MANUAL DEPTH-TO-WATER DATA FROM THE PERIODIC NETWORK, 4TH QUARTER 1993 ONLY. ACQN/DEVL LOCATION : TEST WELL B UE-25 WT #12 UE-25 WT #14 UE-25 WT #15 UE-25 WT #16 UE-25 WT #18 UE-25 WT #3 UE-25 WT #4 UE-25 WT #6 UE-25B #1 UE-25C #1 UE-25C #2 UE-25C #3	10/01/93-12/31/93	HP-75,R1 "METHOD FOR MEASURING WATER LEVELS IN WELLS USING REELED (2600-FOOT AND 2800-FOOT) STEEL TAPES"; HP-25,R1 "METHOD FOR MEASURING WATER LEVEL USING A PORTABLE MULTICONDUCTOR"; HP-26,R1 "METHOD FOR CALIBRATING WATER-LEVEL MEASUREMENT EQUIPMENT USING THE REFERENCE STEEL TAPE".	A	Y	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	UE-5N USW G-2 USW G-3 USW H-1 USW H-3 USW H-5 USW H-6 USW UZ-14 USW VH-1 USW WT-1 USW WT-10 USW WT-2 USW WT-7 WELL J-11 WELL J-12 WELL J-13					
*GS940108312312.005	DEVELOPED WATER-LEVEL DATA, CONSISTING OF WATER-LEVEL ALTITUDE WORKSHEETS, FOR DATA COLLECTED AT SELECTED WELLS IN THE YUCCA MOUNTAIN AREA, NEVADA, 4TH QUARTER 1993 ONLY. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/04/94-01/13/94	DEPTH-TO-WATER MEASUREMENTS CORRECTED FOR BOREHOLE DEVIATION, STRETCH AND THERMAL EXPANSION AND CONVERTED TO WATER-LEVEL ALTITUDE ABOVE SEA LEVEL.	D	N	C
*GS940208312312.002	WATER-LEVEL ALTITUDE DATA FROM WELLS IN THE YUCCA MOUNTAIN AREA, NEVADA, 1992. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/93-02/08/94	RAW TRANSDUCER DATA AND MANUAL DEPTH-TO-WATER DATA CONVERTED TO ALTITUDE OF THE WATER TABLE ABOVE SEA LEVEL USING STANDARD STATISTICAL TECHNIQUES.	D	N	P

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940208312312.003	"WATER LEVELS IN THE YUCCA MOUNTAIN AREA, NEVADA, 1992" BY G.M. O'BRIEN, P. TUCCI AND D.J. BURKHARDT. ACQN/DEVL LOCATION : USGS, DENVER, CO	06/01/93-02/08/94	RAW TRANSDUCER DATA AND MANUAL DEPTH TO WATER DATA CONVERTED TO ALTITUDE OF WATER TABLE ABOVE SEA LEVEL DATA USING STANDARD STATISTICAL TECHNIQUES.	D	N	P
*GS940208312312.006	WATER-LEVEL ALTITUDE DATA, 1993 ACQN/DEVL LOCATION : USGS, DENVER, CO	04/01/93-01/10/94	DEPTH-TO-WATER MEASUREMENTS CORRECTED FOR STRETCH, THERMAL EXPANSION AND BOREHOLE DEVIATION, AND ADJUSTED TO ALTITUDE OF THE WATER TABLE ABOVE SEA LEVEL.	D	N	P
*GS940308312312.007	RAW WATER-LEVEL DATA FROM THE CONTINUOUS WATER-LEVEL MEASUREMENT NETWORK FROM 5/3/89 - 12/31/89. RAW DATA CONSISTS OF LOGBOOKS AND CASSETTE TAPES WITH CSI 21X DATALOGGER OUTPUT. ACQN/DEVL LOCATION : UE-25 WT #3 UE-25 WT #6 UE-25B #1 UE-25C #2 UE-25C #3 UE-25P #1 USW G-3 USW H-1 USW H-3 USW H-4 USW H-5 USW H-6 USW WT-11 USW WT-2	05/03/89-12/31/89	DATA COLLECTED USING TRANSDUCER/DATALOGGER SYSTEMS, PROCEDURES HP-25,R1, METHOD FOR MEASURING WATER LEVEL USING A PORTABLE MULTI-CONDUCTOR; HP-60,R1, METHOD FOR MONITORING WATER-LEVEL CHANGES USING PRESSURE TRANSDUCERS; HP-71,R0, METHOD FOR MONITORING WATER-LEVEL CHANGES USING A CAMPBELL SCIENTIFIC 21X MICROLOGGER; AND HP-75,R0, METHOD FOR MEASURING WATER LEVELS IN WELLS USING REELED (2600-FOOT AND 2800-FOOT) STEEL TAPES.	A	Y	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.2.3.1.3						
**GS920508312313.004	ANALOG CHARTS OF WATER-LEVEL FLUCTUATIONS CAUSED BY EARTHQUAKES. ACQN/DEVL LOCATION : USW H-5	04/22/92-04/26/92	DATA SELECTION (FOR COLLECTION METHOD, REFERENCE SCIENTIFIC NOTEBOOK PLAN HP-221T,R0).	D	Y	C
**GS920508312313.005	"EARTHQUAKE-INDUCED WATER-LEVEL FLUCTUATIONS AT YUCCA MOUNTAIN, NEVADA, APRIL 1992" BY G. M. O'BRIEN. ACQN/DEVL LOCATION : USGS	04/26/92-04/26/92	USING DATA ON STRIP CHARTS AND CALIBRATION DATA FROM CALIBRATIONS OF THE TRANSDUCERS (REFERENCE HP-60, R2), CALCULATED WATER-LEVEL CHANGES WERE DEVELOPED IN WELLS IN RESPONSE TO EARTHQUAKES.	D	Y	C
**GS930408312132.011	HYDROLOGY, BY W.E. WILSON -- FY 1980 REPORT ACQN/DEVL LOCATION : USGS, DENVER, CO.	01/01/81-05/01/82	SUMMARIES/INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA AND PRELIMINARY RESULTS FROM GEOLOGICAL AND HYDROGEOLOGICAL STUDIES INCLUDING GROUNDWATER CHEMISTRY, MINERALOGY, X-RAY DIFFRACTION, TEMPERATURE AND CLIMATE.	D	N	C
**GS930508312313.005	SUMMARY OF HYDRAULIC TESTS AND HYDROLOGIC DATA FOR HOLES UE16D AND UE16F, SYNCLINE RIDGE AREA, NEVADA TEST SITE, BY G.A. DINWIDDIE AND J.E. WEIR, JR. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/78-07/23/79	DRILL HOLES WERE ANALYZED FOR HYDRAULIC POTENTIAL BY STATIC FLUID MOVEMENT, TRACEJECTOR SURVEY, PUMPING, PACKER-SLUG TESTS AND GEOPHYSICAL LOGGING. CHEMICAL ANALYSIS WAS PERFORMED BY USGS STANDARD METHODS.	D	N	T

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS930908312313.006	CALIPER LOGS OF WELLS UE-25C #1, #2 & #3, 12/11/90 ACQN/DEVL LOCATION : UE-25C #1 UE-25C #2 UE-25C #3	12/11/90-12/11/90	USGS STANDARD COLLECTION METHODS.	A	N	P
*GS930908312313.007	DEVELOPMENT OF GEOLOGIC INFORMATION FROM THE C-HOLE COMPLEX AND THE YUCCA MOUNTAIN AREA TO SUPPORT HYDROGEOLOGICAL INTERPRETATIONS. INCLUDES 1991 & 1992 ACOUSTIC TELEVIEWER LOGS. ACQN/DEVL LOCATION : UE-25C #1 UE-25C #2 UE-25C #3	01/01/84-09/16/93	STANDARD USGS COLLECTION TECHNIQUES	A	N	P
*GS930908312313.008	HYDROLOGIC INFORMATION FROM THE C-HOLE COMPLEX AND THE YUCCA MOUNTAIN AREA. INCLUDES FLOW RATES, CALIPER LOGS AND TEMPERATURE ACQN/DEVL LOCATION : UE-25C #1 UE-25C #2 UE-25C #3	01/23/84-09/16/93	STANDARD USGS COLLECTION TECHNIQUES	A	N	P
*GS930908312313.009	PUMPING TESTS IN UE-25C #1, SEPTEMBER-OCTOBER, 1983. ACQN/DEVL LOCATION : UE-25C#1 UE-25P#1 USW H-4	09/25/83-09/16/93	STANDARD USGS COLLECTION TECHNIQUES.	A	N	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS930908312313.010	PUMPING TEST IN WELL UE-25C #2, MARCH 1984. ACQN/DEVL LOCATION : UE-25C #1 UE-25C #2 UE-25P #1 USW H-4	03/01/84-09/16/93	STANDARD USGS COLLECTION TECHNIQUES.	A	N	P
*GS930908312313.011	PUMPING TEST IN WELL UE-25C #3, MAY-JUNE, 1984. ACQN/DEVL LOCATION : UE-25C #1 UE-25C #2 UE-25C #3 UE-25P #1	01/23/84-09/16/93	STANDARD USGS COLLECTION METHODS.	A	N	P
*GS930908312313.012	CONSTANT FLUX TESTS AT THE C-HOLE COMPLEX, OCTOBER-DECEMBER, 1984. ACQN/DEVL LOCATION : UE-25C #1 UE-25C #2 UE-25C #3 UE-25P #1	10/01/84-09/16/93	STANDARD USGS COLLECTION TECHNIQUES.	A	N	P
*GS930908312313.013	FLUID INJECTION TESTS IN UE-25C #1, OCTOBER 1983. ACQN/DEVL LOCATION : UE-25C #1 UE-25C #2 UE-25C #3	10/06/83-09/16/93	STANDARD USGS COLLECTION TECHNIQUES.	A	N	P

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS930908312313.014	SN-0027, PULSE FLOWMETER SURVEY AT THE UE-25 C-HOLE COMPLEX, NEVADA. ACQN/DEVL LOCATION : C-HOLE COMPLEX	12/11/91-12/16/91	HP-233T,R0 (SNP-233T), THERMAL PULSE FLOWMETER SURVEY AT THE UE-25C HOLE COMPLEX -- OFR 87-121, "THERMAL-PULSE FLOWMETER FOR MEASURING SLOW WATER VELOCITIES IN BOREHOLES" BY A.E. HESS,. IN ADDITION TO THE PROCEDURE OUTLINED IN THE OFR, A PACKER STRING WAS USED TO ISOLATE ZONES OF FLOW.	A	Y	C
*GS931008312313.016	"RESULTS AND INTERPRETATION OF PRELIMINARY AQUIFER TESTS IN BOREHOLES UE-25C #1, UE-25C #2, AND UE-25C #3, YUCCA MOUNTAIN, NYE COUNTY, NEVADA" BY A.L. GELDON. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/93-09/21/93	DEVELOPMENT INCLUDING AUTHOR'S INTERPRETATION BY METHODS FULLY OUTLINED IN THE REPORT.	D	N	P
Activity - 8.3.1.2.3.1.4						
**GS920408312314.003	INJECTION TESTS, PUMPING TESTS, TRACEJECTOR SURVEY, SUB-SURFACE DIRECTIONAL SURVEY AND TEST DATA FOR TEST WELL USW H-3. ACQN/DEVL LOCATION : USW H-3	01/21/82-01/25/84	USGS STANDARD COLLECTION AND TESTING METHODS.	A	N	C
**GS920408312314.007	TIME AND TEMPERATURE LOGS, DIRECTIONAL SURVEYS, GEOPHYSICAL LOGS, INJECTION AND PUMPING TESTS, LITHOLOGIC LOGS AND TRACEJECTOR SURVEY FOR TEST WELL USW H-4. ACQN/DEVL LOCATION : USW H-4	03/23/82-07/28/83	USGS STANDARD COLLECTION METHODS.	A	N	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**GS920408312314.010	LOG BOOKS, INJECTION AND PUMPING TESTS, LITHOLOGIC LOGS, TEST AND CORE ANALYSES AND WATER LEVELS FOR USW H-1. ACQN/DEVL LOCATION : USW H-1	09/18/80-12/17/80	USGS STANDARD COLLECTION METHODS.	A	N	C
Activity - 8.3.1.2.3.2.1						
**GS920408312321.001	CHEMICAL COMPOSITION DATA AND LABORATORY ANAYLSES FOR GROUND WATER FROM TEST WELLS IN YUCCA MOUNTAIN AREA. ACQN/DEVL LOCATION : J-12 J-13 UE-25B#1 UE-25C#1 UE-25C#2 UE-25C#3 UE-25P#1 UE-29A#2 USW G-4 USW H-1 USW H-3 USW H-4 USW H-5 USW H-6 USW VH-1	03/26/71-07/06/84	USGS STANDARD COLLECTION METHODS	A	N	C
**GS920408312321.002	FLOWMETER (TRACEJECTOR) SURVEY ON TEST WELLS IN PERMEABLE ZONES IN YUCCA MOUNTAIN AREA. ACQN/DEVL LOCATION : UE-25B#1 USW G-4 USW H-1 USW H-4 USW H-5 USW H-6	10/17/80-10/15/82	USGS STANDARD COLLECTION METHODS	A	N	C

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIFTYPE	QUALIFIED	LOCATION
**GS920408312321.003	CHEMICAL COMPOSITION OF GROUNDWATER IN THE YUCCA MOUNTAIN AREA, NEVADA 1971 - 1984, BY L.V. BENSON AND P.W. MCKINLEY. ACQN/DEVL LOCATION : USGS, DENVER, CO	03/26/71-12/31/85	USGS STANDARD METHODS	D	N	C
Activity - 8.3.1.2.3.2.2						
*GS940308312322.001	"HYDROCHEMICAL DATA BASE FOR THE DEATH VALLEY REGION", BY D.L. PERFECT, C.C. FAUNT, W.C. STEINKAMPF, AND A.K. TURNER. ACQN/DEVL LOCATION : USGS, DENVER, CO	08/01/93-02/25/94	EXISTING HYDROCHEMICAL DATA WAS OBTAINED AND INPUT INTO A DATA BASE. THE REPORT DETAILS HOW THE DATA BASE WAS CONSTRUCTED, WHAT IT CONTAINS, HOW IT WAS EDITED, AS WELL AS OTHER INFORMATION SUCH AS LIMITATIONS, ETC.	D	N	P
Activity - 8.3.1.2.3.2.3						
**GS930408312132.011	HYDROLOGY, BY W.E. WILSON -- FY 1980 REPORT ACQN/DEVL LOCATION : USGS, DENVER, CO.	01/01/81-05/01/82	SUMMARIES/INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA AND PRELIMINARY RESULTS FROM GEOLOGICAL AND HYDROGEOLOGICAL STUDIES INCLUDING GROUNDWATER CHEMISTRY, MINERALOGY, X-RAY DIFFRACTION, TEMPERATURE AND CLIMATE.	D	N	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	DATA TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.2.3.3.2						
*GS930808312332.003	POROSITIES OF CORE SAMPLES FROM BULLFROG MEMBER FORMATION (EAST OF LITTLE SKULL MOUNTAIN) ACQN/DEVL LOCATION : HRF, AREA 25, NTS	07/22/93-07/27/93	HP-229,R1, DETERMINATION OF WATER CONTENT AND PHYSICAL PROPERTIES FOR LABORATORY ROCK SAMPLES	A	Y	P
Activity - 8.3.1.3.2.2.2						
**LA000000000051.001	LONG-TERM THERMAL STABILITY OF CLINOPTILOLITE: THE DEVELOPMENT OF A "B" PHASE. ACQN/DEVL LOCATION : LANL	07/24/85-02/09/90	THE STRUCTURAL EFFECTS OF HEATING SAMPLES OF CLINOPTILOLITES AT 100 DEGREES C AND 200 DEGREES C FOR TIMES UP TO 5 YEARS WERE MONITORED USING X-RAY POWDER DIFFRACTION. CONVERSION TO A COLLAPSED PHASE WAS DEMONSTRATED FOR SOME OF THE SAMPLES AT 200 DEGREES C.	D	N	T
Activity - 8.3.1.3.5.1.1						
*LA000000000033.001	RADIONUCLIDE SOLUBILITY AND SPECIATION STUDIES FOR THE YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT. ACQN/DEVL LOCATION : LAWRENCE BERKELEY LABORATORY	10/01/85-12/30/92	THERMODYNAMIC DATA DETERMINED BY SOLUBILITY MEASUREMENTS FROM OVERSATURATION.	A	N	P

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.4.1.2						
*TMUSWNRG600093.001	GEOPHYSICAL LOGS OF BOREHOLE USW NRG-6 (JOB ID #93-NRG6-01) RUN BY SCHLUMBERGER WELL SERVICES. LOGS RUN INCLUDE DUAL INDUCTION/GAMMA RAY (DIT/GR), COMPENSATED NEUTRON/GAMMA RAY (CNT/GR), AND COMPENSATED SLIM-HOLE DENSITY/GAMMA RAY (FGT/GR). DATA CONSISTS OF FIELD PRINTS (SEPIA AND PAPER LOGS), FINAL PRINTS (SEPIA AND PAPER LOGS), AND DATA TAPES CONSISTING OF FIELD DATA (LIS FORMAT) AND FINAL DATA (LIS AND ASCII FORMATS). ACQN/DEVL LOCATION : N766726.3(N) E564187.2(N) 0' TO 1096'	06/29/93-06/30/93	GEOPHYSICAL LOGGING DATA COLLECTED USING PROCEDURE AP S.III.1-Q, REV. 0, ICN 0, 6/11/93, "YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT FIELD VERIFICATION OF GEOPHYSICAL LOGGING OPERATIONS."	A	Y	P
*TMUSWNRG600094.001	VERTICAL SEISMIC PROFILE (VSP) OF USW NRG-6 (JOB ID #93-NRG6-02) PERFORMED BY LAWRENCE BERKLEY LABORATORY (LBL). DATA CONSISTS OF LOGGER'S LOG AND DATA TAPES OF DIGITIZED WAVEFORMS. ACQN/DEVL LOCATION : N766726.3(N) E564187.2(N) 40' TO 1080'	08/12/93-08/23/93	GEOPHYSICAL LOGGING DATA COLLECTED USING PROCEDURE AP S.III.1-Q, REV. 0, ICN 0, 6/11/93, "YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT FIELD VERIFICATION OF GEOPHYSICAL LOGGING OPERATIONS"	A	Y	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.4.2.1.1						
**GS910708314211.011	ASSESSING THE NATURAL PERFORMANCE OF FELSIC TUFFS USING THE RB-SR AND SM-ND SYSTEMS--A STUDY OF THE ALTERED ZONE IN THE TOPOPAH SPRING MEMBER, PAINTBRUSH TUFF, YUCCA MOUNTAIN, NEVADA, BY Z.E. PETERMAN, R.W. SPENGLER, K. FUTA, B.D. MARSHALL, AND S.A. MAHAN.	07/01/90-11/30/90	GCP-12, RB-SR ISOTOPE GEOCHEMISTRY AND GCP-21, SM-ND ISOTOPE GEOCHEMISTRY. SR AND ND ISOTOPIC DATA AND RB, SR, ND, AND SM CONCENTRATIONS FROM DRILL CORE SPECIMANS FROM UE-25A #1. THIS STUDY UNDERTAKEN TO HELP DETERMINE THE VERTICAL AND LATERAL CHARACTERISTICS OF VOLCANIC STRATA AND THE NATURE, EXTENT, AND TIMING OF THEIR ALTERATION. EMPHASIS IS ON 1) ZEOLITIZED ZONE ASSO. WITH THE LOWER VITROPHYRE, AND 2) DENSELY WELDED HIGH-SILICA RHYOLITE. ISOTOPES AND MINOR AND TRACE-ELEMENT CONCENTRATIONS DETERMINED BY EDXRF OR ISOTOPIC DILUTION. DATA RESULTS PRESENTED IN TABULAR AND GRAPHICAL FORMATS.	D	N	C
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
*GS930108314211.001	PRELIMINARY LITHOLOGIC LOG OF TEST HOLE UE-25 UZ #4 (1985)	05/01/85-07/31/85	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE DRILLED PRIOR TO MAY, 1985. INVESTIGATOR USED X-RAY ANALYSIS, THIN SECTIONS AND SCIENTIFIC OBSERVATIONS.	A	N	C
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
**GS930408314211.010	RELATION BETWEEN P-WAVE VELOCITY AND STRATIGRAPHY OF LATE CENOZOIC DEPOSITS OF SOUTHERN NEVADA, BY EDUARDO A. RODRIGUEZ AND JAMES C. YOUNT.	01/11/85-11/22/85	METHODS OF OPERATION FOR PORTABLE SEISMOGRAPHS FOLLOWED ESTABLISHED PROCEDURE OF MOONEY, H.M., 1973, HANDBOOK OF ENGINEERING SEISMOLOGY, AND TINSLEY, J.C., 1984, IN USGS OFR 84-400. ORDINARY LEAST SQUARES LINEAR REGRESSION WAS USED TO DETERMINE BEST-FIT LINES FOR TRAVEL-TIME PLOTS. COMPLETE BIBLIOGRAPHIC CITATIONS IN REPORT.	D	N	C
	ACQN/DEVL LOCATION : USGS, MENLO PARK, CA					

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**GS930408314211.012	SEARCH FOR POTENTIAL SITES, BY G.L. DIXON AND V.M. GLANZMAN -- FY 1980 REPORT ACQN/DEVL LOCATION : USGS, DENVER, CO.	01/01/81-05/01/82	SUMMARIES/INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA AND PRELIMINARY RESULTS FROM GEOLOGICAL AND GEOPHYSICAL STUDIES INCLUDING MAGNETIC, GRAVITY, LOG DATA AND CORE ANALYSIS (USW G-1).	D	N	C
*GS930708314211.028	PRELIMINARY LITHOLOGIC LOG OF TEST HOLE USW UZ-13, NEVADA. ACQN/DEVL LOCATION : USGS, DENVER, CO	05/19/85-07/31/85	THESE WERE ACQUIRED FROM ANALYSES OF CORE DRILLED PRIOR TO MAY 1985. INVESTIGATOR USED X-RAY ANALYSIS, THIN SECTIONS AND SCIENTIFIC OBSERVATIONS.	A	N	P
*GS930708314211.029	PRELIMINARY LITHOLOGIC LOG OF TEST HOLE USW UZ-6, NEVADA. ACQN/DEVL LOCATION : USGS, DENVER, CO	10/01/84-07/31/85	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE DRILLED PRIOR TO MAY 1985. INVESTIGATOR USED X-RAY ANALYSIS, THIN SECTIONS AND SCIENTIFIC OBSERVATIONS.	A	N	P
*GS930708314211.030	PRELIMINARY LITHOLOGY WELL REPORTS: UE-25 WT #4, USW WT-11, AND UE-25 WT #12 ACQN/DEVL LOCATION : USGS, DENVER, CO	02/01/84-04/23/88	ANALYSIS OF CORE DRILLED PRIOR TO 1984. GEOPHYSICAL LOGS MADE FROM SCIENTIFIC OBSERVATIONS OF BIT CUTTING SAMPLES.	A	N	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS930708314211.031	PRELIMINARY LITHOLOGIC LOG OF TEST HOLE USW UZ-7, NEVADA. ACQN/DEVL LOCATION : USGS, DENVER, CO	05/17/85-07/31/85	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE DRILLED PRIOR TO MAY 1985. INVESTIGATOR USED X-RAY ANALYSIS, THIN SECTIONS AND SCIENTIFIC OBSERVATIONS.	A	N	P
*GS930708314211.032	PRELIMINARY LITHOLOGIC LOG OF TEST HOLES UE-25C #1, UE-25C #2, AND UE-25C #3, NEVADA. ACQN/DEVL LOCATION : USGS, DENVER, CO	02/01/84-07/31/85	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE DRILLED PRIOR TO MAY 1985. INVESTIGATOR USED X-RAY ANALYSIS, THIN SECTIONS AND SCIENTIFIC OBSERVATIONS.	A	N	P
*GS930708314211.033	PRELIMINARY LITHOLOGIC LOG OF TEST HOLE USW UZ-1. ACQN/DEVL LOCATION : USGS, DENVER, CO	02/01/84-07/31/85	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE DRILLED PRIOR TO MAY, 1985. INVESTIGATOR USED X-RAY ANALYSIS, THIN SECTIONS AND SCIENTIFIC OBSERVATIONS.	A	N	C
*GS931008314211.039	GRAPHICAL LITHOLOGIC LOG OF BOREHOLE NRG-2 (UE-25 NRG#2), YUCCA MOUNTAIN, NEVADA: VERSION 1.0 ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY, NTS	08/01/93-09/24/93	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP.	A	Y	C

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**GS931008314211.045	GRAPHICAL LITHOLOGIC LOG OF BORE HOLE USW NRG-6, VERSION 1.0.	08/01/93-09/02/93	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP.	A	Y	C
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY, NTS					
*GS931108314211.041	GRAPHICAL LITHOLOGIC LOG OF BOREHOLE NRG-2B (UE-25 NRG#2B), YUCCA MOUNTAIN, NEVADA: VERSION 1.0	08/01/93-10/01/93	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP.	A	Y	C
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY, NTS					
*GS931108314211.042	GRAPHICAL LITHOLOGIC LOG OF BOREHOLE NRG-4 (UE-25 NRG#4), VERSION 1.0	08/01/93-09/30/93	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP.	A	Y	C
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY, NTS					
*GS931108314211.043	GRAPHICAL LITHOLOGIC LOG OF BOREHOLE NRG-5 (UE-25 NRG#5), VERSION 1.0	08/01/93-09/30/93	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP.	A	Y	C
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY, NTS					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS931108314211.044	SUMMARY LITHOLOGIC DESCRIPTION OF THE UPPER TIVA CANYON FORMATION AND TUFF UNIT "X" IN THE NORTH RAMP AREA, BY THOMAS MOYER, JEFFREY GESLIN AND DAVID BUESCH ACQN/DEVL LOCATION : USGS, LAS VEGAS, NV	08/01/93-09/17/93	EXAMINATION OF GEOLOGIC DESCRIPTION OF CORE INFORMATION COLLECTED IN FY'93 TO SUMMARIZE AND PROVIDE EXPLANATIONS TO ACCOMPANY SOURCE DATA.	D	Y	C
*GS931208314211.046	GRAPHICAL LITHOLOGIC LOG OF BOREHOLE UE-25 NRG#1, VERSION 1.0 ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY, NTS	01/01/93-11/18/93	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP.	A	Y	C
*GS931208314211.047	GRAPHICAL LITHOLOGIC LOG OF BOREHOLE UE-25 UZ #16, VERSION 1.0 ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY, NTS	01/01/93-11/18/93	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP.	A	Y	C
*GS931208314211.048	GRAPHICAL LITHOLOGIC LOG OF BOREHOLE USW UZ-14, VERSION 1.0 ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY, NTS	01/01/93-11/18/93	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP.	A	Y	P

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS931208314211.049	REVISED STRATIGRAPHIC NOMENCLATURE AND MACROSCOPIC IDENTIFICATION OF LITHOSTRATIGRAPHIC UNITS EXPOSED AT YUCCA MOUNTAIN, NEVADA, BY D.C. BUESCH, R.W. SPENGLER, T. MOYER, AND J. GESLIN. ACQN/DEVL LOCATION : USGS, LAS VEGAS, NV	07/30/93-09/30/93	MACROSCOPIC AND MICROSCOPIC OBSERVATIONS INCLUDING PHENOCRYST ASSEMBLAGES, DEPOSITION TEXTURES AND STRUCTURES, ZONES OF WELDING, ZONES OF CRYSTALLIZATION, AND SURFACE ROUGHNESS AND ORIENTATION OF FRACTURES	D	Y	P
*GS931208314211.050	INTEGRATED GEOLOGY AND PRELIMINARY CROSS SECTION ALONG THE NORTH RAMP EXPLORATORY STUDIES FACILITY, YUCCA MOUNTAIN, NEVADA, BY D.C. BUESCH, R.P. DICKERSON, R.M. DRAKE, AND R.W. SPENGLER ACQN/DEVL LOCATION : USGS, LAS VEGAS, NV	09/15/93-12/20/93	ANALYSIS AND INTEGRATION OF SURFACE MAPPING RELATIONSHIPS, LITHOLOGIC LOGS OF CORE FROM DRILL HOLES, AND SURFACE AND DOWN HOLE GEOPHYSICS.	D	N	P
*GS931208314211.051	X-RAY FLUORESCENCE ELEMENTAL COMPOSITIONS, 3/9/93 - 3/14/93 ACQN/DEVL LOCATION : USGS, DENVER, CO	03/09/93-03/14/93	USGS TECHNICAL PROCEDURE GCP-25,R0, DETERMINATION OF CHEMICAL COMPOSITION BY ENERGY DISPERSIVE X-RAY FLUORESCENCE SPECTROMETRY	A	Y	P
*GS940108314211.001	TABLE OF BASAL CONTACTS FROM CORE IN BOREHOLES USW UZ-14 AND USW NRG7/7A BY BUESCH, MOYER, AND GESLIN ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY, NTS	06/01/93-01/18/94	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SN-0001, SCIENTIFIC PLAN, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP.	A	Y	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940208314211.002	TABLE OF CONTACTS IN BOREHOLES USW UZ-N62, VERSION 1.0, BY T. MOYER	01/01/94-01/13/94	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SCIENTIFIC PLAN SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP	A	Y	C
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY					
*GS940208314211.003	TABLE OF CONTACTS IN BOREHOLES USW UZ-N53, USW UZ-N54 AND USW UZ-N55, VERSION 1.0, BY T. MOYER AND J. GESLIN	01/01/94-01/13/94	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SCIENTIFIC PLAN SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP	A	Y	C
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY					
*GS940208314211.004	TABLE OF CONTACTS IN BOREHOLE USW UZ-N27, VERSION 1.0, BY T. MOYER AND J. GESLIN	01/01/94-02/28/94	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SCIENTIFIC PLAN SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP	A	Y	C
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY					
*GS940208314211.005	TABLE OF CONTACTS IN BOREHOLES USW UZ-N31, UZ-N32, UZ-N37, VERSION 1.0, BY T. MOYER AND J. GESLIN	01/01/94-02/28/94	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SCIENTIFIC PLAN SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP	A	Y	C
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY					

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIF	QUALIFIED	LOCATION
*GS940208314211.006	TABLE OF CONTACTS IN BOREHOLES USW UZ-N33 AND USW UZ-N34 VERSION 1.0, BY T. MOYER AND J. GESLIN	01/01/94-02/28/94	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SCIENTIFIC PLAN SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP	A	Y		C
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY						
*GS940208314211.007	TABLE OF CONTACTS IN BOREHOLE USW UZ-N35, VERSION 1.0, BY T. MOYER AND J. GESLIN	01/01/94-02/28/94	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SCIENTIFIC PLAN SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP	A	Y		C
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY						
*GS940208314211.008	TABLE OF CONTACTS IN BOREHOLES USW UZ-N57, UZ-N58, UZ-N59, AND UZ-N61, VERSION 1.0, BY T. MOYER AND J. GESLIN	01/01/94-02/28/94	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SCIENTIFIC PLAN SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP	A	Y		C
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY						
*GS940308314211.009	SUMMARY OF LITHOLOGIC LOGGING OF NEW AND EXISTING BOREHOLES AT YUCCA MOUNTAIN, NEVADA, AUGUST 1993 TO FEBRUARY 1994 BY J. GESLIN, T. MOYER AND D. BUESCH	10/01/93-02/01/94	THIS SUMMARY WAS DEVELOPED FROM THE ANALYSES OF LITHOLOGIC LOGS COMPILED FROM CORE/DRILLHOLE DATA COLLECTED IN FY-93/94 (ROCK CHARACTERISTICS ACTIVITIES)	D	Y		P
	ACQN/DEVL LOCATION : USGS, LAS VEGAS, NV						

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	DATA TYPE	QUALIFIED	LOCATION
*GS940308314211.010	TABLE OF CONTACTS IN BOREHOLE USW UZ-N11 BY T. MOYER	02/01/94-03/04/94	THESE DATA WERE ACQUIRED FROM ANALYSIS OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP	A	Y	P
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY					
*GS940308314211.011	TABLE OF CONTACTS IN BOREHOLE USW UZ-N38 BY T. MOYER	02/01/94-03/04/94	THESE DATA WERE ACQUIRED FROM ANALYSIS OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP	A	Y	P
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY					
*GS940308314211.012	GRAPHICAL LITHOLOGIC LOG OF BOREHOLE UE-25 NRG#2C BY T. MOYER	02/01/94-03/04/94	THESE DATA WERE ACQUIRED FROM ANALYSIS OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP	A	Y	P
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY					
*GS940308314211.013	GRAPHICAL LITHOLOGIC LOG OF BOREHOLE UE-25 NRG#2D BY T. MOYER	02/01/94-03/04/94	THESE DATA WERE ACQUIRED FROM ANALYSIS OF CORE USING SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP	A	Y	P
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS940308314211.014	TABLE OF LITHOLOGIC CONTACTS IN BOREHOLE USW NRG-7/7A TO TOTAL DEPTH, VERSION 1.0, BY T. MOYER AND J. GESLIN	03/01/94-03/11/94	THESE DATA WERE ACQUIRED FROM ANALYSES OF CORE USING SCIENTIFIC PLAN SN-0001, STRATIGRAPHIC STUDIES FROM GEOLOGIC DESCRIPTION OF CORE, BIT CUTTINGS, AND OUTCROP.	A	Y	P
	ACQN/DEVL LOCATION : SAMPLE MANAGEMENT FACILITY					
Activity - 8.3.1.4.2.1.2						
**GS900908314212.015	A RESISTIVITY SOUNDING INVESTIGATION BY THE SCHLUMBERGER METHOD IN THE SYNCLINE RIDGE AREA OF THE NEVADA TEST SITE, NEVADA, BY L.A. ANDERSON, J.J. BISDORF, AND D.R. SCHOENTHALER.	01/01/79-01/01/80	INTERPRETATION OF SCHLUMBERGER RESISTIVITY SURVEY. USGS STANDARD METHODS. THE INTENT OF THE SURVEY WAS TO DETERMINE THE HORIZONTAL CONTINUITY AND THICKNESS OF UNIT J OF THE ELEANA FORMATION.	D	N	C
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
**GS900908314212.016	INTERPRETATION OF RESISTIVITY AND INDUCED POLARIZATION PROFILES WITH SEVERE TOPOGRAPHIC EFFECTS, YUCCA MOUNTAIN AREA, NEVADA TEST SITE, NEVADA, BY CHRISTIAN SMITH & H.P. ROSS.	01/01/65-12/31/79	USGS STANDARD TEST METHODS.	D	N	C
	ACQN/DEVL LOCATION : USGS					
**GS920508314212.001	GRAVITY DATA . THIS FIELD DATA SET CONSISTS OF THE OBSERVED GRAVITY VALUES, TERRAIN CORRECTIONS, ELEVATION CONTROLS, CALIBRATION DATA, LOCATION DATA AND DATA RELATED TO SEISMIC REFLECTION TESTING.	02/14/78-03/19/86	GRAVITY DATA WAS COLLECTED USING LACOSTE AND ROMBERG METERS D-26, G161, G177, AND G614. GRAVITY STATIONS WERE TIED TO BASE STATIONS IN MERCURY OR BEATTY, NV. OR STATIONS IN THE SYNCLINE RIDGE AREA. STATION ELEVATIONS WERE CONTROLLED BY BENCHMARKS, POINTS SURVEYED WITH A HEWLETT-PACKARD ELECTRONIC DISTANCE MEASURING DEVICE, OR PHOTOGRAMETRIC SPOT ELEVATIONS. TERRAIN CORRECTIONS CONSIST OF THE INNERMOST (FIELD), THE INNER-ZONE (MANUAL), AND THE OUTER-ZONE TERRAIN CORRECTIONS.	A	N	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	ACQN/DEVL LOCATION : 36 37'05"N 115 52'05"W ;37 22'05"N 116 37'05"W					
**GS920508314212.002	MAGNETIC DATA (GROUND) GATHERED ALONG SIX PROFILES (LINES PA, PB, PD, PE, PF, AND PL) ACROSS FORTYMILE WASH, NEVADA TEST SITE, NEVADA.	01/16/81-04/08/82	DATA WAS COLLECTED WITH THE SENSOR AT 2.4M (8FT.) ABOVE THE SURFACE. A GEOMETRICS PORTABLE PROTON PRECESSION MAGNETOMETER MODEL G-816 AND BASE STATION MAGNETOMETER G-826A WERE USED. A BASE STATION WAS REQUIRED TO MAKE CORRECTIONS FOR DIURNAL TIME VARIATIONS OF THE EARTH'S MAGNETIC FIELD. THE BASE STATION WAS LOCATED NEAR WELL J-13 AND READINGS WERE TAKEN AT TWO MINUTE INTERVALS OR LESS. MAGNETIC OBSERVATIONS ARE ACCURATE TO ABOUT 1 NT.	A	N	C
	ACQN/DEVL LOCATION : 36 37'30"N 116 15'00"W ;37 00'00"N 116 30'00"W					
**GS920508314212.003	DENSITY DATA FROM SAMPLES COLLECTED AROUND THE FORTYMILE WASH AND WAHMONIE FLATS AREA OF THE NEVADA TEST SITE, NEVADA.	03/19/80-11/02/82	DENSITIES WERE DETERMINED BY WEIGHING THE SAMPLE IN AIR, THEN WEIGHING THE SAMPLES SUBMERGED IN WATER USING AN ELECTRONIC BALANCE EQUIPPED WITH A STIRRUP AND SUSPENDING THE SAMPLE BY A WIRE. GRAIN DENSITY WAS CALCULATED FROM THE DIFFERENCE OF THE TWO WEIGHINGS, USING ARCHIMEDES' PRINCIPLE.	A	N	C
	ACQN/DEVL LOCATION : FORTYMILE WASH WAHMONIE FLATS					
**GS920508314212.005	PRINCIPAL FACTS FOR ABOUT 16,000 GRAVITY STATIONS IN THE NEVADA TEST SITE AND VICINITY, BY R. HARRIS, D. PONCE, D. HEALY, AND H. OLIVER. TABLES INCLUDE: STATION NAME, LATITUDE, LONGITUDE, ELEVATION, OBSERVED GRAVITY, FREE-AIR ANOMALY, INNER ZONE TERRAIN CORRECTION, COMPLETE BOUGUER ANOMALY, ISOSTATIC RESIDUAL ANOMALY, AND THE DATE THE STATION WAS OCCUPIED. (VOL. B IS PRINTED GRAVITY DATA TABLES, C IS ON DISKETTE.)	01/01/58-05/29/87	ALL GRAVITY DATA WERE REDUCED USING STANDARD GRAVITY CORRECTIONS, INCLUDING: EARTH-TIDE CORRECTION; INSTRUMENT DRIFT CORRECTION; LATITUDE CORRECTION; FREE-AIR CORRECTION; BOUGUER CORRECTION; CURVATURE CORRECTION; TERRAIN CORRECTION; AND ISOSTATIC CORRECTION. FURTHER INFORMATION ON THE GRAVITY DATA REDUCTION METHODS CAN BE FOUND ON PG. 5, VOL. A OF THIS REPORT.	D	N	T

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIFF	QUALIFIED	LOCATION
	ACQN/DEVL LOCATION : 36 35'05"N 115 52'05"W ;37 22'05"N 116 37'05"W						
**GS920608314212.008	GROUND MAGNETIC DATA - GATHERED ALONG TRAVERSES IN AMARGOSA VALLEY AND CRATER FLAT, NEVADA	03/15/86-03/19/86	MAGNETIC DATA WERE ACQUIRED UNDER PROCEDURE DESCRIBED IN GPP-11, MAGNETIC METHODS	A	N		C
	ACQN/DEVL LOCATION : 36 30'00"N 116 15'00"W ;36 50'00"N 116 30'00"W						
**GS921108314212.013	GEOPHYSICAL INVESTIGATIONS OF BURIED VOLCANIC CENTERS NEAR YUCCA MOUNTAIN, SOUTHWESTERN NEVADA, BY V.E. LANGENHEIM, H.W. OLIVER, AND K. KIRCHOFF-STEIN	03/15/86-12/15/89	PLOTTED GRAVITY DATA AND EVALUATED SOURCE; PLOTTED MAGNETIC DATA AND MODELED, MAKING SOME ASSUMPTIONS ABOUT SOURCE. COMPARED GRAVITY/MAGNETIC DATA USING STANDARD SCIENTIFIC PRACTICE.	D	N		C
	ACQN/DEVL LOCATION : USGS, MENLO PARK, CA						
**GS930108314212.002	STRUCTURE OF CRATER FLAT AND YUCCA MOUNTAIN, SOUTHEASTERN NEVADA, AS INFERRED FROM GRAVITY DATA, BY H.W. OLIVER AND K.F. FOX.	10/01/92-01/15/93	THIS MODEL WAS DEVELOPED USING EXISTING ISOSTATIC GRAVITY MAP DATA ACQUIRED IN THE VICINITY OF YUCCA MOUNTAIN AND CRATER FLAT.	D	N		C
	ACQN/DEVL LOCATION : USGS, MENLO PARK, CA						
**GS930408314211.012	SEARCH FOR POTENTIAL SITES, BY G.L. DIXON AND V.M. GLANZMAN -- FY 1980 REPORT	01/01/81-05/01/82	SUMMARIES/INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA AND PRELIMINARY RESULTS FROM GEOLOGICAL AND GEOPHYSICAL STUDIES INCLUDING MAGNETIC, GRAVITY, LOG DATA AND CORE ANALYSIS (USW G-1).	D	N		C
	ACQN/DEVL LOCATION : USGS, DENVER, CO.						

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
**GS930608314212.008	A SLINGRAM SURVEY ON THE NEVADA TEST SITE - PART OF INTEGRATED GEOLOGIC-GEOPHYSICAL STUDY OF SITE EVALUATION FOR NUCLEAR WASTE DISPOSAL, BY VINCENT J. FLANIGAN ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/78-01/01/79	CONTOUR MAPS OF SLINGRAM RESPONSE WERE PRODUCED FOR TWO DIFFERENT FREQUENCIES. SELECTED DATA WERE TREATED BY QUANTITATIVE INTERPRETATION PROCEDURES TO DEVELOP A LAYERED EARTH MODEL.	D	N	C
*GS930808314212.011	GRAVITY AND MAGNETIC STUDY OF YUCCA WASH, SOUTHWEST NEVADA, BY V.E. LANGENHEIM, D.A. PONCE, H.W. OLIVER, AND R.F. SIKORA ACQN/DEVL LOCATION : USGS, MENLO PARK, CA	09/30/92-08/30/93	COMPILATION AND ANALYSIS OF THE SOURCE DATA	D	Y	P
*GS940108314212.001	GRAVITY AND MAGNETIC INVESTIGATIONS OF YUCCA WASH, SOUTHWEST NEVADA, BY V.E. LANGENHEIM, D.A. PONCE AND H.W. OLIVER ACQN/DEVL LOCATION : USGS, MENLO PARK, CA	09/01/93-12/31/93	SUMMARIZING SOURCE AND ADDING CONCLUSION	D	Y	P
Activity - 8.3.1.4.2.1.3						
**GS900908314213.010	INTERPRETATION OF GEOPHYSICAL WELL-LOG MEASUREMENTS IN DRILL HOLES UE25A-4, -5, -6, -7, (UE-25A #4, #5, #6, #7), YUCCA MOUNTAIN, NEVADA TEST SITE, BY J.J. DANIELS, J.H. SCOTT, AND J.T. HAGSTRUM. ACQN/DEVL LOCATION : USGS, DENVER, CO	06/01/79-12/31/80	USGS STANDARD METHODS.	D	N	C

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIF	QUALIFIED	LOCATION
**GS911008314213.010	PERMEABILITY AND RELATED ROCK PROPERTIES OF CORE SAMPLES OBTAINED FROM THE YUCCA MOUNTAIN USW GU-3/G-3 AND USW G-4 BOREHOLES, NEVADA TEST SITE, NV. ACQN/DEVL LOCATION : USW G-3 USW G-4 USW GU-3	01/01/84-03/31/86	USGS STANDARD COLLECTION METHODS	A	N		C
**GS920108314213.001	GEOPHYSICAL LOGS AND CORE MEASUREMENTS FROM FORTY BOREHOLES AT YUCCA MOUNTAIN, BY PHILLIP H. NELSON, DOUGLAS C. MULLER, ULRICH SCHIMSCHAL, AND JOYCE KIBLER ACQN/DEVL LOCATION : J-13 UE-25A #1 UE-25A #6 UE-25A #7 UE-25B #1 UE-25C #1 UE-25C #2 UE-25C #3 UE-25P #1 UE-25WT #12 UE-25WT #13 UE-25WT #14 UE-25WT #15 UE-25WT #16 UE-25WT #17 UE-25WT #18 UE-25WT #3 UE-25WT #4 UE-25WT #6 USW G-1 USW G-2 USW G-4 USW GU-3 USW H-1 USW H-3 USW H-4 USW H-5	01/01/78-12/31/84	USGS STANDARD COLLECTION METHODS	A	N		T

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	USW H-6 USW UZ-1 USW UZ-6 USW VH-1 USW VH-2 USW WT-1 USW WT-10 USW WT-11 USW WT-2 USW WT-7					
**GS930708314213.001	PRELIMINARY GEOLOGIC AND GEOPHYSICAL DATA OF THE UE25A-3 (UE-25A #3) EXPLORATORY DRILL HOLE, NEVADA TEST SITE, NEVADA, BY FLORIAN MALDONADO, D.C. MULLER, AND J.N. MORRISON ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/78-01/01/79	CORE INDEX, FRACTURE FREQUENCY, AND FRACTURE DIPS WERE CALCULATED FOR ALL CORES. MATERIAL PROPERTIES CALCULATED INCLUDE AXIAL STRESS AT FAILURE, MODULES OF ELASTICITY, POISSON'S RATIO, AND BULK SHEER MODULI. GEOPHYSCIAL LOGS WERE RUN FOR GEOLOGIC CORRELATIONS AND LITHOLOGIC CHARACTERIZATIONS.	D	N	C
*GS930908314214.006	GEOLOGICAL AND MINERALOGICAL CONTROLS ON PHYSICAL PROPERTIES OF TUFFS AT YUCCA MOUNTAIN, BY PHILLIP H. NELSON. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/92-05/08/92	EXPERIMENTAL PROCEDURES FOUND IN NELSON AND ANDERSON, 1992. MINERALOGY DETERMINED BY X-RAY DIFFRACTION REPORTED AS WEIGHT PERCENTAGE OF TOTAL SOLIDS (BISH AND CHIPERA, 1989). POROSITY ESTIMATED FROM MEASUREMENTS ON NEARBY CORE. GRAIN DENSITY WAS PLOTTED AS A FUNCTION OF DEPTH. DENSITY WAS DETERMINED BY 1) WEIGHING DRIED SATURATED SAMPLES (ANDERSON, 1984), 2) PYCNOMETER (NIMICK AND SCHWARTZ, 1987) AND 3) MINERALOGICAL DETERMINATION (BISH AND CHIPERA, 1989). COMPLETE BIBLIOGRAPHIC CITATIONS FOUND IN REPORT.	D	N	T

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS931208314213.011	SATURATION LEVELS AND TRENDS IN THE UNSATURATED ZONE, YUCCA MOUNTAIN, NEVADA, BY P. NELSON. ACQN/DEVL LOCATION : USGS, DENVER, CO	08/01/93-12/15/93	CALIPER, DENSITY, AND EPITHERMAL NEUTRON LOGS WERE EXAMINED; WATER CONTENT AND POROSITY WERE COMPUTED TO ANALYZE TRENDS. LOGS FROM 15 "WT" BOREHOLES DRILLED TO THE DEPTH OF THE STATIC WATER LEVEL ARE PRESENTED.	D	N	P
Activity - 8.3.1.4.2.1.4						
**GS900908314215.008	PRELIMINARY INTERPRETATION OF PALEOMAGNETIC AND MAGNETIC PROPERTY DATA FROM DRILL HOLES USW G-1, G-2, GU-3, AND VH-1 AND SURFACE LOCALITIES IN THE VICINITY OF YUCCA MOUNTAIN, NYE COUNTY, NEVADA, BY J.G. ROSENBAUM & D.B. SNYDER. ACQN/DEVL LOCATION : USGS USW G-1 USW G-2 USW GU-3 USW VH-1 YUCCA MOUNTAIN VICINITY	01/01/80-12/31/83	USGS STANDARD METHODS.	D	N	C
*GS930908314214.006	GEOLOGICAL AND MINERALOGICAL CONTROLS ON PHYSICAL PROPERTIES OF TUFFS AT YUCCA MOUNTAIN, BY PHILLIP H. NELSON. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/92-05/08/92	EXPERIMENTAL PROCEDURES FOUND IN NELSON AND ANDERSON, 1992. MINERALOGY DETERMINED BY X-RAY DIFFRACTION REPORTED AS WEIGHT PERCENTAGE OF TOTAL SOLIDS (BISH AND CHIPERA, 1989). POROSITY ESTIMATED FROM MEASUREMENTS ON NEARBY CORE. GRAIN DENSITY WAS PLOTTED AS A FUNCTION OF DEPTH. DENSITY WAS DETERMINED BY 1) WEIGHING DRIED SATURATED SAMPLES (ANDERSON, 1984), 2) PYCNOMETER (NIMICK AND SCHWARTZ, 1987) AND 3) MINERALOGICAL DETERMINATION (BISH AND CHIPERA, 1989). COMPLETE BIBLIOGRAPHIC CITATIONS FOUND IN REPORT.	D	N	T

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	DATA TYPE	QUALIFIED	LOCATION
**GS930908314214.007	BULK POROSITY IN LITHOPHYSAL ZONES ABOVE THE STATIC WATER LEVEL AT YUCCA MOUNTAIN, NEVADA, CALCULATED FROM BOREHOLE GRAVITY AND GAMMA-GAMMA DENSITY LOGS, BY D.C. MULLER AND R.W. SPENGLER.	01/01/89-10/02/89	SATURATED BULK DENSITY FROM CORES OBTAINED BELOW STATIC WATER LEVEL AND NATURAL STATE BULK DENSITY FROM CORES OBTAINED ABOVE STATIC WATER LEVEL ARE PLOTTED ALONG WITH DENSITY FROM THE DENSITY LOG. LITHOPHYSAL POROSITY ESTIMATES ARE OBTAINED USING A POINT COUNT METHOD (SPENGLER AND CHORNACK, 1984). COMPLETE BIBLIOGRAPHIC CITATIONS FOUND IN REPORT.	D	N	T
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
Activity - 8.3.1.4.2.1.5						
**GS900908314215.008	PRELIMINARY INTERPRETATION OF PALEOMAGNETIC AND MAGNETIC PROPERTY DATA FROM DRILL HOLES USW G-1, G-2, GU-3, AND VH-1 AND SURFACE LOCALITIES IN THE VICINITY OF YUCCA MOUNTAIN, NYE COUNTY, NEVADA, BY J.G. ROSENBAUM & D.B. SNYDER.	01/01/80-12/31/83	USGS STANDARD METHODS.	D	N	C
	ACQN/DEVL LOCATION : USGS USW G-1 USW G-2 USW GU-3 USW VH-1 YUCCA MOUNTAIN VICINITY					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.4.2.1.6						
**GS930408314216.001	REINTERPRETATION OF THE BEATTY SCARP, NYE COUNTY, NEVADA, BY WC SWADLEY, J.C. YOUNT, AND S.T. HARDING. ACQN/DEVL LOCATION : USGS, MENLO PARK, CA	01/11/85-11/19/85	INFERENCES ARE DRAWN FROM DATA OBTAINED BY MAPPING, SCARP PROFILE MEASUREMENTS, TRENCH LOGGING, RADIOMETRIC DATING AND SEISMIC PROFILING.	D	N	C
*GS931208314216.003	SURFACE REFLECTION SEISMIC IMAGING OF THE GHOST DANCE FAULT IN SURVEYS EXTENDING FROM THE REGION WEST OF USW WT-2 TO THE REGION EAST OF UE-25 UZ #16, CROSSING THE TRACE OF THE FAULT, AND SOUTH FROM THE REGION OF UE-25 NRG #7 PAST USW NRG-6 TO THE SUBDOCK AREA. ACQN/DEVL LOCATION : N9960.5890(N) E10024.4430(N) N9832.4170(N) E10121.2591(N) N9708.8875(N) E10220.6840(N) N9591.6391(N) E10327.8713(N) N9532.4599(N) E10380.5828(N) N9462.4228(N) E10421.1820(N) N9313.9099(N) E10480.1320(N) N9165.3257(N) E10539.6012(N) N9017.7991(N) E10599.5914(N) N8872.6339(N) E10664.9011(N) N8725.8638(N) E10726.7060(N) N8618.3993(N) E10780.9401(N) N8519.8757(N) E10848.3095(N) N8420.8730(N) E10914.4696(N) N8311.9528(N) E10965.2453(N) N8209.2557(N) E11024.6838(N) N8117.1068(N) E11100.9453(N) N8019.7898(N) E11169.7612(N) N7916.5370(N) E11229.9327(N) N7820.6039(N) E11303.4229(N) N7711.9586(N) E11418.2341(N) N7603.4948(N) E11534.4764(N) N7495.5986(N) E11652.2433(N) N7390.1705(N) E11773.0950(N) N7362.8533(N) E11801.6855(N)	10/25/93-10/29/93	SN-0055, HIGH RESOLUTION SURFACE SEISMIC REFLECTION	A	Y	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	DIFFTYPE	QUALIFIED	LOCATION
	N7335.4308(N) E11819.6376(N)					
	N7278.3449(N) E11836.2470(N)					
	N7171.6214(N) E11976.4329(N)					
	N7068.3647(N) E12097.3827(N)					
	N6961.8605(N) E12216.6420(N)					
	N6846.8649(N) E12325.2640(N)					
	N6718.6944(N) E12419.0073(N)					
	N6593.1285(N) E12515.9161(N)					
	N6464.4948(N) E12609.7504(N)					
	N6342.3905(N) E12701.4512(N)					
	N5910.2406(N) E4097.8285(N)					
	N5958.6282(N) E4160.9987(N)					
	N6002.6961(N) E4225.4879(N)					
	N6042.0575(N) E4292.9448(N)					
	N6052.2773(N) E4335.7208(N)					
	N6050.0792(N) E4373.6502(N)					
	N6039.1731(N) E4410.0779(N)					
	N6017.8392(N) E4443.6302(N)					
	N5980.0382(N) E4512.6268(N)					
	N5942.6049(N) E4582.8883(N)					
	N5923.1200(N) E4658.6651(N)					
	N5908.3595(N) E4738.1918(N)					
	N5893.6122(N) E4813.8511(N)					
	N5896.9442(N) E4892.4288(N)					
	N5919.2798(N) E4965.6112(N)					
	N5943.1317(N) E5042.9647(N)					
	N5960.3554(N) E5122.1358(N)					
	N5970.2546(N) E5167.7525(N)					
	N5970.4482(N) E5198.0203(N)					
	N5986.5449(N) E5275.3534(N)					
	N5993.8946(N) E5285.5811(N)					
	N6004.5023(N) E5352.1618(N)					
	N6022.7096(N) E5418.4558(N)					
	N6015.4753(N) E5430.5383(N)					
	N6034.8053(N) E5505.8366(N)					
	N6056.0495(N) E5513.7281(N)					
	N6043.1944(N) E5545.4145(N)					
	N6067.8278(N) E5621.6071(N)					
	N6099.4859(N) E5641.2963(N)					
	N6076.8656(N) E5700.9532(N)					
	N6095.4570(N) E5736.7096(N)					
	N6108.8036(N) E5773.4696(N)					
	N6113.3751(N) E5787.2864(N)					
	N6131.1460(N) E5849.9884(N)					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	N6151.0592(N) E5885.2096(N)					
	N6159.0054(N) E5923.6791(N)					
	N6175.7334(N) E5960.3955(N)					
	N6233.9590(N) E6031.1634(N)					
	N6209.5040(N) E6032.1188(N)					
	N6256.7960(N) E6091.3302(N)					
	N6247.6405(N) E6143.4773(N)					
	N6284.6840(N) E6159.2657(N)					
	N6281.0816(N) E6226.7956(N)					
	N6260.6908(N) E6262.6311(N)					
	N6285.9905(N) E6308.1776(N)					
	N6259.4117(N) E6381.1295(N)					
	N6278.4754(N) E6448.6531(N)					
	N6247.1338(N) E6499.6866(N)					
	N6262.2202(N) E6588.1076(N)					
	N6228.0644(N) E6618.3807(N)					
	N6202.9713(N) E6734.9084(N)					
	N6232.2554(N) E6738.5913(N)					
	N6552.8408(N) E6808.3088(N)					
	N6616.5767(N) E6835.7614(N)					
	N6170.2929(N) E6849.1927(N)					
	N6191.9190(N) E6872.2616(N)					
	N6727.8885(N) E6880.5514(N)					
	N6837.4117(N) E6929.0871(N)					
	N6130.0490(N) E6960.3418(N)					
	N6946.9943(N) E6976.5074(N)					
	N6141.8535(N) E6995.0354(N)					
	N7059.1508(N) E7019.0672(N)					
	N7171.9407(N) E7059.8798(N)					
	N6076.3619(N) E7067.1448(N)					
	N7285.2083(N) E7098.1711(N)					
	N6077.7218(N) E7122.2264(N)					
	N7399.0907(N) E7134.7786(N)					
	N6012.1696(N) E7167.7636(N)					
	N7513.4355(N) E7170.8747(N)					
	N7628.5099(N) E7205.9988(N)					
	N5997.4303(N) E7241.8981(N)					
	N7742.6959(N) E7242.3321(N)					
	N5947.8325(N) E7268.7867(N)					
	N7856.9857(N) E7279.1637(N)					
	N7970.4825(N) E7316.1249(N)					
	N8084.4577(N) E7353.4548(N)					
	N5928.2370(N) E7363.8458(N)					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	N5890.1945(N) E7372.9963(N)					
	N8198.8727(N) E7389.1261(N)					
	N8312.5558(N) E7427.2000(N)					
	N8426.5162(N) E7464.0385(N)					
	N5833.5488(N) E7477.6558(N)					
	N5861.5641(N) E7483.3608(N)					
	N8541.5601(N) E7501.5006(N)					
	N8655.8137(N) E7540.5711(N)					
	N8768.5460(N) E7578.5479(N)					
	N5780.6145(N) E7584.1129(N)					
	N5802.7611(N) E7608.8712(N)					
	N8883.0316(N) E7617.7161(N)					
	N8997.4368(N) E7655.5652(N)					
	N5734.1070(N) E7695.5762(N)					
	N9109.5011(N) E7695.6975(N)					
	N9222.6860(N) E7736.2967(N)					
	N9336.0218(N) E7775.0335(N)					
	N9373.8102(N) E7789.4364(N)					
	N5705.2246(N) E7811.5557(N)					
	N5731.7266(N) E7862.6024(N)					
	N5699.2553(N) E7930.6315(N)					
	N5725.3053(N) E7986.8801(N)					
	N5695.5651(N) E8049.0120(N)					
	N5719.5249(N) E8119.8872(N)					
	N5688.9889(N) E8168.7993(N)					
	N5713.4501(N) E8253.3378(N)					
	N5683.4837(N) E8288.2068(N)					
	N5665.3461(N) E8393.4646(N)					
	N5675.9964(N) E8408.4176(N)					
	N5659.7891(N) E8524.2539(N)					
	N5671.7787(N) E8527.9467(N)					
	N5666.9878(N) E8647.3835(N)					
	N5663.4313(N) E8673.7730(N)					
	N5668.6366(N) E8767.8255(N)					
	N5661.8176(N) E8820.0033(N)					
	N5662.1700(N) E8887.4404(N)					
	N5655.1329(N) E8926.3097(N)					
	N5643.6293(N) E8952.1941(N)					
	N5632.3262(N) E9003.1603(N)					
	N5603.1969(N) E9077.6718(N)					
	N5596.3555(N) E9077.7650(N)					
	N5569.9356(N) E9149.3739(N)					
	N5531.5209(N) E9219.7575(N)					
	N5489.7463(N) E9288.0449(N)					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
	N5423.1018(N) E9387.1449(N) N5354.1660(N) E9488.1005(N) N5289.2922(N) E9585.6306(N) N5219.5190(N) E9683.8299(N) N10489.1708(N) E9749.7864(N) N5151.9322(N) E9782.2171(N) N10386.1000(N) E9809.6943(N) N10239.9481(N) E9875.2712(N) N5083.7328(N) E9880.3085(N) N10095.4777(N) E9940.0237(N) N5018.2490(N) E9980.4391(N) N7724.1308(N) N5756.1761(N)					
Activity - 8.3.1.4.2.2.1						
*GS930108314221.003	ISOTOPIC AND TRACE ELEMENT VARIABILITY IN ALTERED AND UNALTERED TUFFS AT YUCCA MOUNTAIN, NEVADA, BY Z.E. PETERMAN, R.W. SPENGLER, F.R. SINGER, AND R.P. DICKERSON ACQN/DEVL LOCATION : USGS, DENVER, CO	11/17/92-12/31/92	DESCRIPTION OF PROGRESS OF THE ONGOING INVESTIGATION, BUILDING A COMPREHENSIVE BASE OF ISOTOPIC AND GEOCHEMICAL INFORMATION ON THE ROCK MASS AT YUCCA MOUNTAIN.	D	N	C
**GS930308314221.008	STRUCTURE OF PRE-CENOZOIC ROCKS IN THE VICINITY OF YUCCA MOUNTAIN, NEVADA - A POTENTIAL NUCLEAR-WASTE DISPOSAL SITE, BY G.D. ROBINSON. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/84-01/01/85	SUMMARIES AND PRELIMINARY INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA/INFORMATION FOR THE GROSS DISTRIBUTION AND PRESENT STRUCTURE OF PREVOLCANIC ROCKS IN THE YUCCA MOUNTAIN AREA INCLUDING: REGIONAL STRATIGRAPHY AND STRUCTURE OF PRE-CENOZOIC ROCKS, STRUCTURE OF PRE-CENOZOIC ROCKS OF THE YUCCA FLAT AREA, AND STRUCTURE OF THE PRE-CENOZOIC ROCKS OF THE YUCCA MOUNTAIN STUDY AREA.	D	N	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS931008314221.011	STRUCTURAL CHARACTER OF THE NORTHERN SEGMENT OF THE PAINTBRUSH CANYON FAULT, YUCCA MOUNTAIN, NEVADA, BY R.P. DICKERSON AND R.W. SPENGLER ACQN/DEVL LOCATION : USGS, DENVER, CO	05/01/93-09/30/93	TECHNICAL PROCEDURE GP-01,R2, GEOLOGIC MAPPING.	D	N	P
*GS931208314221.012	FAULT ATTITUDE DATA OF THE PAINTBRUSH CANYON FAULT SYSTEM. ACQN/DEVL LOCATION : N770270(N) E570900(N) ;N793000(N) E579000(N)	05/01/92-11/05/93	NWM-USGS GP-01,R2, GEOLOGIC MAPPING.	A	Y	P
*GS931208314221.015	PHOTOMICROGRAPHS OF THIN SECTIONS FROM ANTLER RIDGE ACQN/DEVL LOCATION : USGS, DENVER, CO	05/01/93-12/06/93	GP-18,R1, PETROGRAPHIC ANALYSIS OF VOLCANIC ROCKS	A	Y	P
*GS931208314221.016	PETROGRAPHIC AND GEOCHEMICAL CHARACTERISTICS OF A SECTION THROUGH THE TIVA CANYON TUFF AT ANTLER RIDGE, YUCCA MOUNTAIN, NEVADA, BY F. SINGER, F.J. BYERS, JR., B.L. WIDMAN AND R.P. DICKERSON ACQN/DEVL LOCATION : USGS, DENVER, CO	10/01/93-12/06/93	DETAILED PETROGRAPHIC EXAMINATION OF AN ANTLER RIDGE THIN SECTION SUITE DESCRIBING POST DEPOSITIONAL MINERAL CHANGES RELATED TO COOLING OF TIVA CANYON TUFF WELDED ASH-FLOW UNITS (E.G. DEVITRIFICATION AND VAPOR PHASE MINERALOGY) AIDED BY CHEMICAL ANALYSIS	D	Y	P
*GS931283117452.005	GEOLOGIC MAPPING IN CRATER FLAT, IN AND AROUND FOUR 7.5 MINUTE QUADRANGLES: 1) EAST OF BEATTY MOUNTAIN, 2) BEATTY MOUNTAIN, 3) CRATER FLAT, 4) BIG DUNE. ACQN/DEVL LOCATION : 36 52'30"N 116 37'30"W ;37 00'00"N 116 30'00"W	03/14/93-05/15/93	TECHNICAL PROCEDURE GP-01,R2, GEOLOGIC MAPPING.	A	Y	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIFF	QUALIFIED	LOCATION
*GS940108314221.001	FIELD OBSERVATIONS OF FRACTURES AND FIELD MEASUREMENTS COLLECTED 10/01/92 THROUGH 9/30/93 FOR ATTRIBUTES OF FRACTURES, MAPS AT 1:240, PORTION OF GHOST DANCE FAULT, YUCCA MOUNTAIN, NEVADA.	10/01/92-09/30/93	DATA WERE ACQUIRED USING TECHNICAL PROCEDURES NWM-USGS GP-01,R2, GEOLOGIC MAPPING AND GP-12,R1, MAPPING FRACTURES ON PAVEMENTS, OUTCROPS, AND ALONG TRAVERSES.	A	Y		P
	ACQN/DEVL LOCATION : N762,400(N) E560,600(N) ;N765,200(N) E564,400(N)						
*GS940108314221.002	THE SUNDANCE FAULT: A NEWLY RECOGNIZED SHEAR ZONE AT YUCCA MOUNTAIN, BY R.W. SPENGLER, C.A. BRAUN, AND L.G. MARTIN.	10/01/93-12/31/93	THIS REPORT WAS DEVELOPED BY INTERPRETING DETAILED STRUCTURAL MAPPING OF AN AREA THAT STRADDLES THE SURFACE OF THE GHOST DANCE FAULT. CONCLUSIONS WERE BASED ON OBSERVATIONS AND MAP ANALYSIS AT 1:240 AND 1:600 SCALES.	D	N		P
	ACQN/DEVL LOCATION : USGS, DENVER, CO						
Activity - 8.3.1.4.2.2.2							
**GS921208314222.003	FRACTURE DATA FOR (UE-25) NRG-1 CORE, DATED SEPT 4 & 14, 1992; FRACTURE DATA FOR NRG-1 PAVEMENT, DATED SEPT. 3, 16, 17, 18, 1992; FRACTURE DATA FOR NRG-1 PAVEMENT, DATED 11/16 - 11/20, 1992	09/03/92-11/20/92	TECHNICAL PROCEDURE NWM-USGS GP-12,R1, MAPPING FRACTURES ON PAVEMENTS, OUTCROPS, AND ALONG TRAVERSES.	A	Y		C
	ACQN/DEVL LOCATION : USBR SOIL AND ROCK LAB, DENVER						

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.4.2.2.4						
**GS931008314224.006	DETAILED LINE SURVEY DATA FOR EXPLORATORY STUDIES FACILITY, NORTH RAMP STARTER TUNNEL, RIGHT SLASH. ACQN/DEVL LOCATION : NORTH RAMP OF ESF, AREA 25, NTS	04/14/93-09/10/93	SN-0041,R0, UNDERGROUND MAPPING OF THE NORTH RAMP STARTER TUNNEL AND APPURTENANCES	A	Y	C
**GS931008314224.007	FULL-PERIPHERY MAPS, NORTH RAMP OF THE EXPLORATORY STUDIES FACILITY, THROUGH OCTOBER, 1993. ACQN/DEVL LOCATION : NORTH RAMP OF ESF, AREA 25, NTS	04/14/93-09/10/93	SN-0041,R0, UNDERGROUND MAPPING OF THE NORTH RAMP STARTER TUNNEL AND APPURTENANCES	A	Y	C
*GS940208314224.001	DESCRIPTIONS AND ORIENTATIONS OF TWO FAULTS IDENTIFIED AT SURVEY POINTS NRPM-150 TO NRPM-157, NORTH RAMP PORTAL, ESF, MARCH 1993 ACQN/DEVL LOCATION : NORTH RAMP PORTAL, ESF	03/19/93-03/19/93	NWM-USGS GP-01,R2, GEOLOGIC MAPPING, AND GP-12,R1, MAPPING FRACTURES ON PAVEMENTS, OUTCROPS, AND ALONG TRAVERSES	A	Y	C
*GS940208314224.002	FULL PERIPHERY MAP/STARTER TUNNEL ACQN/DEVL LOCATION : USBR, DENVER, CO	01/01/94-02/28/94	FIELD DATA IS EXPORTED INTO DIPS AND NWA STATPAK THEN EXPORTED TO AUTOCAD. THE ANALYSIS PAPER DESCRIBES THE COLLECTION METHOD AND LIMITATIONS AND ADDITIONAL EXPLANATIONS FOR THE FULL PERIPHERY MAP	D	Y	C

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.4.2.2.5						
*GS931208314225.001	VSP DATA FROM USW NRG-6 AND USW WT-2	01/01/93-12/09/93	SP-13,R1, VSP AND CROSSHOLE TOMOGRAPHIC SURVEYS	A	Y	C

ACQN/DEVL LOCATION :

N760709.03529(N)	E561861.06022(N)
N760660.54000(N)	E561923.56000(N)
N760635.22251(N)	E561971.61496(N)
N760617.72844(N)	E562016.83945(N)
N760596.53374(N)	E562060.00276(N)
N760586.96610(N)	E562111.65543(N)
N760592.39532(N)	E562159.11495(N)
N760613.91922(N)	E562209.96883(N)
N760643.42035(N)	E562248.65178(N)
N760674.34866(N)	E562286.07975(N)
N760708.62988(N)	E562322.38096(N)
N760743.42170(N)	E562356.79929(N)
N760768.46645(N)	E562406.87925(N)
N760789.85461(N)	E562446.05127(N)
N760802.13060(N)	E562490.77385(N)
N760812.43019(N)	E562540.73690(N)
N760817.82754(N)	E562590.35809(N)
N760822.32512(N)	E562640.04954(N)
N760823.01716(N)	E562686.90466(N)
N760824.51338(N)	E562739.71504(N)
N760823.72724(N)	E562787.52201(N)
N760819.13400(N)	E562836.77942(N)
N760804.52429(N)	E562897.30774(N)
N766649.33809(N)	E564161.39669(N)
N766726.02468(N)	E564186.92569(N)
N766067.45545(N)	E564351.69944(N)
N766820.34544(N)	E564552.00920(N)

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.5.1.2.1						
*GS931208315121.002	STABLE ISOTOPE ANALYSES OF GASTROPODS, 10/93-11/93. ACQN/DEVL LOCATION : USGS, DENVER, CO	10/01/93-11/30/93	NWM-USGS GCP-16,R3, CARBONATE CARBON AND OXYGEN ISOTOPE ANALYSES.	A	Y	C
*GS931208315121.003	MOLLUSCS AS CLIMATE INDICATORS - PRELIMINARY RESULTS OF STABLE ISOTOPE AND COMMUNITY ANALYSIS, BY S.E. SHARPE, J.F. WHELAN, R.M. FORESTER, AND T. MCCONNAUGHEY ACQN/DEVL LOCATION : DESERT RESEARCH INSTITUTE, RENO, NV	09/30/93-12/15/93	EVALUATION OF THE USE OF ISOTOPE SIGNATURE ANALYSIS OF MOLLUSCS WITHIN A SAMPLE TO DETERMINE THE CLIMATE VARIABILITY ASSOCIATED WITH THE SAMPLE'S TIMESPAN	D	Y	P
Activity - 8.3.1.5.1.2.2						
**GS931208315122.003	FOSSIL OSTRACODE SPECIMENS FROM MARSH DEPOSITS IN LAS VEGAS VALLEY ACQN/DEVL LOCATION : USGS, DENVER, CO	01/20/93-12/01/93	SAMPLE COLLECTION FOLLOWED GP-27,R2, TRENCH WALL AND NATURAL OUTCROP SAMPLING FOR COORDINATED STUDIES, SAMPLE PROCESSING FOLLOWED HP-78,R1, NONMARINE CALCEREOUS MICROFOSSIL SAMPLE PREPARATION AND DATA ACQUISITION.	A	Y	C
*GS931208315122.004	LATE GLACIAL CLIMATE ESTIMATES FOR SOUTHERN NEVADA: THE FOSSIL OSTRACODE RECORD, BY R.M. FORESTER AND A.J. SMITH. ACQN/DEVL LOCATION : USGS, DENVER, CO	09/30/93-11/30/93	THE OSTRACODE CONTENTS OF SEVERAL SAMPLES COLLECTED FROM NEAR THE TOP OF UNIT D AND NEAR THE BASE OF UNIT E (QUADE 1986, QUADE AND PRATT, 1989) WHERE THE UNIT D/E BOUNDARY IS ABOUT 13 TO 14 KA, WERE USED TO PROVIDE PRELIMINARY PALEOHYDROLOGICAL RECONSTRUCTIONS FROM OSTRACODES.	D	Y	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.5.1.3.1						
*GS940208315131.001	RADIOCARBON DATING ANALYSES OF VEGETATIVE MATERIALS FROM PACKRAT MIDDENS	07/15/93-10/27/93	ANALYSES WERE PROVIDED BY BETA ANALYTIC, AN APPROVED YMP-USGS VENDOR, USING THE AMS TECHNIQUE AND REPORTED AS RCYBP. STANDARDS AND CONVENTIONS ARE FULLY ANNOTATED.	A	Y	P
	ACQN/DEVL LOCATION : BETA ANALYTIC INC., MIAMI, FLORIDA					
Activity - 8.3.1.5.1.4.1						
**GS930508315141.005	URANIUM-TREND DATING OF FLUVIAL AND FAN DEPOSITS IN THE BEATTY AREA, NEVADA BY J.N. ROSHOLT, W.C. SWADLEY AND C.A. BUSH.	01/01/85-09/26/85	ANALYSES OF CACO3 RINDS BY CONVENTIONAL CLOSED-SYSTEM URANIUM-SERIES DATING. U AND TH CONCENTRATIONS BY RADIOISOTOPE-DILUTION TECHNIQUE DESCRIBED BY ROSHOLT (1984). CALICHE AGES BY ISOCHRON-PLOT METHOD, SZABO AND STERR (1978). CHARACTERIZATION OF ANALYTICAL RESULTS PLOTTED AS ACTIVITY RATIOS IN GRAPHICAL FORM. COMPLETE BIBLIOGRAPHIC CITATIONS IN REPORT.	D	N	C
	ACQN/DEVL LOCATION : USGS, DENVER, CO					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.5.1.4.2						
*GS940108315142.001	DATA ON LATE TERTIARY ESTABLISHMENT OF FORTYMILE CANYON INCLUDING SURFICIAL DEPOSITS MAPPING AND ANALYSIS OF PUBLISHED GEOLOGIC QUADRANGLE MAPPING. ACQN/DEVL LOCATION : 36 48'45"N 116 26'15"W ;37 15'00"N 116 15'00"W	10/01/92-12/22/92	GP-01,R2, GEOLOGIC MAPPING, AND SCIENTIFIC NOTEBOOK SN-0056, SEDIMENTARY GRAVEL CLAST COUNTING AND CLASSIFICATION AT SECTION EXPOSURES.	A	Y	C
*GS940108315142.002	LATE TERTIARY ESTABLISHMENT OF FORTYMILE CANYON: DRAINAGE REVERSAL IN THE EAST MOAT OF THE TIMBER MOUNTAIN CALDERA, BY S.C. LUNDSTROM AND R.G. WARREN ACQN/DEVL LOCATION : USGS, LAS VEGAS, NV	09/20/93-12/22/93	ANALYSIS OF THE TIMING OF FORTYMILE CANYON ESTABLISHMENT REPORTED AND FIGURES DESIGNED TO HELP CONVEY TEXT.	D	Y	P
*GS940108315142.003	DATA THAT SUPPORTS SURFICIAL GEOLOGIC MAPPING OF THE NORTHERN 1/3 OF THE YUCCA MOUNTAIN REGION DEFINED IN THE STUDY PLAN. ACQN/DEVL LOCATION : 36 48'45"N 116 26'15"W ;36 52'30"N 116 22'30"W 38 52'30"N 116 30'00"W ;36 56'15"N 116 22'30"W	05/01/92-12/22/93	GEOLOGIC MAPPING FOLLOWING TECHNICAL PROCEDURE GP-01,R2, GEOLOGIC MAPPING, INCLUDING AIRPHOTO INTERPRETATION AND FIELD OBSERVATIONS.	A	Y	P
*GS940108315142.004	PRELIMINARY SURFICIAL DEPOSITS MAP OF THE NORTHEAST 1/4 OF THE BUSTED BUTTE QUADRANGLE, 1:12,000 SCALE, BY S.C. LUNDSTROM, J.R. WESLING AND E.M. TAYLOR ACQN/DEVL LOCATION : USGS, LAS VEGAS, NV	05/01/92-12/22/92	COMPILATION AND ANALYSIS OF SURFICIAL DEPOSIT MAPPING DATA FOR THE NORTHERN 1/3 OF YM REGION, INCLUDING AIRPHOTO INTERPRETATION AND FIELD OBSERVATIONS.	D	Y	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS940108315142.005	PRELIMINARY SURFICIAL DEPOSITS MAP OF THE SOUTHWEST 1/4 OF THE TOPOPAH SPRING NW QUADRANGLE, BY S.C. LUNDSTROM AND E.M. TAYLOR ACQN/DEVL LOCATION : USGS, LAS VEGAS, NV	05/01/92-12/22/93	COMPILATION AND ANALYSIS OF SURFICIAL DEPOSIT MAPPING DATA FOR THE NORTHERN 1/3 OF YM REGION, INCLUDING AIRPHOTO INTERPRETATION AND FIELD OBSERVATIONS.	D	Y	P
*GS940108315142.006	PRELIMINARY SURFICIAL DEPOSITS MAP OF THE SOUTHEAST 1/4 OF THE TOPOPAH SPRING NW QUADRANGLE, BY S.C. LUNDSTROM AND E.M. TAYLOR ACQN/DEVL LOCATION : USGS, LAS VEGAS, NV	05/01/92-12/22/93	COMPILATION AND ANALYSIS OF SURFICIAL DEPOSIT MAPPING DATA FOR THE NORTHERN 1/3 OF YM REGION, INCLUDING AIRPHOTO INTERPRETATION AND FIELD OBSERVATIONS.	D	Y	P
Activity - 8.3.1.5.1.4.3						
**GS931108315143.001	THERMOLUMINESCENCE AGE DATING FOR MIDWAY VALLEY TRENCHES 4, 5A, AND 14D, STAGECOACH ROAD TRENCH 1, AND BUSTED BUTTE WALL 4 ACQN/DEVL LOCATION : TL LAB, USGS, DENVER	11/19/92-11/16/93	NWM-USGS GCP-29,R0, THERMOLUMINESCENCE DATING	A	Y	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	DIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.5.2.1.1						
*GS940208315211.001	EVIDENCE OF PREHISTORIC FLOODING AND THE POTENTIAL FOR FUTURE EXTREME FLOODING AT COYOTE WASH, YUCCA MOUNTAIN, NYE COUNTY, NEVADA, BY PATRICK A. GLANCY.	10/01/87-08/17/92	FLOOD-HAZARD POTENTIAL WAS EVALUATED BY 1) EXAMINATION OF TRENCHED UNCONSOLIDATED DEPOSITS TO CHARACTERIZE AND CHRONICLE PAST FLOOD EVENTS, 2) APPLICATION OF HYDROLOGIC TECHNIQUES TO ESTIMATE PEAK-FLOOD DISCHARGE AND 3) APPLICATION OF EMPIRICAL TECHNIQUES TO ESTIMATE POTENTIAL MAXIMUM DISCHARGE. RESULTS ARE PRESENTED IN SKETCHES AND TABLES.	D	N	P
	ACQN/DEVL LOCATION : USGS, CARSON CITY, NV					
Activity - 8.3.1.5.2.1.3						
**GS930108315213.001	CHANNEL GEOMETRY DATA FROM SCIENTIFIC NOTEBOOK SN-0008, COLLECTED BY WAITE OTERKAMP.	05/07/90-06/14/91	DATA COLLECTED USING HP-205T,R1 "SELECTION OF SITES AND COLLECTION OF DATA FOR CHANNEL GEOMETRY MEASUREMENTS".	A	Y	C
	ACQN/DEVL LOCATION : T11S R47E,NE/SE/SE OF SECTION 28 T11S R47E,SE/NE/NW OF SECTION 33 T11S R47E,SW/NW/NW OF SECTION 34 T12S R47E,SE/NW/NW OF SECTION 20 T12S R47E,SE/SE/NW OF SECTION 30 T12S R50E,NE/NE/SE OF SECTION 10 T12S R50E,NE/NE/SE OF SECTION 28 T12S R50E,NE/NE/SW OF SECTION 18 T12S R50E,NE/NE/SW OF SECTION 28 T12S R50E,NE/SE/NE OF SECTION 10 T12S R50E,NW/SW/SW OF SECTION 27 T12S R50E,SE/SE/NW OF SECTION 15 T12S R50E,SW/SW/NW OF SECTION 27 T12S R51E,NE/NW/SW OF SECTION 19 T12S R51E,NW/NW/NW OF SECTION 34 T13S R47E,NE/NW/NW OF SECTION 33 T13S R47E,SW/NE/NE OF SECTION 18 T13S R50E,NE/NE/SW OF SECTION 07 T13S R50E,NE/NW/SW OF SECTION 07 T13S R50E,NE/SW/SW OF SECTION 06 T13S R50E,NW/NW/SW OF SECTION 25 T13S R50E,SE/SE/SE OF SECTION 12 T13S R50E,SW/NW/NW OF SECTION 07 T13S R50E,SW/SW/SW OF SECTION 07					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIFF	QUALIFIED	LOCATION
	T13S R51E,NW/NW/NE OF SECTION 07 T14S R47E,SE/SE/SW OF SECTION 24 T14S R49E,CENTER/SW OF SECTION 13 T14S R49E,NW/NW/NE OF SECTION 35 T14S R50E,NE/NE/SW OF SECTION 16 T15S R47E,CENTER OF SECTION 02 T15S R48E,CENTER OF SECTION 19 T15S R48E,NE/NE/NW OF SECTION 03 T15S R48E,SW/NE/NW OF SECTION 36 T15S R49E,NE/NE/SE OF SECTION 16 T15S R49E,NE/NE/SE OF SECTION 21 T15S R49E,NE/NE/SW OF SECTION 10 T15S R49E,NW/NE/NE OF SECTION 31 T15S R49E,NW/NW/SE OF SECTION 20 T15S R49E,NW/NW/SW OF SECTION 29 T15S R49E,SE/SW/SW OF SECTION 20 T15S R49E,SW/NE/SE OF SECTION 03 T15S R49E,SW/SW/NW OF SECTION 31 T15S R50E,NE/NW/SE OF SECTION 05 T15S R50E,NE/SW/SE OF SECTION 18 T15S R50E,SE/SW/SW OF SECTION 24 T15S R50E,SW/SW/SW OF SECTION 19 T16S R48E,SE/SE/NE OF SECTION 06 T16S R52E,SE/SW/NW OF SECTION 14 T21/22S R6E, SW/SW OF SECTION 24 T22S R6E,NW/SE/SW OF SECTION 01 T24S R06E,NW/SE/SW OF SECTION 18 T24S R06E,NW/SE/SW OF SECTION 28 T26S R05E,NE/NW/NE OF SECTION 22						
*GS930908315213.021	PHYSICAL WATER PROPERTIES OBTAINED IN FIELD DURING SAMPLING TRIPS FROM 1988 THROUGH 5/2/89. DATA RECORDED ON SAMPLE COLLECTION FORMS.	01/01/88-05/02/89	YMP-USGS TECHNICAL PROCEDURES HP-59,R0, METHOD FOR CALIBRATING DIGITAL THERMOMETERS; HP-23,R0, COLLECTION AND FIELD ANALYSIS OF GROUND-WATER SAMPLES FROM SATURATED ZONE; AND HP-91,R0, COLLECTION AND FIELD ANALYSIS OF SURFACE-WATER SAMPLES	A	N		P

ACQN/DEVL LOCATION : 35 00'00"N 118 00'00"W ;38 00'00"N 115 00'00"W

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS931208315213.022	PHYSICAL WATER PROPERTIES OBTAINED IN FIELD DURING SAMPLING TRIPS FROM 5/3/89 THROUGH 6/30/93. DATA RECORDED ON SAMPLE COLLECTION FORMS.	05/03/89-06/30/93	YMP-USGS TECHNICAL PROCEDURES HP-59,RO, METHOD FOR CALIBRATING DIGITAL THERMOMETERS; HP-23,RO R2 &R3, COLLECTION AND FIELD ANALYSIS OF GROUND-WATER SAMPLES FROM SATURATED ZONE; AND HP-91,R0 R1 R2 &R3, COLLECTION AND FIELD ANALYSIS OF SURFACE-WATER SAMPLES.	A	Y	P
	ACQN/DEVL LOCATION : 35 00'00"N 118 00'00"W ;38 00'00"N 115 00'00"W					
Activity - 8.3.1.5.2.1.4						
**GS921208315214.033	WEATHER DATA FROM KAWICH PEAK WEATHER STATION INCLUDING AIR TEMPERATURE, SOIL TEMPERATURE, SOLAR RADIATION, AND HUMIDITY.	09/25/91-09/17/92	DATA WERE ACQUIRED USING THE FOLLOWING TECHNICAL PROCEDURES: HP-97,R1, MEASUREMENT OF TEMPERATURE AND RELATIVE HUMIDITY USING A CSI 207 TEMPERATURE AND RELATIVE HUMIDITY PROBE; HP-168,R0, MEASUREMENT OF ENERGY FLUX DENSITY BY A PYRANOMETER; AND HP-170,R1, METHOD FOR MEASURING TEMPERATURE USING A CAMPBELL SCIENTIFIC, INC., 107 TEMPERATURE PROBE.	A	Y	C
	ACQN/DEVL LOCATION : 37 57'19"N 116 27'00"W					
**GS921208315214.034	WEATHER DATA FROM KAWICH BASE WEATHER STATION INCLUDING AIR TEMPERATURE, SOIL TEMPERATURE, SOLAR RADIATION, HUMIDITY, WIND SPEED, AND WIND DIRECTION.	09/25/91-09/17/92	DATA WERE ACQUIRED USING THE FOLLOWING TECHNICAL PROCEDURES: HP-97,R1, MEASUREMENT OF TEMPERATURE AND RELATIVE HUMIDITY USING A CSI 207 TEMPERATURE AND RELATIVE HUMIDITY PROBE; HP-168,R0, MEASUREMENT OF ENERGY FLUX DENSITY BY A PYRANOMETER; HP-170,R1, METHOD FOR MEASURING TEMPERATURE USING A CAMPBELL SCIENTIFIC, INC., 107 TEMPERATURE PROBE; AND HP-198,R1, MEASUREMENT OF WIND SPEED AND WIND DIRECTION USING THE 05103 R.M. YOUNG WIND METER.	A	Y	C
	ACQN/DEVL LOCATION : 37 57'37"N 116 25'23"W					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**GS921208315214.035	WEATHER DATA FROM VEG SPRING WEATHER STATION INCLUDING AIR TEMPERATURE, SOIL TEMPERATURE, SOLAR RADIATION, AND HUMIDITY.	09/24/91-09/16/92	DATA WERE ACQUIRED USING THE FOLLOWING HPS: HP-97,R1, MEASUREMENT OF TEMPERATURE AND RELATIVE HUMIDITY USING A CSI 207 TEMPERATURE AND RELATIVE HUMIDITY PROBE; HP-168,R0, MEASUREMENT OF ENERGY FLUX DENSITY BY A PYRANOMETER; AND HP-170,R1, METHOD FOR MEASURING TEMPERATURE USING A CAMPBELL SCIENTIFIC, INC., 107 TEMPERATURE PROBE.	A	Y	C
	ACQN/DEVL LOCATION : 38 53'04"N 117 21'13"W					
**GS921208315214.036	WEATHER DATA FROM STEWART CREEK WEATHER STATION INCLUDING AIR TEMPERATURE, SOIL TEMPERATURE, SOLAR RADIATION, HUMIDITY, WIND SPEED, AND WIND DIRECTION.	09/24/91-09/16/92	DATA WERE ACQUIRED USING THE FOLLOWING TECHNICAL PROCEDURES: HP-97,R1, MEASUREMENT OF TEMPERATURE AND RELATIVE HUMIDITY USING A CSI 207 TEMPERATURE AND RELATIVE HUMIDITY PROBE; HP-168,R0, MEASUREMENT OF ENERGY FLUX DENSITY BY A PYRANOMETER; HP-170,R1, METHOD FOR MEASURING TEMPERATURE USING A CAMPBELL SCIENTIFIC, INC., 107 TEMPERATURE PROBE; AND HP-198,R1, MEASUREMENT OF WIND SPEED AND WIND DIRECTION USING THE 05103 R.M. YOUNG WIND MONITOR.	A	Y	C
	ACQN/DEVL LOCATION : 38 53'18"N 117 21'36"W					
**GS930808315214.016	FIELD NOTES FOR THE ANALOG RECHARGE PROJECT FROM NOVEMBER 1989 TO APRIL 1992.	11/07/89-04/27/92	DATA ACQUIRED USING THE FOLLOWING HPS: HP-16,R3, COLLECTION OF ATM PRECIP SAMPLES FOR H-2 AND O-18 ANALYSIS; HP-54,R0 AND R1, WATER-FLOW MMT USING WEIRS, FLUMES, AND BARRELS; HP-57, R1, USING WATER-LEVEL RECORDERS; HP-91,R2 AND R3, COLLECTION AND ANALYSIS OF SURFACE-WATER SAMPLES; HP-97, R0 AND R1, MMT OF TEMP AND RH USING A CSI 207 PROBE; HP-165,R0, MEASURING SNOW WATER CONTENT; HP-166,R0 AND R1, STREAM DISCHARGE MMT USING A PYGMY CURRENT METER; HP-167,R0, PRECIP MMT USING A BELFORT WEIGHING RAIN GAGE; HP-168,R0, MMT OF	A	Y	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
			ENERGY FLUX DENSITY BY A PYRANOMETER; HP-170,R0 AND R1, MEASURING TEMP USING A CSI 107 PROBE; HP-171,R0 AND R1, LOW TENSION VADOSE MOISTURE SAMPLING; HP-172, R0, WATER LEVEL MMT USING A TEN-TURN POT; HP-184,R0 AND R1, COLLECTION OF ATM PRECIP SAMPLES FOR CHEMICAL ANALYSIS; AND HP-198, R0, R0-MOD 1, AND R1, MMT OF WIND SPEED AND DIRECTION USING A RM YOUNG WIND MONITOR.			
	ACQN/DEVL LOCATION : 37 57'19"N 117 21'37"W ;38 53'23"N 116 25'23"W					
**GS930908315214.017	WEATHER DATA FROM KAWICH BASE WEATHER STATION INCLUDING AIR TEMPERATURE, SOIL TEMPERATURE, SOLAR RADIATION, HUMIDITY, WIND SPEED, AND WIND DIRECTION FOR SEPTEMBER, 1992.	09/17/92-09/30/92	DATA WERE ACQUIRED USING THE FOLLOWING TECHNICAL PROCEDURES: HP-97, R1, MEASUREMENT OF TEMPERATURE AND RELATIVE HUMIDITY USING A CSI 207 TEMPERATURE AND RELATIVE HUMIDITY PROBE; HP-168, R0, MEASUREMENT OF ENERGY FLUX DENSITY BY A PYRANOMETER; HP-170, R1, METHOD FOR MEASURING TEMPERATURE USING A CAMPBELL SCIENTIFIC, INC., 107 TEMPERATURE PROBE; AND HP-198, R1, MEASUREMENT OF WIND SPEED AND WIND DIRECTION USING THE 05103 R.M. YOUNG WIND METER.	A	Y	C
	ACQN/DEVL LOCATION : 37 57'37"N 116 25'23"W					
**GS930908315214.018	WEATHER DATA FROM KAWICH PEAK WEATHER STATION INCLUDING AIR TEMPERATURE, SOIL TEMPERATURE, SOLAR RADIATION, AND HUMIDITY FOR SEPTEMBER, 1992.	09/17/92-09/30/92	DATA WERE ACQUIRED USING THE FOLLOWING TECHNICAL PROCEDURES: HP-97, R1, MEASUREMENT OF TEMPERATURE AND RELATIVE HUMIDITY USING A CSI 207 TEMPERATURE AND RELATIVE HUMIDITY PROBE; HP-168, R0, MEASUREMENT OF ENERGY FLUX DENSITY BY A PYRANOMETER; AND HP-170, R1, METHOD FOR MEASURING TEMPERATURE USING A CAMPBELL SCIENTIFIC, INC., 107 TEMPERATURE PROBE.	A	Y	C
	ACQN/DEVL LOCATION : 37 57'19"N 116 27'00"W					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**GS930908315214.019	WEATHER DATA FROM STEWART CREEK WEATHER STATION INCLUDING AIR TEMPERATURE, SOIL TEMPERATURE, SOLAR RADIATION, HUMIDITY, WIND SPEED, AND WIND DIRECTION FOR SEPTEMBER, 1992.	09/16/92-09/30/92	DATA WERE ACQUIRED USING THE FOLLOWING TECHNICAL PROCEDURES: HP-97, R1, MEASUREMENT OF TEMPERATURE AND RELATIVE HUMIDITY USING A CSI 207 TEMPERATURE AND RELATIVE HUMIDITY PROBE; HP-168, R0, MEASUREMENT OF ENERGY FLUX DENSITY BY A PYRANOMETER; HP-170, R1, METHOD FOR MEASURING TEMPERATURE USING A CAMPBELL SCIENTIFIC, INC., 107 TEMPERATURE PROBE; AND HP-198, R1, MEASUREMENT OF WIND SPEED AND WIND DIRECTION USING THE 05103 R.M. YOUNG WIND METER.	A	Y	C
	ACQN/DEVL LOCATION : 38 53'18"N 117 21'36"W					
**GS930908315214.025	PRECIPITATION DATA FROM KAWICH BASE WEATHER STATION FROM SEPTEMBER, 1991, TO DECEMBER, 1992.	09/25/91-12/03/92	DATA WERE ACQUIRED USING THE FOLLOWING TECHNICAL PROCEDURE: HP-167, R0, PRECIPITATION MEASUREMENT USING A BELFORT WEIGHING RAIN GAGE.	A	Y	C
	ACQN/DEVL LOCATION : 37 57'37"N 116 25'23"W					
**GS930908315214.026	PRECIPITATION DATA FROM KAWICH PEAK WEATHER STATION FROM SEPTEMBER, 1991, TO FEBRUARY, 1993.	09/25/91-02/03/93	DATA WERE ACQUIRED USING THE FOLLOWING TECHNICAL PROCEDURE: HP-167, R0, PRECIPITATION MEASUREMENT USING A BELFORT WEIGHING RAIN GAGE.	A	Y	C
	ACQN/DEVL LOCATION : 37 57'19"N 116 27'00"W					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**GS930908315214.027	PRECIPITATION DATA FROM STEWART BASE WEATHER STATION FROM SEPTEMBER, 1991, TO FEBRUARY, 1993. ACQN/DEVL LOCATION : 38 53'18"N 117 21'37"W	09/24/91-02/02/93	DATA WERE ACQUIRED USING THE FOLLOWING TECHNICAL PROCEDURE: HP-167, R0, PRECIPITATION MEASUREMENT USING A BELFORT WEIGHING RAIN GAGE.	A	Y	C
**GS930908315214.028	PRECIPITATION DATA FROM VEG SPRING WEATHER STATION FROM SEPTEMBER, 1991, TO FEBRUARY, 1993. ACQN/DEVL LOCATION : 38 53'04"N 117 21'13"W	09/24/91-02/02/93	DATA WERE ACQUIRED USING THE FOLLOWING TECHNICAL PROCEDURE: HP-167, R0, PRECIPITATION MEASUREMENT USING A BELFORT WEIGHING RAIN GAGE.	A	Y	C
**GS931008315214.031	FIELD NOTES FOR THE ANALOG RECHARGE PROJECT FROM JUNE, 1992, TO SEPTEMBER, 1992. ACQN/DEVL LOCATION : 37 57'19"N 117 21'37"W ;38 53'23"N 116 25'23"W	06/09/92-09/30/92	DATA ACQUIRED USING THE FOLLOWING PROCEDURES: HP-16,R3, COLLECTION OF ATM PRECIP SAMPLES FOR H-2 AND O-18 ANALYSIS; HP-54,R1, WATER-FLOW MMT USING WEIRS, FLUMES, AND BARRELS; HP-57,R1, USING WATER-LEVEL RECORDERS; HP-91,R3, COLLECTION AND ANALYSIS OF SURFACE-WATER SAMPLES; HP-97,R1, MMT OF TEMP AND RH USING A CSI 207 PROBE; HP-165,R0, MEASURING SNOW WATER CONTENT; HP-166,R1, STREAM DISCHARGE MEASUREMENT USING A PYGMY CURRENT METER; HP-167,R0, PRECIP MMT USING A BELFORT WEIGHING RAIN GAGE; HP-168,R0, MMT OF ENERGY FLUX DENSITY BY A PYRANOMETER; HP-170,R1, MEASURING TEMP USING A CSI 107 PROBE; HP-171,R1, LOW TENSION VADOSE MOISTURE SAMPLING; HP-172, R0, WATER LEVEL MMT USING A TEN-TURN POT; HP-184,R1, COLLECTION OF ATM PRECIP SAMPLES FOR CHEMICAL ANALYSIS; AND HP-198, R1, MMT OF WIND SPEED AND DIRECTION USING AN RM YOUNG WIND MONITOR.	A	Y	C

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS931108315214.033	AN ESTIMATE OF THE ROUGHNESS LENGTH AND DISPLACEMENT HEIGHT OF SONORAN DESERT VEGETATION, SOUTH-CENTRAL ARIZONA, BY H.C. CLAASSEN AND A.C. RIGGS ACQN/DEVL LOCATION : USGS, DENVER, CO	02/15/89-01/16/91	WINDSPEED, WIND DIRECTION, TEMPERATURE AND RELATIVE HUMIDITY DATA USED TO ESTIMATE THE ROUGHNESS LENGTH FOR MOMENTUM AND DISPLACEMENT HEIGHT FOR TYPICAL SONORAN DESERT VEGETATION.	D	N	P
*GS940108315214.001	SNOW SURVEY NOTES FOR KAWICH BASIN AND STEWART BASIN FOR THE 1992 WATER YEAR. ACQN/DEVL LOCATION : 37 57'19"N 117 21'37"W ;38 53'23"N 116 25'23"W	02/18/92-04/09/92	DATA WERE ACQUIRED USING THE FOLLOWING HYDROLOGIC PROCEDURE: HP-165,R0, METHOD FOR MEASURING SNOW WATER CONTENT.	A	Y	C
*GS940308315214.002	ESTIMATES OF GROUND-WATER RECHARGE RATES FOR TWO SMALL BASINS IN CENTRAL NEVADA, BY ROBERT W. LICHTY AND PATRICK W. MCKINLEY. ACQN/DEVL LOCATION : USGS, DENVER, CO	10/01/93-03/31/94	DATA WERE DEVELOPED USING THE PRECIPITATION-RUNOFF MODELING SYSTEM (PRMS) AND THE CHLORIDE-ION MODEL (CHLORO) MODELING SOFTWARE.	D	N	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.5.2.1.5						
**GS920708315215.027	87SR/86SR RATIOS IN SAMPLES FROM YUCCA MOUNTAIN VICINITY ACQN/DEVL LOCATION : USGS, DENVER, CO	07/01/92-07/27/92	NWM-USGS GCP-12,R3, RB-SR ISOTOPE GEOCHEMISTRY.	D	N	C
**GS930108315215.003	URANIUM, THORIUM AND LEAD ANALYSIS OF CALCITE- SILICA SAMPLES FROM BARE MTN., STRIPED HILLS, YUCCA MTN. DRILL CORES ACQN/DEVL LOCATION : USGS, DENVER	04/06/92-10/02/92	USGS TECHNICAL PROCEDURE NWM-USGS-GCP-13, R2, URANIUM, THORIUM, AND LEAD ISOTOPE GEOCHEMISTRY	A	Y	C
**GS930108315215.004	LEAD ISOTOPIC COMPOSITION OF PALEOZOIC AND LATE PROTEROZOIC CARBONATE ROCKS IN THE VICINITY OF YUCCA MOUNTAIN, NV, BY R.E. ZARTMAN AND L.M. KWAK. ACQN/DEVL LOCATION : USGS, DENVER	10/01/92-12/08/92	THIS REPORT WAS DEVELOPED TO ASSIST IN DETERMINING WHETHER SECONDARY CARBONATE-BEARING COMPOUNDS, SUCH AS FOUND UBIQUITOUSLY IN CALCRETES AND SHALLOW VEIN DEPOSITS, HAVE BEEN INTRODUCED INTO THE SURFACE AND NEAR SURFACE ENVIRONMENT ENTIRELY BY PEDOGENIC PROCESSES OR, IN PART, BY THE UPWARD MOVEMENT OF THE HYDROTHERMAL FLUIDS.	D	Y	C
**GS930108315215.005	U AND SR IN GROUNDWATER AND CALCITE, YUCCA MOUNTAIN, NEVADA: EVIDENCE AGAINST UPWELLING WATER, BY J.S. STUCKLESS, Z.E. PETERMAN & D.R. MUHS. ACQN/DEVL LOCATION : USGS, DENVER, CO	10/01/90-02/01/91	SR AND U ISOTOPIC COMPOSITIONS OF HYDROGENIC MATERIALS WERE USED TO TEST WHETHER THE DEPOSITS IN FAULT ZONES AT YUCCA MOUNTAIN COULD HAVE FORMED FROM UPWELLING OF DEEP-SEATED WATERS.	D	N	C

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**GS930108315215.008	PRELIMINARY STUDY OF LEAD ISOTOPES IN THE CARBONATE-SILICA VEINS OF TRENCH 14, YUCCA MOUNTAIN, BY R.E. ZARTMAN AND L.M. KWAK ACQN/DEVL LOCATION : USGS, DENVER, CO	09/01/89-05/31/91	ANALYSIS OF SOURCE MATERIALS THAT HAVE CONTRIBUTED TO THE TRENCH-14 CARBONATE-SILICATE VEINS BASED ON A LEAD ISOTOPE CHARACTERIZATION OF THE VEIN & OTHER ROCKS FROM WHICH THE LEAD MAY HAVE BEEN DERIVED.	D	Y	C
**GS930108315215.010	AGES AND STABLE-ISOTOPE COMPOSITIONS OF SECONDARY CALCITE AND OPAL IN DRILL CORES FROM TERTIARY VOLCANIC ROCKS OF THE YUCCA MOUNTAIN AREA, NEVADA, BY B.J. SZABO AND T.K. KYSER. ACQN/DEVL LOCATION : USGS, DENVER, CO	04/01/87-05/23/89	AGES OF CALCITE, FREE OF ACID-INSOLUBLE RESIDUE, AND OF OPAL SAMPLES ARE CALCULATED FROM THEIR MEASURED 230TH/234U ACTIVITY RATIOS USING STANDARD RADIOACTIVE GROWTH AND DECAY EQUATIONS ASSUMING THAT THE AUTHIGENIC CALCITE AND OPAL HAD REMAINED IDEAL CLOSED SYSTEMS WITH RESPECT TO ISOTOPES OF U AND TH SINCE THEIR FORMATION. THE DATES FOR IMPURE CALCITE SAMPLES WERE CALCULATED USING THE RESULTS FOR THE ACID-SOLUBLE AND ACID INSOLUBLE FRACTIONS IN A PSEUDO-ISOCHRON-PLOT METHOD DESCRIBED BY SZABO AND OTHERS (1981) AND SZABO AND ROSHOLT (1982).	D	N	C
**GS930308315215.015	WATER TABLE DECLINE IN THE SOUTH-CENTRAL GREAT BASIN DURING THE QUATERNARY: IMPLICATIONS FOR TOXIC WASTE DISPOSAL, BY I.J. WINOGRAD AND B.J. SZABO ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/85-12/31/85	DATA FROM WATER TABLE ALTITUDES AND EXTRAPOLATION OF GROWTH RATE, BASED ON URANIUM-SERIES DATING, WERE USED TO DEVELOP CONCLUSIONS REGARDING THE CLIMATIC FLUCTUATIONS AND CHANGES IN HYDROGEOLOGIC AND TECTONIC CONDITIONS DURING THE QUATERNARY PERIOD.	D	N	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS930408315215.017	FIELD LOGS OF THE NORTH AND SOUTH WALLS EXPOSED IN TRENCH 14 ON THE BOW RIDGE FAULT AT EXILE HILL, NYE COUNTY, NEVADA. ACQN/DEVL LOCATION : TRENCH 14, NTS	08/01/84-12/31/85	TRENCH 14 WALLS WERE MAPPED BY PLACING ONE-METER GRIDS OVER THE TRENCH WALLS. DATA POINTS WERE MEASURED OFF THE GRID AND DRAWN ON GRID PAPER AT A SCALE OF 1" = 1 METER AND 2" = 2 METERS.	A	N	P
*GS930408315215.018	FRACTURE ORIENTATIONS IN BEDROCK AND ALLUVIUM, NORTH AND SOUTH WALLS OF TRENCH 14. ACQN/DEVL LOCATION : NORTH AND SOUTH WALLS, TRENCH 14, NTS	10/01/84-10/01/84	FAULT ORIENTATIONS MEASURED WITH A BRUNTON COMPASS.	A	N	P
*GS930408315215.019	FIELD LOG OF THE SOUTH WALL OF TRENCH 14D, EXILE HILL, NEVADA. ACQN/DEVL LOCATION : TRENCH 14D, NTS	07/20/90-07/22/90	TRENCH WALL WAS MAPPED BY PLACING A ONE METER GRID OVER THE TRENCH WALL. DATA POINTS WERE MEASURED OFF THE GRID AND DRAWN ON GRID PAPER AT A SCALE OF 2" = 1 METER.	A	Y	P
*GS930408315215.020	FIELD DESCRIPTION OF A CHARACTERISTIC SOIL EXPOSED IN THE SLOPE-WASH ALLUVIUM AT TRENCH 14. ACQN/DEVL LOCATION : TRENCH 14, NTS	09/01/84-09/01/84	DESCRIBE SOIL IN THE FIELD USING STANDARD SOIL DESCRIPTION TECHNIQUES AND NOMENCLATURE.	A	N	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIF	QUALIFIED	LOCATION
*GS930408315215.021	SELECTED GRAIN-SIZE DATA, BULK DENSITY, AND CALCIUM CARBONATE CONTENT FROM A CHARACTERISTIC SOIL EXPOSED IN THE SLOPE-WASH ALLUVIUM IN TRENCH 14, EXILE HILL, NEVADA. ACQN/DEVL LOCATION : USGS CENTRAL REGIONAL GEOLOGY LAB, DENVER, CO USGS, DENVER, CO	02/01/86-03/31/86	STANDARD LABORATORY ANALYSIS - CENTRAL REGION GEOLOGY SEDIMENTOLOGY LAB, CO.	A	N		P
*GS930408315215.022	X-RAY DIFFRACTION TRACE OF OPALINE SILICA FROM TRENCH 14. ACQN/DEVL LOCATION : USGS CENTRAL REGIONAL GEOLOGY LAB, DENVER, CO	12/01/84-12/31/84	MINIFRAX X-RAY DIFFRACTOMETER.	A	N		P
*GS930408315215.023	DOMINANT PHYSICAL CHARACTERISTICS AND PERCENTAGES OF CALCIUM CARBONATE IN THE DEPOSITS EXPOSED IN TRENCH 14D. ACQN/DEVL LOCATION : TRENCH 14D, NTS USGS, DENVER, CO	08/01/90-09/01/90	PHYSICAL CHARACTERISTICS DETERMINED USING STANDARD SOIL DESCRIPTIONS IN THE FIELD AT TRENCH 14D. PERCENT OF CALCIUM CARBONATE AND PARTICLE SIZE DISTRIBUTION DETERMINED AT THE CENTRAL REGION GEOLOGY SEDIMENTOLOGY LAB.	A	Y		P
*GS930408315215.024	LITHOLOGY, FAULT DISPLACEMENT, AND ORIGIN OF SECONDARY CALCIUM CARBONATE AND OPALINE SILICA AT TRENCHES 14 AND 14D ON THE BOW RIDGE FAULT AT EXILE HILL, NYE COUNTY, NEVADA, BY E.M. TAYLOR AND H.E. HUCKINS. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/88-12/01/90	RAW PHYSICAL, CHEMICAL, MINERALOGIC, BIOLOGIC, PETROGRAPHIC AND ISOTOPIC DATA WERE ANALYZED TO DETERMINE THE GENERAL PROPERTIES THAT ARE CHARACTERISTIC OF PEDOGENIC DEPOSITS. THE GOAL WAS TO DETERMINE THE ORIGIN OF THE CALCIUM CARBONATE AND OPALINE SILICA IN VEINS AND ALLUVIUM AT TRENCH 14.	D	N		P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS931008315215.029	STRONTIUM ISOTOPE RATIOS AND ISOTOPE DILUTION DATA FOR RUBIDIUM AND STRONTIUM COLLECTED 11/19/92 TO 12/3/93.	11/19/92-12/03/93	USGS TECHNICAL PROCEDURE GCP-12,R3, RB-SR ISOTOPE GEOCHEMISTRY	A	Y	P
	ACQN/DEVL LOCATION : SOLID MASS SPECTROMETER BAY, USGS, DENVER, CO					
**GS931108315215.034	CARBON 14 AGES FROM DRILL HOLES USW G-1, G-2, GU-3, AND G-4, APRIL 92 - JAN. 93.	04/01/92-01/31/93	DATA WERE ACQUIRED BY DR. T. STAFFORD OF THE UNIVERSITY OF COLORADO. CARBONATE CARBON WAS EXTRACTED BY STANDARD 14C PROCEDURES AND THE 14C CONTENT WAS DETERMINED BY AMS AT LAWRENCE LIVERMORE NATIONAL LABORATORIES.	A	N	C
	ACQN/DEVL LOCATION : LLNL, LIVERMORE, CA UNIV. OF COLORADO, BOULDER, CO					
**GS931208315215.036	STABLE ISOTOPE COMPOSITION OF SOIL CO2, MARCH 93 - SEPT. 93.	03/01/93-09/30/93	NWM-USGS GCP-33,R0, EXTRACTION OF SOIL GAS CO2 FOR STABLE ISOTOPE ANALYSIS AND GCP-16,R3, CARBONATE CARBON AND OXYGEN STABLE ISOTOPE ANALYSES.	A	Y	C
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
*GS931208315215.037	ISOTOPIC STUDIES OF YUCCA MOUNTAIN SOIL FLUIDS AND CARBONATE PEDOGENESIS, BY T. MCCONNAUGHEY, K. WICKLAND, AND J. WHELAN.	09/01/93-12/17/93	STUDY OF ISOTOPIC COMPOSITIONS OF SECONDARY MINERALS PRECIPITATED FROM FLUIDS PERCOLATING THROUGH SOILS, FRACTURES, AND FAULTS, AND ORGANISMS LIVING IN THOSE FLUIDS, TO INFER THE ISOTOPIC COMPOSITIONS OF THE PARENT FLUIDS. TO INCREASE ACCURACY OF THIS PROCESS ISOTOPIC COMPOSITIONS OF MODERN SOIL FLUIDS ARE COMPARED, WHERE POSSIBLE, WITH MODERN CARBONATE PRECIPITATES.	D	Y	P
	ACQN/DEVL LOCATION : USGS, DENVER, CO					

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIF	QUALIFIED	LOCATION
*GS940108315215.001	PALEOCLIMATIC AND PALEOHYDROLOGIC RECORDS FROM SECONDARY CALCITE, YUCCA MOUNTAIN, NEVADA, BY J.F. WHELAN, D.T. VANIMAN, J.S. STUCKLESS, AND R.M. MOSCATI. ACQN/DEVL LOCATION : USGS, DENVER, CO	09/24/93-12/29/93	ANALYSIS OF SECONDARY CALCITE THROUGH STABLE ISOTOPE ANALYSES OF CALCITE AND OPAL, FLUID INCLUSION FORMATION CONDITIONS AND GAS COMPOSITIONS, SR ISOTOPE RATIOS, AND REE COMPOSITIONS TO SUGGEST PALEOCLIMATIC AND PALEOHYDROLOGIC RECORDS.	D	N	P
*GS940108315215.002	FLUID INCLUSION STUDIES OF CALCITE VEINS FROM YUCCA MOUNTAIN, NEVADA, TUFFS: ENVIRONMENT OF FORMATION, BY E. ROEDDER, J.F. WHELAN, AND D.T. VANIMAN. ACQN/DEVL LOCATION : HARVARD UNIV., CAMBRIDGE, MA	08/24/93-12/30/93	THE CRUSHING TEST PROVIDES A QUALITATIVE ESTIMATE OF THE GAS PRESSURE WITHIN A VAPOR INCLUSION AT THE TIMES OF CRUSHING. OPTICAL MEASUREMENTS ARE MADE TO ESTABLISH THE APPROXIMATE VOLUME OF THE INCLUSION BEFORE CRUSHING AND THE VOLUME PERCENT OF THE ORIGINAL VOLUME. THE VOLUME DECREASE IS A FUNCTION OF VAPOR PRESSURE OF WATER IN THE VAPOR PHASE AT THE TIME OF TRAPPING (AND HENCE, THE TEMPERATURE OF TRAPPING).	D	Y	P
*GS940108315215.003	U-TH ISOTOPIC DATA FOR U-SERIES DISEQUILIBRIUM DATA FROM CARBONATES ASSOCIATED WITH EARLY HOLOCENE TO LATE PLEISTOCENE GROUND-WATER DISCHARGE AT PAHRUMP AND DEATH VALLEY. DATA INCLUDE SAMPLE AND SPIKE WEIGHTS, AND CUMULATIVE ALPHA DECAY COUNTS FOR EACH OF THE ISOTOPES OF INTEREST (238U, 236U, 234U, 232TH, 230TH, 229TH) AS WELL AS CALCULATED U AND TH CONCENTRATIONS, ACTIVITY RATIOS, AND CORRELATION COEFFICIENTS. ACQN/DEVL LOCATION : USGS U-SERIES LABS, DENVER, CO	10/23/92-12/15/93	YMP-USGS GCP-03,R2, U-SERIES DATING	A	Y	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS940108315215.004	STRONTIUM ISOTOPE GEOCHEMISTRY OF SOIL AND PLAYA DEPOSITS NEAR YUCCA MOUNTAIN, NEVADA, BY B.D. MARSHALL AND S.A. MAHAN ACQN/DEVL LOCATION : USGS, DENVER, CO	09/01/93-01/27/94	INTERPRETATION OF LAND DEVELOPMENT OF MODEL BASED ON SOURCE DATA	D	N	P
*GS940208315215.005	AN EVALUATION OF EVIDENCE PERTAINING TO THE ORIGIN OF VEIN DEPOSITS EXPOSED IN TRENCH 14, NEVADA TEST SITE, NEVADA, BY J.S. STUCKLESS ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/90-08/30/90	SUMMARIES AND INTERPRETATIONS OF PREVIOUSLY PUBLISHED WORK.	D	N	C
*GS940308315215.006	URANIUM, THORIUM, AND LEAD ANALYSES OF CALCITE-SILICA DRILL CORES USW G-1, G-2, G-3 AND G-4 AND WATER SAMPLES FROM YUCCA MOUNTAIN VICINITY. ACQN/DEVL LOCATION : USGS, DENVER, CO	09/01/92-12/14/93	TECHNICAL PROCEDURE NWM-USGS GCP-13,R2, URANIUM, THORIUM, AND LEAD ISOTOPE GEOCHEMISTRY.	A	Y	P
Activity - 8.3.1.6.1.1.3						
**GS930408318512.005	TECTONICS, SEISMICITY, VOLCANISM AND EROSION RATES IN THE SOUTHERN GREAT BASIN, BY W.J. CARR AND A.M. ROGERS -- FY 1980 REPORT. ACQN/DEVL LOCATION : USGS, DENVER, CO.	01/01/81-05/01/82	SUMMARIES/INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA AND PRELIMINARY RESULTS FROM TECTONIC, SEISMIC, VOLCANIC, EROSION AND DEPOSITION STUDIES.	D	N	C

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.8.5.1.2						
**GS930408318512.005	TECTONICS, SEISMICITY, VOLCANISM AND EROSION RATES IN THE SOUTHERN GREAT BASIN, BY W.J. CARR AND A.M. ROGERS -- FY 1980 REPORT. ACQN/DEVL LOCATION : USGS, DENVER, CO.	01/01/81-05/01/82	SUMMARIES/INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA AND PRELIMINARY RESULTS FROM TECTONIC, SEISMIC, VOLCANIC, EROSION AND DEPOSITION STUDIES.	D	N	C
**GS931008318512.009	40AR/39AR AGE OF THE LATHROP WELLS VOLCANIC CENTER, YUCCA MOUNTAIN, NEVADA, BY BRENT D. TURRIN, DUANE CHAMPION, AND ROBERT J. FLECK ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/88-10/31/89	PALEOMAGNETIC AND 40AR/39AR ANALYSES WERE USED TO PRODUCE ISOCHRON AND INVERSE-ISOCHRON PLOTS AND IDEOGRAMS SHOWING INTEGRATED PROBABILITY DISTRIBUTION OF 40AR/39AR.	D	N	C
Activity - 8.3.1.8.5.2.3						
**GS930208318523.001	TEMPERATURE, THERMAL CONDUCTIVITY, AND HEAT FLOW NEAR YUCCA MOUNTAIN, NEVADA: SOME TECTONIC AND HYDROLOGIC IMPLICATIONS, BY J.H. SASS, A.H. LACHENBRUCH, W.W. DUDLEY, JR., S.S. PRIEST, AND R.J. MUNROE.	01/01/87-12/01/87	HEAT FLOW ESTIMATES BY 1) LEAST-SQS. GRADIENT X HARMONIC MEAN OF MEASURED CONDUCTIVITIES OVER SAME INTERVAL, 2) LEAST-SQS. GRADIENT X CONDUCTIVITY CALCULATED FROM FORMATION MEANS, AND 3) LEAST-SQS. GRADIENT X HARMONIC MEAN OF CONDUCTIVITIES INFERRED FROM K VS. VP RELATION. TEMP. MEASUREMENTS IN AIR BY 1) SASS,J.H.&OTHERS,1971,HEAT FLOW IN THE WESTERN U.S.:JNL. OF GEOPHYSICAL RESEARCH, V.76,P.6376-6413, AND 2) TECH. PROCEDURE NWM USGS GPP-02,R0, HEAT-FLOW STUDIES RELATED TO NUCLEAR WASTE STORAGE INVESTIGATIONS. THERMAL CONDUCTIVITY BY 1) SASS,J.H.&OTHERS,1984,LABORATORY LINE-SOURCE METHODS FOR THE MEASUREMENT OF TH. CONDUCT. OF ROCKS NEAR ROOM TEMP.:USGS OFR 84-91, AND 2) SASS &OTHERS,1971, OP.CIT. 3) SASS,J.H.&OTHERS,1980,ANALYSIS OF THERMAL DATA FROM DRILL HOLES UE25A-3 AND UE25A-1, CALICO HILLS & YM,NTS: USGS OFR 80-826 AND 4) NWM USGS GPP-05,R1 HEAT-FLOW STUDIES CALIBRATION PROCEDURES	D	N	T

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
	ACQN/DEVL LOCATION : USGS, DENVER, CO USGS, FLAGSTAFF, AZ USGS, MENLO PARK, CA					
Activity - 8.3.1.9.2.1.1						
*GS940108319211.001	ISOTOPIC TRACERS OF GOLD DEPOSITION IN PALEOZOIC LIMESTONES OF SOUTHERN NEVADA, BY Z.E. PETERMAN, B.L. WIDMANN, B.D. MARSHALL, J.D. ALEINKOFF, K. FUTA AND S.A. MAHAN	09/01/93-01/27/94	PRESENTATION OF SR ISOTOPE DATA AND PRELIMINARY CONCLUSIONS REGARDING EFFECTS OF HYDROTHERMAL ALTERATIONS ON SR ISOTOPE COMPOSITIONS.	D	N	P
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
Activity - 8.3.1.9.2.1.4						
*GS931208319214.001	THERMAL AND PETROLEUM GENERATION HISTORY IN THE ELEANA FORMATION AND TERTIARY SOURCE ROCKS, YUCCA MOUNTAIN AREA, SOUTHERN NYE COUNTY, NEVADA, BY CHARLIE BARKER.	07/01/93-11/08/93	WELL SAMPLES COLLECTED FROM THE USGS CORE LIBRARY (NOT YMP) WERE ANALYZED FOR ORGANIC GEOCHEMICAL AND GEOLOGIC ASSESSMENT, THERMAL MATURATION MEASUREMENTS, AND THERMAL HISTORY RECONSTRUCTION TO EVALUATE PETROLEUM POTENTIAL.	D	N	P
	ACQN/DEVL LOCATION : USGS, DENVER, CO					

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.14.2.1.2						
*GS930383114212.002	DRAFT LOGS PREPARED FROM ACCESS ROAD, GROUND SURFACE FACILITIES, GENERAL TEST PIT LOCATION YMP NORTH PORTAL ACQN/DEVL LOCATION : NRG-1	09/15/92-09/19/92	THESE DATA WERE COLLECTED PER TECHNICAL PROCEDURE EGP-5005-86,R2, DETERMINING UNIFIED SOIL CLASSIFIICATION (VISUAL METHOD)	A	Y	P
Activity - 8.3.1.14.2.1.3						
*SNF29041993002.013	ESF NORTH RAMP YUCCA MOUNTAIN PROJECT SITE CHARACTERIZATION CROSS SECTION THROUGH EXILE HILL NORTH RAMP 0+00 TO 6+00M ACQN/DEVL LOCATION : J.F.T.AGAPITO	05/01/93-12/10/93	GEOLOGIC LOGGING OF CORE FROM NORTH RAMP BOREHOLES.	D	Y	C
Activity - 8.3.1.14.2.2.1						
**SNL02030193001.012	MECHANICAL PROPERTIES DATA (ULTRASONIC VELOCITIES, STATIC ELASTIC PROPERTIES, & UNCONFINED STRENGTH) FOR DRILLHOLE UE25 NRG-5 SAMPLES FROM DEPTH 847.2 FT. TO 896.5 FT. ACQN/DEVL LOCATION : NER, INC., WHITE RIVER JUNCTION, VERMONT	08/13/93-11/30/93	STANDARD LABORATORY ROCK MECHANICS PROCEDURES AS PER TP-219: "UNCONFINED COMPRESSION EXPERIMENTS AT 22 DEGREES C AND A STRAIN RATE OF 10E-5 S-1.", ASTM STM D2845-90: "LABORATORY DETERMINATION OF PULSE VELOCITIES AND ULTRASONIC CONSTANTS OF ROCK."	A	Y	C
**SNL02030193001.013	MECHANICAL PROPERTIES DATA (ULTRASONIC VELOCITIES, STATIC ELASTIC PROPERTIES, UNCONFINED STRENGTH, TENSILE STRENGTH, & POROSITY) FOR DRILLHOLE UE25 NRG-2B SAMPLES FROM DEPTH 2.7 FT. TO 87.6 FT.	09/23/93-11/30/93	STANDARD LABORATORY ROCK MECHANICS PROCEDURES AS PER TP-219: "UNCONFINED COMPRESSION EXPERIMENTS AT 22 DEGREES C AND A STRAIN RATE OF 10E-5 S-1.", ASTM STM D3967-92: "SPLITTING TENSILE STRENGTH OF INTACT ROCK CORE SPECIMENS.", ASTM STM D2845-90: "LABORATORY DETERMINATION OF PULSE VELOCITIES AND ULTRASONIC ELASTIC CONSTANTS OF ROCK.", & ASTM STM D854-92: "TEST METHOD FOR SPECIFIC GRAVITY OF SOILS."	A	Y	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	DATA TYPE	QUALIFIED	LOCATION
	ACQN/DEVL LOCATION : NER, INC., WHITE RIVER JUNCTION, VERMONT					
Activity - 8.3.1.14.2.2.2						
*SNF29041993002.010	SCHMIDT HAMMER TEST DATA FROM NRG DRILLHOLES CORE.	10/01/93-12/01/93	SCIENTIFIC NOTEBOOK IN ACCORDANCE WITH: 1. ISRM (1978), SUGGESTED METHODS FOR DETERMINING HARDNESS AND ABRASIVENESS OF ROCKS, "INTERNATIONAL JOURNAL OF ROCK MECHANICS. MINING SCIENCES & GEOMECHANICS ABSTRACTS", 15:89-98, PERGAMON PRESS LTD., GREAT BRITIAN. 2. GOKTAN, R. M. AND C. AYDAY (1993), A SUGGESTED IMPROVEMENT TO THE SCHMIDT REBOUND HARDNESS ISRM SUGGESTED METHOD WITH PARTICULAR REFERENCE TO ROCK MACHINEABILITY, "INTERNATIONAL JOURNAL OF ROCK MECHANICS, MINING SCIENCES & GEOMECHANICS ABSTRACTS", 39(3):321-322, PERGAMON PRESS LTD., GREAT BRITIAN.	A	Y	C
	ACQN/DEVL LOCATION : SAIC & JFT AGAPITO					
**SNL02030193001.012	MECHANICAL PROPERTIES DATA (ULTRASONIC VELOCITIES, STATIC ELASTIC PROPERTIES, & UNCONFINED STRENGTH) FOR DRILLHOLE UE25 NRG-5 SAMPLES FROM DEPTH 847.2 FT. TO 896.5 FT.	08/13/93-11/30/93	STANDARD LABORATORY ROCK MECHANICS PROCEDURES AS PER TP-219: "UNCONFINED COMPRESSION EXPERIMENTS AT 22 DEGREES C AND A STRAIN RATE OF 10E-5 S-1.", ASTM STM D2845-90: "LABORATORY DETERMINATION OF PULSE VELOCITIES AND ULTRASONIC CONSTANTS OF ROCK."	A	Y	C
	ACQN/DEVL LOCATION : NER, INC., WHITE RIVER JUNCTION, VERMONT					

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**SNL02030193001.013	MECHANICAL PROPERTIES DATA (ULTRASONIC VELOCITIES, STATIC ELASTIC PROPERTIES, UNCONFINED STRENGTH, TENSILE STRENGTH, & POROSITY) FOR DRILLHOLE UE25 NRG-2B SAMPLES FROM DEPTH 2.7 FT. TO 87.6 FT.	09/23/93-11/30/93	STANDARD LABORATORY ROCK MECHANICS PROCEDURES AS PER TP-219: "UNCONFINED COMPRESSION EXPERIMENTS AT 22 DEGREES C AND A STRAIN RATE OF 10E-5 S-1.", ASTM STM D3967-92: "SPLITTING TENSILE STRENGTH OF INTACT ROCK CORE SPECIMENS.", ASTM STM D2845-90: "LABORATORY DETERMINATION OF PULSE VELOCITIES AND ULTRASONIC ELASTIC CONSTANTS OF ROCK.", & ASTM STM D854-92: "TEST METHOD FOR SPECIFIC GRAVITY OF SOILS."	A	Y	C
	ACQN/DEVL LOCATION : NER, INC., WHITE RIVER JUNCTION, VERMONT					
Activity - 8.3.1.14.2.3						
*SNF29041993002.011	YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT ESTIMATED ROCK MASS QUALITY INDICES BASED ON CORE LOG DATA HOLES UE25 NRG-1, -2, -2A, -3, -4, -5, AND USW NRG-6.	11/01/93-12/16/93	Q AND RMR ESTIMATED USING ROCK STRUCTURAL DATA SUMMARIES DEVELOPED FROM STRUCTURAL LOGGING OF CORE (TDIF NO. 302241), OBSERVATIONS OF ROCK CONDITIONS IN THE NORTH RAMP STARTER TUNNEL AND LABORATORY TEST DATA ON CORE.	D	Y	C
	ACQN/DEVL LOCATION : J. F. T. AGAPITO					
*SNF29041993002.012	YUCCA MOUNTAIN SITE CHARACTERIZATION ROCK MASS MECHANICAL PROPERTIES ESTIMATES BOREHOLES NRG-1, -2, -2A, -3, -4, -5, AND USW NRG-6.	11/01/93-12/16/93	BASED ON STRUCTURAL CORE LOGS FOR NRG HOLES AND MECHANICAL LABORATORY TEST RESULTS.	D	Y	C
	ACQN/DEVL LOCATION : J. F. T. AGAPITO					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIF	QUALIFIED	LOCATION
Activity - 8.3.1.14.2.3.3							
*GS930283114233.001	RESISTIVITY DATA FOR THE YMP NORTH PORTAL	05/28/92-06/04/92	THESE DATA WERE COLLECTED PER TECHNICAL PROCEDURE USBR GPP-01,R0, ELECTRICAL RESISTIVITY MEASUREMENT USING THE ABEM TERRAMETER SAS SYSTEM, EXCEPT AS NOTED IN COMMENTS.	A	Y		C
	ACQN/DEVL LOCATION : UE-25 NRG-1						
Activity - 8.3.1.15.1.3.1							
*SNL02030193001.014	MECHANICAL PROPERTIES DATA (GRAIN DENSITY, POROSITY, UNCONFINED STRENGTH, ELASTIC PROPERTIES, & INDIRECT TENSILE STRENGTH) FOR DRILLHOLE UE25 NRG-4 SAMPLES FROM DEPTH 378.1 FT. TO 695.8 FT.	10/01/93-01/27/94	STANDARD LABORATORY ROCK MECHANICS PROCEDURES AS PER TP-219: "UNCONFINED COMPRESSION EXPERIMENTS AT 22 DEGREES C AND A STRAIN RATE OF 10-E S-1.", ASTM STM D3967-92: "SPLITTING TENSILE STRENGTH OF INTACT ROCK CORE SPECIMENS.", ASTM STM D2845-90: "LABORATORY DETERMINATION OF PULSE VELOCITIES AND ULTRASONIC ELASTIC CONSTANTS OF ROCK.", & ASTM STM D854-92: "TEST METHOD FOR SPECIFIC GRAVITY OF SOILS."	A	Y		C
	ACQN/DEVL LOCATION : NER, INC., WHITE RIVER JUNCTION, VERMONT						
*SNL02030193001.015	MECHANICAL PROPERTIES DATA (ULTRASONIC VELOCITIES, STATIC ELASTIC PROPERTIES, TRIAXIAL STRENGTH, DRY BULK DENSITY, & POROSITY) FOR DRILLHOLE UE25 NRG-4 SAMPLES FROM DEPTH 527.0 FT.	10/01/93-02/16/94	ASTM STM D2845-90: "LABORATORY DETERMINATION OF PULSE VELOCITIES AND ULTRASONIC ELASTIC CONSTANTS OF ROCK"., ISRM "SUGGESTED METHODS FOR DETERMINING THE STRENGTH OF ROCK MATERIALS IN TRIAXIAL COMPRESSION: REVISED VERSION", 1983.	A	Y		C
	ACQN/DEVL LOCATION : NER, INC., WHITE RIVER JUNCTION, VERMONT						

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DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*SNL02030193001.016	MECHANICAL PROPERTIES DATA (ULTRASONIC VELOCITIES, STATIC ELASTIC PROPERTIES, & UNCONFINED STRENGTH) FOR DRILLHOLE USW NRG-7/7A SAMPLES FROM DEPTH 18.0 FT TO 472.9 FT.	01/13/94-03/16/94	ASTM STM D2845-90: "LABORATORY DETERMINATION OF PULSE VELOCITIES AND ULTRASONIC ELASTIC CONSTANTS OF ROCK.", ISRM "SUGGESTED METHODS FOR DETERMINING THE STRENGTH OF ROCK MATERIALS IN TRIAXIAL COMPRESSION: REVISED VERSION", 1983.	A	Y	P
	ACQN/DEVL LOCATION : NER, INC., WHITE RIVER JUNCTION, VERMONT					
**SNSAND80145300.000	SAND80-1453: "ROCK MECHANICS PROPERTIES OF VOLCANIC TUFFS FROM THE NEVADA TEST SITE." NNA.870406.0497	11/01/78-07/01/80	UNIAXIAL AND TRIAXIAL COMPRESSION TEST AT CONSTANT STRAIN-RATE WERE RUN ON SAMPLES OF VOLCANIC TUFF FROM HOLE UE25A#1 AND G-TUNNEL, BOTH LOCATED ON THE NEVADA TEST SITE. TESTING IS ACCOMPLISHED IN A 1.8 GN ULTRA-STIFF, ELECTRO-HYDRAULIC, SERVO-CONTROLLED COMPRESSION TESTING MACHINE. RAM DISPLACEMENT IS USED AS THE PROGRAMMED FEEDBACK VARIABLE. (FOR MORE DETAIL SEE SAND80-1453)	D	N	T
	ACQN/DEVL LOCATION : SNL					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.15.1.3.2						
*SNL02030193001.014	MECHANICAL PROPERTIES DATA (GRAIN DENSITY, POROSITY, UNCONFINED STRENGTH, ELASTIC PROPERTIES, & INDIRECT TENSILE STRENGTH) FOR DRILLHOLE UE25 NRG-4 SAMPLES FROM DEPTH 378.1 FT. TO 695.8 FT.	10/01/93-01/27/94	STANDARD LABORATORY ROCK MECHANICS PROCEDURES AS PER TP-219: "UNCONFINED COMPRESSION EXPERIMENTS AT 22 DEGREES C AND A STRAIN RATE OF 10-E S-1.", ASTM STM D3967-92: "SPLITTING TENSILE STRENGTH OF INTACT ROCK CORE SPECIMENS.", ASTM STM D2845-90: "LABORATORY DETERMINATION OF PULSE VELOCITIES AND ULTRASONIC ELASTIC CONSTANTS OF ROCK.", & ASTM STM D854-92: "TEST METHOD FOR SPECIFIC GRAVITY OF SOILS."	A	Y	C
	ACQN/DEVL LOCATION : NER, INC., WHITE RIVER JUNCTION, VERMONT					
*SNL02030193001.015	MECHANICAL PROPERTIES DATA (ULTRASONIC VELOCITIES, STATIC ELASTIC PROPERTIES, TRIAXIAL STRENGTH, DRY BULK DENSITY, & POROSITY) FOR DRILLHOLE UE25 NRG-4 SAMPLES FROM DEPTH 527.0 FT.	10/01/93-02/16/94	ASTM STM D2845-90: "LABORATORY DETERMINATION OF PULSE VELOCITIES AND ULTRASONIC ELASTIC CONSTANTS OF ROCK"., ISRM "SUGGESTED METHODS FOR DETERMINING THE STRENGTH OF ROCK MATERIALS IN TRIAXIAL COMPRESSION: REVISED VERSION", 1983.	A	Y	C
	ACQN/DEVL LOCATION : NER, INC., WHITE RIVER JUNCTION, VERMONT					
*SNL02030193001.016	MECHANICAL PROPERTIES DATA (ULTRASONIC VELOCITIES, STATIC ELASTIC PROPERTIES, & UNCONFINED STRENGTH) FOR DRILLHOLE USW NRG-7/7A SAMPLES FROM DEPTH 18.0 FT TO 472.9 FT.	01/13/94-03/16/94	ASTM STM D2845-90: "LABORATORY DETERMINATION OF PULSE VELOCITIES AND ULTRASONIC ELASTIC CONSTANTS OF ROCK.", ISRM "SUGGESTED METHODS FOR DETERMINING THE STRENGTH OF ROCK MATERIALS IN TRIAXIAL COMPRESSION: REVISED VERSION", 1983.	A	Y	P
	ACQN/DEVL LOCATION : NER, INC., WHITE RIVER JUNCTION, VERMONT					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.15.1.4.1						
**SNSAND80145300.000	SAND80-1453: "ROCK MECHANICS PROPERTIES OF VOLCANIC TUFFS FROM THE NEVADA TEST SITE." NNA.870406.0497	11/01/78-07/01/80	UNIAXIAL AND TRIAXIAL COMPRESSION TEST AT CONSTANT STRAIN-RATE WERE RUN ON SAMPLES OF VOLCANIC TUFF FROM HOLE UE25A#1 AND G-TUNNEL, BOTH LOCATED ON THE NEVADA TEST SITE. TESTING IS ACCOMPLISHED IN A 1.8 GN ULTRA-STIFF, ELECTRO-HYDRAULIC, SERVO-CONTROLLED COMPRESSION TESTING MACHINE. RAM DISPLACEMENT IS USED AS THE PROGRAMMED FEEDBACK VARIABLE. (FOR MORE DETAIL SEE SAND80-1453)	D	N	T
	ACQN/DEVL LOCATION : SNL					
Activity - 8.3.1.15.1.8.2						
*SNF28021693001.002	ROCK MASS CLASSIFICATION DATA FOR THE ALCOVE/NORTH RAMP STARTER TUNNEL.	12/09/93-12/09/93	MADE ENGINEERING ESTIMATES IN THE FIELD USING Q SYSTEM AND RMR PARAMETERS.	A	Y	C
	ACQN/DEVL LOCATION : NTS-YUCCA MTN, ALCOVE/NORTH RAMP STARTER TUNNEL					
*SNF28021693001.003	ROCK MASS CLASSIFICATION RESULTS FOR THE ALCOVE/NORTH RAMP STARTER TUNNEL.	12/13/93-12/16/93	REDUCED DATA FROM ENGINEERING ESTIMATES USING THE Q AND RMR METHODS.	D	Y	C
	ACQN/DEVL LOCATION : NTS-YUCCA MTN, ALCOVE/NORTH RAMP STARTER TUNNEL					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.17.2.1.2						
**GS900983117212.001	A SLINGRAM SURVEY AT YUCCA MOUNTAIN ON THE NEVADA TEST SITE, BY VINCENT J. FLANIGAN. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/80-12/31/80	USGS STANDARD COLLECTION METHODS. ELECTROMAGNETIC (EM) DATA PRESENTED IN THIS REPORT IS PART OF A STUDY BY THE USGS AIMED AT EVALUATING THE MIOCENE (?) AND PLIOCENE YUCCA MOUNTAIN MEMBER OF VARIOUS UNITS OF THE PAINTBRUSH TUFF IN THE VICINITY OF YUCCA MOUNTAIN AS A POSSIBLE REPOSITORY FOR NUCLEAR WASTES.	D	N	C
Activity - 8.3.1.17.4.1.2						
**GS910583117412.019	29 SOUTHERN GREAT BASIN LOCAL EARTHQUAKE ARCHIVE TAPES NUMBERED: L640-L642, L643-L645, L647-L669. DATES: 1/01/87 - 12/31/87. ACQN/DEVL LOCATION : SOUTHERN GREAT BASIN	01/01/87-12/31/87	SOUTHERN GREAT BASIN SEISMIC NETWORK.	A	N	P
**GS910583117412.034	543 EARTHQUAKE DEVELOCORDER FILMS. DATES 1/2/89-12/30/89. ACQN/DEVL LOCATION : SOUTHERN GREAT BASIN	01/02/89-01/01/90	SOUTHERN GREAT BASIN SEISMIC NETWORK.	A	N	P
**GS920483117412.014	SEISMICITY AND FOCAL MECHANISMS FOR THE SOUTHERN GREAT BASIN OF NEVADA AND CALIFORNIA. ACQN/DEVL LOCATION : USGS	02/01/91-07/23/91	METHODS OF ANALYSES ARE FOUND IN PROCEDURES SP-01, SP-04, SP-06, SP-11.	D	N	T

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**GS920783117412.022	SEISMICITY AND FOCAL MECHANISMS FOR THE SOUTHERN GREAT BASIN OF NEVADA AND CALIFORNIA IN 1991. ACQN/DEVL LOCATION : USGS	02/01/92-06/01/92	METHODS OF ANALYSES AND EXTRAPOLATION ARE AS FOUND IN NWM-USGS TECHNICAL PROCEDURES: SP-01, PRELIMINARY EARTHQUAKE LOCATION PROCEDURE; SP-04, PRELIMINARY EARTHQUAKE MAGNITUDE DETERMINATION PROCEDURE; SP-06, PRELIMINARY DETERMINATION OF EARTHQUAKE FOCAL MECHANISM FROM P-WAVE POLARITIES AND SV/P AMPLITUDES; SP-11, OPERATION AND CALIBRATION OF REMOTE TELEMETERED SEISMIC ARRAY	D	Y	T
*GS920983117412.032	SEISMICITY AND FOCAL MECHANISMS FOR THE SOUTHERN GREAT BASIN OF NEVADA AND CALIFORNIA: 1987 THROUGH 1989 BY S.C. HARMSEN AND C.G.BUFE ACQN/DEVL LOCATION : USGS/BGRA	01/01/90-02/13/91	FOCAL MECHANISMS FROM THIRTY-ONE SGB EARTHQUAKES ARE PRESENTED IN THIS REPORT. PRELIMINARY HYPOCENTER LISTINGS AND SEISMICITY DATA ANALYSIS FROM DATA COLLECTED BY THE SGBSN FOR THE PERIOD AUGUST 1978 THROUGH DECEMBER 1986 ARE PRESENTED IN ROGERS AND OTHERS (1987) AND HARMSEN AND ROGERS (1987). THIS REPORT IS AN ADDENDUM/UPDATE TO THOSE REPORTS.	D	N	T
*GS930183117412.001	SOUTHERN GREAT BASIN LOCAL EARTHQUAKE ARCHIVE TAPES FOR 6/9/92 THROUGH 9/19/92, NUMBERED L1240B, L1246B ACQN/DEVL LOCATION : SOUTHERN GREAT BASIN	06/29/92-09/19/92 10/22/92-12/16/92	SOUTHERN GREAT BASIN SEISMIC NETWORK	A	Y	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940183117412.001	SEISMIC EVENT WAVEFORMS FOR THE SOUTHERN GREAT BASIN SEISMIC NETWORK: OCTOBER 1, 1992, TO DECEMBER 31, 1992.	10/01/92-12/31/92	PERMANENT NETWORK OF 62 SEISMIC STATIONS WERE RECORDED AT UNRSL USING CUSP RT(GSP0009.01) NWM-USGS SP-11,R3, OPERATION AND CALIBRATION OF REMOTE TELEMETERED SEISMIC ARRAY AND ANALYZED USING TECHNICAL PROCEDURES: NWM-USGS SP-01,R5, EARTHQUAKE LOCATION PROCEDURE, NWM-USGS-SP-04,R3, EARTHQUAKE MAGNITUDE DETERMINATION PROCEDURE.	A	Y	P
	ACQN/DEVL LOCATION : SOUTHERN GREAT BASIN SEISMIC NETWORK					
*GS940283117412.002	DATA ON THE SEISMOLOGICAL FIELD INVESTIGATIONS OF THE 29 JUNE, 1992, LITTLE SKULL MOUNTAIN EARTHQUAKE	07/15/92-12/31/92	APPROXIMATELY 20 PORTABLE SEISMIC STATIONS WHICH USED DIGITAL ACQUISITION HARDWARE TO RECORD SEISMIC DATA. SP-16T,R0, TWO-DIMENSIONAL SEISMIC ARRAY MEASUREMENTS AT YUCCA MTN.	A	Y	P
	ACQN/DEVL LOCATION : WITHIN A 10-KM RADIUS OF EPICENTER COORDINATES: 36 43.1'N 116 16.35'W					
*GS940383117412.003	THE 29 JUNE, 1992, LITTLE SKULL MOUNTAIN EARTHQUAKE AND ITS AFTERSHOCK SEQUENCE, BY K. SMITH, ET AL.	06/29/92-02/28/94	DATA FROM PERMANENT SGBSN SITES, UNR PORTABLE SITES, AND USGS PORTABLE SITES WAS COMBINED TO CHARACTERIZE THE LITTLE SKULL MOUNTAIN SEISMIC ACTIVITY	D	Y	P
	ACQN/DEVL LOCATION : UNR SEISMOLOGICAL LAB, RENO, NEVADA					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.17.4.1.3						
**GS930408318512.005	TECTONICS, SEISMICITY, VOLCANISM AND EROSION RATES IN THE SOUTHERN GREAT BASIN, BY W.J. CARR AND A.M. ROGERS -- FY 1980 REPORT. ACQN/DEVL LOCATION : USGS, DENVER, CO.	01/01/81-05/01/82	SUMMARIES/INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA AND PRELIMINARY RESULTS FROM TECTONIC, SEISMIC, VOLCANIC, EROSION AND DEPOSITION STUDIES.	D	N	C
Activity - 8.3.1.17.4.2.1						
*GS930883117421.001	PRELIMINARY TRENCH MAP OF MIDWAY VALLEY TRENCH 4, EAST WALL ACROSS THE PAINTBRUSH CANYON FAULT INCLUDING SOIL DESCRIPTIONS AND UNIT DESCRIPTIONS (FORMERLY TRENCH 17). ACQN/DEVL LOCATION : MWV-T4	07/01/91-08/13/93	GP-07,R1, CONVENTIONAL MAPPING OF TRENCH WALLS AND GP-17,R1, DESCRIBING AND SAMPLING SOILS IN THE FIELD.	A	Y	C
*GS931183117421.004	SURFICIAL GEOLOGIC MAP OF MIDWAY VALLEY, YUCCA MOUNTAIN AREA, NYE COUNTY, NEVADA, BY J. WESLING, F. SWAN, T. BULLARD, AND A. THOMAS. ACQN/DEVL LOCATION : GEOMATRIX, SAN FRANCISCO, CA	08/01/93-09/30/93	THE SURFICIAL GEOLOGY OF THE MIDWAY VALLEY AREA WAS MAPPED BY DELINEATING MAP UNITS ON AERIAL PHOTOGRAPHS AND EXAMINING THOSE UNITS IN THE FIELD. STEREOSCOPIC PAIRS OF 1:6000-SCALE COLOR AND COLOR-INFRARED AERIAL PHOTOGRAPHS WERE INTERPRETED, AND THE GEOLOGIC CONTACTS WERE TRANSFERRED TO 1:6000-SCALE TOPOGRAPHIC BASE MAPS. FIELD INVESTIGATIONS WERE CONDUCTED TO CHECK THE GEOLOGIC CONTACTS AND TO COLLECT DATA ON THE SURFACE CHARACTERISTICS, SOILS, AND DEPOSITS ASSOCIATED WITH IDENTIFIED MAP UNITS.	D	Y	P

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.17.4.2.2						
*GS930883117421.001	PRELIMINARY TRENCH MAP OF MIDWAY VALLEY TRENCH 4, EAST WALL ACROSS THE PAINTBRUSH CANYON FAULT INCLUDING SOIL DESCRIPTIONS AND UNIT DESCRIPTIONS (FORMERLY TRENCH 17). ACQN/DEVL LOCATION : MWV-T4	07/01/91-08/13/93	GP-07,R1, CONVENTIONAL MAPPING OF TRENCH WALLS AND GP-17,R1, DESCRIBING AND SAMPLING SOILS IN THE FIELD.	A	Y	C
*GS940183117422.001	PRELIMINARY GEOLOGIC MAP OF EXILE HILL, OCTOBER 1993; LOCATIONS AND ORIENTATION OF BOW RIDGE FAULT, THE NORTHWEST-TRENDING FAULT AND THE CONTACTS BETWEEN CCR, CUC, AND CUL IN THE AREA EAST OF BOREHOLE UE-25 #8 ACQN/DEVL LOCATION : N762500(N) E569000(N) ;N767500(N) E570500(N)	12/01/91-08/31/93	GP-01,R2, GEOLOGIC MAPPING	A	Y	C
Activity - 8.3.1.17.4.3.1						
**GS900983117431.001	DATA REPORT FOR THE 1985 SEISMIC REFRACTION EXPERIMENT AT YUCCA MOUNTAIN AND VICINITY, SOUTHWESTERN NEVADA, BY VICKIE D. SUTTON. ACQN/DEVL LOCATION : USGS	02/01/85-12/31/85	USGS STANDARD METHODS.	D	N	C
**GS900983117431.003	DATA REPORT FOR THE 1983 SEISMIC-REFRACTION EXPERIMENT AT YUCCA MOUNTAIN, BEATTY AND VICINITY, SOUTHWESTERN NEVADA, BY V.D. SUTTON. ACQN/DEVL LOCATION : USGS, MENLO PARK, CA	01/01/84-08/02/84	USGS STANDARD METHOD. INCLUDES RECORD SECTIONS FROM THE TEN SHOTPOINTS, A LIST OF SHOTPOINT LOCATIONS AND TIMES, DKDAT DATA FILES AND TAPE GRADE CODE AND A LIST OF FIRST-ARRIVAL TRAVEL TIME PICKS.	D	N	C

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.17.4.3.2						
**GS930283117432.002	TECTONIC SETTING OF YUCCA MOUNTAIN, SOUTHWEST NEVADA, BY R.B. SCOTT	01/01/83-06/19/84	INTERPRETATION OF TECTONIC DEVELOPMENT BASED ON DETAILED GEOLOGIC MAPPING AND RELATED INVESTIGATIONS. STANDARD METHODS FOR GEOLOGIC MAPPING AND RELATED STUDIES USED IN COLLECTION OF DATA.	D	N	C
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
**GS930583117432.007	SURFICIAL GEOLOGIC MAP OF THE SPECTER RANGE NW QUADRANGLE, NYE COUNTY, NEVADA, BY WC SWADLEY AND H.E. HUCKINS	01/01/85-02/28/86	SURFICIAL GEOLOGIC MAP PREPARED USING VISUAL INTERPRETATIONS, AERIAL PHOTOGRAPHS, AND PREVIOUSLY PUBLISHED MATERIAL.	D	N	C
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
*GS930983117432.014	FLUVIAL ORIGIN OF THE BEATTY SCARP, NYE COUNTY, NEVADA, BY L.W. ANDERSON.	10/01/92-12/31/93	SYNTHESIS AND REVIEW OF THE SOURCE DATA ALONG WITH THE ADDITION OF A NEW SCARP PROFILE	D	N	P
	ACQN/DEVL LOCATION : USGS, DENVER, CO					
**GS931083117432.001	TOPOGRAPHIC PROFILES OF THE BEATTY SCARP	06/17/93-06/19/93	GP-52,R0, TOPOGRAPHIC PROFILING OF GEOMORPHIC FEATURES -- FIELD MEASUREMENT	A	Y	C
	ACQN/DEVL LOCATION : 36 48'00"N 116 45'00"W ;36 52'30"N 116 42'00"W					

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.17.4.3.4						
*GS940183117434.001	PRELIMINARY TRENCH LOGS OF BMT-1 AND BMT-2, BARE MOUNTAIN. FAULT, NYE COUNTY, NEVADA, JAN. 1994. ACQN/DEVL LOCATION : BMT-1 BMT-2	06/27/93-01/10/94	GP-07,R1, CONVENTIONAL GEOLOGIC MAPPING OF TRENCH WALLS, GP-17,R1, DESCRIBING AND SAMPLING SOILS IN THE FIELD, GP-39,R0, GEOPHOTOGRAMMETRIC MAPPING OF TRENCH WALLS - FIELD WORK, AND GP-53,R0, GEOLOGIC MAPPING OF TRENCH WALLS WITH A TOTAL STATION.	A	Y	C
Activity - 8.3.1.17.4.5.2						
**GS930483117452.002	DETACHMENT FAULTING IN THE DEATH VALLEY REGION, CALIFORNIA AND NEVADA, BY WARREN HAMILTON. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/85-02/12/86	GENERAL STRUCTURAL STYLE INFERRED FROM FIVE SEISMIC REFLECTION PROFILES RECORDED BY VIBROSEIS BY CONTINENTAL REFLECTION PROFILING OF CORNELL UNIVERSITY.	D	N	C
*GS931283117452.005	GEOLOGIC MAPPING IN CRATER FLAT, IN AND AROUND FOUR 7.5 MINUTE QUADRANGLES: 1) EAST OF BEATTY MOUNTAIN, 2) BEATTY MOUNTAIN, 3) CRATER FLAT, 4) BIG DUNE. ACQN/DEVL LOCATION : 36 52'30"N 116 37'30"W ;37 00'00"N 116 30'00"W	03/14/93-05/15/93	TECHNICAL PROCEDURE GP-01,R2, GEOLOGIC MAPPING.	A	Y	P
*GS931283117452.006	GEOLOGIC MAP OF THE EAST OF BEATTY MOUNTAIN 7.5 MINUTE QUADRANGLE, NYE COUNTY, NEVADA, BY C.J. FRIDRICH, P.P. ORKILD, M. MURRAY, J.R. PRICE, R.L. CHRISTIANSEN, P.W. LIPMAN, W.J. CARR, W.D. QUINLIVAN, AND R.B. SCOTT. ACQN/DEVL LOCATION : USGS, DENVER, CO	05/15/93-10/12/93	USGS GP-01,R2, GEOLOGIC MAPPING	D	Y	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*GS940383117452.001	ORIENTATION DATA FOR KINEMATIC ANALYSIS OF MYLONITES OR OTHER SAMPLES FROM BULLFROG HILLS. ACQN/DEVL LOCATION : T12S R45E SECTION 13 T12S R45E SECTION 21	03/01/92-03/01/92	SN-0035 "THERMOBAROMETRIC AND KINEMATIC STUDIES OF METAMORPHIC ROCKS AT BARE MOUNTAIN AND PROXIMAL SITES".	A	Y	P
*GS940383117452.002	ELECTRON MICROPROBE ANALYSIS OF MINERALS FROM BULLFROG HILLS AND BARE MOUNTAIN ACQN/DEVL LOCATION : NORTHERN ARIZONA UNIVERSITY ELECTRON MICROPROBE LABORATORY	08/09/93-02/18/94	SN-0035 "THERMOBAROMETRIC AND KINEMATIC STUDIES OF METAMORPHIC ROCKS AT BARE MOUNTAIN AND PROXIMAL SITES".	A	Y	P
*GS940383117452.003	FREEZING AND HOMOGENIZATION TEMPERATURE MEASUREMENTS ON FLUID INCLUSION IN QUARTZ VEINS FROM BARE MOUNTAIN. ACQN/DEVL LOCATION : NORTHERN ARIZONA UNIVERSITY, FLAGSTAFF	12/12/93-12/18/93	SN-0035 "THERMOBAROMETRIC AND KINEMATIC STUDIES OF METAMORPHIC ROCKS AT BARE MOUNTAIN AND PROXIMAL SITES"	A	Y	P
Activity - 8.3.1.17.4.6.1						
**GS930408318512.005	TECTONICS, SEISMICITY, VOLCANISM AND EROSION RATES IN THE SOUTHERN GREAT BASIN, BY W.J. CARR AND A.M. ROGERS -- FY 1980 REPORT. ACQN/DEVL LOCATION : USGS, DENVER, CO.	01/01/81-05/01/82	SUMMARIES/INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA AND PRELIMINARY RESULTS FROM TECTONIC, SEISMIC, VOLCANIC, EROSION AND DEPOSITION STUDIES.	D	N	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIF	QUALIFIED	LOCATION
Activity - 8.3.1.17.4.6.2							
**GS930483117462.002	PRELIMINARY TRENCH LOG AND ACCOMPANYING LITHOLOGIC AND STRUCTURAL DESCRIPTIONS FOR INNER WALL, NORTH BRANCH, OF TRENCH 14D; PREPARED BY C. MENGES, R. CRESS, AND G. VADURRO. THIS LOG PREPARED FOR THE INNER (SOUTHERN) WALL OF THE NORTH BRANCH OF THE BOX PORTION OF MODIFIED TRENCH 14D. ACQN/DEVL LOCATION : TRENCH 14	07/09/92-03/26/93	TECHNICAL PROCEDURE NWM-USGS GP-07,R1, CONVENTIONAL GEOLOGIC MAPPING OF TRENCH WALLS.	A	Y		C
*GS930783117462.003	PRELIMINARY TRENCH LOG FOR OUTER WALL, NORTH BRANCH, OF TRENCH 14D; PREPARED BY C. MENGES, G. VADURRO, AND J. OSWALD. PREPARED FOR OUTER (NORTHERN) WALL OF THE NORTH BRANCH OF THE BOX PORTION OF MODIFIED TRENCH 14D; INCLUDES DETAILED DESCRIPTIONS OF UNITS AND STRUCTURES IN TRENCH LOG OF ADJACENT WALL (INNER WALL, NORTH BRANCH, TRENCH 14D), WITH EXCEPTION OF FISSURE-FILL DESCRIPTIONS ALONG MAIN FAULT ZONE. ACQN/DEVL LOCATION : TRENCH 14D, NTS	12/21/92-06/18/93	TECHNICAL PROCEDURE NWM-USGS GP-07,R1, CONVENTIONAL GEOLOGIC MAPPING OF TRENCH WALLS.	A	Y		C
*GS930783117462.004	PRELIMINARY TRENCH LOG, WITH UNIT DESCRIPTIONS, OF TRENCH SCF-T1, SOUTH WALL, ON SOLITARIO CANYON FAULT. ACQN/DEVL LOCATION : N743160(N) E554120(N)	10/01/92-04/28/93	TECHNICAL PROCEDURE NWM-USGS-GP-07, R1, CONVENTIONAL GEOLOGIC MAPPING OF TRENCH WALLS.	A	Y		P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIFF	QUALIFIED	LOCATION
*GS931283117462.006	PRELIMINARY TRENCH LOG, AND ACCOMPANYING DESCRIPTIONS AND DATA SHEETS FOR LITHOLOGIC UNITS, SOILS, AND DEFORMATION, FOR TRENCHES SCR-T1 AND SCR-T3 (PARTS OF BOTH NORTH AND SOUTH WALLS IN EACH TRENCH). LOGS AND DATA PREPARED BY C. MENGES, J. OSWALD AND J. COE. EACH LOG INCLUDES CEILING MAPPED PHOTOGRAMMETRICALLY AND MANUALLY (WITH CONVENTIONAL METHOD). ACQN/DEVL LOCATION : N718620(N) E556680(N) N721790(N) E559700(N)	05/01/93-10/31/93	TECHNICAL PROCEDURE NWM-USGS GP-07,R1, CONVENTIONAL GEOLOGIC MAPPING OF TRENCH WALLS, AND TECHNICAL PROCEDURES NWM-USGS GP-39,R0, GEOPHOTOGRAMMETRIC MAPPING OF TRENCH WALLS: FIELDWORK; AND NWM-USGS GP-40,R0, GEOPHOTOGRAMMETRIC MAPPING OF TRENCH WALLS - LABORATORY METHODS.	A	Y	C
*GS931283117462.007	U-TH ISOTOPIC DATA FOR U-SERIES DISEQUILIBRIUM DATING OF PEDOGENIC CARBONATE ASSOCIATED WITH QUATERNARY FAULTING ON THE EAST SIDE OF YUCCA MOUNTAIN. DATA INCLUDE SAMPLE AND SPIKE WEIGHTS, AND CUMULATIVE ALPHA DECAY COUNTS FOR 238U, 236U, 232TH, 230TH, AND 229TH AS WELL AS CALCULATED U AND TH CONCENTRATIONS, ACTIVITY RATIOS AND CORRELATION COEFFICIENTS. ACQN/DEVL LOCATION : USGS U-SERIES LABS, DENVER, CO	11/01/93-12/15/93	YMP-USGS GCP-03,R2, U-SERIES DATING	A	Y	C
*GS931283117462.008	AGE CALCULATED FROM ACQUIRED U-TH ISOTOPIC DATA. ACQN/DEVL LOCATION : USGS U-SERIES LABS, DENVER, CO	11/01/93-12/15/93	230TH/238U CALCULATIONS DETERMINED BY MIXING LINE REGRESSION USING MAXIMUM LIKELIHOOD ESTIMATION ALGORITHMS (LUDWIG AND TITTERINGTON, MAXIMUM LIKELIHOOD ESTIMATION OF U-TH ERRORS, IN REVIEW FOR PUB. IN GEOCHEMICA ET COSMOCHEMICA ACTA)	D	Y	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
*GS940183117462.001	U-SERIES DISEQUILIBRIUM AND THERMOLUMINESCENCE AGES OF PALEOSOLS ASSOCIATED WITH QUATERNARY FAULTS, EAST SIDE OF YUCCA MOUNTAIN, BY J.B. PACES, B. WIDMANN, C.M. MENGES, J.R. WESLING, C.A. BUSH, K. FUTA, H.T. MILLARD, P.B. MAAT, AND J.W. WHITNEY. ACQN/DEVL LOCATION : USGS U-SERIES LABS, DENVER, CO	11/01/93-12/28/93	DATA INCLUDE U-SERIES DISEQUILIBRIUM AND THERMOLUMINESCENCE AGES DETERMINED ON PEDOGENIC MATERIALS ASSOCIATED WITH FAULTS ON THE EAST SIDE OF YUCCA MOUNTAIN.	D	Y	P
*GS940183117462.002	PRELIMINARY LOG OF WALL 4 OF BUSTED BUTTE AND ACCOMPANYING FIELD NOTES AND SOIL PROFILE DESCRIPTION SHEETS. LOGS AND DATA PREPARED BY J. WESLING, C. MENGES, J. OSWALD, AND J. COE. ACQN/DEVL LOCATION : N739796.0(N) E570559.0(N)	03/12/93-11/20/93	DATA WERE COLLECTED USING GP-07,R1, CONVENTIONAL GEOLOGIC MAPPING OF TRENCH WALLS; GP-17,R1, DESCRIBING AND SAMPLING SOILS IN THE FIELD; AND GP-39,R0, GEOPHOTOGRAMMETRIC MAPPING OF TRENCH WALLS - FIELD WORK; AND GP-40,R0, GEOPHOTOGRAMMETRIC MAPPING OF TRENCH WALLS - LABORATORY	A	Y	C
*GS940183117462.003	PRELIMINARY RESULTS OF PALEOSEISMIC INVESTIGATIONS OF QUATERNARY FAULTS ON EASTERN YUCCA MOUNTAIN, NYE COUNTY, NEVADA, BY C. MENGES, J. WESLING, J. WHITNEY, F. SWAN, J. COE, A. THOMAS, AND J. OSWALD. ACQN/DEVL LOCATION : USGS, LAS VEGAS, NV	09/24/93-01/05/94	TRENCH WALL OR NATURAL EXPOSURE DEFORMATION FEATURES, STRATIGRAPHIC UNITS, AND SOILS WERE DESCRIBED AND WHERE POSSIBLE, CRITICAL UNITS AND SOILS BRACKETING FAULT EVENTS WERE SAMPLED FOR GEOCHRONOLOGIC DATING. ALL THESE DATA WERE USED TO INTERPRET THE STRATIGRAPHIC POSITIONS, SIZES, AND TO THE EXTENT POSSIBLE, AGES OF SURFACE RUPTURES ON THE FAULT ZONE.	D	Y	P

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.17.4.7.1						
**GS920283117471.002	VIBROSEIS AND EXPLOSIVE SOURCE SEISMIC REFLECTION DATA. ACQN/DEVL LOCATION : T16S R49-52E	01/03/88-01/24/88	NWM-USGS-SP-10, R0	A	N	C
**GS920283117471.004	COMPARISON OF VIBROSEIS AND EXPLOSIVE SOURCE METHODS FOR DEEP CRUSTAL SEISMIC REFLECTION PROFILING IN THE BASIN AND RANGE PROVINCE, BY T.M. BROCHER AND P.E. HART. ACQN/DEVL LOCATION : USGS, MENLO PARK, CA	06/06/89-06/21/91	ANALYTICAL AND INTERPRETIVE METHODS BASED ON THE AUTHORS' COMBINED EDUCATION AND WORK EXPERIENCES WERE USED TO DEVELOP THIS ARTICLE	D	N	C
Activity - 8.3.1.17.4.7.2						
**GS930483117472.003	PRELIMINARY INTERPRETATION OF SEISMIC-REFRACTION AND GRAVITY STUDIES WEST OF YUCCA MOUNTAIN, NEVADA AND CALIFORNIA, BY H.D. ACKERMAN, W.D. MOONEY, D.B. SNYDER, AND V.D. SUTTON. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/85-10/21/85	SUMMARIES AND GEOLOGIC INTERPRETATIONS OF SEISMIC REFRACTON DATA. SEISMIC REFRACTION DATA PROCESSES BY DIRECT COMPUTER INVERSION OF THE DATA METHOD, ACKERMAN AND OTHERS, 1982, A COMPREHENSIVE SYSTEM FOR INTERPRETING SEISMIC REFRACTION ARRIVAL-TIME DATA USING INTERACTIVE COMPUTER METHODS, USGS OFR 82-1065.	D	N	C
**GS930583117472.005	GRAVITY AND MAGNETIC EVIDENCE FOR A GRANITIC INTRUSION NEAR WAHMONIE SITE, NEVADA TEST SITE, NEVADA, BY DAVID A. PONCE ACQN/DEVL LOCATION : USGS, MENLO PARK, CA	01/01/83-06/10/83	TWO DIMENSIONAL GRAVITY MODEL CONSTRUCTED USING MAGNETIC, SEISMIC, AND ELECTRIC DATA.	D	N	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
**GS930583117472.006	REGIONAL GEOLOGIC AND GEOPHYSICAL MAPS OF THE SOUTHERN GREAT BASIN BY T.G. HILDENBRAND, A.M. ROGERS, H.W. OLIVER, S.C. HARMSEN, J.K. NAKATA, D.S. AITKEN, R.N. HARRIS, AND M.D. CARR. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/87-01/01/88	REPORT CONTAINS A COLLECTION OF MAPS DEVELOPED BY USING PREVIOUSLY PUBLISHED DATA. THE MAPS PRESENT AN OVERVIEW OF THE GENERAL GRAVITY, AEROMAGNETIC, AND TERRAIN FEATURES. TEXT DISCUSSES REDUCTION PROCESSES, ASSUMPTIONS, AND APPLIED EQUATIONS WHERE APPLICABLE.	D	N	C
Activity - 8.3.1.17.4.7.3						
**GS930583117472.005	GRAVITY AND MAGNETIC EVIDENCE FOR A GRANITIC INTRUSION NEAR WAHMONIE SITE, NEVADA TEST SITE, NEVADA, BY DAVID A. PONCE ACQN/DEVL LOCATION : USGS, MENLO PARK, CA	01/01/83-06/10/83	TWO DIMENSIONAL GRAVITY MODEL CONSTRUCTED USING MAGNETIC, SEISMIC, AND ELECTRIC DATA.	D	N	C
**GS930583117472.006	REGIONAL GEOLOGIC AND GEOPHYSICAL MAPS OF THE SOUTHERN GREAT BASIN BY T.G. HILDENBRAND, A.M. ROGERS, H.W. OLIVER, S.C. HARMSEN, J.K. NAKATA, D.S. AITKEN, R.N. HARRIS, AND M.D. CARR. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/87-01/01/88	REPORT CONTAINS A COLLECTION OF MAPS DEVELOPED BY USING PREVIOUSLY PUBLISHED DATA. THE MAPS PRESENT AN OVERVIEW OF THE GENERAL GRAVITY, AEROMAGNETIC, AND TERRAIN FEATURES. TEXT DISCUSSES REDUCTION PROCESSES, ASSUMPTIONS, AND APPLIED EQUATIONS WHERE APPLICABLE.	D	N	C

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.17.4.7.4						
**GS930583117472.005	GRAVITY AND MAGNETIC EVIDENCE FOR A GRANITIC INTRUSION NEAR WAHMONIE SITE, NEVADA TEST SITE, NEVADA, BY DAVID A. PONCE ACQN/DEVL LOCATION : USGS, MENLO PARK, CA	01/01/83-06/10/83	TWO DIMENSIONAL GRAVITY MODEL CONSTRUCTED USING MAGNETIC, SEISMIC, AND ELECTRIC DATA.	D	N	C
Activity - 8.3.1.17.4.7.5						
**GS930383117475.001	TIME-DOMAIN ELECTROMAGNETIC SOUNDINGS AT THE NEVADA TEST SITE, NEVADA, BY F.C. FRISCHKNECHT AND P.V. RAAB. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/83-01/01/84	DESCRIPTIONS OF WORK DONE NEAR YM TO DEVELOP AND DEMONSTRATE ELECTROMAGNETIC SOUNDING METHODS WHICH WOULD BE EFFECTIVE IN GEOLOGICALLY COMPLICATED REGIONS. EFFORTS FOCUSED ON SHORT-OFFSET (NEAR ZONE) TIME-DOMAIN ELECTROMAGNETIC (TDEM) TECHNIQUES IN WHICH THE RECEIVING LOOP IS INSIDE OR VERY NEAR THE TRANSMITTING LOOP.	D	N	C
Activity - 8.3.1.17.4.7.8						
**GS930383117478.001	PRELIMINARY RESULTS OF HIGH-RESOLUTION SEISMIC-REFLECTION SURVEYS CONDUCTED ACROSS THE BEATTY AND CRATER FLAT FAULT SCARPS, NEVADA, BY S.T. HARDING. ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/85-08/20/85	PRELIMINARY RESULTS AND INTERPRETATIONS OF THE HIGH-RESOLUTION SEISMIC-REFLECTION SURVEY ACROSS THE BEATTY AND CRATER FLAT FAULT SCARPS THAT USED THE MINI-SOSIE HIGH-SOLUTION SEISMIC-REFLECTION TECHNIQUE.	D	N	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.17.4.8.1						
**GS930283117481.001	STRESS FIELD AT YUCCA MOUNTAIN, BY J.M. STOCK AND J.H. HEALEY.	01/01/85-10/21/85	DESCRIPTIONS & INTERPRETATIONS OF DATA/INFO. INCLUDING STRESS MAGNITUDES, STRESS DIRECTIONS AND TOPOGRAPHIC EFFECTS ON STRESS LEVELS. METHOD IN HICKMAN,S.H. & M.D.ZOBACK,1983, THE INTERPRETATION OF HYDRAULIC FRACTURING PRESSURE-TIME DATA FOR IN-SITU STRESS DETERMINATION, IN HYDRAULIC FRACTURING STRESS MEASUREMENTS, NAT'L ACADEMY PRESS, WASH.D.C.,44-54, USED TO DETERMINE STRESS MAGNITUDES. TEST PROCEDURES & EQUIPMENT SETUP IN 1) HEALY, J.H.,& OTHERS,1984, REPORT ON TELEVIEWER LOG AND STRESS MEASUREMENTS IN CORE HOLE USW-G1,NTS,DEC.13-22,1981, USGS OFR 84-15; 2) STOCK,J.M.,& OTHERS,1984, REPORT ON TELEVIEWER LOG AND STRESS MEASUREMENTS IN CORE HOLE USW G-2,NTS,OCT-NOV.1982, USGS OFR 84-172; AND 3) STOCK,J.M.,& OTHERS, 1986, REPORT ON TELEVIEWER LOG AND STRESS MEASUREMENTS IN HOLES USW G-3 AND UE-25P#1,YM,NYE CO.,NV, USGS OFR 86-369. STRESS DIRECTION DETERMINED USING TELEVIEWER LOGS.	D	N	C
	ACQN/DEVL LOCATION : USGS, MENLO PARK, CA					
**GS930483117481.002	AN EVALUATION OF THE TOPOGRAPHIC MODIFICATION OF STRESSES AT YUCCA MOUNTAIN, NEVADA, BY HENRI S. SWOLFS, WILLIAM Z. SAVAGE, AND WILLIAM L. ELLIS.	01/01/85-07/24/86	SOLUTION FOR TOPOGRAPHICALLY INDUCED STRESSES DERIVED FROM KOLOSOV-MUSKHELISHVILI METHOD OF COMPLEX POTENTIALS FOR PLANE ELASTICITY, SAVAGE, W.Z., AND OTHERS, 1985, GRAVITATION OF STRESSES IN LONG SYMMETRIC RIDGES AND VALLEYS: INTERNATIONAL JOURNAL OF ROCK MECHANICS, MINERAL SCIENCE, AND GEOCHEMICAL ABSTRACTS. CONFORMAL MAPPING FUNCTION USED TO TRANSFORM A SYMMETRIC RIDGE INTO A HALF-PLANE TO OBTAIN GRAVITY-INDUCED STRESSES.	D	N	C
	ACQN/DEVL LOCATION : USGS, DENVER, CO					

SITE CHARACTERIZATION PLAN BASELINE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.17.4.10.1						
*GS930731174101.001	YMP LEVEL DATA: 11/90 - 07/91 - SECTION OBSERVATIONS. ACQN/DEVL LOCATION : USGS, DENVER, CO	11/01/90-07/01/91	GP-06,R2 & R3, GEODETIC LEVELING AND TRILATERATION SURVEYS	A	Y	C
*GS930731174101.002	GPS DATA (FOR QUADRILATERAL SURVEYS) CALIBRATION (I.E. CHECK AGAINST KNOWN BASELINE) FOR GPS RECEIVERS - DATA AND COMPUTATIONS, 11/90 - 07/91. ACQN/DEVL LOCATION : USGS, DENVER, CO	03/01/91-06/01/91	GP-06,R2 & R3, GEODETIC LEVELING AND TRILATERATION SURVEYS	A	Y	C
**GS930731174101.003	1983 - 1988 LEVELING RESULTS, 1983 - 1988 QUADRILATERAL RESULTS AND VARIOUS EARLIER DATA ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/83-12/31/88	STANDARD USGS METHODS FOR GEODETIC LEVELING AND SECTION OBSERVATIONS.	A	N	T
*GS930731174101.005	YMP LEVEL DATA: GEODETIC LEVELING AND SECTION OBSERVATIONS, 1992 - 1993 ACQN/DEVL LOCATION : USGS, DENVER, CO	11/01/92-04/01/93	GP-06,R3, GEODETIC LEVELING AND TRILATERATION SURVEYS	A	Y	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	DATA TYPE	QUALIFIED	LOCATION
Activity - 8.3.1.17.4.12.1						
**GS930408318512.005	TECTONICS, SEISMICITY, VOLCANISM AND EROSION RATES IN THE SOUTHERN GREAT BASIN, BY W.J. CARR AND A.M. ROGERS -- FY 1980 REPORT. ACQN/DEVL LOCATION : USGS, DENVER, CO.	01/01/81-05/01/82	SUMMARIES/INTERPRETATIONS OF PREVIOUSLY PUBLISHED DATA AND PRELIMINARY RESULTS FROM TECTONIC, SEISMIC, VOLCANIC, EROSION AND DEPOSITION STUDIES.	D	N	C
**GS930431174121.001	VOLCANO-TECTONIC SETTING OF YUCCA MOUNTAIN AND CRATER FLAT, SOUTHWESTERN NEVADA, BY W.J. CARR. ACQN/DEVL LOCATION : USGS, MENLO PARK, CA	01/01/85-11/08/85	INTERPRETATIONS BASED ON A COMPILATION OF OTHER WORKS.	D	N	C
Activity - 8.3.2.2.1.4						
*SNSAND92045000.000	SAND92-0450: "ROCK MASS MECHANICAL PROPERTY ESTIMATIONS FOR THE YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT" ACQN/DEVL LOCATION : SNL-SANDIA NATIONAL LABORATORY	10/15/91-06/01/93	ROCK MASS QUALITIES WERE ESTIMATED FROM REPRESENTATIVE INTACT ROCK AND JOINT MECHANICAL PROPERTIES SELECTED FOR WELDED AND NONWELDED TUFFS. THESE QUALITIES WERE ESTIMATED USING BOTH THE NORWEGIAN GEOTECHNICAL INSTITUTE (Q) AND GEOMECHANICS RATING (RMR) SYSTEMS. ROCK MASS MECHANICAL PROPERTIES WERE DEVELOPED BASED ON ESTIMATES OF ROCK MASS QUALITY, CURRENT KNOWLEDGE OF INTACT PROPERTIES, AND FRACTURE/JOINT CHARACTERISTICS. (SEE SAND92-0450 FOR MORE DETAIL).	D	N	C

SITE CHARACTERIZATION PLAN BASELINE - PROTOTYPE

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	QUALIFIED	LOCATION
**GS90090123344G.001	TRIAXIAL-COMPRESSION EXTRACTION OF PORE WATER FROM UNSATURATED TUFF, YUCCA MOUNTAIN, NEVADA, BY I.C. YANG, A.K. TURNER, T.M. SAYRE AND PARVIZ MONTAZER ACQN/DEVL LOCATION : USGS, DENVER, CO	06/01/87-12/31/87	THIS REPORT IS A DETAILED DESCRIPTION OF THE METHOD USED IN THIS STUDY.	D	N	C
*GS920908312244.001	AIR-INJECTION TESTING/PRESSURES AND TEMPERATURES AT APACHE LEAP TUFF SITE, SUPERIOR, AZ ACQN/DEVL LOCATION : 33 18'00"N 111 04'10"W	12/11/90-05/20/91	PROTOTYPE DATA WERE COLLECTED USING BEST SCIENTIFIC PRACTICES AND RECORDED IN A NOTEBOOK OR RECORDED AS INSTRUMENT READINGS ON FLOPPY DISKS AND REDUCED USING THE PROGRAM WHICH IS INCLUDED ON THE DISKS.	A	N	P
**GS930912331210.002	PORE-WATER EXTRACTION FROM UNSATURATED TUFFS USING ONE-DIMENSIONAL COMPRESSION, BY TIMOTHY E. MOWER, J.D. HIGGINS AND IN CHE YANG ACQN/DEVL LOCATION : USGS, DENVER, CO	01/01/90-12/27/90	ONE DIMENSIONAL COMPRESSION FOR EXTRACTING PORE-WATER WAS TESTED USING A THICK STEEL CYLINDER TO CONFINE THE CORE. RESULTING MECHANICAL DATA ARE SUMMARIZED IN TABULAR FORM.	D	N	C
*GS940201236221.001	SEASONAL OCCURRENCES OF OSTRACODES IN LAKES AND STREAMS OF THE SAN FRANCISCO PENINSULA, CALIFORNIA, BY CLAIRE CARTER ACQN/DEVL LOCATION : SAN FRANCISCO PENINSULA, CA	05/01/89-05/01/90	FRESH WATER OSTRACODES WERE SAMPLED, PICKED ONTO MICROPALEONTOLOGICAL SLIDES, IDENTIFIED, AND COUNTED. WATER SURFACE, AIR, AND SEDIMENT TEMPERATURES WERE MEASURED AND COMPARED TO FAUNA LEVELS.	A	N	C

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TYPE	DIF	QUALIFIED	LOCATION
*SNF30050393001.003	SNL NORTH RAMP STARTER TUNNEL ROCK-MASS MONITORING DATA: PLOTS OF DRIFT CONVERGENCE AND CONVERGENCE RATE FOR ESF STARTER TUNNEL; AND PLOTS OF ROCK BOLT LOAD CELLS.	06/01/93-12/14/93	MAKE DISPLACEMENT MEASUREMENTS USING A TAPE EXTENSOMETER; CHECK ROCK BOLT LOAD CELL DATA BY READINGS WITH A VOLTMETER.	A	N		C

ACQN/DEVL LOCATION : NEVADA TEST SITE-NORTH PORTAL/ESF STARTER TUNNEL

SOCIOECONOMIC PLAN

DATA TRACKING NO.	TITLE/DESCRIPTION	ACQN/DEVL PERIOD	ACQN/DEVL METHOD	TDIF TYPE	QUALIFIED	LOCATION
*TM00121361T1EB.002	YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT SOCIOECONOMIC MONITORING PROGRAM QUARTERLY EMPLOYMENT DATA REPORT, OCTOBER 1993 THROUGH DECEMBER 1993 ACQN/DEVL LOCATION : T&MSS	10/01/93-12/31/93	MONITORING OF YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT CHARACTERISTICS AS DESCRIBED IN REVISION 0 OF THE SOCIOECONOMIC PLAN	A	Y	C

APPENDIX A

SITE CHARACTERIZATION PROGRAM BASELINE ACTIVITY NUMBERS AND NAMES

ACTIVITY NO.	ACTIVITY NAME
8.3.1.2.1.1.1	Precipitation and meteorological monitoring
8.3.1.2.1.2.1	Surface-water runoff monitoring
8.3.1.2.1.2.2	Transport of debris by severe runoff
8.3.1.2.1.3.1	Assessment of the regional hydrogeologic data needs in the saturated zones
8.3.1.2.1.3.2	Regional potentiometric-level distribution and hydrogeologic framework studies
8.3.1.2.1.3.3	Fortymile Wash recharge study
8.3.1.2.1.3.4	Evapotranspiration studies
8.3.1.2.1.4.1	Conceptualization of regional hydrologic flow models
8.3.1.2.1.4.2	Subregional two-dimensional area hydrologic modeling
8.3.1.2.2.1.1	Characterization of hydrological properties of surficial materials
8.3.1.2.2.1.2	Evaluation of natural infiltration
8.3.1.2.2.2.1	Chloride and chlorine-36 measurements of percolation at Yucca Mountain
8.3.1.2.2.3.1	Matrix hydrologic properties testing
8.3.1.2.2.3.2	Site vertical borehole studies
8.3.1.2.2.4.2	Percolation tests in the Exploratory Studies Facility
8.3.1.2.2.4.8	Hydrochemistry tests in the Exploratory Studies Facility
8.3.1.2.2.4.9	Multipurpose-borehole testing
8.3.1.2.2.6.1	Gaseous-phase circulation study

ACTIVITY NO.	ACTIVITY NAME
8.3.1.2.2.7.1	Gaseous - phase chemical investigations
8.3.1.2.2.7.2	Aqueous-phase chemical investigations
8.3.1.2.2.8.1	Development of conceptual and numerical models of fluid flow in unsaturated, fractured rock
8.3.1.2.2.9.1	Conceptualization of the unsaturated-zone hydrogeologic system
8.3.1.2.2.9.3	Simulation of the natural hydrogeologic system
8.3.1.2.3.1.2	Site potentiometric-level evaluation
8.3.1.2.3.1.3	Analysis of single- and multiple-well hydraulic-stress tests
8.3.1.2.3.1.4	Multiple-well interference testing
8.3.1.2.3.1.6	Well testing with conservative tracers throughout the site
8.3.1.2.3.1.7	Testing of the C-hole sites with conservative tracers
8.3.1.2.3.2.1	Assessment of saturated-zone hydrochemical data availability and needs
8.3.1.2.3.2.2	Hydrochemical characterization of water in the upper part of the saturated zone
8.3.1.2.3.2.3	Regional hydrochemical tests and analyses
8.3.1.2.3.3.1	Conceptualization of saturated-zone flow models within the boundaries of the accessible environment
8.3.1.2.3.3.2	Development of fracture network model
8.3.1.3.1.1	Ground-water chemistry model
8.3.1.3.2.1	Mineralogy, petrology, and chemistry of transport pathways
8.3.1.3.2.1.1	Petrologic stratigraphy of the Topopah Spring Member

ACTIVITY NO.	ACTIVITY NAME
8.3.1.3.2.1.2	Mineral distributions between the host rock and the accessible environment
8.3.1.3.2.1.3	Fracture mineralogy
8.3.1.3.2.2.1	History of mineralogic and geochemical alteration of Yucca Mountain
8.3.1.3.2.2.2	Smectite, zeolite, manganese minerals, glass dehydration, and transformation
8.3.1.3.4.1	Batch sorption studies
8.3.1.3.4.1.1	Batch sorption measurements as a function of solid phase composition
8.3.1.3.4.1.2	Sorption as a function of sorbing element concentrations (isotherms)
8.3.1.3.4.1.3	Sorption as a function of ground-water composition
8.3.1.3.4.2	Biological sorption and transport
8.3.1.3.5.1.1	Solubility measurements
8.3.1.3.6.1.1	Crushed tuff column experiments
8.3.1.3.6.2.1	Uptake of radionuclides on rock beakers in a saturated system
8.3.1.3.6.2.2	Diffusion through a saturated tuff slab
8.3.1.4.1.2	Integration of geophysical activities
8.3.1.4.2.1.1	Surface and subsurface stratigraphic studies of the host rock and surrounding units
8.3.1.4.2.1.2	Surface-based geophysical surveys
8.3.1.4.2.1.3	Borehole geophysical surveys
8.3.1.4.2.1.4	Petrophysical properties testing
8.3.1.4.2.1.5	Magnetic properties and stratigraphic correlations
8.3.1.4.2.1.6	Integration of geophysical activities

ACTIVITY NO.	ACTIVITY NAME
8.3.1.4.2.2	Characterization of the structural features within the site area
8.3.1.4.2.2.1	Geologic mapping of zonal features in the Paintbrush Tuff
8.3.1.4.2.2.2	Surface-fracture network studies
8.3.1.4.2.2.3	Borehole evaluation of faults and fractures
8.3.1.4.2.2.4	Geologic mapping of the Exploratory Studies Facility
8.3.1.4.2.2.5	Seismic tomography/vertical seismic profiling
8.3.1.4.2.3.1	Development of a three-dimensional geologic model of the site area
8.3.1.4.3.1	Systematic acquisition of site-specific subsurface information
8.3.1.4.3.1.1	Systematic drilling program
8.3.1.5.1.1.1	Synoptic characterization of regional climate
8.3.1.5.1.2.1	Paleontologic analyses
8.3.1.5.1.2.2	Analysis of the stratigraphy-sedimentology of marsh lacustrine, and playa deposits
8.3.1.5.1.3.1	Analysis of pack rat middens
8.3.1.5.1.3.3	Determination of vegetation-climate relationships
8.3.1.5.1.4.1	Modeling of soil properties in the Yucca Mountain region
8.3.1.5.1.4.2	Surficial deposits mapping of the Yucca Mountain area
8.3.1.5.1.4.3	Eolian history of the Yucca Mountain region
8.3.1.5.1.5.1	Paleoclimate-paleoenvironmental synthesis
8.3.1.5.2.1.1	Regional paleoflood evaluation
8.3.1.5.2.1.2	Quaternary unsaturated zone hydrochemical analysis

TIVITY NO.	ACTIVITY NAME
8.3.1.5.2.1.3	Evaluation of past discharge areas
8.3.1.5.2.1.4	Analog recharge studies
8.3.1.5.2.1.5	Studies of calcite and opaline silica vein deposits
8.3.1.6.1.1.1	Development of a geomorphic map of Yucca Mountain
8.3.1.6.1.1.2	Analysis of the downcutting history of Fortymile Wash and its tributaries
8.3.1.6.1.1.3	An analysis of hillslope erosion at Yucca Mountain
8.3.1.6.2.1.1	Synthesis and data evaluation of impact of future climatic conditions on locations and rates of erosion
8.3.1.6.3.1.1	Synthesis and data evaluation of the impact of future uplift or subsidence and faulting on erosion at Yucca Mountain and vicinity
8.3.1.8.1.1.3	Presence of magma bodies in the vicinity of the site
8.3.1.8.1.2.1	Eruptive effects
8.3.1.8.3.2.2	Assessment of the effects of igneous intrusions on water-table elevations
8.3.1.8.3.2.5	Effects of faulting on water-table elevation
8.3.1.8.5.1.2	Geochronology studies
8.3.1.8.5.1.3	Field geologic studies
8.3.1.8.5.1.4	Geochemistry of scoria sequences
8.3.1.8.5.1.5	Geochemical cycles of basaltic volcanic fields
8.3.1.8.5.2.1	Evaluation of depth of curie temperature isotherm
8.3.1.8.5.2.3	Heat flow at Yucca Mountain and evaluation of regional ambient heat flow and local heat flow anomalies
8.3.1.9.2.1.1	Geochemical assessment of Yucca Mountain in relation to the potential for mineralization

ACTIVITY NO.	ACTIVITY NAME
8.3.1.9.2.1.4	Assessment of hydrocarbon resources at and near the site
8.3.1.9.2.2.1	Projected trends in local and regional ground-water development, and estimated withdrawal rates in southern Nevada, proximal to Yucca Mountain
8.3.1.12.2.1.1	Site meteorological monitoring program
8.3.1.14.2.1.1	Site reconnaissance
8.3.1.14.2.1.2	Preliminary and detailed exploration
8.3.1.14.2.1.3	Detailed exploration
8.3.1.14.2.2.1	Physical property and index laboratory tests
8.3.1.14.2.2.2	Mechanical and dynamic laboratory property tests
8.3.1.14.2.3	Field tests and characterization measurements
8.3.1.14.2.3.1	Physical property field tests and characterization measurements
8.3.1.14.2.3.2	Mechanical property field tests
8.3.1.14.2.3.3	Geophysical field measurements
8.3.1.15.1.1.1	Density and porosity characterization
8.3.1.15.1.1.3	Thermal conductivity characterization
8.3.1.15.1.2.1	Thermal expansion characterization
8.3.1.15.1.3	Laboratory determination of mechanical properties of intact rock
8.3.1.15.1.3.1	Compressive mechanical properties of intact rock at baseline experiment conditions
8.3.1.15.1.3.2	Effects of variable environmental conditions on mechanical properties
8.3.1.15.1.4	Laboratory determination of the mechanical properties of fractures
8.3.1.15.1.7.1	Plate loading tests

ACTIVITY NO.	ACTIVITY NAME
8.3.1.15.1.8.1	Evaluation of mining methods
8.3.1.15.2.1.2	Overcore stress experiments in the exploratory studies facility
8.3.1.15.2.2.1	Surface-based evaluation of ambient thermal conditions
8.3.1.16.1.1.1	Site flood and debris hazards studies
8.3.1.16.2.1.4	Identification and evaluation of potential effects of repository related withdrawals on the local flow system at Yucca Mountain, Nevada
8.3.1.17.2.1.2	Assess the potential for displacement on faults that intersect underground facilities
8.3.1.17.3.3.2	Select or develop empirical models for ground motion from underground nuclear explosions
8.3.1.17.3.5.1	Identify controlling seismic events
8.3.1.17.3.5.2	Characterize ground motion from the controlling seismic events
8.3.1.17.3.6.2	Evaluate ground motion probabilities
8.3.1.17.4.1.1	Compile historical earthquake record
8.3.1.17.4.1.2	Monitor current seismicity
8.3.1.17.4.1.3	Evaluate potential for induced seismicity at the site
8.3.1.17.4.2	Location and recency of faulting near prospective surface facilities
8.3.1.17.4.2.1	Identify appropriate trench locations in Midway Valley
8.3.1.17.4.3.1	Conduct and evaluate deep geophysical surveys in an east-west transect crossing the Furnace Creek fault zone, Yucca Mountain, and the Walker Lane
8.3.1.17.4.3.2	Evaluate Quaternary faults within 100 km of Yucca Mountain
8.3.1.17.4.3.4	Evaluate the Bare Mountain fault zone

ACTIVITY NO.	ACTIVITY NAME
8.3.1.17.4.3.5	Evaluate structural domains and characterize the Yucca Mountain region with respect to regional patterns of faults and fractures
8.3.1.17.4.4.1	Evaluate the Rock Valley fault system
8.3.1.17.4.5.1	Evaluate the significance of the Miocene-Paleozoic contact in the Calico Hills area to detachment faulting within the site area
8.3.1.17.4.5.2	Evaluate postulated detachment faults in the Beatty-Bare Mountain area
8.3.1.17.4.6.1	Evaluate Quaternary geology and potential Quaternary faults at Yucca Mountain
8.3.1.17.4.6.2	Evaluate age and recurrence of movement on suspected and known Quaternary faults
8.3.1.17.4.7.1	Evaluate intermediate depth (2 to 3 km) reflection and refraction methods and plan potential application of these methods within the site area
8.3.1.17.4.7.2	Detailed gravity survey of the site area
8.3.1.17.4.7.3	Detailed aeromagnetic survey of the site area
8.3.1.17.4.7.4	Detailed ground magnetic survey of specific features within the site area
8.3.1.17.4.7.5	Evaluate surface geoelectric methods and plan potential application of these methods within the site area
8.3.1.17.4.7.8	Evaluate shallow seismic reflection (mini-sosie) methods and, if appropriate, conduct surveys of selected structures at and proximal to the site area
8.3.1.17.4.8.1	Evaluate present stress field within site area
8.3.1.17.4.8.2	Evaluate and test shallow borehole hydrofrac and triaxial strain recovery methods for the determination of in situ stress and, if appropriate, plan potential application of these methods within and proximal to the site

ACTIVITY NO.	ACTIVITY NAME
8.3.1.17.4.9.1	Evaluate age and extent of tectonically stable areas at and near Yucca Mountain
8.3.1.17.4.10.1	Relevel base-station network, Yucca Mountain and vicinity
8.3.1.17.4.10.2	Survey selected base stations, Yucca Mountain and vicinity, using global positioning satellite
8.3.1.17.4.10.3	Analyze existing releveling data, Yucca Mountain and vicinity
8.3.1.17.4.12.1	Evaluate tectonic processes and tectonic stability at the site
8.3.2.4.1.1	Design activity to verify access and drift usability
8.3.5.4.1.1	Refinement of site data parameters required for Issue 2.2
8.3.5.10.2.1	Characterization of the spent fuel waste form
8.3.5.10.2.2	Characterization of the glass waste form
8.3.5.10.3.2	Develop geochemical speciation and reaction model
8.3.5.10.5.1	Determine radionuclide transport parameters
8.3.5.10.5.2	Radionuclide transport modeling in the near-field waste package environment
8.3.5.12.1.1	Application of results
8.3.5.12.2.1	Model development
8.3.5.12.2.1.1	Development of a theoretical framework for calculational models
8.3.5.12.2.2	Verification and validation

APPENDIX B

GEOLOGIC AND ENGINEERING MATERIALS: BIBLIOGRAPHY OF CHEMICAL SPECIES (GEMBOCHS) DATA CATALOG

Introduction

The GEMBOCHS database and software library together provide a suite of thermodynamic datafiles for use with geochemical modeling codes such as EQ3/6, which in turn are used to carry out aqueous speciation and fluid-rock mass transfer calculations that provide quantitative insight into the geochemical evolution of diverse geologic systems. In the context of Yucca Mountain Site Characterization Project (YMP) investigations, participant geochemists depend heavily on GEMBOCHS and EQ3/6 in their efforts to assess and predict the likely and potential geochemical consequences of the proposed subterranean repository.

This appendix lists the general types of data contained in the database and provides tabular summaries of the specific species, reference-state thermodynamic data, and literature references currently included in GEMBOCHS.

GEMBOCHS Data Types

The following lists provide skeletal summaries of the compositional, reaction, and thermodynamic data included in GEMBOCHS for minerals, gases, and aqueous species. For a given species, some (or most) of these data may be lacking; conversely, for certain parameters, more than one referenced value is often available.

Compositional Data for Minerals, Gases, and Aqueous Species

- Elemental Composition
- Common Name

Reaction Data for Aqueous Dissociation of Minerals, Gases, and Aqueous Species

- Reaction Stoichiometry
- Equilibrium Constants
- Pressure, Temperature Conditions
- Standard Molal Gibbs Free Energies of Reaction
- Standard Molal Enthalpies of Reaction
- Standard Molal Entropies of Reaction

Standard Molal Volumes of Reaction
Standard Molal Heat Capacities of Reaction
Parameter Units
Literature References

Thermodynamic Data for Minerals

Standard Molal Gibbs Free Energy of Formation
Standard Molal Enthalpy of Formation
Standard Molal Entropy at Reference Pressure (*Pr*) and Temperature (*Tr*)
Standard Molal Volume at *Pr*, *Tr*
Standard Molal Heat Capacity at *Pr*, *Tr*
Molecular Weight
Heat Capacity Coefficients
Temperature Limits on Heat Capacity Coefficients
Standard Molal Enthalpy of Transition
Standard Molal Entropy of Transition
Standard Molal Volume of Transition
Clapeyron Slope
Parameter Units
Literature References

Thermodynamic Data for Gases

Standard Molal Gibbs Free Energy of Formation
Standard Molal Enthalpy of Formation
Standard Molal Entropy at *Pr*, *Tr*
Standard Molal Volume at *Pr*, *Tr*
Standard Molal Heat Capacity at *Pr*, *Tr*
Molecular Weight
Heat Capacity Coefficients
Temperature Limits on Heat Capacity Coefficients
Parameter Units
Literature References

Thermodynamic Data for Aqueous Species

Standard Molal Gibbs Free Energy of Formation
Standard Molal Enthalpy of Formation
Standard Molal Entropy at *Pr*, *Tr*
Standard Molal Volume at *Pr*, *Tr*
Standard Molal Heat Capacity at *Pr*, *Tr*
Molecular Weight
Equation-of-State Coefficients
Debye-Huckel Parameters
Ionic Charge
Electronic Entropy
Parameter Units
Literature References

GEMBOCHS Species, Data, and References

Table B1 provides a comprehensive inventory of the chemical species for which at least some data are available in GEMBOCHS, a symbolic description of the data used to represent reference-state stability of individual species, and a matrix indicating the presence or absence of these species in each of the six standard thermodynamic datafiles currently provided for use with EQ3/6.

In the "species" section of the table, the common name for each distinct species is given in the "name" column, its chemical composition is provided in the "composition" column, and its "aqueous" or "mineral" nature in the "type" column. This last column requires some explanation. Although all aqueous species are grouped together in this table, within GEMBOCHS they are subdivided into "basis", "auxiliary basis", and "[other] aqueous" species, where the basis and auxiliary basis species are used in reactions that represent aqueous dissociation of minerals, gases, liquids, and other aqueous species. There is no physical differentiation associated with this subdivision, and from a thermodynamic standpoint such classification is completely arbitrary (albeit necessary from practical considerations).

Similarly, all minerals are grouped together here, although in the database itself they are subdivided into "[stoichiometric] solids", "solid solutions", "gases", and "liquids". However, in contrast to the case for aqueous species, these four subtypes are clearly distinct physically. In the following table, solid solutions are distinguished by the explicit parenthetical representation of cation mixing sites in their composition: e.g., Orthopyroxene: $(Fe,Mg)SiO_3$. Gases are denoted by their "(g)" suffix: e.g., $CO_2(g)$, and liquids by their "(l)" suffix: e.g., $Br_2(l)$. All other species of type "mineral" are stoichiometric (pure) solids. Although these four species types are physically distinct, their thermodynamic behavior is represented with similar equations, hence, their grouping in this compilation.

Note that the composition column is blank whenever its specification would be redundant, and that the primary sort on the table is by species type; hence, all aqueous species are listed (alphabetically) in the first block, followed by the minerals (also alphabetized) in the second. Also note that the composition column, which is of 55-character length in the database, has been truncated to 28-character length below. This length restriction is rarely significant, although it can be in some instances (e.g., several Clinoptilolites).

In the "data" section, the "type" column refers to the type of data used to represent thermodynamic stability of the species at the reference T-P state of 25C, 1 bar. Type "1" denotes use of the standard molal Gibbs free energy of formation of the species from its elements in their standard state; type "2" refers to use of the standard molal enthalpy of formation and standard molal entropy to calculate the corresponding Gibbs free energy; type "3" signifies use of a reported equilibrium constant for aqueous dissociation of the species; type "4" indicates use of chemical potential data reported by Harvie et al. (1984); and finally, for species of the type "0", there is insufficient data to calculate the standard molal Gibbs free energy. Provided in the adjacent "lit. source" column is the literature source for the indicated data. These sources are given in standard squibb notation, which is simply a concatenation of the last two digits of the year of publication (20th century) and the first three letters of the author's last name; if there are two or more authors, the first three letters of the second author's last name are appended following a slash character. The literature references are provided in complete form in Table B2, which begins on page B-98.

Note that the summary of data used to calculate species stability in the reference state represents only a small fraction of the thermodynamic data contained in the GEMBOCHS database. Not tabulated or referenced here are the equation-of-state, heat-capacity, and phase-transition data used to calculate standard molal thermodynamic properties at elevated temperatures and pressures; Debye-Huckel parameters used to evaluate activity coefficients of aqueous species; site mixing parameters used to represent the thermodynamic behavior of solid solutions, etc.

The final "EQ3/6 Datafiles" section provides a matrix summary of the presence (indicated by an "X") or absence ("0") of a given species in each of the six thermodynamic datafiles provided for use with EQ3/6. The "com" file is a composite database that encompasses the broadest range of bulk chemical composition, at the expense of a somewhat reduced level of internal consistency; the "alt" file mirrors the "com" file with one exception: data for aqueous Np, Pu, and Am complexes are taken exclusively from Palmer et al. (1992), as described above. The "sup" file is based on equations and data taken from the SUPCRT92 software package (Johnson et al., 1992), which currently includes approximately 550 species and features a high level of internal consistency and a comprehensive equation-of-state for aqueous species. The "nea" file is based on the internally consistent, albeit bulk-composition restricted, CODATA (Cox et al., 1989) and NEA-Uranium (Grenthe et al., 1992) compilations. The "pit" (Pitzer, e.g., 1973, 1987) and "hmw" (Harvie et al., 1984) files

are primarily distinguished by their treatment of activity coefficients for aqueous species, which are based on Pitzer's equations. (In contrast, the "com", "alt", and "nea" files contain data which facilitate calculation of aqueous activity coefficients using an extended Debye-Huckel model, which is more appropriate for relatively dilute aqueous solutions.)

Each of these datafiles is particularly suited for use with certain geochemical modeling problems. For example, if the bulk chemistry of the system to be modeled is somewhat exotic (containing actinides, rare earths, etc.), then the "com" or "alt" files are likely the only choice; if the problem to be addressed involves common rock-forming minerals and relatively dilute aqueous solutions, then the "sup" file is recommended owing to its high level of internal consistency and aqueous-species equation of state. If the model environment is characterized by brines or other fluids of relatively high ionic strength, then the "pit" or "hmw" files are most appropriate. At present, the "nea" file is of limited practical use as its primarily restricted to Uranium species. However, this compilation will enjoy greatly enhanced applicability upon incorporation of the critical reviews of thermodynamic data currently in progress for Tc, Np, Pu, and Am species, which will be analogs to the Uranium volume of Grenthe et al. (1992).

Table B1: Summary of GEMBOCHS species, reference-state data, and EQ3/6 datafiles

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
(AmO2)2(OH)2++		aqueous	3	92pal/sil	0	X	0	0	0	0
(AmO2)2OH+++		aqueous	3	92pal/sil	0	X	0	0	0	0
(AmO2)3(CO3)6(6-)		aqueous	3	92pal/sil	0	X	0	0	0	0
(AmO2)3(OH)4++		aqueous	3	92pal/sil	0	X	0	0	0	0
(AmO2)3(OH)5+		aqueous	3	92pal/sil	0	X	0	0	0	0
(AmO2)3(OH)7-		aqueous	3	92pal/sil	0	X	0	0	0	0
(AmO2)4(OH)7+		aqueous	3	92pal/sil	0	X	0	0	0	0
(NH4)2Sb2S4(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
(NpO2)2(OH)2++		aqueous	1	84lem	0	0	0	0	0	0
(NpO2)2(OH)2++		aqueous	3	84lem	X	0	0	0	0	0
(NpO2)2(OH)2++		aqueous	3	92pal/sil	0	X	0	0	0	0
(NpO2)2OH+++		aqueous	3	92pal/sil	0	X	0	0	0	0
(NpO2)3(CO3)6(6-)		aqueous	3	92pal/sil	0	X	0	0	0	0
(NpO2)3(OH)4++		aqueous	3	92pal/sil	0	X	0	0	0	0
(NpO2)3(OH)5+		aqueous	1	84lem	0	0	0	0	0	0
(NpO2)3(OH)5+		aqueous	3	84lem	X	0	0	0	0	0
(NpO2)3(OH)5+		aqueous	3	92pal/sil	0	X	0	0	0	0
(NpO2)3(OH)7-		aqueous	3	92pal/sil	0	X	0	0	0	0
(NpO2)4(OH)7+		aqueous	3	92pal/sil	0	X	0	0	0	0
(PuO2)2(OH)2++		aqueous	1	80lem/tre	X	0	0	0	0	0
(PuO2)2(OH)2++		aqueous	3	80lem/tre	0	0	0	0	0	0
(PuO2)2(OH)2++		aqueous	3	92pal/sil	0	X	0	0	0	0
(PuO2)2OH+++		aqueous	3	92pal/sil	0	X	0	0	0	0
(PuO2)3(CO3)6(6-)		aqueous	3	92pal/sil	0	X	0	0	0	0
(PuO2)3(OH)4++		aqueous	3	92pal/sil	X	X	0	0	0	0
(PuO2)3(OH)5+		aqueous	1	80lem/tre	X	0	0	0	0	0
(PuO2)3(OH)5+		aqueous	3	80lem/tre	0	0	0	0	0	0
(PuO2)3(OH)5+		aqueous	3	92pal/sil	0	X	0	0	0	0
(PuO2)3(OH)7-		aqueous	3	92pal/sil	0	X	0	0	0	0
(PuO2)4(OH)7+		aqueous	3	92pal/sil	0	X	0	0	0	0
(TcO(OH)2)2(aq)		aqueous	1	83rar	X	X	0	0	0	0
(UO2)11(CO3)6(OH)12--		aqueous	1	92gre/fug	X	X	0	0	X	0
(UO2)2(CO3)(OH)3-		aqueous	3	84tri	0	0	0	0	0	0
(UO2)2(OH)2++		aqueous	0	chemval*	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
(UO2)2(OH)2++		aqueous	1	92gre/fug	X	X	0	0	X	0
(UO2)2(OH)2++		aqueous	3	chemval*	0	0	0	0	0	0
(UO2)2CO3(OH)3-		aqueous	1	92gre/fug	X	X	0	0	X	0
(UO2)2OH+++		aqueous	1	92gre/fug	X	X	0	0	X	0
(UO2)3(CO3)6(6-)		aqueous	0	chemval*	0	0	0	0	0	0
(UO2)3(CO3)6(6-)		aqueous	1	92gre/fug	X	X	0	0	X	0
(UO2)3(CO3)6(6-)		aqueous	3	chemval*	0	0	0	0	0	0
(UO2)3(OH)4++		aqueous	1	92gre/fug	X	X	0	0	X	0
(UO2)3(OH)5+		aqueous	0	chemval*	0	0	0	0	0	0
(UO2)3(OH)5+		aqueous	1	92gre/fug	X	X	0	0	X	0
(UO2)3(OH)5+		aqueous	3	chemval*	0	0	0	0	0	0
(UO2)3(OH)5CO2+		aqueous	1	92gre/fug	X	X	0	0	X	0
(UO2)3(OH)7-		aqueous	1	92gre/fug	X	X	0	0	X	0
(UO2)3O(OH)2(HCO3)+		aqueous	1	92gre/fug	X	X	0	0	X	0
(UO2)4(OH)7+		aqueous	1	92gre/fug	X	X	0	0	X	0
(VO)2(OH)2++		aqueous	3	76bae/mes	X	X	0	0	0	0
1-Butanamine(aq)	C4H9NH2	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Butanol(aq)	C4H9OH	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Butene(aq)	C4H8	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Butyne(aq)	C4H6	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Heptanamine(aq)	C7H15NH2	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Heptanol(aq)	C7H15OH	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Heptene(aq)	C7H14	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Heptyne(aq)	C7H12	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Hexanamine(aq)	C6H13NH2	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Hexanol(aq)	C6H13OH	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Hexene(aq)	C6H12	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Hexyne(aq)	C6H10	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Octanamine(aq)	C8H17NH2	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Octanol(aq)	C8H12OH	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Octene(aq)	C8H16	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Octyne(aq)	C8H14	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Pentanamine(aq)	C5H11NH2	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Pentanol(aq)	C5H11OH	aqueous	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
1-Pentene(aq)	C5H10	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Pentyne(aq)	C5H8	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Propanamine(aq)	C3H7NH2	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Propanol(aq)	C3H7OH	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Propene(aq)	C3H6	aqueous	1	supcrt92**	X	X	X	0	0	0
1-Propyne(aq)	C3H4	aqueous	1	supcrt92**	X	X	X	0	0	0
2-Butanone(aq)	C4H8O	aqueous	1	supcrt92**	X	X	X	0	0	0
2-Heptanone(aq)	C7H14O	aqueous	1	supcrt92**	X	X	X	0	0	0
2-Hexanone(aq)	C6H12O	aqueous	1	supcrt92**	X	X	X	0	0	0
2-Octanone(aq)	C8H16O	aqueous	1	supcrt92**	X	X	X	0	0	0
2-Pentanone(aq)	C5H10O	aqueous	1	supcrt92**	X	X	X	0	0	0
Acetaldehyde(aq)	CH3CHO	aqueous	1	93sch/sho	X	X	X	0	0	0
Acetamide(aq)	CH3CONH2	aqueous	1	93sho	X	X	X	0	0	0
Acetate	CH3COO-	aqueous	1	supcrt92**	X	X	X	0	0	0
Acetic acid(aq)	CH3COOH	aqueous	1	supcrt92**	X	X	X	0	0	0
Acetone(aq)	CH3COCH3	aqueous	1	supcrt92**	X	X	X	0	0	0
Ag(CH3COO)2-		aqueous	1	93sho/kor	X	X	X	0	0	0
Ag(CO3)2---		aqueous	1	supcrt92**	X	X	X	0	0	0
Ag+		aqueous	1	supcrt92**	X	X	X	X	0	0
Ag+		aqueous	2	89cox/wag	0	0	0	0	0	0
Ag++		aqueous	1	supcrt92**	X	X	X	0	0	0
AgCH3COO(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
AgCO3-		aqueous	1	supcrt92**	X	X	X	0	0	0
AgCl(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
AgCl2-		aqueous	1	supcrt92**	X	X	X	0	0	0
AgCl3--		aqueous	1	supcrt92**	X	X	X	0	0	0
AgCl4---		aqueous	1	supcrt92**	X	X	X	0	0	0
AgF(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
AgNO3(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
Al(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Al(O-phth)+		aqueous	3	77mar/smi	0	0	0	0	0	0
Al(O-phth)2-		aqueous	3	89mar/smi	0	0	0	0	0	0
Al(OH)2+		aqueous	0	chemval*	0	0	0	0	0	0
Al(OH)2+		aqueous	3	93bou/kna	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Al(OH)2+		aqueous	3	chemval*	0	0	0	0	0	0
Al(OH)3(aq)		aqueous	3	93bou/kna	X	X	0	0	0	0
Al(OH)4-		aqueous	0	chemval*	0	0	0	0	0	0
Al(OH)4-		aqueous	3	93bou/kna	X	X	0	0	0	0
Al(OH)4-		aqueous	3	chemval*	0	0	0	0	0	0
Al(SO4)2-		aqueous	0	chemval*	0	0	0	0	0	0
Al(SO4)2-		aqueous	3	69iza/eat	X	X	0	0	0	0
Al(SO4)2-		aqueous	3	chemval*	0	0	0	0	0	0
Al+++		aqueous	1	supcrt92**	X	X	X	X	0	0
Al+++		aqueous	2	89cox/wag	0	0	0	0	0	0
Al13O4(OH)24(7+)		aqueous	3	76bae/mes	X	X	0	0	0	0
Al2(OH)2++++		aqueous	0	chemval*	0	0	0	0	0	0
Al2(OH)2++++		aqueous	3	76smi/mar	X	X	0	0	0	0
Al2(OH)2++++		aqueous	3	chemval*	0	0	0	0	0	0
Al3(OH)4(5+)		aqueous	0	chemval*	0	0	0	0	0	0
Al3(OH)4(5+)		aqueous	3	76smi/mar	X	X	0	0	0	0
Al3(OH)4(5+)		aqueous	3	chemval*	0	0	0	0	0	0
AlCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
AlCH3COO++		aqueous	3	77mar/smi	0	0	0	0	0	0
AlF++		aqueous	3	76smi/mar	X	X	0	0	0	0
AlF2+		aqueous	3	76smi/mar	X	X	0	0	0	0
AlF3(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
AlF4-		aqueous	3	76smi/mar	X	X	0	0	0	0
AlF5--		aqueous	0	76smi/mar	0	0	0	0	0	0
AlF6---		aqueous	0	76smi/mar	0	0	0	0	0	0
AlH2PO4++		aqueous	3	79lan	X	X	0	0	0	0
AlHPO4+		aqueous	3	79lan	X	X	0	0	0	0
AlO2-		aqueous	1	supcrt92**	0	0	0	0	0	0
AlOH++		aqueous	0	chemval*	0	0	0	0	0	0
AlOH++		aqueous	1	supcrt92**	X	X	X	0	0	0
AlOH++		aqueous	3	93bou/kna	0	0	0	0	0	0
AlOH++		aqueous	3	chemval*	0	0	0	0	0	0
AlSO4+		aqueous	0	chemval*	0	0	0	0	0	0
AlSO4+		aqueous	3	69iza/eat	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
AlSO4+		aqueous	3	chemval*	0	0	0	0	0	0
Alanine(aq)	C3H7NO2	aqueous	1	supcrt92**	X	X	X	0	0	0
Alanylglycine(aq)	C5H10N2O3	aqueous	1	92sho	X	X	X	0	0	0
Am(CO3)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(CO3)2-		aqueous	1	84ker	0	0	0	0	0	0
Am(CO3)2-		aqueous	3	86ker/sil	X	0	0	0	0	0
Am(CO3)2-		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(CO3)3--		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(CO3)3---		aqueous	3	86ker/sil	X	0	0	0	0	0
Am(CO3)3---		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(CO3)4----		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(CO3)5(6-)		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(H2PO4)2+		aqueous	1	84ker	X	0	0	0	0	0
Am(H2PO4)2+		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(H2PO4)2++		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(H2PO4)3(aq)		aqueous	1	84ker	X	0	0	0	0	0
Am(H2PO4)3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(H2PO4)4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(H2PO4)4-		aqueous	1	84ker	X	0	0	0	0	0
Am(H2PO4)4-		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(HPO4)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(HPO4)3--		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(HPO4)4----		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(HPO4)5(6-)		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(NO3)2+		aqueous	1	84ker	X	0	0	0	0	0
Am(NO3)2+		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(NO3)2++		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(NO3)3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(NO3)3+		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(NO3)4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(OH)2+		aqueous	1	84ker	0	0	0	0	0	0
Am(OH)2+		aqueous	3	86ker/sil	X	0	0	0	0	0
Am(OH)2+		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(OH)2++		aqueous	3	92pal/sil	0	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Am(OH)3(aq)		aqueous	1	84ker	0	0	0	0	0	0
Am(OH)3(aq)		aqueous	3	86ker/sil	X	0	0	0	0	0
Am(OH)3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(OH)3+		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(OH)4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(OH)5-		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(SO4)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(SO4)2-		aqueous	1	84ker	X	0	0	0	0	0
Am(SO4)2-		aqueous	3	92pal/sil	0	X	0	0	0	0
Am(SO4)3--		aqueous	3	92pal/sil	0	X	0	0	0	0
Am+++		aqueous	1	76fug/oet	X	X	0	0	0	0
Am++++		aqueous	1	76fug/oet	X	X	0	X	0	0
AmCO3+		aqueous	1	84ker	0	0	0	0	0	0
AmCO3+		aqueous	3	86ker/sil	X	0	0	0	0	0
AmCO3+		aqueous	3	92pal/sil	0	X	0	0	0	0
AmCO3++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmCl++		aqueous	1	84ker	X	0	0	0	0	0
AmCl++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmCl+++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmCl2+		aqueous	1	84ker	X	0	0	0	0	0
AmCl2+		aqueous	3	92pal/sil	0	X	0	0	0	0
AmCl2++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmCl3+		aqueous	3	92pal/sil	0	X	0	0	0	0
AmF++		aqueous	1	84ker	X	0	0	X	0	0
AmF++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmF+++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmF2+		aqueous	1	84ker	X	0	0	0	0	0
AmF2+		aqueous	3	92pal/sil	0	X	0	0	0	0
AmF2++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmF3(aq)		aqueous	1	84ker	X	0	0	0	0	0
AmF3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmF3+		aqueous	3	92pal/sil	0	X	0	0	0	0
AmF4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmF5-		aqueous	3	92pal/sil	0	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
AmF6--		aqueous	3	92pal/sil	0	X	0	0	0	0
AmH2PO4++		aqueous	1	84ker	X	0	0	0	0	0
AmH2PO4++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmH2PO4+++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmHPO4++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmNO3++		aqueous	1	84ker	X	0	0	0	0	0
AmNO3++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmNO3+++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2(CO3)2--		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2(CO3)2---		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2(CO3)3(5-)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2(CO3)3----		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2(H2PO4)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2(NO3)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2(NO3)2-		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2(OH)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2(OH)3-		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2(OH)4--		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2(SO4)2--		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2+		aqueous	1	76fug/oet	0	0	0	0	0	0
AmO2++		aqueous	1	76fug/oet	0	0	0	0	0	0
AmO2CO3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2CO3-		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2Cl(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2Cl+		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2Cl2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2Cl2-		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2F(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2F+		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2F2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2F3-		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2F4--		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2H2PO4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2H2PO4+		aqueous	3	92pal/sil	0	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
AmO2HCO3(aq)		aqueous	1	84ker	0	0	0	0	0	0
AmO2HPO4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2HPO4-		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2NO3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2NO3+		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2OH(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2OH+		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2PO4--		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2SO4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
AmO2SO4-		aqueous	3	92pal/sil	0	X	0	0	0	0
AmOH++		aqueous	1	84ker	0	0	0	0	0	0
AmOH++		aqueous	3	86ker/sil	X	0	0	0	0	0
AmOH++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmOH+++		aqueous	3	92pal/sil	0	X	0	0	0	0
AmSO4+		aqueous	1	84ker	X	0	0	0	0	0
AmSO4+		aqueous	3	92pal/sil	0	X	0	0	0	0
AmSO4++		aqueous	3	92pal/sil	0	X	0	0	0	0
Ar(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
As(OH)3(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
As(OH)4-		aqueous	3	76bae/mes	0	0	0	0	0	0
AsH3(aq)		aqueous	1	69ser/kho	X	X	0	0	0	0
AsO2-		aqueous	2	92gre/fug	X	X	0	0	X	0
AsO2OH--		aqueous	1	69ser/kho	X	X	0	0	0	0
AsO3F--		aqueous	1	82wag/eva	X	X	0	0	0	0
AsO4---		aqueous	1	92gre/fug	0	0	0	0	X	0
AsO4---		aqueous	2	82wag/eva	X	X	0	X	0	0
Asparagine(aq)	C4H8N2O3	aqueous	1	supcrt92**	X	X	X	0	0	0
Aspartic acid(aq)	C4H7NO4	aqueous	1	supcrt92**	X	X	X	0	0	0
Au(CH3COO)2-		aqueous	1	93sho/kor	X	X	X	0	0	0
Au+		aqueous	1	supcrt92**	X	X	X	0	0	0
Au+++		aqueous	1	supcrt92**	X	X	X	0	0	0
AuCH3COO(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
B(OH)3(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
B(OH)3(aq)		aqueous	2	89cox/wag	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
B(OH)4-		aqueous	3	72mes/bae	0	0	0	0	0	0
B(OH)4-		aqueous	3	80bas	0	0	0	0	0	0
B2O(OH)5-		aqueous	3	77bas	X	X	0	0	0	0
B3O3(OH)4-		aqueous	3	80bas	0	0	0	0	0	0
B4O5(OH)4--		aqueous	3	80bas	0	0	0	0	0	0
BF2(OH)2-		aqueous	1	80bas	X	X	0	0	0	0
BF3OH-		aqueous	1	80bas	X	X	0	0	0	0
BF4-		aqueous	1	supcrt92**	X	X	X	0	0	0
BH4-		aqueous	1	82wag/eva	X	X	0	0	0	0
BO2-		aqueous	1	supcrt92**	X	X	X	0	0	0
Ba(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Ba(o-Phthalate)(aq)		aqueous	3	89mar/smi	X	X	0	0	0	0
Ba++		aqueous	1	supcrt92**	X	X	X	X	0	0
Ba++		aqueous	2	92gre/fug	0	0	0	0	X	0
BaB(OH)4+		aqueous	1	80bas	X	X	0	0	0	0
BaCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
BaCH3COO+		aqueous	3	89mar/smi	0	0	0	0	0	0
BaCO3(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
BaCl+		aqueous	1	supcrt92**	X	X	X	0	0	0
BaF+		aqueous	1	supcrt92**	X	X	X	0	0	0
BaHCO3+		aqueous	1	supcrt92**	0	0	0	0	0	0
BaNO3+		aqueous	3	76smi/mar	X	X	0	0	0	0
BaOH+		aqueous	3	76bae/mes	X	X	0	0	0	0
BaSO4(aq)		aqueous	3	76smi/mar	0	0	0	0	0	0
Be(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Be++		aqueous	1	supcrt92**	X	X	X	X	0	0
BeCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
BeO2--		aqueous	1	supcrt92**	X	X	X	0	0	0
Benzene(aq)	C6H6	aqueous	1	supcrt92**	X	X	X	0	0	0
Bi(CH3COO)2+		aqueous	1	93sho/kor	0	0	0	0	0	0
Bi(CH3COO)3(aq)		aqueous	1	93sho/kor	0	0	0	0	0	0
BiCH3COO++		aqueous	1	93sho/kor	0	0	0	0	0	0
Br-		aqueous	1	supcrt92**	X	X	X	X	0	0
Br-		aqueous	2	89cox/wag	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Br3-		aqueous	1	supcrt92**	X	X	X	0	0	0
BrO-		aqueous	1	92gre/fug	0	0	0	0	X	0
BrO-		aqueous	1	supcrt92**	X	X	X	0	0	0
BrO3-		aqueous	1	supcrt92**	X	X	X	X	0	0
BrO3-		aqueous	2	92gre/fug	0	0	0	0	X	0
BrO4-		aqueous	1	supcrt92**	X	X	X	0	0	0
Butanal(aq)	CH3(CH2)2CHO	aqueous	1	93sch/sho	X	X	X	0	0	0
Butanoate	C3H7COO-	aqueous	1	supcrt92**	X	X	X	0	0	0
Butanoic acid(aq)	C3H7COOH	aqueous	1	supcrt92**	X	X	X	0	0	0
CN-		aqueous	1	supcrt92**	X	X	X	0	0	0
CO(aq)		aqueous	1	93sho/mck	X	X	X	0	0	0
CO2(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
CO2(aq)		aqueous	2	89cox/wag	0	0	0	0	0	0
CO2(aq)		aqueous	4	84har/mol	0	0	0	0	0	X
CO3--		aqueous	1	supcrt92**	X	X	X	0	0	0
CO3--		aqueous	2	89cox/wag	0	0	0	0	0	0
CO3--		aqueous	4	84har/mol	0	0	0	0	0	X
Ca(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Ca(o-Phthalate)(aq)		aqueous	3	89mar/smi	X	X	0	0	0	0
Ca++		aqueous	1	supcrt92**	X	X	X	X	0	0
Ca++		aqueous	2	89cox/wag	0	0	0	0	0	0
Ca++		aqueous	4	84har/mol	0	0	0	0	0	X
CaB(OH)4+		aqueous	1	80bas	X	X	0	0	0	0
CaCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
CaCH3COO+		aqueous	3	89mar/smi	0	0	0	0	0	0
CaCO3(aq)		aqueous	0	chemval*	0	0	0	0	0	0
CaCO3(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
CaCO3(aq)		aqueous	3	82plu/bus	0	0	0	0	0	0
CaCO3(aq)		aqueous	3	chemval*	0	0	0	0	0	0
CaCO3(aq)		aqueous	3	data0R53	0	0	0	0	0	0
CaCO3(aq)		aqueous	4	84har/mol	0	0	0	0	0	X
CaCl+		aqueous	1	supcrt92**	X	X	X	0	0	0
CaCl2(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
CaF+		aqueous	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
CaH2PO4+		aqueous	3	76smi/mar	X	X	0	0	0	0
CaHCO3+		aqueous	0	chemval*	0	0	0	0	0	0
CaHCO3+		aqueous	1	87gar/par	0	0	0	0	0	0
CaHCO3+		aqueous	1	supcrt92**	X	X	X	0	0	0
CaHCO3+		aqueous	3	chemval*	0	0	0	0	0	0
CaHCO3+		aqueous	3	data0R53	0	0	0	0	0	0
CaHP2O7-		aqueous	3	76smi/mar	0	0	0	0	0	0
CaHPO4(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
CaNO3+		aqueous	3	76smi/mar	X	X	0	0	0	0
CaOH+		aqueous	3	76bae/mes	X	X	0	0	0	0
CaP2O7--		aqueous	3	76smi/mar	X	X	0	0	0	0
CaPO4-		aqueous	3	76smi/mar	X	X	0	0	0	0
CaSO4(aq)		aqueous	0	chemval*	0	0	0	0	0	0
CaSO4(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
CaSO4(aq)		aqueous	3	chemval*	0	0	0	0	0	0
Cd(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Cd(CH3COO)3-		aqueous	1	93sho/kor	X	X	X	0	0	0
Cd++		aqueous	1	supcrt92**	X	X	X	X	0	0
Cd++		aqueous	2	89cox/wag	0	0	0	0	0	0
CdCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
CdSeO4(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
Ce(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Ce(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Ce+++		aqueous	1	supcrt92**	X	X	X	X	0	0
CeCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Cl-		aqueous	1	supcrt92**	X	X	X	X	0	0
Cl-		aqueous	2	89cox/wag	0	0	0	0	0	0
Cl-		aqueous	4	84har/mol	0	0	0	0	0	X
ClO-		aqueous	1	92gre/fug	0	0	0	0	X	0
ClO-		aqueous	1	supcrt92**	X	X	X	0	0	0
ClO2-		aqueous	1	92gre/fug	0	0	0	0	X	0
ClO2-		aqueous	1	supcrt92**	X	X	X	0	0	0
ClO3-		aqueous	1	supcrt92**	X	X	X	X	0	0
ClO3-		aqueous	2	92gre/fug	0	0	0	0	X	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
ClO4-		aqueous	1	supcrt92**	X	X	X	X	0	0
ClO4-		aqueous	2	89cox/wag	0	0	0	0	0	0
Co(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Co(CH3COO)3-		aqueous	1	93sho/kor	X	X	X	0	0	0
Co(HS)2(aq)		aqueous	1	74nau/ryz	X	X	0	0	0	0
Co(OH)2(aq)		aqueous	3	76bae/mes	X	X	0	0	0	0
Co(OH)3-		aqueous	3	76smi/mar	0	0	0	0	0	0
Co(OH)4--		aqueous	3	76smi/mar	X	X	0	0	0	0
Co++		aqueous	1	supcrt92**	X	X	X	X	0	0
Co+++		aqueous	1	supcrt92**	X	X	X	0	0	0
Co2(OH)3+		aqueous	3	76bae/mes	X	X	0	0	0	0
Co4(OH)4++++		aqueous	3	76smi/mar	X	X	0	0	0	0
CoBr2(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
CoCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
CoCl+		aqueous	1	74nau/ryz	X	X	0	0	0	0
CoCl+		aqueous	3	74nau/ryz	0	0	0	0	0	0
CoHS+		aqueous	1	74nau/ryz	X	X	0	0	0	0
CoI2(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
CoNO3+		aqueous	3	76smi/mar	X	X	0	0	0	0
CoOH+		aqueous	1	supcrt92**	0	0	0	0	0	0
CoS2O3(aq)		aqueous	1	74nau/ryz	X	X	0	0	0	0
CoSO4(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
CoSeO4(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
Cr(OH)2+		aqueous	3	76bae/mes	X	X	0	0	0	0
Cr(OH)3(aq)		aqueous	3	76bae/mes	X	X	0	0	0	0
Cr(OH)4-		aqueous	3	76bae/mes	X	X	0	0	0	0
Cr++		aqueous	1	76del/hal	X	X	0	0	0	0
Cr+++		aqueous	2	76del/hal	X	X	0	X	0	0
Cr2(OH)2++++		aqueous	3	76bae/mes	X	X	0	0	0	0
Cr2O7--		aqueous	1	supcrt92**	X	X	X	0	0	0
Cr3(OH)4(5+)		aqueous	3	76bae/mes	X	X	0	0	0	0
CrBr++		aqueous	1	76del/hal	X	X	0	0	0	0
CrCl++		aqueous	1	76del/hal	X	X	0	0	0	0
CrCl2+		aqueous	1	76del/hal	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
CrO3Cl-		aqueous	1	76del/hal	X	X	0	0	0	0
CrO4--		aqueous	1	supcrt92**	X	X	X	X	0	0
CrO4---		aqueous	1	76del/hal	X	X	0	0	0	0
CrOH++		aqueous	3	76bae/mes	X	X	0	0	0	0
Cs(CH3COO)2-		aqueous	1	93sho/kor	X	X	X	0	0	0
Cs+		aqueous	1	supcrt92**	X	X	X	X	0	0
Cs+		aqueous	2	89cox/wag	0	0	0	0	0	0
CsBr(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
CsCH3COO(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
CsCl(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
CsI(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
Cu(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Cu(CH3COO)2-		aqueous	1	93sho/kor	X	X	X	0	0	0
Cu(CH3COO)3-		aqueous	1	93sho/kor	X	X	X	0	0	0
Cu(CO3)2--		aqueous	1	87woo/gar	X	X	0	0	0	0
Cu(NH3)2++		aqueous	1	82wag/eva	X	X	0	0	0	0
Cu(NH3)3++		aqueous	2	82wag/eva	X	X	0	0	0	0
Cu(NO2)2(aq)		aqueous	3	82hog	X	X	0	0	0	0
Cu+		aqueous	1	supcrt92**	X	X	X	X	0	0
Cu++		aqueous	1	supcrt92**	X	X	X	X	0	0
Cu++		aqueous	2	89cox/wag	0	0	0	0	0	0
CuCH3COO(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
CuCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
CuCO3(OH)2--		aqueous	1	87woo/gar	X	X	0	0	0	0
CuCO3(aq)		aqueous	1	87woo/gar	X	X	0	0	0	0
CuCl+		aqueous	1	82wag/eva	X	X	0	0	0	0
CuCl2(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
CuCl2-		aqueous	1	82wag/eva	X	X	0	0	0	0
CuCl3--		aqueous	1	82wag/eva	X	X	0	0	0	0
CuCl4--		aqueous	1	87woo/gar	X	X	0	0	0	0
CuF+		aqueous	3	76smi/mar	X	X	0	0	0	0
CuH2PO4+		aqueous	3	79mat/spo	X	X	0	0	0	0
CuHPO4(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
CuNH3++		aqueous	3	76smi/mar	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
CuNO2+		aqueous	3	82hog	X	X	0	0	0	0
CuO2--		aqueous	1	82wag/eva	X	X	0	0	0	0
CuOH+		aqueous	1	87woo/gar	X	X	0	0	0	0
CuPO4-		aqueous	3	79mat/spo	X	X	0	0	0	0
Decanal(aq)	CH3(CH2)8CHO	aqueous	1	93sch/sho	X	X	X	0	0	0
Diglycine(aq)	C4H8N2O3	aqueous	1	92sho	X	X	X	0	0	0
Diketopiperazine(aq)	C4H6N2O2	aqueous	1	92sho	X	X	X	0	0	0
Dy(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Dy(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Dy+++		aqueous	1	supcrt92**	X	X	X	X	0	0
DyCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Er(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Er(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Er+++		aqueous	1	supcrt92**	X	X	X	X	0	0
ErCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Ethanamine(aq)	C2H5NH2	aqueous	1	supcrt92**	X	X	X	0	0	0
Ethane(aq)	C2H6	aqueous	1	supcrt92**	X	X	X	0	0	0
Ethanol(aq)	C2H5OH	aqueous	1	supcrt92**	X	X	X	0	0	0
Ethylacetate(aq)	CH3COOCH2CH3	aqueous	1	93sho	X	X	X	0	0	0
Ethylbenzene(aq)	C6H5C2H5	aqueous	1	supcrt92**	X	X	X	0	0	0
Ethylene(aq)	C2H4	aqueous	1	supcrt92**	X	X	X	0	0	0
Ethyne(aq)	C2H2	aqueous	1	supcrt92**	X	X	X	0	0	0
Eu(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Eu(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Eu(CO3)2-		aqueous	1	87rar 2	X	X	0	0	0	0
Eu(CO3)3---		aqueous	1	87rar 2	X	X	0	0	0	0
Eu(HCO3)++		aqueous	1	87rar 2	X	X	0	0	0	0
Eu(OH)2+		aqueous	1	87rar 2	X	X	0	0	0	0
Eu(OH)2CO3-		aqueous	1	87rar 2	X	X	0	0	0	0
Eu(OH)3(aq)		aqueous	1	87rar 2	X	X	0	0	0	0
Eu(OH)4-		aqueous	1	87rar 2	X	X	0	0	0	0
Eu(SO4)2-		aqueous	1	85rar 2	X	X	0	0	0	0
Eu++		aqueous	1	supcrt92**	X	X	X	0	0	0
Eu+++		aqueous	1	supcrt92**	X	X	X	X	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Eu2(OH)2++++		aqueous	1	87rar 2	X	X	0	0	0	0
EuBr++		aqueous	1	85rar 2	X	X	0	0	0	0
EuBr2+		aqueous	1	85rar 2	X	X	0	0	0	0
EuBrO3++		aqueous	1	85rar 2	X	X	0	0	0	0
EuCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
EuCO3+		aqueous	1	87rar 2	X	X	0	0	0	0
EuCl++		aqueous	1	85rar 2	X	X	0	0	0	0
EuCl2+		aqueous	1	85rar 2	X	X	0	0	0	0
EuF++		aqueous	1	85rar 2	X	X	0	0	0	0
EuF2+		aqueous	1	85rar 2	X	X	0	0	0	0
EuIO3++		aqueous	1	85rar 2	X	X	0	0	0	0
EuNO3++		aqueous	1	85rar 2	X	X	0	0	0	0
EuOH(CO3)2--		aqueous	1	87rar 2	X	X	0	0	0	0
EuOH++		aqueous	1	87rar 2	X	X	0	0	0	0
EuOHCO3(aq)		aqueous	1	87rar 2	X	X	0	0	0	0
EuSO4+		aqueous	1	85rar 2	X	X	0	0	0	0
F-		aqueous	1	supcrt92**	X	X	X	X	0	0
F-		aqueous	2	89cox/wag	0	0	0	0	0	0
Fe(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Fe(CH3COO)2(aq)		aqueous	1	supcrt92**	0	0	0	0	0	0
Fe(CH3COO)2+		aqueous	3	77mar/smi	0	0	0	0	0	0
Fe(CH3COO)3(aq)		aqueous	3	77mar/smi	0	0	0	0	0	0
Fe(OH)2(aq)		aqueous	0	chemval*	0	0	0	0	0	0
Fe(OH)2(aq)		aqueous	3	76bae/mes	X	X	0	0	0	0
Fe(OH)2(aq)		aqueous	3	chemval*	0	0	0	0	0	0
Fe(OH)2+		aqueous	0	chemval*	0	0	0	0	0	0
Fe(OH)2+		aqueous	3	76bae/mes	X	X	0	0	0	0
Fe(OH)2+		aqueous	3	chemval*	0	0	0	0	0	0
Fe(OH)3(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
Fe(OH)3-		aqueous	0	chemval*	0	0	0	0	0	0
Fe(OH)3-		aqueous	1	82wag/eva	X	X	0	0	0	0
Fe(OH)3-		aqueous	3	chemval*	0	0	0	0	0	0
Fe(OH)4-		aqueous	3	76bae/mes	X	X	0	0	0	0
Fe(SO4)2-		aqueous	1	82wag/eva	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Fe++		aqueous	1	supcrt92**	X	X	X	X	0	0
Fe+++		aqueous	0	chemval*	0	0	0	0	0	0
Fe+++		aqueous	1	supcrt92**	X	X	X	0	0	0
Fe+++		aqueous	3	chemval*	0	0	0	0	0	0
Fe2(OH)2++++		aqueous	0	chemval*	0	0	0	0	0	0
Fe2(OH)2++++		aqueous	1	82wag/eva	X	X	0	0	0	0
Fe2(OH)2++++		aqueous	3	chemval*	0	0	0	0	0	0
Fe3(OH)4(5+)		aqueous	3	76bae/mes	X	X	0	0	0	0
FeCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
FeCH3COO+		aqueous	1	supcrt92**	0	0	0	0	0	0
FeCH3COO++		aqueous	3	77mar/smi	0	0	0	0	0	0
FeCO3(aq)		aqueous	3	81tur/whi	X	X	0	0	0	0
FeCO3+		aqueous	3	81tur/whi	X	X	0	0	0	0
FeCl+		aqueous	1	supcrt92**	X	X	X	0	0	0
FeCl++		aqueous	0	chemval*	0	0	0	0	0	0
FeCl++		aqueous	1	82wag/eva	X	X	0	0	0	0
FeCl++		aqueous	3	chemval*	0	0	0	0	0	0
FeCl2(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
FeCl2(aq)		aqueous	3	90db 1	0	0	0	0	0	0
FeCl2+		aqueous	3	69hel	X	X	0	0	0	0
FeCl3(aq)		aqueous	0	chemval*	0	0	0	0	0	0
FeCl3(aq)		aqueous	1	82wag/eva	0	0	0	0	0	0
FeCl3(aq)		aqueous	3	chemval*	0	0	0	0	0	0
FeCl4-		aqueous	3	69hel	X	X	0	0	0	0
FeCl4--		aqueous	3	90db 1	X	X	0	0	0	0
FeF+		aqueous	3	82hog	X	X	0	0	0	0
FeF++		aqueous	1	82wag/eva	X	X	0	0	0	0
FeF2+		aqueous	1	82wag/eva	X	X	0	0	0	0
FeF3(aq)		aqueous	3	82mar/smi	0	0	0	0	0	0
FeH2PO4+		aqueous	3	72nri 1	X	X	0	0	0	0
FeH2PO4++		aqueous	3	79lan	X	X	0	0	0	0
FeH3SiO4++		aqueous	1	73ols/ome	0	0	0	0	0	0
FeHCO3+		aqueous	3	79mat/spo	X	X	0	0	0	0
FeHPO4(aq)		aqueous	3	82hog	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
FeHPO4+		aqueous	3	76smi/mar	X	X	0	0	0	0
FeHSO4++		aqueous	3	89mar/smi	0	0	0	0	0	0
FeHSeO3++		aqueous	3	76smi/mar	0	0	0	0	0	0
FeNO2++		aqueous	3	82mar/smi	X	X	0	0	0	0
FeNO3++		aqueous	3	76smi/mar	X	X	0	0	0	0
FeO(aq)		aqueous	1	supcrt92**	0	0	0	0	0	0
FeOH+		aqueous	0	chemval*	0	0	0	0	0	0
FeOH+		aqueous	1	supcrt92**	0	0	0	0	0	0
FeOH+		aqueous	3	chemval*	0	0	0	0	0	0
FeOH++		aqueous	0	chemval*	0	0	0	0	0	0
FeOH++		aqueous	1	82wag/eva	X	X	0	0	0	0
FeOH++		aqueous	3	chemval*	0	0	0	0	0	0
FePO4-		aqueous	3	79mat/spo	X	X	0	0	0	0
FeSO4(aq)		aqueous	0	chemval*	0	0	0	0	0	0
FeSO4(aq)		aqueous	3	69iza/eat	X	X	0	0	0	0
FeSO4(aq)		aqueous	3	chemval*	0	0	0	0	0	0
FeSO4+		aqueous	0	chemval*	0	0	0	0	0	0
FeSO4+		aqueous	1	82wag/eva	X	X	0	0	0	0
FeSO4+		aqueous	3	chemval*	0	0	0	0	0	0
Formaldehyde(aq)	HCHO	aqueous	1	93sch/sho	X	X	X	0	0	0
Formate	HCOO-	aqueous	1	supcrt92**	X	X	X	0	0	0
Formic acid(aq)	HCOOH	aqueous	1	supcrt92**	X	X	X	0	0	0
Ga+++		aqueous	1	supcrt92**	X	X	X	X	0	0
Gd(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Gd(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Gd+++		aqueous	1	supcrt92**	X	X	X	X	0	0
GdCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Glutamic acid(aq)	C5H9NO4	aqueous	1	supcrt92**	X	X	X	0	0	0
Glutamine(aq)	C5H10N2O3	aqueous	1	supcrt92**	X	X	X	0	0	0
Glycine(aq)	C2H5NO2	aqueous	1	supcrt92**	X	X	X	0	0	0
H(o-Phthalate)-		aqueous	3	82mar/smi	X	X	0	0	0	0
H+		aqueous	1	supcrt92**	X	X	X	X	0	0
H+		aqueous	2	89cox/wag	0	0	0	0	0	0
H+		aqueous	4	84har/mol	0	0	0	0	0	X

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
H2(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
H2AsO3-		aqueous	1	supcrt92**	X	X	X	0	0	0
H2AsO3-		aqueous	2	92gre/fug	0	0	0	0	X	0
H2AsO4-		aqueous	1	supcrt92**	X	X	X	X	0	0
H2AsO4-		aqueous	2	92gre/fug	0	0	0	0	X	0
H2B4O7(aq)		aqueous	0	82wag/eva	0	0	0	0	0	0
H2CO3(aq)		aqueous	0	chemval*	0	0	0	0	0	0
H2CO3(aq)		aqueous	3	chemval*	0	0	0	0	0	0
H2CrO4(aq)		aqueous	1	76del/hal	X	X	0	0	0	0
H2F2(aq)		aqueous	3	80bal/nor	X	X	0	0	0	0
H2O		aqueous	1	supcrt92**	X	X	X	X	0	0
H2O		aqueous	2	89cox/wag	0	0	0	0	0	0
H2O		aqueous	3	supcrt92**	0	0	X	X	0	0
H2O		aqueous	4	84har/mol	0	0	0	0	0	X
H2O2(aq)		aqueous	0	92gre/fug	0	0	0	0	0	0
H2P2O7--		aqueous	1	92gre/fug	0	0	0	0	X	0
H2P2O7--		aqueous	1	supcrt92**	X	X	X	0	0	0
H2PO3F(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
H2PO4-		aqueous	1	supcrt92**	X	X	X	X	0	0
H2PO4-		aqueous	2	89cox/wag	0	0	0	0	0	0
H2RuO5(aq)		aqueous	1	85rar 1	0	0	0	0	0	0
H2S(aq)		aqueous	0	chemval*	0	0	0	0	0	0
H2S(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
H2S(aq)		aqueous	2	89cox/wag	0	0	0	0	0	0
H2S(aq)		aqueous	3	chemval*	0	0	0	0	0	0
H2SO3(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
H2SO4(aq)		aqueous	3	82arn/sig	X	X	0	0	0	0
H2Se(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
H2SeO3(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
H2SeO3(aq)		aqueous	1	92gre/fug	0	0	0	0	X	0
H2SiO4--		aqueous	0	chemval*	0	0	0	0	0	0
H2SiO4--		aqueous	1	74nau/ryz	X	X	0	0	0	0
H2SiO4--		aqueous	3	chemval*	0	0	0	0	0	0
H2TcO4(aq)		aqueous	1	84rar	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
H2VO4-		aqueous	1	supcrt92**	X	X	X	0	0	0
H3AsO3(aq)		aqueous	2	92gre/fug	X	X	0	0	X	0
H3AsO4(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
H3AsO4(aq)		aqueous	2	92gre/fug	0	0	0	0	X	0
H3P2O7-		aqueous	1	92gre/fug	0	0	0	0	X	0
H3P2O7-		aqueous	1	supcrt92**	X	X	X	0	0	0
H3PO4(aq)		aqueous	1	92gre/fug	0	0	0	0	X	0
H3PO4(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
H3SiO4-		aqueous	1	76bae/mes	0	0	0	0	0	0
H3SiO4-		aqueous	3	76smi/mar	0	0	0	0	0	0
H3SiO4-		aqueous	3	chemval*	0	0	0	0	0	0
H4(H2SiO4)4----		aqueous	3	76smi/mar	X	X	0	0	0	0
H4P2O7(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
H4P2O7(aq)		aqueous	1	92gre/fug	0	0	0	0	X	0
H4P2O7(aq)		aqueous	3	76smi/mar	0	0	0	0	0	0
H6(H2SiO4)4--		aqueous	3	76smi/mar	X	X	0	0	0	0
HAsO2(aq)		aqueous	2	92gre/fug	X	X	0	0	X	0
HAsO3F-		aqueous	1	82wag/eva	X	X	0	0	0	0
HAsO4--		aqueous	1	supcrt92**	X	X	X	X	0	0
HAsO4--		aqueous	2	92gre/fug	0	0	0	0	X	0
HAsS2(aq)		aqueous	3	64sil/mar	X	X	0	0	0	0
HB4O7-		aqueous	0	82wag/eva	0	0	0	0	0	0
HBrO(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
HCN(aq)		aqueous	1	93sho/mck	X	X	X	0	0	0
HCO3-		aqueous	0	chemval*	0	0	0	0	0	0
HCO3-		aqueous	1	supcrt92**	X	X	X	0	0	0
HCO3-		aqueous	2	89cox/wag	0	0	0	0	0	0
HCO3-		aqueous	3	chemval*	0	0	0	0	0	0
HCO3-		aqueous	4	84har/mol	0	0	0	0	0	X
HCl(aq)		aqueous	3	87rua/sew	X	X	0	0	0	0
HClO(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
HClO2(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
HCoO2-		aqueous	1	82wag/eva	X	X	0	0	0	0
HCrO4-		aqueous	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
HF(aq)		aqueous	1	92gre/fug	0	0	0	0	X	0
HF(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
HF2-		aqueous	1	92gre/fug	0	0	0	0	X	0
HF2-		aqueous	1	supcrt92**	X	X	X	0	0	0
HFeO2-		aqueous	1	supcrt92**	0	0	0	0	0	0
HIO3(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
HN3(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
HNIO2-		aqueous	1	supcrt92**	0	0	X	0	0	0
HNO2(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
HNO3(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
HO2-		aqueous	1	supcrt92**	X	X	X	0	0	0
HP2O7---		aqueous	1	82wag/eva	X	X	0	0	0	0
HP2O7---		aqueous	1	92gre/fug	0	0	0	0	X	0
HPO3F-		aqueous	1	82wag/eva	X	X	0	0	0	0
HPO4--		aqueous	1	supcrt92**	X	X	X	X	0	0
HPO4--		aqueous	2	89cox/wag	0	0	0	0	0	0
HPbO2-		aqueous	1	supcrt92**	0	0	0	0	0	0
HRuO5-		aqueous	1	85rar 1	X	X	0	0	0	0
HS-		aqueous	1	supcrt92**	X	X	X	0	0	0
HS-		aqueous	2	89cox/wag	0	0	0	0	0	0
HS2O3-		aqueous	1	92gre/fug	X	X	0	0	X	0
HSO3-		aqueous	1	92gre/fug	0	0	0	0	X	0
HSO3-		aqueous	1	supcrt92**	X	X	X	0	0	0
HSO4-		aqueous	0	chemval*	0	0	0	0	0	0
HSO4-		aqueous	1	supcrt92**	X	X	X	0	0	0
HSO4-		aqueous	2	89cox/wag	0	0	0	0	0	0
HSO4-		aqueous	3	chemval*	0	0	0	0	0	0
HSO4-		aqueous	4	84har/mol	0	0	0	0	0	X
HSO5-		aqueous	1	supcrt92**	X	X	X	0	0	0
HSb2S4-		aqueous	3	89spy/ree	X	X	0	0	0	0
HSe-		aqueous	1	supcrt92**	X	X	X	0	0	0
HSeO3-		aqueous	1	92gre/fug	0	0	0	0	X	0
HSeO3-		aqueous	1	supcrt92**	X	X	X	0	0	0
HSeO4-		aqueous	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
HSiO3-		aqueous	1	supcrt92**	X	X	X	0	0	0
HTcO4-		aqueous	1	84rar	X	X	0	0	0	0
HVO4--		aqueous	1	supcrt92**	X	X	X	0	0	0
HZnO2-		aqueous	1	supcrt92**	0	0	0	0	0	0
He(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
Heptanal(aq)	CH3(CH2)5CHO	aqueous	1	93sch/sho	X	X	X	0	0	0
Heptanoate	C6H13COO-	aqueous	1	supcrt92**	X	X	X	0	0	0
Heptanoic acid(aq)	C6H13COOH	aqueous	1	supcrt92**	X	X	X	0	0	0
Hexanal(aq)	CH3(CH2)4CHO	aqueous	1	93sch/sho	X	X	X	0	0	0
Hexanoate	C5H11COO-	aqueous	1	supcrt92**	X	X	X	0	0	0
Hexanoic acid(aq)	C5H11COOH	aqueous	1	supcrt92**	X	X	X	0	0	0
Hg(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Hg(CH3COO)3-		aqueous	1	93sho/kor	X	X	X	0	0	0
Hg++		aqueous	1	supcrt92**	X	X	X	0	0	0
Hg++		aqueous	2	89cox/wag	0	0	0	0	0	0
Hg2++		aqueous	1	supcrt92**	X	X	X	0	0	0
Hg2++		aqueous	2	89cox/wag	0	0	0	0	0	0
HgCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
Ho(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Ho(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Ho+++		aqueous	1	supcrt92**	X	X	X	X	0	0
HoCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
I-		aqueous	1	supcrt92**	X	X	X	X	0	0
I-		aqueous	2	89cox/wag	0	0	0	0	0	0
I3-		aqueous	1	supcrt92**	X	X	X	0	0	0
IO-		aqueous	1	supcrt92**	X	X	X	0	0	0
IO3-		aqueous	1	supcrt92**	X	X	X	0	0	0
IO3-		aqueous	2	92gre/fug	0	0	0	0	X	0
IO4-		aqueous	1	supcrt92**	X	X	X	0	0	0
In+++		aqueous	1	supcrt92**	X	X	X	X	0	0
Isoleucine(aq)	C6H13NO2	aqueous	1	supcrt92**	X	X	X	0	0	0
K(CH3COO)2-		aqueous	1	93sho/kor	X	X	X	0	0	0
K+		aqueous	1	supcrt92**	X	X	X	X	0	0
K+		aqueous	2	89cox/wag	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
K+		aqueous	4	84har/mol	0	0	0	0	0	X
KBr(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
KCH3COO(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
KCl(aq)		aqueous	0	chemval*	0	0	0	0	0	0
KCl(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
KCl(aq)		aqueous	3	82arn/sig	0	0	0	0	0	0
KCl(aq)		aqueous	3	chemval*	0	0	0	0	0	0
KHPO4-		aqueous	3	89mar/smi	X	X	0	0	0	0
KHSO4(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
KI(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
KOH(aq)		aqueous	0	chemval*	0	0	0	0	0	0
KOH(aq)		aqueous	1	supcrt92**	0	0	0	0	0	0
KOH(aq)		aqueous	3	76bae/mes	X	X	0	0	0	0
KOH(aq)		aqueous	3	chemval*	0	0	0	0	0	0
KP2O7---		aqueous	1	82wag/eva	X	X	0	0	0	0
KP2O7---		aqueous	3	76smi/mar	0	0	0	0	0	0
KSO4-		aqueous	0	chemval*	0	0	0	0	0	0
KSO4-		aqueous	1	supcrt92**	X	X	X	0	0	0
KSO4-		aqueous	3	chemval*	0	0	0	0	0	0
Kr(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
La(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
La(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
La+++		aqueous	1	supcrt92**	X	X	X	X	0	0
LaCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Leucine(aq)	C6H13NO2	aqueous	1	supcrt92**	X	X	X	0	0	0
Leucylglycine(aq)	C8H16N2O3	aqueous	1	92sho	X	X	X	0	0	0
Li(CH3COO)2-		aqueous	1	93sho/kor	X	X	X	0	0	0
Li+		aqueous	1	supcrt92**	X	X	X	X	0	0
Li+		aqueous	2	89cox/wag	0	0	0	0	0	0
LiCH3COO(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
LiCl(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
LiOH(aq)		aqueous	3	76bae/mes	X	X	0	0	0	0
LiSO4-		aqueous	3	82mar/smi	X	X	0	0	0	0
Lu(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Lu(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Lu+++		aqueous	1	supcrt92**	X	X	X	X	0	0
LuCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Methanamine(aq)	CH3NH2	aqueous	1	supcrt92**	X	X	X	0	0	0
Methane(aq)	CH4	aqueous	0	chemval*	0	0	0	0	0	0
Methane(aq)	CH4	aqueous	1	supcrt92**	X	X	X	0	0	0
Methane(aq)	CH4	aqueous	3	chemval*	0	0	0	0	0	0
Methanol(aq)	CH3OH	aqueous	1	supcrt92**	X	X	X	0	0	0
Methionine(aq)	C5H11NO2S	aqueous	1	supcrt92**	X	X	X	0	0	0
Mg(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Mg++		aqueous	1	supcrt92**	X	X	X	X	0	0
Mg++		aqueous	2	89cox/wag	0	0	0	0	0	0
Mg++		aqueous	4	84har/mol	0	0	0	0	0	X
Mg2CO3++		aqueous	0	82mar/smi	0	0	0	0	0	0
Mg2OH+++		aqueous	0	82mar/smi	0	0	0	0	0	0
Mg4(OH)4++++		aqueous	3	76bae/mes	X	X	0	0	0	0
MgB(OH)4+		aqueous	1	80bas	X	X	0	0	0	0
MgCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
MgCH3COO+		aqueous	3	89mar/smi	0	0	0	0	0	0
MgCO3(aq)		aqueous	0	chemval*	0	0	0	0	0	0
MgCO3(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
MgCO3(aq)		aqueous	3	chemval*	0	0	0	0	0	0
MgCO3(aq)		aqueous	4	84har/mol	0	0	0	0	0	X
MgCl+		aqueous	1	supcrt92**	X	X	X	0	0	0
MgF+		aqueous	1	supcrt92**	X	X	X	0	0	0
MgH2PO4+		aqueous	3	89mar/smi	X	X	0	0	0	0
MgHCO3+		aqueous	0	chemval*	0	0	0	0	0	0
MgHCO3+		aqueous	1	supcrt92**	X	X	X	0	0	0
MgHCO3+		aqueous	3	chemval*	0	0	0	0	0	0
MgHP2O7-		aqueous	3	76smi/mar	0	0	0	0	0	0
MgHPO4(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
MgOH+		aqueous	0	chemval*	0	0	0	0	0	0
MgOH+		aqueous	1	supcrt92**	0	0	0	0	0	0
MgOH+		aqueous	3	chemval*	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
MgOH+		aqueous	4	84har/mol	0	0	0	0	0	X
MgP2O7--		aqueous	1	82wag/eva	X	X	0	0	0	0
MgP2O7--		aqueous	3	76smi/mar	0	0	0	0	0	0
MgPO4-		aqueous	3	74tru/jon	X	X	0	0	0	0
MgSO4(aq)		aqueous	0	chemval*	0	0	0	0	0	0
MgSO4(aq)		aqueous	1	82mar/smi	X	X	0	0	0	0
MgSO4(aq)		aqueous	3	chemval*	0	0	0	0	0	0
Mn(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Mn(CH3COO)3-		aqueous	1	93sho/kor	X	X	X	0	0	0
Mn(NO3)2(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
Mn(OH)2(aq)		aqueous	3	76bae/mes	X	X	0	0	0	0
Mn(OH)3-		aqueous	1	82wag/eva	X	X	0	0	0	0
Mn(OH)4--		aqueous	3	76bae/mes	X	X	0	0	0	0
Mn++		aqueous	1	supcrt92**	X	X	X	X	0	0
Mn+++		aqueous	1	76mac	X	X	0	0	0	0
Mn2(OH)3+		aqueous	3	76bae/mes	X	X	0	0	0	0
Mn2OH+++		aqueous	3	76bae/mes	X	X	0	0	0	0
MnCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
MnCO3(aq)		aqueous	3	79mat/spo	X	X	0	0	0	0
MnCl+		aqueous	1	supcrt92**	X	X	X	0	0	0
MnCl2(aq)		aqueous	1	82wag/eva	0	0	0	0	0	0
MnCl3-		aqueous	1	82wag/eva	X	X	0	0	0	0
MnF+		aqueous	3	89mar/smi	X	X	0	0	0	0
MnH2PO4+		aqueous	3	79mat/spo	X	X	0	0	0	0
MnHCO3+		aqueous	1	82wag/eva	X	X	0	0	0	0
MnHCO3+		aqueous	3	79mat/spo	0	0	0	0	0	0
MnHPO4(aq)		aqueous	3	79mat/spo	X	X	0	0	0	0
MnNO3+		aqueous	3	76smi/mar	X	X	0	0	0	0
MnO4-		aqueous	1	supcrt92**	X	X	X	0	0	0
MnO4--		aqueous	1	supcrt92**	X	X	X	0	0	0
MnOH+		aqueous	3	76bae/mes	X	X	0	0	0	0
MnPO4-		aqueous	3	79mat/spo	X	X	0	0	0	0
MnSO4(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
MnSeO4(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
MoO4--		aqueous	1	supcrt92**	X	X	X	0	0	0
N2(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
N3-		aqueous	1	92gre/fug	X	X	0	0	X	0
NH3(aq)		aqueous	1	92gre/fug	0	0	0	0	X	0
NH3(aq)		aqueous	1	supcrt92**	X	X	X	X	0	0
NH4(CH3COO)2-		aqueous	1	93sho/kor	X	X	X	0	0	0
NH4+		aqueous	1	supcrt92**	X	X	X	X	0	0
NH4+		aqueous	2	89cox/wag	0	0	0	0	0	0
NH4CH3COO(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
NH4SO4-		aqueous	3	82mar/smi	X	X	0	0	0	0
NH4SbO2(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
NO2-		aqueous	1	supcrt92**	X	X	X	X	0	0
NO3-		aqueous	1	supcrt92**	X	X	X	X	0	0
NO3-		aqueous	2	89cox/wag	0	0	0	0	0	0
Na(CH3COO)2-		aqueous	1	93sho/kor	X	X	X	0	0	0
Na(o-Phthalate)-		aqueous	3	89mar/smi	X	X	0	0	0	0
Na+		aqueous	1	supcrt92**	X	X	X	X	0	0
Na+		aqueous	2	89cox/wag	0	0	0	0	0	0
Na+		aqueous	4	84har/mol	0	0	0	0	0	X
Na2CO3(aq)		aqueous	0	chemval*	0	0	0	0	0	0
Na2CO3(aq)		aqueous	3	chemval*	0	0	0	0	0	0
Na2P2O7--		aqueous	3	76smi/mar	X	X	0	0	0	0
Na2SO4(aq)		aqueous	0	chemval*	0	0	0	0	0	0
Na2SO4(aq)		aqueous	3	chemval*	0	0	0	0	0	0
NaB(OH)4(aq)		aqueous	1	80bas	X	X	0	0	0	0
NaBr(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
NaCH3COO(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
NaCH3COO(aq)		aqueous	3	89mar/smi	0	0	0	0	0	0
NaCO3-		aqueous	0	chemval*	0	0	0	0	0	0
NaCO3-		aqueous	1	82wag/eva	X	X	0	0	0	0
NaCO3-		aqueous	3	chemval*	0	0	0	0	0	0
NaCl(aq)		aqueous	0	chemval*	0	0	0	0	0	0
NaCl(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
NaCl(aq)		aqueous	3	chemval*	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
NaF(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
NaH3SiO4(aq)		aqueous	3	82arn/sig	0	0	0	0	0	0
NaHCO3(aq)		aqueous	0	chemval*	0	0	0	0	0	0
NaHCO3(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
NaHCO3(aq)		aqueous	3	chemval*	0	0	0	0	0	0
NaHP2O7--		aqueous	3	76smi/mar	X	X	0	0	0	0
NaHPO4-		aqueous	3	89mar/smi	X	X	0	0	0	0
NaHSiO3(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
NaI(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
NaOH(aq)		aqueous	0	chemval*	0	0	0	0	0	0
NaOH(aq)		aqueous	3	76bae/mes	X	X	0	0	0	0
NaOH(aq)		aqueous	3	chemval*	0	0	0	0	0	0
NaP2O7---		aqueous	1	82wag/eva	0	0	0	0	0	0
NaP2O7---		aqueous	3	76smi/mar	X	X	0	0	0	0
NaSO4-		aqueous	0	chemval*	0	0	0	0	0	0
NaSO4-		aqueous	3	82mar/smi	X	X	0	0	0	0
NaSO4-		aqueous	3	chemval*	0	0	0	0	0	0
Nd(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Nd(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Nd+++		aqueous	1	supcrt92**	X	X	X	X	0	0
NdCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Ne(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
Ni(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Ni(CH3COO)3-		aqueous	1	93sho/kor	X	X	X	0	0	0
Ni(NH3)2++		aqueous	1	82wag/eva	X	X	0	0	0	0
Ni(NH3)6++		aqueous	1	82wag/eva	X	X	0	0	0	0
Ni(NO3)2(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
Ni(OH)2(aq)		aqueous	1	82wag/eva	0	0	0	0	0	0
Ni(OH)2(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
Ni(OH)3-		aqueous	3	76smi/mar	X	X	0	0	0	0
Ni++		aqueous	1	supcrt92**	X	X	X	X	0	0
Ni2OH+++		aqueous	3	76bae/mes	X	X	0	0	0	0
Ni4(OH)4++++		aqueous	3	89mar/smi	X	X	0	0	0	0
NiBr+		aqueous	3	76smi/mar	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
NiCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
NiCl+		aqueous	1	supcrt92**	X	X	X	0	0	0
NiHP2O7-		aqueous	1	82wag/eva	X	X	0	0	0	0
NiNO3+		aqueous	3	76smi/mar	X	X	0	0	0	0
NiO(aq)		aqueous	1	supcrt92**	0	0	0	0	0	0
NiOH+		aqueous	1	supcrt92**	0	0	0	0	0	0
NiP2O7--		aqueous	1	82wag/eva	X	X	0	0	0	0
NiSO4(aq)		aqueous	1	74nau/ryz	X	X	0	0	0	0
NiSeO4(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
Nonanal(aq)	CH3(CH2)7CHO	aqueous	1	93sch/sho	X	X	X	0	0	0
Np(CO3)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(CO3)2-		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(CO3)3--		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(CO3)3---		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(CO3)4----		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(CO3)5(6-)		aqueous	1	84lem	0	0	0	0	0	0
Np(CO3)5(6-)		aqueous	3	84lem	X	0	0	0	0	0
Np(CO3)5(6-)		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(H2PO4)2+		aqueous	1	84lem	0	0	0	0	0	0
Np(H2PO4)2+		aqueous	3	84lem	X	0	0	0	0	0
Np(H2PO4)2+		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(H2PO4)2++		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(H2PO4)3(aq)		aqueous	1	84lem	0	0	0	0	0	0
Np(H2PO4)3(aq)		aqueous	3	84lem	X	0	0	0	0	0
Np(H2PO4)3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(H2PO4)4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(H2PO4)4-		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(HPO4)2(aq)		aqueous	1	84lem	0	0	0	0	0	0
Np(HPO4)2(aq)		aqueous	3	84lem	X	0	0	0	0	0
Np(HPO4)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(HPO4)3--		aqueous	1	84lem	0	0	0	0	0	0
Np(HPO4)3--		aqueous	3	84lem	X	0	0	0	0	0
Np(HPO4)3--		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(HPO4)4----		aqueous	1	84lem	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Np(HPO4)4----		aqueous	3	84lem	X	0	0	0	0	0
Np(HPO4)4----		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(HPO4)5(6-)		aqueous	1	84lem	0	0	0	0	0	0
Np(HPO4)5(6-)		aqueous	3	84lem	X	0	0	0	0	0
Np(HPO4)5(6-)		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(NO3)2+		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(NO3)2++		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(NO3)3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(NO3)3+		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(NO3)4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(OH)2+		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(OH)2++		aqueous	1	84lem	0	0	0	0	0	0
Np(OH)2++		aqueous	3	84lem	X	0	0	0	0	0
Np(OH)2++		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(OH)3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(OH)3+		aqueous	1	84lem	0	0	0	0	0	0
Np(OH)3+		aqueous	3	84lem	X	0	0	0	0	0
Np(OH)3+		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(OH)4(aq)		aqueous	1	84lem	0	0	0	0	0	0
Np(OH)4(aq)		aqueous	3	84lem	X	0	0	0	0	0
Np(OH)4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(OH)5-		aqueous	1	84lem	0	0	0	0	0	0
Np(OH)5-		aqueous	3	84lem	X	0	0	0	0	0
Np(OH)5-		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(SO4)2(aq)		aqueous	1	84lem	0	0	0	0	0	0
Np(SO4)2(aq)		aqueous	3	84lem	X	0	0	0	0	0
Np(SO4)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(SO4)2-		aqueous	3	92pal/sil	0	X	0	0	0	0
Np(SO4)3--		aqueous	3	92pal/sil	0	X	0	0	0	0
Np+++		aqueous	1	76fug/oet	0	0	0	0	0	0
Np+++		aqueous	1	84lem	X	X	0	0	0	0
Np++++		aqueous	1	76fug/oet	0	0	0	0	0	0
Np++++		aqueous	1	84lem	X	X	0	0	0	0
NpCO3+		aqueous	3	92pal/sil	0	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
NpCO3++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpCl++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpCl+++		aqueous	1	84lem	0	0	0	0	0	0
NpCl+++		aqueous	3	84lem	X	0	0	0	0	0
NpCl+++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpCl2+		aqueous	3	92pal/sil	0	X	0	0	0	0
NpCl2++		aqueous	1	84lem	0	0	0	0	0	0
NpCl2++		aqueous	3	84lem	X	0	0	0	0	0
NpCl2++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpCl3+		aqueous	3	92pal/sil	0	X	0	0	0	0
NpF++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpF+++		aqueous	1	84lem	0	0	0	0	0	0
NpF+++		aqueous	3	84lem	X	0	0	0	0	0
NpF+++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpF2+		aqueous	3	92pal/sil	0	X	0	0	0	0
NpF2++		aqueous	1	84lem	0	0	0	0	0	0
NpF2++		aqueous	3	84lem	X	0	0	0	0	0
NpF2++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpF3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpF3+		aqueous	3	92pal/sil	0	X	0	0	0	0
NpF4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpF5-		aqueous	3	92pal/sil	0	X	0	0	0	0
NpF6--		aqueous	3	92pal/sil	0	X	0	0	0	0
NpH2PO4++		aqueous	1	84lem	0	0	0	0	0	0
NpH2PO4++		aqueous	3	84lem	X	0	0	0	0	0
NpH2PO4++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpH2PO4+++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpHPO4++		aqueous	1	84lem	0	0	0	0	0	0
NpHPO4++		aqueous	3	84lem	X	0	0	0	0	0
NpHPO4++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpNO3++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpNO3+++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2(CO3)2--		aqueous	1	84lem	0	0	0	0	0	0
NpO2(CO3)2--		aqueous	3	84lem	X	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
NpO2(CO3)2--		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2(CO3)2---		aqueous	1	84lem	0	0	0	0	0	0
NpO2(CO3)2---		aqueous	3	84lem	X	0	0	0	0	0
NpO2(CO3)2---		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2(CO3)3(5-)		aqueous	1	84lem	0	0	0	0	0	0
NpO2(CO3)3(5-)		aqueous	3	84lem	X	0	0	0	0	0
NpO2(CO3)3(5-)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2(CO3)3----		aqueous	1	84lem	0	0	0	0	0	0
NpO2(CO3)3----		aqueous	3	84lem	X	0	0	0	0	0
NpO2(CO3)3----		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2(H2PO4)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2(NO3)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2(NO3)2-		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2(OH)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2(OH)3-		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2(OH)4--		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2(SO4)2--		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2+		aqueous	1	76fug/oet	0	0	0	0	0	0
NpO2+		aqueous	1	84lem	X	X	0	X	0	0
NpO2++		aqueous	1	76fug/oet	X	X	0	X	0	0
NpO2++		aqueous	1	84lem	X	X	0	0	0	0
NpO2CO3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2CO3-		aqueous	1	84lem	0	0	0	0	0	0
NpO2CO3-		aqueous	3	84lem	X	0	0	0	0	0
NpO2CO3-		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2Cl(aq)		aqueous	1	84lem	0	0	0	0	0	0
NpO2Cl(aq)		aqueous	3	84lem	X	0	0	0	0	0
NpO2Cl(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2Cl+		aqueous	1	84lem	0	0	0	0	0	0
NpO2Cl+		aqueous	3	84lem	X	0	0	0	0	0
NpO2Cl+		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2Cl2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2Cl2-		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2F(aq)		aqueous	1	84lem	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
NpO2F(aq)		aqueous	3	84lem	X	0	0	0	0	0
NpO2F(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2F+		aqueous	1	84lem	0	0	0	0	0	0
NpO2F+		aqueous	3	84lem	X	0	0	0	0	0
NpO2F+		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2F2(aq)		aqueous	1	84lem	0	0	0	0	0	0
NpO2F2(aq)		aqueous	3	84lem	X	0	0	0	0	0
NpO2F2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2F3-		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2F4--		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2H2PO4(aq)		aqueous	1	84lem	0	0	0	0	0	0
NpO2H2PO4(aq)		aqueous	3	84lem	X	0	0	0	0	0
NpO2H2PO4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2H2PO4+		aqueous	1	84lem	0	0	0	0	0	0
NpO2H2PO4+		aqueous	3	84lem	X	0	0	0	0	0
NpO2H2PO4+		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2HPO4(aq)		aqueous	1	84lem	0	0	0	0	0	0
NpO2HPO4(aq)		aqueous	3	84lem	X	0	0	0	0	0
NpO2HPO4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2HPO4-		aqueous	1	84lem	0	0	0	0	0	0
NpO2HPO4-		aqueous	3	84lem	X	0	0	0	0	0
NpO2HPO4-		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2NO3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2NO3+		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2OH(aq)		aqueous	1	84lem	0	0	0	0	0	0
NpO2OH(aq)		aqueous	3	84lem	X	0	0	0	0	0
NpO2OH(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2OH+		aqueous	1	84lem	0	0	0	0	0	0
NpO2OH+		aqueous	3	84lem	X	0	0	0	0	0
NpO2OH+		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2PO4--		aqueous	3	92pal/sil	0	X	0	0	0	0
NpO2SO4(aq)		aqueous	1	84lem	0	0	0	0	0	0
NpO2SO4(aq)		aqueous	3	84lem	X	0	0	0	0	0
NpO2SO4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
NpO2SO4-		aqueous	1	84lem	0	0	0	0	0	0
NpO2SO4-		aqueous	3	84lem	X	0	0	0	0	0
NpO2SO4-		aqueous	3	92pal/sil	0	X	0	0	0	0
NpOH++		aqueous	1	84lem	0	0	0	0	0	0
NpOH++		aqueous	3	84lem	X	0	0	0	0	0
NpOH++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpOH+++		aqueous	1	84lem	0	0	0	0	0	0
NpOH+++		aqueous	3	84lem	X	0	0	0	0	0
NpOH+++		aqueous	3	92pal/sil	0	X	0	0	0	0
NpSO4+		aqueous	3	92pal/sil	0	X	0	0	0	0
NpSO4++		aqueous	1	84lem	0	0	0	0	0	0
NpSO4++		aqueous	3	84lem	X	0	0	0	0	0
NpSO4++		aqueous	3	92pal/sil	0	X	0	0	0	0
O2(aq)		aqueous	1	supcrt92**	X	X	X	X	0	0
O2(aq)		aqueous	2	89cox/wag	0	0	0	0	0	0
O2(g)		aqueous	2	89cox/wag	0	0	0	0	0	0
O2(g)		aqueous	4	84har/mol	0	0	0	0	0	X
OH-		aqueous	0	chemval*	0	0	0	0	0	0
OH-		aqueous	1	supcrt92**	X	X	X	X	0	0
OH-		aqueous	2	89cox/wag	0	0	0	0	0	0
OH-		aqueous	3	chemval*	0	0	0	0	0	0
OH-		aqueous	4	84har/mol	0	0	0	0	0	X
Octanal(aq)	CH3(CH2)6CHO	aqueous	1	93sch/sho	X	X	X	0	0	0
Octanoate	C7H15COO-	aqueous	1	supcrt92**	X	X	X	0	0	0
Octanoic acid(aq)	C7H15COOH	aqueous	1	supcrt92**	X	X	X	0	0	0
P2O7----		aqueous	1	92gre/fug	0	0	0	0	X	0
P2O7----		aqueous	2	82wag/eva	X	X	0	X	0	0
PH4+		aqueous	1	82wag/eva	X	X	0	0	0	0
PO3F--		aqueous	1	82wag/eva	X	X	0	0	0	0
PO4---		aqueous	1	92gre/fug	0	0	0	0	X	0
PO4---		aqueous	1	supcrt92**	X	X	X	X	0	0
PO4---		aqueous	2	92gre/fug	0	0	0	0	X	0
Pb(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Pb(CH3COO)2(aq)		aqueous	1	supcrt92**	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Pb(CH3COO)3-		aqueous	1	93sho/kor	X	X	X	0	0	0
Pb++		aqueous	1	supcrt92**	X	X	X	X	0	0
Pb++		aqueous	2	89cox/wag	0	0	0	0	0	0
Pb++++		aqueous	1	74pou	X	X	0	0	0	0
PbCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
PbCH3COO+		aqueous	1	supcrt92**	0	0	0	0	0	0
PbCl+		aqueous	1	supcrt92**	X	X	X	0	0	0
PbCl2(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
PbCl3-		aqueous	1	supcrt92**	X	X	X	0	0	0
PbCl4--		aqueous	1	supcrt92**	X	X	X	0	0	0
PbF+		aqueous	1	82wag/eva	X	X	0	0	0	0
PbF2(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
PbF3-		aqueous	3	80bal/nor	0	0	0	0	0	0
PbF4--		aqueous	3	80bal/nor	0	0	0	0	0	0
PbH2PO4+		aqueous	3	76smi/mar	X	X	0	0	0	0
PbHPO4(aq)		aqueous	3	72nri 2	X	X	0	0	0	0
PbO(aq)		aqueous	1	supcrt92**	0	0	0	0	0	0
PbOH+		aqueous	1	supcrt92**	0	0	0	0	0	0
Pd++		aqueous	1	supcrt92**	X	X	X	0	0	0
Pentanal(aq)	CH3(CH2)3CHO	aqueous	1	93sch/sho	X	X	X	0	0	0
Pentanoate	C4H9COO-	aqueous	1	supcrt92**	X	X	X	0	0	0
Pentanoic acid(aq)	C4H9COOH	aqueous	1	supcrt92**	X	X	X	0	0	0
Phenol(aq)	C6H5OH	aqueous	1	supcrt92**	X	X	X	0	0	0
Phenylalanine(aq)	C9H11NO2	aqueous	1	supcrt92**	X	X	X	0	0	0
Pr(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Pr(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Pr+++		aqueous	1	supcrt92**	X	X	X	X	0	0
PrCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Propanal(aq)	CH3CH2CHO	aqueous	1	93sch/sho	X	X	X	0	0	0
Propane(aq)	C3H8	aqueous	1	supcrt92**	X	X	X	0	0	0
Propanoate	C2H5COO-	aqueous	1	supcrt92**	X	X	X	0	0	0
Propanoic acid(aq)	C2H5COOH	aqueous	1	supcrt92**	X	X	X	0	0	0
Pu(CO3)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(CO3)2-		aqueous	3	92pal/sil	0	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Pu(CO3)3--		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(CO3)3---		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(CO3)4----		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(CO3)5(6-)		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(H2PO4)2+		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(H2PO4)2++		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(H2PO4)3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(H2PO4)4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(H2PO4)4-		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(HPO4)2(aq)		aqueous	1	80lem/tre	X	0	0	0	0	0
Pu(HPO4)2(aq)		aqueous	3	80lem/tre	0	0	0	0	0	0
Pu(HPO4)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(HPO4)3--		aqueous	1	80lem/tre	X	0	0	0	0	0
Pu(HPO4)3--		aqueous	3	80lem/tre	0	0	0	0	0	0
Pu(HPO4)3--		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(HPO4)4----		aqueous	1	80lem/tre	X	0	0	0	0	0
Pu(HPO4)4----		aqueous	3	80lem/tre	0	0	0	0	0	0
Pu(HPO4)4----		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(HPO4)5(6-)		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(NO3)2+		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(NO3)2++		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(NO3)3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(NO3)3+		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(NO3)4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(OH)2+		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(OH)2++		aqueous	1	80lem/tre	X	0	0	0	0	0
Pu(OH)2++		aqueous	3	80lem/tre	0	0	0	0	0	0
Pu(OH)2++		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(OH)3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(OH)3+		aqueous	1	80lem/tre	X	0	0	0	0	0
Pu(OH)3+		aqueous	3	80lem/tre	0	0	0	0	0	0
Pu(OH)3+		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(OH)4(aq)		aqueous	1	80lem/tre	X	0	0	0	0	0
Pu(OH)4(aq)		aqueous	3	80lem/tre	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Pu(OH)4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(OH)5-		aqueous	1	80lem/tre	X	0	0	0	0	0
Pu(OH)5-		aqueous	3	80lem/tre	0	0	0	0	0	0
Pu(OH)5-		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(SO4)2(aq)		aqueous	1	80lem/tre	X	0	0	0	0	0
Pu(SO4)2(aq)		aqueous	3	80lem/tre	0	0	0	0	0	0
Pu(SO4)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(SO4)2-		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu(SO4)2-		aqueous	3	chemval*	X	0	0	0	0	0
Pu(SO4)3--		aqueous	3	92pal/sil	0	X	0	0	0	0
Pu+++		aqueous	1	76fug/oet	0	0	0	0	0	0
Pu+++		aqueous	1	80lem/tre	X	X	0	0	0	0
Pu+++		aqueous	3	80lem/tre	0	0	0	0	0	0
Pu++++		aqueous	1	76fug/oet	0	0	0	0	0	0
Pu++++		aqueous	1	80lem/tre	X	X	0	0	0	0
PuCO3+		aqueous	3	92pal/sil	0	X	0	0	0	0
PuCO3++		aqueous	1	80lem/tre	0	0	0	0	0	0
PuCO3++		aqueous	3	85sil/nit	0	0	0	0	0	0
PuCO3++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuCl++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuCl+++		aqueous	1	80lem/tre	0	0	0	0	0	0
PuCl+++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuCl2+		aqueous	3	92pal/sil	0	X	0	0	0	0
PuCl2++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuCl3+		aqueous	3	80lem/tre	0	0	0	0	0	0
PuCl3+		aqueous	3	92pal/sil	0	X	0	0	0	0
PuF++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuF+++		aqueous	1	80lem/tre	0	0	0	0	0	0
PuF+++		aqueous	3	80lem/tre	0	0	0	0	0	0
PuF+++		aqueous	3	84nas/cle	X	0	0	0	0	0
PuF+++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuF2+		aqueous	3	92pal/sil	0	X	0	0	0	0
PuF2++		aqueous	3	84nas/cle	X	0	0	0	0	0
PuF2++		aqueous	3	92pal/sil	0	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
PuF3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuF3+		aqueous	3	84nas/cle	X	0	0	0	0	0
PuF3+		aqueous	3	92pal/sil	0	X	0	0	0	0
PuF4(aq)		aqueous	3	84nas/cle	X	0	0	0	0	0
PuF4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuF5-		aqueous	3	92pal/sil	0	X	0	0	0	0
PuF6--		aqueous	3	92pal/sil	0	X	0	0	0	0
PuH2PO4++		aqueous	1	80lem/tre	X	0	0	0	0	0
PuH2PO4++		aqueous	3	80lem/tre	0	0	0	0	0	0
PuH2PO4++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuH2PO4+++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuHPO4++		aqueous	1	80lem/tre	X	0	0	0	0	0
PuHPO4++		aqueous	3	80lem/tre	0	0	0	0	0	0
PuHPO4++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuNO3++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuNO3+++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2(CO3)2--		aqueous	1	80lem/tre	X	0	0	0	0	0
PuO2(CO3)2--		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2(CO3)2--		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2(CO3)2---		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2(CO3)3(5-)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2(CO3)3----		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2(H2PO4)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2(NO3)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2(NO3)2-		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2(OH)2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2(OH)3-		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2(OH)4--		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2(SO4)2--		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2+		aqueous	1	76fug/oet	0	0	0	0	0	0
PuO2+		aqueous	1	80lem/tre	X	X	0	0	0	0
PuO2+		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2++		aqueous	1	76fug/oet	0	0	0	0	0	0
PuO2++		aqueous	1	80lem/tre	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
PuO2++		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2CO3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2CO3-		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2Cl(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2Cl+		aqueous	1	80lem/tre	X	0	0	0	0	0
PuO2Cl+		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2Cl+		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2Cl2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2Cl2-		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2F(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2F+		aqueous	1	80lem/tre	X	0	0	0	0	0
PuO2F+		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2F+		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2F2(aq)		aqueous	1	80lem/tre	X	0	0	0	0	0
PuO2F2(aq)		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2F2(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2F3-		aqueous	1	80lem/tre	X	0	0	0	0	0
PuO2F3-		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2F3-		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2F4--		aqueous	1	80lem/tre	X	0	0	0	0	0
PuO2F4--		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2F4--		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2H2PO4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2H2PO4+		aqueous	1	80lem/tre	X	0	0	0	0	0
PuO2H2PO4+		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2H2PO4+		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2HPO4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2HPO4-		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2NO3(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2NO3+		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2OH(aq)		aqueous	1	80lem/tre	X	0	0	0	0	0
PuO2OH(aq)		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2OH(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2OH+		aqueous	1	80lem/tre	X	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
PuO2OH+		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2OH+		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2PO4--		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2SO4(aq)		aqueous	1	80lem/tre	X	0	0	0	0	0
PuO2SO4(aq)		aqueous	3	80lem/tre	0	0	0	0	0	0
PuO2SO4(aq)		aqueous	3	92pal/sil	0	X	0	0	0	0
PuO2SO4-		aqueous	3	92pal/sil	0	X	0	0	0	0
PuOH++		aqueous	1	80lem/tre	X	0	0	0	0	0
PuOH++		aqueous	3	80lem/tre	0	0	0	0	0	0
PuOH++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuOH+++		aqueous	1	80lem/tre	X	0	0	0	0	0
PuOH+++		aqueous	3	80lem/tre	0	0	0	0	0	0
PuOH+++		aqueous	3	92pal/sil	0	X	0	0	0	0
PuSO4+		aqueous	1	80lem/tre	X	0	0	0	0	0
PuSO4+		aqueous	3	80lem/tre	0	0	0	0	0	0
PuSO4+		aqueous	3	92pal/sil	0	X	0	0	0	0
PuSO4++		aqueous	1	80lem/tre	X	0	0	0	0	0
PuSO4++		aqueous	3	80lem/tre	0	0	0	0	0	0
PuSO4++		aqueous	3	92pal/sil	0	X	0	0	0	0
Ra(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Ra++		aqueous	1	supcrt92**	X	X	X	0	0	0
RaCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
Rb(CH3COO)2-		aqueous	1	93sho/kor	X	X	X	0	0	0
Rb+		aqueous	1	supcrt92**	X	X	X	X	0	0
Rb+		aqueous	2	89cox/wag	0	0	0	0	0	0
RbBr(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
RbCH3COO(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
RbCl(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
RbF(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
RbI(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
ReO4-		aqueous	1	supcrt92**	X	X	X	0	0	0
Rn(aq)		aqueous	1	85rar 1	X	X	0	0	0	0
Ru(Cl)2+		aqueous	1	85rar 1	X	X	0	0	0	0
Ru(Cl)3(aq)										

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Ru(OH)2+		aqueous	1	85rar 1	X	X	0	0	0	0
Ru(OH)2++		aqueous	1	85rar 1	X	X	0	0	0	0
Ru(OH)2Cl+		aqueous	1	85rar 1	X	X	0	0	0	0
Ru(OH)2Cl2(aq)		aqueous	1	85rar 1	X	X	0	0	0	0
Ru(OH)2Cl3-		aqueous	1	85rar 1	X	X	0	0	0	0
Ru(OH)2Cl4--		aqueous	1	85rar 1	X	X	0	0	0	0
Ru(OH)2SO4(aq)		aqueous	1	85rar 1	X	X	0	0	0	0
Ru(OH)4(aq)		aqueous	1	87rar 1	X	X	0	0	0	0
Ru(SO4)2-		aqueous	1	85rar 1	X	X	0	0	0	0
Ru++		aqueous	1	85rar 1	X	X	0	0	0	0
Ru+++		aqueous	1	85rar 1	X	X	0	0	0	0
Ru4(OH)12++++		aqueous	1	85rar 1	X	X	0	0	0	0
RuCl+		aqueous	1	85rar 1	X	X	0	0	0	0
RuCl++		aqueous	1	85rar 1	X	X	0	0	0	0
RuCl4-		aqueous	1	85rar 1	X	X	0	0	0	0
RuCl5--		aqueous	1	85rar 1	X	X	0	0	0	0
RuCl6---		aqueous	1	85rar 1	X	X	0	0	0	0
RuO4(aq)		aqueous	1	85rar 1	X	X	0	0	0	0
RuO4-		aqueous	1	85rar 1	X	X	0	0	0	0
RuO4--		aqueous	1	85rar 1	X	X	0	0	0	0
RuOH++		aqueous	1	85rar 1	X	X	0	0	0	0
RuSO4(aq)		aqueous	1	85rar 1	X	X	0	0	0	0
RuSO4+		aqueous	1	85rar 1	X	X	0	0	0	0
S--		aqueous	0	chemval*	0	0	0	0	0	0
S--		aqueous	1	82wag/eva	X	X	0	0	0	0
S--		aqueous	1	92gre/fug	0	0	0	0	X	0
S--		aqueous	3	chemval*	0	0	0	0	0	0
S2--		aqueous	0	chemval*	0	0	0	0	0	0
S2--		aqueous	1	supcrt92**	X	X	X	0	0	0
S2O3--		aqueous	1	92gre/fug	0	0	0	0	X	0
S2O3--		aqueous	1	supcrt92**	X	X	X	X	0	0
S2O4--		aqueous	1	supcrt92**	X	X	X	0	0	0
S2O5--		aqueous	1	supcrt92**	X	X	X	0	0	0
S2O6--		aqueous	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
S2O8--		aqueous	1	supcrt92**	X	X	X	0	0	0
S3--		aqueous	1	supcrt92**	X	X	X	0	0	0
S3O6--		aqueous	1	supcrt92**	X	X	X	0	0	0
S4--		aqueous	1	supcrt92**	X	X	X	0	0	0
S4O6--		aqueous	1	supcrt92**	X	X	X	0	0	0
S5--		aqueous	1	supcrt92**	X	X	X	0	0	0
S5O6--		aqueous	1	supcrt92**	X	X	X	0	0	0
SCN-		aqueous	1	92gre/fug	X	X	0	0	X	0
SO2(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
SO3--		aqueous	1	92gre/fug	0	0	0	0	X	0
SO3--		aqueous	1	supcrt92**	X	X	X	0	0	0
SO4--		aqueous	0	chemval*	0	0	0	0	0	0
SO4--		aqueous	1	supcrt92**	X	X	X	X	0	0
SO4--		aqueous	2	89cox/wag	0	0	0	0	0	0
SO4--		aqueous	3	chemval*	0	0	0	0	0	0
SO4--		aqueous	4	84har/mol	0	0	0	0	0	X
Sb(OH)2+		aqueous	3	89spy/ree	X	X	0	0	0	0
Sb(OH)2F(aq)		aqueous	1	82wag/eva	0	0	0	0	0	0
Sb(OH)2F(aq)		aqueous	3	89spy/ree	X	X	0	0	0	0
Sb(OH)3(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
Sb(OH)4-		aqueous	3	89spy/ree	X	X	0	0	0	0
Sb2S4--		aqueous	3	89spy/ree	X	X	0	0	0	0
SbCl4-		aqueous	1	74nau/ryz	X	X	0	0	0	0
SbO+		aqueous	1	82wag/eva	0	0	0	0	0	0
SbO2-		aqueous	1	82wag/eva	0	0	0	0	0	0
SbOF(aq)		aqueous	1	82wag/eva	0	0	0	X	0	0
Sc(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Sc(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Sc+++		aqueous	1	supcrt92**	X	X	X	X	0	0
ScCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Se--		aqueous	1	74nau/ryz	X	X	0	0	0	0
SeO3--		aqueous	1	92gre/fug	0	0	0	0	X	0
SeO3--		aqueous	1	supcrt92**	X	X	X	0	0	0
SeO4--		aqueous	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Serine(aq)	C3H7NO3	aqueous	1	supcrt92**	X	X	X	0	0	0
Si(OH)4(aq)		aqueous	1	92gre/fug	0	0	0	0	X	0
Si2O2(OH)5-		aqueous	1	92gre/fug	0	0	0	0	X	0
Si2O3(OH)4--		aqueous	1	92gre/fug	0	0	0	0	X	0
Si3O5(OH)5---		aqueous	1	92gre/fug	0	0	0	0	X	0
Si3O6(OH)3---		aqueous	1	92gre/fug	0	0	0	0	X	0
Si4O7(OH)5---		aqueous	1	92gre/fug	0	0	0	0	X	0
Si4O8(OH)4----		aqueous	1	92gre/fug	X	X	0	0	X	0
SiF6--		aqueous	1	supcrt92**	X	X	X	0	0	0
SiO(OH)3-		aqueous	1	92gre/fug	0	0	0	0	X	0
SiO2(OH)2--		aqueous	1	92gre/fug	0	0	0	0	X	0
SiO2(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
Sm(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Sm(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Sm++		aqueous	1	supcrt92**	X	X	X	0	0	0
Sm+++		aqueous	1	supcrt92**	X	X	X	X	0	0
SmCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Sn(OH)2(aq)		aqueous	1	84jac/hel	0	0	0	0	0	0
Sn(OH)2(aq)		aqueous	3	84jac/hel	X	X	0	0	0	0
Sn(OH)2++		aqueous	1	84jac/hel	0	0	0	0	0	0
Sn(OH)2++		aqueous	3	84jac/hel	X	X	0	0	0	0
Sn(OH)3+		aqueous	1	84jac/hel	0	0	0	0	0	0
Sn(OH)3+		aqueous	3	84jac/hel	X	X	0	0	0	0
Sn(OH)3-		aqueous	1	84jac/hel	0	0	0	0	0	0
Sn(OH)3-		aqueous	3	84jac/hel	X	X	0	0	0	0
Sn(OH)4(aq)		aqueous	1	84jac/hel	0	0	0	0	0	0
Sn(OH)4(aq)		aqueous	3	84jac/hel	X	X	0	0	0	0
Sn(SO4)2(aq)		aqueous	1	82wag/eva	X	X	0	0	0	0
Sn++		aqueous	1	supcrt92**	X	X	X	0	0	0
Sn++		aqueous	2	89cox/wag	0	0	0	0	0	0
Sn++++		aqueous	1	84jac/hel	X	X	0	0	0	0
SnCl+		aqueous	3	84jac/hel	X	X	0	0	0	0
SnCl2(aq)		aqueous	3	84jac/hel	X	X	0	0	0	0
SnCl3-		aqueous	3	84jac/hel	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
SnF+		aqueous	3	84jac/hel	X	X	0	0	0	0
SnF+++		aqueous	0	84jac/hel	0	0	0	0	0	0
SnF2(aq)		aqueous	3	84jac/hel	X	X	0	0	0	0
SnF2++		aqueous	0	84jac/hel	0	0	0	0	0	0
SnF3+		aqueous	0	84jac/hel	0	0	0	0	0	0
SnF3-		aqueous	3	84jac/hel	X	X	0	0	0	0
SnF4(aq)		aqueous	0	84jac/hel	0	0	0	0	0	0
SnOH+		aqueous	1	84jac/hel	0	0	0	0	0	0
SnOH+		aqueous	3	84jac/hel	X	X	0	0	0	0
SnOH+++		aqueous	1	84jac/hel	0	0	0	0	0	0
SnOH+++		aqueous	3	84jac/hel	X	X	0	0	0	0
SnSO4++		aqueous	1	82wag/eva	X	X	0	0	0	0
Sr(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Sr++		aqueous	1	supcrt92**	X	X	X	X	0	0
Sr++		aqueous	2	92gre/fug	0	0	0	0	X	0
SrCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
SrCH3COO+		aqueous	3	89mar/smi	0	0	0	0	0	0
SrCO3(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
SrCl+		aqueous	1	supcrt92**	X	X	X	0	0	0
SrCl2(aq)		aqueous	0	chemval*	0	0	0	0	0	0
SrCl2(aq)		aqueous	3	chemval*	0	0	0	0	0	0
SrF+		aqueous	1	supcrt92**	X	X	X	0	0	0
SrH2PO4+		aqueous	3	76smi/mar	X	X	0	0	0	0
SrHCO3+		aqueous	1	supcrt92**	0	0	0	0	0	0
SrHPO4(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
SrNO3+		aqueous	3	76smi/mar	X	X	0	0	0	0
SrOH+		aqueous	0	chemval*	0	0	0	0	0	0
SrOH+		aqueous	3	76bae/mes	X	X	0	0	0	0
SrOH+		aqueous	3	chemval*	0	0	0	0	0	0
SrP2O7--		aqueous	3	76smi/mar	X	X	0	0	0	0
SrSO4(aq)		aqueous	0	chemval*	0	0	0	0	0	0
SrSO4(aq)		aqueous	3	83rea	X	X	0	0	0	0
SrSO4(aq)		aqueous	3	chemval*	0	0	0	0	0	0
Tb(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Tb(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Tb+++		aqueous	1	supcrt92**	X	X	X	X	0	0
TbCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Tc++		aqueous	1	83rar	X	X	0	0	0	0
Tc+++		aqueous	1	83rar	X	X	0	0	0	0
TcO(OH)2(aq)		aqueous	1	83rar	X	X	0	0	0	0
TcO++		aqueous	1	83rar	X	X	0	0	0	0
TcO4-		aqueous	1	84rar	X	X	0	0	0	0
TcO4--		aqueous	1	84rar	X	X	0	0	0	0
TcO4---		aqueous	1	84rar	X	X	0	0	0	0
TcOOH+		aqueous	1	83rar	X	X	0	0	0	0
Th(H2PO4)2++		aqueous	1	80lan/her	X	X	0	0	0	0
Th(HPO4)2(aq)		aqueous	1	80lan/her	X	X	0	0	0	0
Th(HPO4)3--		aqueous	1	80lan/her	X	X	0	0	0	0
Th(OH)2++		aqueous	1	80lan/her	X	X	0	0	0	0
Th(OH)3+		aqueous	1	80lan/her	X	X	0	0	0	0
Th(OH)4(aq)		aqueous	1	80lan/her	X	X	0	0	0	0
Th(OH)4(aq)		aqueous	3	76bae/mes	0	0	0	0	0	0
Th(SO4)2(aq)		aqueous	1	80lan/her	X	X	0	0	0	0
Th(SO4)3--		aqueous	1	80lan/her	X	X	0	0	0	0
Th(SO4)4----		aqueous	1	80lan/her	X	X	0	0	0	0
Th++++		aqueous	2	76fug/oet	X	X	0	X	0	0
Th2(OH)2(6+)		aqueous	1	80lan/her	X	X	0	0	0	0
Th4(OH)8(8+)		aqueous	1	80lan/her	X	X	0	0	0	0
Th6(OH)15(9+)		aqueous	1	80lan/her	X	X	0	0	0	0
ThCl+++		aqueous	1	80lan/her	X	X	0	0	0	0
ThCl2++		aqueous	1	80lan/her	X	X	0	0	0	0
ThCl3+		aqueous	1	80lan/her	X	X	0	0	0	0
ThCl4(aq)		aqueous	1	80lan/her	X	X	0	0	0	0
ThF+++		aqueous	1	80lan/her	X	X	0	0	0	0
ThF2++		aqueous	1	80lan/her	X	X	0	0	0	0
ThF3+		aqueous	1	80lan/her	X	X	0	0	0	0
ThF4(aq)		aqueous	1	80lan/her	X	X	0	0	0	0
ThH2PO4+++		aqueous	1	80lan/her	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
ThH3PO4++++		aqueous	1	80lan/her	X	X	0	0	0	0
ThHPO4++		aqueous	1	80lan/her	X	X	0	0	0	0
ThOH+++		aqueous	1	82wag/eva	X	X	0	0	0	0
ThSO4++		aqueous	1	80lan/her	X	X	0	0	0	0
Threonine(aq)	C4H9NO3	aqueous	1	supcrt92**	X	X	X	0	0	0
Ti(OH)4(aq)		aqueous	1	81bar/lan	X	X	0	0	0	0
Tl(CH3COO)2-		aqueous	1	93sho/kor	X	X	X	0	0	0
Tl+		aqueous	1	supcrt92**	X	X	X	X	0	0
Tl+++		aqueous	1	supcrt92**	X	X	X	0	0	0
TlCH3COO(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Tm(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Tm(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Tm+++		aqueous	1	supcrt92**	X	X	X	X	0	0
TmCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Toluene(aq)	C6H5CH3	aqueous	1	supcrt92**	X	X	X	0	0	0
Tryptophan(aq)	C11H12N2O2	aqueous	1	supcrt92**	X	X	X	0	0	0
Tyrosine(aq)	C9H11NO3	aqueous	1	supcrt92**	X	X	X	0	0	0
U(CH3COO)2+		aqueous	1	93sho/kor	0	0	0	0	0	0
U(CH3COO)3(aq)		aqueous	1	93sho/kor	0	0	0	0	0	0
U(CO3)4----		aqueous	1	92gre/fug	X	X	0	0	X	0
U(CO3)5(6-)		aqueous	0	chemval*	0	0	0	0	0	0
U(CO3)5(6-)		aqueous	1	92gre/fug	X	X	0	0	X	0
U(CO3)5(6-)		aqueous	3	chemval*	0	0	0	0	0	0
U(HPO4)2(aq)		aqueous	1	78lan	0	0	0	0	0	0
U(HPO4)3--		aqueous	1	78lan	0	0	0	0	0	0
U(HPO4)4----		aqueous	1	78lan	0	0	0	0	0	0
U(NO3)2++		aqueous	1	92gre/fug	X	X	0	0	X	0
U(OH)2+		aqueous	3	80all/kip	0	0	0	0	0	0
U(OH)2++		aqueous	1	78lan	0	0	0	0	0	0
U(OH)3(aq)		aqueous	3	80all/kip	0	0	0	0	0	0
U(OH)3+		aqueous	1	78lan	0	0	0	0	0	0
U(OH)4(aq)		aqueous	0	chemval*	0	0	0	0	0	0
U(OH)4(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
U(OH)4(aq)		aqueous	3	chemval*	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
U(OH)4-		aqueous	3	80all/kip	0	0	0	0	0	0
U(OH)5-		aqueous	1	92gre/fug	0	0	0	0	0	0
U(SCN)2++		aqueous	1	92gre/fug	X	X	0	0	X	0
U(SO4)2(aq)		aqueous	0	chemval*	0	0	0	0	0	0
U(SO4)2(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
U(SO4)2(aq)		aqueous	3	chemval*	0	0	0	0	0	0
U+++		aqueous	2	92gre/fug	X	X	0	0	X	0
U++++		aqueous	1	92gre/fug	X	X	0	0	X	0
U2(OH)2(6+)		aqueous	3	80all/kip	0	0	0	0	0	0
U2(OH)2++++		aqueous	3	80all/kip	0	0	0	0	0	0
U2(OH)3(5+)		aqueous	3	80all/kip	0	0	0	0	0	0
U2(OH)4++++		aqueous	3	80all/kip	0	0	0	0	0	0
U2(OH)5+++		aqueous	3	80all/kip	0	0	0	0	0	0
U6(OH)15(9+)		aqueous	1	78lan	0	0	0	0	0	0
UBr+++		aqueous	1	92gre/fug	X	X	0	0	X	0
UCH3COO++		aqueous	1	93sho/kor	0	0	0	0	0	0
UCl+++		aqueous	0	chemval*	0	0	0	0	0	0
UCl+++		aqueous	1	92gre/fug	X	X	0	0	X	0
UCl+++		aqueous	3	chemval*	0	0	0	0	0	0
UCl4(aq)		aqueous	1	82wag/eva	0	0	0	0	0	0
UF+++		aqueous	1	92gre/fug	X	X	0	0	X	0
UF2++		aqueous	1	92gre/fug	X	X	0	0	X	0
UF3+		aqueous	1	92gre/fug	X	X	0	0	X	0
UF4(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UF5-		aqueous	1	92gre/fug	X	X	0	0	X	0
UF6--		aqueous	1	92gre/fug	X	X	0	0	X	0
UHPO4++		aqueous	1	78lan	0	0	0	0	0	0
UI+++		aqueous	1	92gre/fug	X	X	0	0	X	0
UNO3+++		aqueous	1	92gre/fug	X	X	0	0	X	0
UNO3+++		aqueous	3	76smi/mar	0	0	0	0	0	0
UO2(CH3COO)2(aq)		aqueous	1	93sho/kor	0	0	0	0	0	0
UO2(CH3COO)2(aq)		aqueous	3	89mar/smi	0	0	0	0	0	0
UO2(CH3COO)3-		aqueous	1	93sho/kor	0	0	0	0	0	0
UO2(CH3COO)3-		aqueous	3	89mar/smi	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
UO2(CO3)2--		aqueous	0	chemval*	0	0	0	0	0	0
UO2(CO3)2--		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(CO3)2--		aqueous	3	chemval*	0	0	0	0	0	0
UO2(CO3)3(5-)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(CO3)3----		aqueous	0	chemval*	0	0	0	0	0	0
UO2(CO3)3----		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(CO3)3----		aqueous	3	chemval*	0	0	0	0	0	0
UO2(H2PO4)(H3PO4)+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(H2PO4)(H3PO4)+		aqueous	3	84tri	0	0	0	0	0	0
UO2(H2PO4)2(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(H2PO4)2(aq)		aqueous	3	84tri	0	0	0	0	0	0
UO2(H2PO4)3-		aqueous	1	78lan	0	0	0	0	0	0
UO2(HPO4)2--		aqueous	1	78lan	0	0	0	0	0	0
UO2(HPO4)2--		aqueous	3	82lan/don	0	0	0	0	0	0
UO2(IO3)2(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(N3)2(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(N3)3-		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(N3)4--		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(NO3)2(aq)		aqueous	1	78cor/oha	0	0	0	0	0	0
UO2(OH)2(aq)		aqueous	1	92gre/fug	X	X	0	0	0	0
UO2(OH)2-		aqueous	3	80all/kip	0	0	0	0	0	0
UO2(OH)3-		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(OH)4--		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(SCN)2(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(SCN)3-		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(SO3)2--		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(SO4)2--		aqueous	0	chemval*	0	0	0	0	0	0
UO2(SO4)2--		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2(SO4)2--		aqueous	3	chemval*	0	0	0	0	0	0
UO2+		aqueous	0	chemval*	0	0	0	0	0	0
UO2+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2+		aqueous	3	chemval*	0	0	0	0	0	0
UO2++		aqueous	0	chemval*	0	0	0	0	0	0
UO2++		aqueous	2	89cox/wag	X	X	0	X	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
UO2++		aqueous	3	chemval*	0	0	0	0	0	0
UO2Br+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2BrO3+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2CH3COO+		aqueous	1	93sho/kor	0	0	0	0	0	0
UO2CH3COO+		aqueous	3	89mar/smi	0	0	0	0	0	0
UO2CO3(aq)		aqueous	0	chemval*	0	0	0	0	0	0
UO2CO3(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2CO3(aq)		aqueous	3	chemval*	0	0	0	0	0	0
UO2Cl+		aqueous	0	chemval*	0	0	0	0	0	0
UO2Cl+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2Cl+		aqueous	3	chemval*	0	0	0	0	0	0
UO2Cl2(aq)		aqueous	0	chemval*	0	0	0	0	0	0
UO2Cl2(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2Cl2(aq)		aqueous	3	chemval*	0	0	0	0	0	0
UO2ClO3+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2F+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2F2(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2F3-		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2F4--		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2H2PO4+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2H2PO4+		aqueous	3	84tri	0	0	0	0	0	0
UO2H3PO4++		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2H3PO4++		aqueous	3	84tri	0	0	0	0	0	0
UO2HPO4(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2IO3+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2N3+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2NO3+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2OH(aq)		aqueous	3	80all/kip	0	0	0	0	0	0
UO2OH+		aqueous	0	chemval*	0	0	0	0	0	0
UO2OH+		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2OH+		aqueous	3	chemval*	0	0	0	0	0	0
UO2PO4-		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2S2O3(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2SCN+		aqueous	1	92gre/fug	X	X	0	0	X	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
UO2SO3(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2SO4(aq)		aqueous	0	chemval*	0	0	0	0	0	0
UO2SO4(aq)		aqueous	1	92gre/fug	X	X	0	0	X	0
UO2SO4(aq)		aqueous	3	chemval*	0	0	0	0	0	0
UO2SiO(OH)3+		aqueous	1	78lan	0	0	0	0	0	0
UOH++		aqueous	3	80all/kip	0	0	0	0	0	0
UOH+++		aqueous	0	chemval*	0	0	0	0	0	0
UOH+++		aqueous	1	92gre/fug	X	X	0	0	X	0
UOH+++		aqueous	3	chemval*	0	0	0	0	0	0
USCN+++		aqueous	1	92gre/fug	X	X	0	0	X	0
USO4++		aqueous	0	chemval*	0	0	0	0	0	0
USO4++		aqueous	1	92gre/fug	X	X	0	0	X	0
USO4++		aqueous	3	chemval*	0	0	0	0	0	0
Urea(aq)		aqueous	1	93sho/mck	X	X	X	0	0	0
V(OH)2+		aqueous	1	78lan	X	X	0	0	0	0
V+++		aqueous	1	76isr/mei	X	X	0	0	0	0
V2(OH)2++++		aqueous	3	76bae/mes	X	X	0	0	0	0
VO(OH)3(aq)		aqueous	3	76bae/mes	X	X	0	0	0	0
VO++		aqueous	1	supcrt92**	X	X	X	0	0	0
VO2(HPO4)2---		aqueous	3	82hog	X	X	0	0	0	0
VO2(OH)2-		aqueous	3	76bae/mes	X	X	0	0	0	0
VO2+		aqueous	1	supcrt92**	X	X	X	0	0	0
VO2F(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
VO2F2-		aqueous	3	76smi/mar	X	X	0	0	0	0
VO2F3--		aqueous	0	76smi/mar	0	0	0	0	0	0
VO2H2PO4(aq)		aqueous	3	82hog	X	X	0	0	0	0
VO2HPO4-		aqueous	3	82hog	X	X	0	0	0	0
VO2SO4-		aqueous	3	82hog	X	X	0	0	0	0
VO3OH--		aqueous	3	76bae/mes	X	X	0	0	0	0
VO4---		aqueous	1	82wag/eva	X	X	0	0	0	0
VOF+		aqueous	3	76smi/mar	X	X	0	0	0	0
VOF2(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
VOF3-		aqueous	1	71ahr	0	0	0	0	0	0
VOF4--		aqueous	1	71ahr	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
VOH++		aqueous	3	76bae/mes	X	X	0	0	0	0
VOOH+		aqueous	3	76bae/mes	X	X	0	0	0	0
VOSO4(aq)		aqueous	3	71bai	X	X	0	0	0	0
VSO4+		aqueous	3	82hog	X	X	0	0	0	0
Valine(aq)	C5H11NO2	aqueous	1	supcrt92**	X	X	X	0	0	0
WO4--		aqueous	1	supcrt92**	X	X	X	0	0	0
Xe(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
Y(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Y(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Y+++		aqueous	1	supcrt92**	X	X	X	X	0	0
YCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Yb(CH3COO)2+		aqueous	1	93sho/kor	X	X	X	0	0	0
Yb(CH3COO)3(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Yb++		aqueous	1	supcrt92**	X	X	X	0	0	0
Yb+++		aqueous	1	supcrt92**	X	X	X	X	0	0
YbCH3COO++		aqueous	1	93sho/kor	X	X	X	0	0	0
Zn(CH3COO)2(aq)		aqueous	1	93sho/kor	X	X	X	0	0	0
Zn(CH3COO)2(aq)		aqueous	1	supcrt92**	0	0	0	0	0	0
Zn(CH3COO)3-		aqueous	1	93sho/kor	X	X	X	0	0	0
Zn(CH3COO)3-		aqueous	1	supcrt92**	0	0	0	0	0	0
Zn++		aqueous	1	supcrt92**	X	X	X	X	0	0
Zn++		aqueous	2	89cox/wag	0	0	0	0	0	0
ZnCH3COO+		aqueous	1	93sho/kor	X	X	X	0	0	0
ZnCH3COO+		aqueous	1	supcrt92**	0	0	0	0	0	0
ZnCl+		aqueous	1	supcrt92**	X	X	X	0	0	0
ZnCl+		aqueous	3	87bou/bar	0	0	0	0	0	0
ZnCl2(aq)		aqueous	1	supcrt92**	X	X	X	0	0	0
ZnCl2(aq)		aqueous	3	87bou/bar	0	0	0	0	0	0
ZnCl3-		aqueous	1	supcrt92**	X	X	X	0	0	0
ZnCl3-		aqueous	3	87bou/bar	0	0	0	0	0	0
ZnCl4--		aqueous	1	supcrt92**	X	X	X	0	0	0
ZnCl4--		aqueous	3	87bou/bar	0	0	0	0	0	0
ZnF+		aqueous	3	76smi/mar	X	X	0	0	0	0
ZnH2PO4+		aqueous	3	76smi/mar	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
ZnHCO3+		aqueous	3	87bou/bar	X	X	0	0	0	0
ZnHPO4(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
ZnO(aq)		aqueous	1	supcrt92**	0	0	0	0	0	0
ZnO2--		aqueous	1	supcrt92**	0	0	0	0	0	0
ZnOH+		aqueous	1	supcrt92**	0	0	0	0	0	0
ZnOH+		aqueous	3	87bou/bar	X	X	0	0	0	0
ZnPO4-		aqueous	3	79mat/spo	X	X	0	0	0	0
ZnSeO4(aq)		aqueous	3	76smi/mar	X	X	0	0	0	0
Zr(OH)2++		aqueous	1	74nau/ryz	X	X	0	0	0	0
Zr(OH)3+		aqueous	1	74nau/ryz	X	X	0	0	0	0
Zr(OH)4(aq)		aqueous	1	74nau/ryz	X	X	0	0	0	0
Zr(SO4)2(aq)		aqueous	1	74nau/ryz	X	X	0	0	0	0
Zr(SO4)3--		aqueous	1	74nau/ryz	X	X	0	0	0	0
Zr++++		aqueous	1	74nau/ryz	X	X	0	0	0	0
ZrF+++		aqueous	1	74nau/ryz	X	X	0	0	0	0
ZrF2++		aqueous	1	74nau/ryz	X	X	0	0	0	0
ZrF3+		aqueous	1	74nau/ryz	X	X	0	0	0	0
ZrF4(aq)		aqueous	1	74nau/ryz	X	X	0	0	0	0
ZrF5-		aqueous	1	74nau/ryz	X	X	0	0	0	0
ZrF6--		aqueous	1	74nau/ryz	X	X	0	0	0	0
ZrOH+++		aqueous	1	74nau/ryz	X	X	0	0	0	0
ZrSO4++		aqueous	1	74nau/ryz	X	X	0	0	0	0
a-Aminobutyric acid(aq)	C4H9NO2	aqueous	1	supcrt92**	X	X	X	0	0	0
m-Xylene(aq)	C6H4(CH3)2	aqueous	1	supcrt92**	0	0	0	0	0	0
n-Butane(aq)	C4H10	aqueous	1	supcrt92**	X	X	X	0	0	0
n-Butylbenzene(aq)	C6H5C4H9	aqueous	1	supcrt92**	X	X	X	0	0	0
n-Heptane(aq)	C7H16	aqueous	1	supcrt92**	X	X	X	0	0	0
n-Heptylbenzene(aq)	C6H5C7H15	aqueous	1	supcrt92**	X	X	X	0	0	0
n-Hexane(aq)	C6H14	aqueous	1	supcrt92**	X	X	X	0	0	0
n-Hexylbenzene(aq)	C6H5C6H13	aqueous	1	supcrt92**	X	X	X	0	0	0
n-Octane(aq)	C8H18	aqueous	1	supcrt92**	X	X	X	0	0	0
n-Octylbenzene(aq)	C6H5C8H17	aqueous	1	supcrt92**	X	X	X	0	0	0
n-Pentane(aq)	C5H12	aqueous	1	supcrt92**	X	X	X	0	0	0
n-Pentylbenzene(aq)	C6H5C5H11	aqueous	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
n-Propylbenzene(aq)	C6H5C3H7	aqueous	1	supcrt92**	X	X	X	0	0	0
o-Phthalate	C8O4H4	aqueous	1	85wol	X	X	0	0	0	0
o-Phthalic acid(aq)		aqueous	3	89mar/smi	X	X	0	0	0	0
o-Xylene(aq)	C6H4(CH3)2	aqueous	1	supcrt92**	0	0	0	0	0	0
p-Xylene(aq)	C6H4(CH3)2	aqueous	1	supcrt92**	0	0	0	0	0	0
(As2O5)3:5H2O		mineral	0	92gre/fug	0	0	0	0	0	0
(Pb(OH)2)3.PbCl2		mineral	1	82wag/eva	X	X	0	X	0	0
(UO2)2As2O7		mineral	2	92gre/fug	X	X	0	X	X	0
(UO2)2Cl3		mineral	2	92gre/fug	X	X	0	0	X	0
(UO2)2P2O7		mineral	2	92gre/fug	X	X	0	X	X	0
(UO2)3(AsO4)2		mineral	2	92gre/fug	X	X	0	X	X	0
(UO2)3(PO4)2		mineral	2	92gre/fug	X	X	0	X	X	0
(UO2)3(PO4)2		mineral	3	84tri	0	0	0	0	0	0
(UO2)3(PO4)2:4H2O		mineral	1	92gre/fug	X	X	0	X	X	0
(VO)3(PO4)2		mineral	1	82wag/eva	X	X	0	0	0	0
Acanthite	Ag2S	mineral	1	supcrt92**	X	X	X	0	0	0
Acmite	NaFeSi2O6	mineral	1	supcrt92**	0	0	0	0	0	0
Afwillite	Ca3Si2O4(OH)6	mineral	1	82sar/bar	X	X	0	0	0	0
Ag		mineral	1	supcrt92**	X	X	X	X	0	0
Ag		mineral	2	89cox/wag	0	0	0	0	0	0
Ag(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Ag3PO4		mineral	0	73don	0	0	0	0	0	0
Ag3PO4		mineral	3	76smi/mar	X	X	0	X	0	0
Ahlfeldite	NiSeO3:2H2O	mineral	1	74nau/ryz	X	X	0	0	0	0
Akermanite	Ca2MgSi2O7	mineral	1	supcrt92**	X	X	X	0	0	0
Al		mineral	2	89cox/wag	X	X	0	X	0	0
Al(OH)3(am)		mineral	3	74tru/jon	0	0	0	0	0	0
Al(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Al2(SO4)3		mineral	1	79rob/hem	X	X	0	X	0	0
Al2(SO4)3:6H2O		mineral	1	82wag/eva	X	X	0	X	0	0
AlF3		mineral	2	89cox/wag	X	X	0	X	0	0
Alabandite	MnS	mineral	1	supcrt92**	X	X	X	0	0	0
Alamosite	PbSiO3	mineral	1	82wag/eva	X	X	0	0	0	0
Albite	NaAlSi3O8	mineral	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Albite high	NaAlSi3O8	mineral	1	supcrt92**	X	X	X	0	0	0
Albite low	NaAlSi3O8	mineral	1	supcrt92**	X	X	X	0	0	0
Almandine	Al2Fe3(SiO4)3	mineral	1	supcrt92**	0	0	0	0	0	0
Alstonite	BaCa(CO3)2	mineral	1	82wag/eva	X	X	0	0	0	0
Alum-K	KAl(SO4)2:12H2O	mineral	2	73bar/kna	X	X	0	X	0	0
Alunite	KAl3(OH)6(SO4)2	mineral	1	supcrt92**	X	X	X	X	0	0
Am		mineral	1	76oet/ran	X	X	0	0	0	0
Am(OH)3		mineral	3	86ker/sil	X	X	0	X	0	0
Am(OH)3(am)		mineral	3	86ker/sil	X	X	0	X	0	0
AmOHCO3		mineral	3	86ker/sil	X	X	0	X	0	0
Amesite-14A	Mg4Al4Si2O10(OH)8	mineral	1	78wol	X	X	0	0	0	0
Amesite-14A	Mg4Al4Si2O10(OH)8	mineral	1	supcrt92**	0	0	0	0	0	0
Amesite-7a	Mg2Al2SiO5(OH)4	mineral	1	78wol	0	0	0	0	0	0
Amesite-7a	Mg2Al2SiO5(OH)4	mineral	1	supcrt92**	0	0	0	0	0	0
Analcime	Na.96Al.96Si2.04O6:H2O	mineral	1	82joh/flo	X	X	0	0	0	0
Analcime	Na.96Al.96Si2.04O6:H2O	mineral	1	supcrt92**	0	0	X	0	0	0
Analcime-dehy	Na.96Al.96Si2.04O6	mineral	1	82joh/flo	X	X	0	0	0	0
Analcime-dehy	Na.96Al.96Si2.04O6	mineral	1	supcrt92**	0	0	X	0	0	0
Andalusite	Al2SiO5	mineral	1	supcrt92**	X	X	X	0	0	0
Andradite	Ca3Fe2(SiO4)3	mineral	1	supcrt92**	X	X	X	0	0	0
Anglesite	PbSO4	mineral	1	supcrt92**	X	X	X	X	0	0
Anglesite	PbSO4	mineral	2	89cox/wag	0	0	0	0	0	0
Anhydrite	CaSO4	mineral	1	supcrt92**	X	X	X	X	0	0
Anhydrite	CaSO4	mineral	4	84har/mol	0	0	0	0	0	X
Annite	KFe3AlSi3O10(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
Anorthite	CaAl2(SiO4)2	mineral	1	supcrt92**	X	X	X	0	0	0
Antarcticite	CaCl2:6H2O	mineral	1	84har/mol	X	X	0	X	0	X
Antarcticite	CaCl2:6H2O	mineral	4	84har/mol	0	0	0	X	0	X
Anthophyllite	Mg7Si8O22(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
Antigorite	Mg48Si24O85(OH)62	mineral	1	supcrt92**	X	X	X	0	0	0
Antlerite	Cu3(SO4)(OH)4	mineral	1	82wag/eva	X	X	0	X	0	0
Aphthitalite	NaK3(SO4)2	mineral	1	84har/mol	X	X	0	X	0	X
Aphthitalite	NaK3(SO4)2	mineral	4	84har/mol	0	0	0	X	0	X
Ar(g)		mineral	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Ar(g)		mineral	2	89cox/wag	0	0	0	0	0	0
Aragonite	CaCO3	mineral	1	supcrt92**	X	X	X	0	0	0
Aragonite	CaCO3	mineral	4	84har/mol	0	0	0	0	0	X
Arcanite	K2SO4	mineral	1	79rob/hem	X	X	0	X	0	0
Arcanite	K2SO4	mineral	4	84har/mol	0	0	0	0	0	X
Arsenolite	As2O3	mineral	1	79rob/hem	X	X	0	0	0	0
Arsenopyrite	FeAsS	mineral	1	82wag/eva	X	X	0	0	0	0
Artinite	Mg2CO3(OH)2:3H2O	mineral	1	supcrt92**	X	X	X	0	0	0
As		mineral	1	79rob/hem	X	X	0	0	0	0
As		mineral	1	92gre/fug	0	0	0	0	X	0
As2O5		mineral	2	82wag/eva	X	X	0	X	0	0
As2O5		mineral	2	92gre/fug	0	0	0	0	X	0
As4O6(mono)		mineral	2	92gre/fug	X	X	0	X	X	0
As4O6(octa)		mineral	2	92gre/fug	X	X	0	X	X	0
Atacamite	Cu4Cl2(OH)6	mineral	1	87woo/gar	X	X	0	X	0	0
Au		mineral	1	supcrt92**	X	X	X	0	0	0
Autunite-H	H2(UO2)2(PO4)2	mineral	1	78lan	0	0	0	0	0	0
Autunite-K	K2(UO2)2(PO4)2	mineral	1	78lan	0	0	0	0	0	0
Autunite-Na	Na2(UO2)2(PO4)2	mineral	1	78lan	0	0	0	0	0	0
Autunite-Sr	Sr(UO2)2(PO4)2	mineral	1	78lan	0	0	0	0	0	0
Azurite	Cu3(CO3)2(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
B		mineral	2	89cox/wag	X	X	0	0	0	0
B(g)		mineral	2	89cox/wag	X	X	0	0	0	0
B2O3		mineral	2	89cox/wag	X	X	0	0	0	0
BF3(g)		mineral	2	89cox/wag	X	X	0	0	0	0
Ba		mineral	1	79rob/hem	X	X	0	X	0	0
Ba		mineral	1	92gre/fug	0	0	0	0	X	0
Ba(OH)2:8H2O		mineral	1	82wag/eva	X	X	0	X	0	0
Ba2CaUO6		mineral	0	92gre/fug	0	0	0	0	0	0
Ba2MgUO6		mineral	0	92gre/fug	0	0	0	0	0	0
Ba2Si3O8		mineral	1	82wag/eva	X	X	0	0	0	0
Ba2SiO4		mineral	1	82wag/eva	X	X	0	0	0	0
Ba2SrUO6		mineral	0	92gre/fug	0	0	0	0	0	0
Ba2U2O7		mineral	2	92gre/fug	X	X	0	X	X	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Ba3(AsO4)2		mineral	0	82wag/eva	0	0	0	0	0	0
Ba3UO6		mineral	2	92gre/fug	X	X	0	X	X	0
BaBr2		mineral	1	82wag/eva	X	X	0	X	0	0
BaBr2:2H2O		mineral	1	82wag/eva	X	X	0	X	0	0
BaCl2		mineral	1	82wag/eva	X	X	0	X	0	0
BaCl2		mineral	2	92gre/fug	0	0	0	0	X	0
BaCl2:2H2O		mineral	1	82wag/eva	X	X	0	X	0	0
BaCl2:H2O		mineral	1	82wag/eva	X	X	0	X	0	0
BaCrO4		mineral	1	76del/hal	X	X	0	X	0	0
BaHPO4		mineral	0	90crc	0	0	0	0	0	0
BaHPO4		mineral	3	76smi/mar	X	X	0	X	0	0
BaI2		mineral	1	85cha/dav	X	X	0	X	0	0
BaMnO4		mineral	1	82wag/eva	X	X	0	0	0	0
BaO		mineral	1	82wag/eva	X	X	0	X	0	0
BaO		mineral	2	92gre/fug	0	0	0	0	X	0
BaS		mineral	1	82wag/eva	X	X	0	0	0	0
BaSeO3		mineral	1	82wag/eva	X	X	0	0	0	0
BaSeO4		mineral	1	82wag/eva	X	X	0	0	0	0
BaSiF6		mineral	1	82wag/eva	X	X	0	0	0	0
BaSiO3		mineral	2	82wag/eva	0	0	0	0	0	0
BaU2O7		mineral	2	92gre/fug	X	X	0	X	X	0
BaUO3		mineral	0	92gre/fug	0	0	0	0	0	0
BaUO4		mineral	2	92gre/fug	X	X	0	X	X	0
BaZrO3		mineral	1	74nau/ryz	X	X	0	0	0	0
Baddeleyite	ZrO2	mineral	1	79rob/hem	X	X	0	0	0	0
Barite	BaSO4	mineral	1	supcrt92**	X	X	X	X	0	0
Barytocalcite	BaCa(CO3)2	mineral	1	82wag/eva	X	X	0	0	0	0
Bassanite	CaSO4:1/2H2O	mineral	1	82wag/eva	X	X	0	X	0	0
Bassetite	Fe(UO2)2(PO4)2	mineral	1	78lan	X	X	0	X	0	0
Be		mineral	1	89cox/wag	X	X	0	X	0	0
Be(g)		mineral	2	89cox/wag	0	0	0	X	0	0
Be13U		mineral	2	92gre/fug	X	X	0	0	0	0
Beidellite-Ca	Ca.165Al2.33Si3.67O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Beidellite-Cs	Cs.33Si3.67Al2.33O10(OH)2	mineral	1	88db 4	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Beidellite-H	H.33Al2.33Si3.67O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Beidellite-K	K.33Al2.33Si3.67O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Beidellite-Mg	Mg.165Al2.33Si3.67O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Beidellite-Na	Na.33Al2.33Si3.67O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Berlinite	AlPO4	mineral	1	82wag/eva	X	X	0	X	0	0
Berndtite	SnS2	mineral	1	supcrt92**	X	X	X	0	0	0
Bi		mineral	1	79rob/hem	0	0	0	0	0	0
Bieberite	CoSO4:7H2O	mineral	1	82wag/eva	X	X	0	X	0	0
Biotite	K(Mg,Fe)3AlSi3O10(OH)2	mineral	1	ss***	X	X	0	0	0	0
Birnessite	Mn8O14:5H2O	mineral	1	83ker	X	X	0	X	0	0
Bischofite	MgCl2:6H2O	mineral	1	84har/mol	X	X	0	X	0	X
Bischofite	MgCl2:6H2O	mineral	4	84har/mol	0	0	0	X	0	X
Bixbyite	Mn2O3	mineral	1	79rob/hem	X	X	0	X	0	0
Bloedite	Na2Mg(SO4)2:4H2O	mineral	1	84har/mol	X	X	0	X	0	X
Bloedite	Na2Mg(SO4)2:4H2O	mineral	4	84har/mol	0	0	0	X	0	X
Boehmite	AlO2H	mineral	1	supcrt92**	X	X	X	X	0	0
Boltwoodite	KH3OUO2SiO4	mineral	1	82hem	X	X	0	0	0	0
Boltwoodite-Na	Na.7K.3H3O1UO2SiO4:H2O	mineral	1	82hem	X	X	0	0	0	0
Borax	Na2[B4O5(OH)4]:8H2O	mineral	1	82wag/eva	X	X	0	0	0	0
Boric acid	B(OH)3	mineral	2	89cox/wag	X	X	0	0	0	0
Bornite	Cu5FeS4	mineral	1	supcrt92**	X	X	X	0	0	0
Br(g)		mineral	2	89cox/wag	0	0	0	0	0	0
Br2(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Br2(l)		mineral	2	89cox/wag	X	X	0	X	0	0
Brezinaite	Cr3S4	mineral	2	78vau/cra	X	X	0	0	0	0
Brochantite	Cu4(SO4)(OH)6	mineral	1	87woo/gar	X	X	0	X	0	0
Bromellite	BeO	mineral	1	supcrt92**	0	0	0	0	0	0
Bromellite	BeO	mineral	2	89cox/wag	X	X	0	X	0	0
Brucite	Mg(OH)2	mineral	1	supcrt92**	X	X	X	X	0	0
Brucite	Mg(OH)2	mineral	4	84har/mol	0	0	0	0	0	X
Brushite	CaHPO4:2H2O	mineral	0	90crc	0	0	0	0	0	0
Brushite	CaHPO4:2H2O	mineral	3	76ben/ada	X	X	0	X	0	0
Bunsenite	NiO	mineral	1	supcrt92**	X	X	X	X	0	0
Burkeite	Na6CO3(SO4)2	mineral	1	84har/mol	X	X	0	0	0	X
Burkeite	Na6CO3(SO4)2	mineral	4	84har/mol	0	0	0	0	0	X

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
C		mineral	1	supcrt92**	X	X	X	0	0	0
C		mineral	2	89cox/wag	0	0	0	0	0	0
C(g)		mineral	2	89cox/wag	X	X	0	0	0	0
C2H4(g)		mineral	1	93sho	X	X	X	0	0	0
CH4(g)		mineral	1	supcrt92**	X	X	X	0	0	0
CO(g)		mineral	1	93sho	X	X	X	0	0	0
CO(g)		mineral	2	89cox/wag	X	X	0	0	0	0
CO2(g)		mineral	1	supcrt92**	X	X	X	0	0	0
CO2(g)		mineral	2	89cox/wag	0	0	0	0	0	0
CO2(g)		mineral	4	84har/mol	0	0	0	0	0	X
Ca		mineral	2	89cox/wag	X	X	0	X	0	0
Ca(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Ca-Al Pyroxene	CaAl2SiO6	mineral	1	supcrt92**	X	X	X	0	0	0
Ca2Al2O5:8H2O		mineral	1	82sar/bar	X	X	0	X	0	0
Ca2Cl2(OH)2:H2O		mineral	1	84har/mol	X	X	0	X	0	X
Ca2Cl2(OH)2:H2O		mineral	4	84har/mol	0	0	0	X	0	X
Ca2V2O7		mineral	1	82wag/eva	X	X	0	0	0	0
Ca3(AsO4)2		mineral	1	82wag/eva	X	X	0	X	0	0
Ca3Al2O6		mineral	1	82sar/bar	X	X	0	X	0	0
Ca3UO6		mineral	0	92gre/fug	0	0	0	0	0	0
Ca3V2O8		mineral	1	82wag/eva	X	X	0	0	0	0
Ca4Al2Fe2O10		mineral	1	82sar/bar	X	X	0	0	0	0
Ca4Al2O7:13H2O		mineral	1	82sar/bar	X	X	0	X	0	0
Ca4Al2O7:19H2O		mineral	1	82sar/bar	X	X	0	X	0	0
Ca4Cl2(OH)6:13H2O		mineral	1	84har/mol	X	X	0	X	0	X
Ca4Cl2(OH)6:13H2O		mineral	4	84har/mol	0	0	0	X	0	X
Ca6Al4Fe2O15		mineral	0	82sar/bar	0	0	0	0	0	0
CaAl2O4		mineral	1	82sar/bar	X	X	0	X	0	0
CaAl2O4:10H2O		mineral	1	82sar/bar	X	X	0	X	0	0
CaAl4O7		mineral	1	82sar/bar	X	X	0	X	0	0
CaCl2:4H2O		mineral	4	84har/mol	0	0	0	0	0	X
CaCl2:H2O		mineral	2	82wag/eva	0	0	0	0	0	0
CaSO4:0.5H2O(beta)		mineral	1	82wag/eva	X	X	0	X	0	0
CaSeO3:2H2O		mineral	1	74nau/ryz	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
CaSeO4		mineral	0	90crc	0	0	0	0	0	0
CaSeO4		mineral	3	76smi/mar	X	X	0	0	0	0
CaUO4		mineral	0	chemval*	0	0	0	0	0	0
CaUO4		mineral	2	92gre/fug	X	X	0	X	X	0
CaUO4		mineral	3	chemval*	0	0	0	0	0	0
CaV2O6		mineral	1	82wag/eva	X	X	0	0	0	0
CaZrO3		mineral	1	74nau/ryz	X	X	0	0	0	0
Cadmoselite	CdSe	mineral	2	74mil	X	X	0	0	0	0
Calcite	CaCO3	mineral	0	chemval*	0	0	0	0	0	0
Calcite	CaCO3	mineral	1	supcrt92**	X	X	X	0	0	0
Calcite	CaCO3	mineral	3	chemval*	0	0	0	0	0	0
Calcite	CaCO3	mineral	4	84har/mol	0	0	0	0	0	X
Calomel	Hg2Cl2	mineral	2	89cox/wag	X	X	0	0	0	0
Carbonate-Calcite	(Ca,Mn,Zn,Mg,Fe,Sr)CO3	mineral	1	ss***	X	X	0	0	0	0
Carnallite	KMgCl3:6H2O	mineral	1	84har/mol	X	X	0	X	0	X
Carnallite	KMgCl3:6H2O	mineral	4	84har/mol	0	0	0	X	0	X
Carnotite	K2(UO2)2(VO4)2	mineral	1	78lan	X	X	0	0	0	0
Cassiterite	SnO2	mineral	1	supcrt92**	X	X	X	0	0	0
Cassiterite	SnO2	mineral	2	89cox/wag	0	0	0	0	0	0
Cattierite	CoS2	mineral	1	78vau/cra	X	X	0	X	0	0
Cd		mineral	2	89cox/wag	X	X	0	X	0	0
Cd(g)		mineral	2	89cox/wag	X	X	0	X	0	0
CdCr2O4		mineral	1	76del/hal	X	X	0	X	0	0
CdSO4:2.667H2O		mineral	2	92gre/fug	X	X	0	X	X	0
CdSeO3		mineral	1	82wag/eva	X	X	0	0	0	0
CdSeO4		mineral	1	82wag/eva	X	X	0	0	0	0
Ce		mineral	1	79rob/hem	X	X	0	X	0	0
Celadonite	KMgAlSi4O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Celadonite	KMgAlSi4O10(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Celestite	SrSO4	mineral	0	chemval*	0	0	0	0	0	0
Celestite	SrSO4	mineral	1	supcrt92**	X	X	X	X	0	0
Celestite	SrSO4	mineral	3	chemval*	0	0	0	0	0	0
Cerussite	PbCO3	mineral	1	supcrt92**	X	X	X	0	0	0
Chalcanthite	CuSO4:5H2O	mineral	1	82wag/eva	X	X	0	X	0	0
Chalcedony	SiO2	mineral	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Chalcocite	Cu2S	mineral	1	supcrt92**	X	X	X	0	0	0
Chalcocyanite	CuSO4	mineral	2	89cox/wag	X	X	0	X	0	0
Chalcopyrite	CuFeS2	mineral	1	supcrt92**	X	X	X	0	0	0
Chamosite-7A	Fe2Al2SiO5(OH)4	mineral	1	78wol	X	X	0	0	0	0
Chamosite-7A	Fe2Al2SiO5(OH)4	mineral	1	supcrt92**	0	0	0	0	0	0
Chlorargyrite	AgCl	mineral	1	supcrt92**	X	X	X	X	0	0
Chlorargyrite	AgCl	mineral	2	89cox/wag	0	0	0	0	0	0
Chlorite-ss	(Fe,Mg)5Al2Si3O10(OH)8	mineral	1	ss***	X	X	0	0	0	0
Chloritoid	FeAl2SiO5(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Chlorocalcite	KCaCl3	mineral	0		0	0	0	0	0	0
Chloromagnesite	MgCl2	mineral	1	79rob/hem	X	X	0	X	0	0
Chromite	FeCr2O4	mineral	1	82wag/eva	X	X	0	X	0	0
Chrysocolla	CuSiH4O5	mineral	1	87woo/gar	X	X	0	0	0	0
Chrysotile	Mg3Si2O5(OH)4	mineral	1	supcrt92**	X	X	X	0	0	0
Cinnabar	HgS	mineral	1	supcrt92**	X	X	X	0	0	0
Cl(g)		mineral	1	89cox/wag	0	0	0	0	0	0
Cl2(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Claudetite	As2O3	mineral	1	79rob/hem	X	X	0	0	0	0
Clausthalite	PbSe	mineral	2	82wag/eva	X	X	0	0	0	0
Clinochalcomenite	CuSeO3:2H2O	mineral	1	74nau/ryz	X	X	0	0	0	0
Clinochlore-14A	Mg5Al2Si3O10(OH)8	mineral	1	supcrt92**	X	X	X	0	0	0
Clinochlore-7A	Mg5Al2Si3O10(OH)8	mineral	1	supcrt92**	X	X	X	0	0	0
Clinoptilolite	Na.954K.543Ca.761Mg.124Sr.03	mineral	1	89db 6	X	X	0	0	0	0
Clinoptilolite-Ba	Ba1.7335Al3.45Fe.017Si14.533	mineral	1	89db2	0	0	0	0	0	0
Clinoptilolite-Ca	Ca1.7335Al3.45Fe.017Si14.533	mineral	1	89db 7	X	X	0	0	0	0
Clinoptilolite-Cs	Cs3.467Al3.45Fe.017Si14.533O	mineral	1	89db 7	X	X	0	0	0	0
Clinoptilolite-K	K3.467Al3.45Fe.017Si14.533O3	mineral	1	89db 7	X	X	0	0	0	0
Clinoptilolite-Mg	Mg1.7335Al3.45Fe.017Si14.533	mineral	1	89db2	0	0	0	0	0	0
Clinoptilolite-Mn	Mn1.7335Al3.45Fe.017Si14.533	mineral	1	89db2	0	0	0	0	0	0
Clinoptilolite-NH4	(NH4)3.467Al3.45Fe.017Si14.5	mineral	1	89db 7	X	X	0	0	0	0
Clinoptilolite-Na	Na3.467Al3.45Fe.017Si14.533O	mineral	1	89db 7	X	X	0	0	0	0
Clinoptilolite-Sr	Sr1.7335Al3.45Fe.017Si14.533	mineral	1	89db 7	X	X	0	0	0	0
Clinoptilolite-dehy	Sr.036Mg.124Ca.761Mn.002Ba.0	mineral	1	89db 6	X	X	0	0	0	0
Clinoptilolite-dehy-Ca	Ca1.7335Al3.45Fe.017Si14.533	mineral	1	89db 7	X	X	0	0	0	0
Clinoptilolite-dehy-Cs	Cs3.467Al3.45Fe.017Si14.533O	mineral	1	89db 7	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Clinoptilolite-dehy-K	K3.467Al3.45Fe.017Si14.533O3	mineral	1	89db 7	X	X	0	0	0	0
Clinoptilolite-dehy-NH4	(NH4)3.467Al3.45Fe.017Si14.5	mineral	1	89db 7	X	X	0	0	0	0
Clinoptilolite-dehy-Na	Na3.467Al3.45Fe.017Si14.533O	mineral	1	89db 7	X	X	0	0	0	0
Clinoptilolite-dehy-Sr	Sr1.7335Al3.45Fe.017Si14.533	mineral	1	89db 7	X	X	0	0	0	0
Clinoptilolite-hy-Ca	Ca1.7335Al3.45Fe.017Si14.533	mineral	1	viani	X	X	0	0	0	0
Clinoptilolite-hy-Cs	Cs3.467Al3.45Fe.017Si14.5330	mineral	1	viani	X	X	0	0	0	0
Clinoptilolite-hy-K	K3.467Al3.45Fe.017Si14.53303	mineral	1	viani	X	X	0	0	0	0
Clinoptilolite-hy-Na	Na3.467Al3.45Fe.017Si14.5330	mineral	1	viani	X	X	0	0	0	0
Clinoptilolite-hy-Sr	Sr1.7335Al3.45Fe.017Si14.533	mineral	1	viani	X	X	0	0	0	0
Clinoptilolite-hy-ss	(Na,K,Cs,NH4,Ca.5,Sr.5)3.467	mineral	1	ss***	X	X	0	0	0	0
Clinoptilolite-ss	(Na,K,Cs,NH4,Ca.5,Sr.5)3.467	mineral	1	ss***	X	X	0	0	0	0
Clinozoisite	Ca2Al3Si3O12(OH)	mineral	1	supcrt92**	X	X	X	0	0	0
Co		mineral	1	79rob/hem	X	X	0	X	0	0
Co(NO3)2		mineral	1	65gar/chr	X	X	0	X	0	0
Co(OH)2		mineral	0	73don	0	0	0	0	0	0
Co(OH)2		mineral	3	76bae/mes	X	X	0	X	0	0
Co2SiO4		mineral	2	82wag/eva	X	X	0	0	0	0
Co3(AsO4)2		mineral	1	82wag/eva	X	X	0	X	0	0
Co3(PO4)2		mineral	1	82wag/eva	X	X	0	X	0	0
CoBr2		mineral	0	82wag/eva	0	0	0	0	0	0
CoCl2		mineral	1	82wag/eva	X	X	0	X	0	0
CoCl2:2H2O		mineral	1	82wag/eva	X	X	0	X	0	0
CoCl2:6H2O		mineral	1	82wag/eva	X	X	0	X	0	0
CoF2		mineral	1	82wag/eva	X	X	0	X	0	0
CoF3		mineral	2	79kub/alc	X	X	0	0	0	0
CoFe2O4		mineral	1	74nau/ryz	X	X	0	0	0	0
CoHPO4		mineral	1	82wag/eva	X	X	0	X	0	0
CoO		mineral	1	82wag/eva	X	X	0	X	0	0
CoS		mineral	1	74nau/ryz	X	X	0	0	0	0
CoSO4		mineral	1	82wag/eva	X	X	0	X	0	0
CoSO4.3Co(OH)2		mineral	1	82wag/eva	X	X	0	X	0	0
CoSO4:6H2O		mineral	1	82wag/eva	X	X	0	X	0	0
CoSO4:H2O		mineral	1	74nau/ryz	X	X	0	X	0	0
CoSeO3		mineral	3	76smi/mar	X	X	0	0	0	0
CoWO4		mineral	1	74nau/ryz	X	X	0	0	0	0
Coesite	SiO2	mineral	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Coffinite	USiO4	mineral	0	chemval*	0	0	0	0	0	0
Coffinite	USiO4	mineral	1	82hem	0	0	0	0	0	0
Coffinite	USiO4	mineral	1	92gre/fug	X	X	0	0	X	0
Coffinite	USiO4	mineral	3	chemval*	0	0	0	0	0	0
Colemanite	Ca2B6O11:5H2O	mineral	1	77bas	X	X	0	0	0	0
Cordierite anhyd	Mg2Al4Si5O18	mineral	1	supcrt92**	X	X	X	0	0	0
Cordierite hydr	Mg2Al4Si5O18:H2O	mineral	1	supcrt92**	X	X	X	0	0	0
Corkite	PbFe3(PO4)(SO4)(OH)6	mineral	1	78ric/nri	X	X	0	0	0	0
Corundum	Al2O3	mineral	1	supcrt92**	X	X	X	X	0	0
Corundum	Al2O3	mineral	2	89cox/wag	0	0	0	0	0	0
Cotunnite	PbCl2	mineral	1	82wag/eva	X	X	0	X	0	0
Covellite	CuS	mineral	1	supcrt92**	X	X	X	0	0	0
Cr		mineral	1	79rob/hem	X	X	0	X	0	0
CrCl3		mineral	2	82wag/eva	X	X	0	X	0	0
CrF3		mineral	2	76del/hal	X	X	0	X	0	0
CrF4		mineral	2	76del/hal	X	X	0	X	0	0
CrI3		mineral	2	76del/hal	X	X	0	X	0	0
CrO2		mineral	2	76del/hal	X	X	0	X	0	0
CrO3		mineral	2	76del/hal	X	X	0	X	0	0
CrS		mineral	1	76del/hal	X	X	0	0	0	0
Cristobalite	SiO2	mineral	1	supcrt92**	X	X	X	0	0	0
Cristobalite-a	SiO2	mineral	1	supcrt92**	X	X	X	0	0	0
Cristobalite-b	SiO2	mineral	1	supcrt92**	X	X	X	0	0	0
Crocoite	PbCrO4	mineral	1	76del/hal	X	X	0	X	0	0
Cronstedtite-7A	Fe2Fe2SiO5(OH)4	mineral	1	78wol	X	X	0	0	0	0
Cronstedtite-7A	Fe2Fe2SiO5(OH)4	mineral	1	supcrt92**	0	0	0	0	0	0
Cs		mineral	2	89cox/wag	X	X	0	X	0	0
Cs(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Cs2U2O7		mineral	2	92gre/fug	X	X	0	X	X	0
Cs2U4O12		mineral	2	92gre/fug	X	X	0	X	X	0
Cs2UO4		mineral	1	82hem	0	0	0	0	0	0
Cs2UO4		mineral	2	92gre/fug	X	X	0	X	X	0
Cu		mineral	1	supcrt92**	X	X	X	X	0	0
Cu		mineral	2	89cox/wag	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Cu(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Cu3(PO4)2		mineral	1	82wag/eva	X	X	0	X	0	0
Cu3(PO4)2:3H2O		mineral	3	80bal/nor	X	X	0	X	0	0
CuCl2		mineral	1	82wag/eva	X	X	0	X	0	0
CuCr2O4		mineral	1	76del/hal	X	X	0	X	0	0
CuF		mineral	0	73don	0	0	0	0	0	0
CuF		mineral	3	80bal/nor	X	X	0	X	0	0
CuF2		mineral	0	90crc	0	0	0	0	0	0
CuF2		mineral	3	80bal/nor	X	X	0	X	0	0
CuF2:2H2O		mineral	0	90crc	0	0	0	0	0	0
CuF2:2H2O		mineral	3	80bal/nor	X	X	0	X	0	0
CuSeO3		mineral	1	82wag/eva	X	X	0	0	0	0
Cummingtonite	Mg7Si8O22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Cuprite	Cu2O	mineral	1	supcrt92**	X	X	X	X	0	0
Daphnite-14A	Fe5AlAlSi3O10(OH)8	mineral	1	78wol	X	X	0	0	0	0
Daphnite-14A	Fe5AlAlSi3O10(OH)8	mineral	1	supcrt92**	0	0	0	0	0	0
Daphnite-7A	Fe5AlAlSi3O10(OH)8	mineral	1	78wol	X	X	0	0	0	0
Daphnite-7A	Fe5AlAlSi3O10(OH)8	mineral	1	supcrt92**	0	0	0	0	0	0
Dawsonite	NaAlCO3(OH)2	mineral	1	79rob/hem	X	X	0	0	0	0
Delafossite	CuFeO2	mineral	1	74nau/ryz	X	X	0	X	0	0
Diaspore	AlHO2	mineral	1	supcrt92**	X	X	X	X	0	0
Dicalcium silicate	Ca2SiO4	mineral	2	82wag/eva	X	X	0	0	0	0
Dickite	Al2Si2O5(OH)4	mineral	1	supcrt92**	0	0	0	0	0	0
Diopside	CaMgSi2O6	mineral	1	supcrt92**	X	X	X	0	0	0
Dioptase	CuSiO2(OH)2	mineral	1	87woo/gar	X	X	0	0	0	0
Dolomite	CaMg(CO3)2	mineral	0	chemval*	0	0	0	0	0	0
Dolomite	CaMg(CO3)2	mineral	1	supcrt92**	X	X	X	0	0	0
Dolomite	CaMg(CO3)2	mineral	3	chemval*	0	0	0	0	0	0
Dolomite	CaMg(CO3)2	mineral	4	84har/mol	0	0	0	0	0	X
Dolomite-dis	CaMg(CO3)2	mineral	1	supcrt92**	X	X	X	0	0	0
Dolomite-ord	CaMg(CO3)2	mineral	1	supcrt92**	X	X	X	0	0	0
Downeyite	SeO2	mineral	0	92gre/fug	0	0	0	0	0	0
Downeyite	SeO2	mineral	2	74mil	X	X	0	0	0	0
Dy		mineral	1	79rob/hem	X	X	0	X	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Edenite	NaCa2Mg5Si7AlO22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Enstatite	MgSiO3	mineral	1	supcrt92**	X	X	X	0	0	0
Epidote	Ca2FeAl2Si3O12OH	mineral	1	supcrt92**	X	X	X	0	0	0
Epidote-ord	FeCa2Al2(OH)(SiO4)3	mineral	1	supcrt92**	X	X	X	0	0	0
Epidote-ss	Ca2(Fe,Al)Al2Si3O12(OH)	mineral	1	ss***	X	X	0	0	0	0
Epsomite	MgSO4:7H2O	mineral	1	84har/mol	X	X	0	X	0	X
Epsomite	MgSO4:7H2O	mineral	4	84har/mol	0	0	0	X	0	X
Er		mineral	1	79rob/hem	X	X	0	X	0	0
Erythrite	Co3(AsO4)2:8H2O	mineral	1	74nau/ryz	X	X	0	X	0	0
Eskolaite	Cr2O3	mineral	1	82wag/eva	X	X	0	X	0	0
Ettringite	Ca6Al2(SO4)3(OH)12:26H2O	mineral	2	82sar/bar	X	X	0	X	0	0
Eu		mineral	1	85rar 2	X	X	0	X	0	0
Eu(IO3)3:2H2O		mineral	1	85rar 2	X	X	0	X	0	0
Eu(NO3)3:6H2O		mineral	1	85rar 2	X	X	0	X	0	0
Eu(OH)2.5Cl.5		mineral	1	85rar 2	X	X	0	X	0	0
Eu(OH)2Cl		mineral	1	85rar 2	X	X	0	X	0	0
Eu(OH)3		mineral	1	87rar 2	X	X	0	X	0	0
Eu2(CO3)3:3H2O		mineral	1	87rar 2	X	X	0	0	0	0
Eu2(SO4)3:8H2O		mineral	1	85rar 2	X	X	0	X	0	0
Eu2O3(cubic)		mineral	1	85rar 2	X	X	0	X	0	0
Eu2O3(monoclinic)		mineral	1	85rar 2	X	X	0	X	0	0
Eu3O4		mineral	1	85rar 2	X	X	0	X	0	0
EuBr3		mineral	1	85rar 2	X	X	0	X	0	0
EuCl2		mineral	2	87rar 2	X	X	0	X	0	0
EuCl3		mineral	1	85rar 2	X	X	0	X	0	0
EuCl3:6H2O		mineral	1	85rar 2	X	X	0	X	0	0
EuF3:0.5H2O		mineral	1	85rar 2	X	X	0	X	0	0
EuO		mineral	1	85rar 2	X	X	0	X	0	0
EuOCl		mineral	1	87rar 2	X	X	0	X	0	0
EuS		mineral	1	85rar 2	X	X	0	0	0	0
EuSO4		mineral	1	85rar 2	X	X	0	X	0	0
Eucryptite	LiAlSiO4	mineral	1	82wag/eva	X	X	0	0	0	0
F(g)		mineral	2	89cox/wag	0	0	0	0	0	0
F2(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Fayalite	Fe2SiO4	mineral	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Fe		mineral	1	supcrt92**	X	X	X	X	0	0
Fe(OH)2		mineral	1	82wag/eva	X	X	0	X	0	0
Fe(OH)3		mineral	0	chemval*	0	0	0	0	0	0
Fe(OH)3		mineral	1	82wag/eva	X	X	0	0	0	0
Fe(OH)3		mineral	3	chemval*	0	0	0	0	0	0
Fe2(SO4)3		mineral	1	79rob/hem	X	X	0	0	0	0
FeAsO4		mineral	3	64sil/mar	X	X	0	0	0	0
FeF2		mineral	1	82wag/eva	X	X	0	X	0	0
FeF3		mineral	2	79kub/alc	X	X	0	0	0	0
FeO		mineral	1	supcrt92**	X	X	X	X	0	0
FeSO4		mineral	1	82wag/eva	X	X	0	X	0	0
FeSe		mineral	2	78vau/cra	0	0	0	0	0	0
FeV2O4		mineral	2	79kub/alc	X	X	0	0	0	0
Ferrite-Ca	CaFe2O4	mineral	1	82sar/bar	X	X	0	0	0	0
Ferrite-Cu	CuFe2O4	mineral	1	82wag/eva	X	X	0	0	0	0
Ferrite-Dicalcium	Ca2Fe2O5	mineral	1	79rob/hem	X	X	0	0	0	0
Ferrite-Mg	MgFe2O4	mineral	1	79rob/hem	X	X	0	0	0	0
Ferrite-Zn	ZnFe2O4	mineral	1	82wag/eva	X	X	0	0	0	0
Ferroedenite	NaCa2Fe5Si7AlO22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Ferrogedrite	Fe5Al4Si6O22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Ferropargasite	NaCa2Fe4Al3Si6O22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Ferroselite	FeSe2	mineral	2	74mil	X	X	0	0	0	0
Ferrosilite	FeSiO3	mineral	1	supcrt92**	X	X	X	0	0	0
Ferrotremolite	Ca2Fe5Si8O22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Fluorapatite	Ca5(PO4)3F	mineral	1	79rob/hem	X	X	0	X	0	0
Fluoredenite	NaCa2Mg5Si7AlO22F2	mineral	1	supcrt92**	0	0	0	0	0	0
Fluorite	CaF2	mineral	1	supcrt92**	X	X	X	X	0	0
Fluorphlogopite	KAlMg3Si3O10F2	mineral	1	supcrt92**	0	0	0	0	0	0
Fluortremolite	Ca2Mg5Si8O22F2	mineral	1	supcrt92**	0	0	0	0	0	0
Forsterite	Mg2SiO4	mineral	1	supcrt92**	X	X	X	0	0	0
Foshagite	Ca4Si3O9(OH)2:0.5H2O	mineral	1	82sar/bar	X	X	0	0	0	0
Fr		mineral	1	82wag/eva	0	0	0	0	0	0
Frankdicksonite	BaF2	mineral	1	82wag/eva	0	0	0	0	0	0
Frankdicksonite	BaF2	mineral	3	76smi/mar	X	X	0	X	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Freboldite	CoSe	mineral	1	78vau/cra	X	X	0	0	0	0
Ga		mineral	1	79rob/hem	X	X	0	X	0	0
Galena	PbS	mineral	1	supcrt92**	X	X	X	0	0	0
Garnet-ss	Ca3(Al,Fe)2Si3O12	mineral	1	ss***	X	X	0	0	0	0
Gaylussite	CaNa2(CO3)2:5H2O	mineral	1	84har/mol	X	X	0	0	0	X
Gaylussite	CaNa2(CO3)2:5H2O	mineral	4	84har/mol	0	0	0	0	0	X
Gd		mineral	1	79rob/hem	X	X	0	X	0	0
Ge		mineral	1	89cox/wag	0	0	0	0	0	0
Ge(g)		mineral	2	89cox/wag	0	0	0	0	0	0
GeF4(g)		mineral	2	89cox/wag	0	0	0	0	0	0
GeO2		mineral	2	89cox/wag	0	0	0	0	0	0
Gehlenite	Ca2Al2SiO7	mineral	1	supcrt92**	X	X	X	0	0	0
Gibbsite	Al(OH)3	mineral	1	supcrt92**	X	X	X	X	0	0
Gismondine	Ca2Al4Si4O16:9H2O	mineral	1	89db 3	X	X	0	0	0	0
Glauberite	Na2Ca(SO4)2	mineral	1	84har/mol	X	X	0	X	0	X
Glauberite	Na2Ca(SO4)2	mineral	4	84har/mol	0	0	0	X	0	X
Glaucophane	Na2Al2Mg3Si8O22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Goethite	FeOOH	mineral	1	79rob/hem	X	X	0	0	0	0
Greenalite	Fe3Si2O5(OH)4	mineral	1	78wol	X	X	0	0	0	0
Greenalite	Fe3Si2O5(OH)4	mineral	1	supcrt92**	0	0	0	0	0	0
Grossular	Ca3Al2(SiO4)3	mineral	1	supcrt92**	X	X	X	0	0	0
Grunerite	Fe7Si8O22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Gypsum	CaSO4:2H2O	mineral	0	chemval*	0	0	0	0	0	0
Gypsum	CaSO4:2H2O	mineral	1	79rob/hem	X	X	0	X	0	0
Gypsum	CaSO4:2H2O	mineral	3	chemval*	0	0	0	0	0	0
Gypsum	CaSO4:2H2O	mineral	4	84har/mol	0	0	0	0	0	X
Gyrolite	Ca2Si3O7(OH)2:1.5H2O	mineral	1	82sar/bar	X	X	0	0	0	0
H(g)		mineral	2	89cox/wag	0	0	0	0	0	0
H-Autunite	H2(UO2)2(PO4)2	mineral	1	92gre/fug	X	X	0	X	X	0
H2(g)		mineral	1	supcrt92**	X	X	X	X	0	0
H2(g)		mineral	2	89cox/wag	0	0	0	0	0	0
H2(g)		mineral	4	84har/mol	0	0	0	0	0	X
H2O(g)		mineral	1	supcrt92**	X	X	X	X	0	0
H2O(g)		mineral	2	89cox/wag	0	0	0	0	0	0
H2S(g)		mineral	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
H2S(g)		mineral	2	89cox/wag	0	0	0	0	0	0
H3OUF6		mineral	0	92gre/fug	0	0	0	0	0	0
HBr(g)		mineral	2	89cox/wag	X	X	0	X	0	0
HCl(g)		mineral	2	89cox/wag	X	X	0	X	0	0
HF		mineral	1	79rob/hem	0	0	0	0	0	0
HF(g)		mineral	2	89cox/wag	X	X	0	X	0	0
HI(g)		mineral	2	89cox/wag	X	X	0	X	0	0
HTcO4		mineral	1	83rar	X	X	0	0	0	0
Haiweeite	Ca(UO2)2(Si2O5)3:5H2O	mineral	1	82hem	X	X	0	0	0	0
Halite	NaCl	mineral	1	supcrt92**	X	X	X	X	0	0
Halite	NaCl	mineral	4	84har/mol	0	0	0	0	0	X
Halloysite	Al2Si2O5(OH)4	mineral	1	supcrt92**	0	0	0	0	0	0
Hastingsite	NaAl2Ca2Fe5Si6O22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Hatrurite	Ca3SiO5	mineral	1	82sar/bar	X	X	0	0	0	0
Hausmannite	Mn3O4	mineral	1	79rob/hem	X	X	0	X	0	0
He(g)		mineral	1	supcrt92**	X	X	X	0	0	0
He(g)		mineral	2	89cox/wag	0	0	0	0	0	0
Heazlewoodite	Ni3S2	mineral	1	82wag/eva	X	X	0	0	0	0
Hedenbergite	CaFe(SiO3)2	mineral	1	supcrt92**	X	X	X	0	0	0
Hematite	Fe2O3	mineral	1	supcrt92**	X	X	X	0	0	0
Hercynite	FeAl2O4	mineral	1	79rob/hem	X	X	0	X	0	0
Herzenbergite	SnS	mineral	1	supcrt92**	X	X	X	0	0	0
Heulandite	Ba.065Sr.175Ca.585K.132Na.38	mineral	1	85joh/flo	X	X	0	0	0	0
Heulandite	Ba.065Sr.175Ca.585K.132Na.38	mineral	1	supcrt92**	0	0	0	0	0	0
Hexahydrite	MgSO4:6H2O	mineral	1	84har/mol	X	X	0	X	0	X
Hexahydrite	MgSO4:6H2O	mineral	4	84har/mol	0	0	0	X	0	X
Hg(g)		mineral	2	89cox/wag	X	X	0	0	0	0
Hg(l)		mineral	1	supcrt92**	X	X	X	0	0	0
Hg(l)		mineral	2	89cox/wag	0	0	0	0	0	0
Hg2SO4		mineral	2	89cox/wag	X	X	0	0	0	0
Hg2SeO3		mineral	1	82wag/eva	X	X	0	0	0	0
HgSeO3		mineral	1	82wag/eva	X	X	0	0	0	0
Hillebrandite	Ca2SiO3(OH)2:0.17H2O	mineral	1	82sar/bar	X	X	0	0	0	0
Hinsdalite	Al3PPbSO8(OH)6	mineral	0	86jen	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Hinsdalite	Al3PPbSO8(OH)6	mineral	3	80bal/nor	X	X	0	X	0	0
Ho		mineral	1	82wag/eva	X	X	0	X	0	0
Hopeite	Zn3(PO4)2:4H2O	mineral	0	90crc	0	0	0	0	0	0
Hopeite	Zn3(PO4)2:4H2O	mineral	3	76smi/mar	X	X	0	X	0	0
Huntite	CaMg3(CO3)4	mineral	1	supcrt92**	X	X	X	0	0	0
Hydroboracite	MgCaB6O11:6H2O	mineral	1	77bas	X	X	0	0	0	0
Hydrocerussite	Pb3(CO3)2(OH)2	mineral	1	78ric/nri	X	X	0	0	0	0
Hydromagnesite	Mg5(CO3)4(OH)2:4H2O	mineral	1	supcrt92**	X	X	X	0	0	0
Hydrophilite	CaCl2	mineral	1	79rob/hem	X	X	0	X	0	0
Hydroxylapatite	Ca5(OH)(PO4)3	mineral	1	79rob/hem	X	X	0	X	0	0
I(g)		mineral	2	89cox/wag	0	0	0	0	0	0
I2		mineral	2	89cox/wag	X	X	0	X	0	0
I2(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Ice	H2O	mineral	2	87kee/rup	X	X	0	X	0	0
Illite	K0.6Mg0.25Al1.8Al0.5Si3.5O10	mineral	1	78wol	X	X	0	0	0	0
Ilmenite	FeTiO3	mineral	1	79rob/hem	X	X	0	0	0	0
In		mineral	1	79rob/hem	X	X	0	X	0	0
Ir		mineral	1	79rob/hem	0	0	0	0	0	0
Jadeite	NaAl(SiO3)2	mineral	1	supcrt92**	X	X	X	0	0	0
Jarosite	KFe3(SO4)2(OH)6	mineral	1	75kas/bor	X	X	0	0	0	0
Jarosite-Na	Fe3(SO4)2(OH)6	mineral	1	75kas/bor	X	X	0	0	0	0
K		mineral	2	89cox/wag	X	X	0	X	0	0
K(g)		mineral	2	89cox/wag	X	X	0	X	0	0
K-Feldspar	KAlSi3O8	mineral	1	supcrt92**	X	X	X	0	0	0
K2CO3:3/2H2O		mineral	1	84har/mol	X	X	0	0	0	X
K2CO3:3/2H2O		mineral	4	84har/mol	0	0	0	0	0	X
K2CaCl4		mineral	0		0	0	0	0	0	0
K2O		mineral	1	supcrt92**	X	X	X	X	0	0
K2Se		mineral	2	74mil	X	X	0	0	0	0
K2SiO3		mineral	2	77pau	0	0	0	0	0	0
K2TcCl6		mineral	0	83rar	0	0	0	0	0	0
K2U2O7		mineral	0	92gre/fug	0	0	0	0	0	0
K2UO4		mineral	2	92gre/fug	X	X	0	X	X	0
K3H(SO4)2		mineral	1	84har/mol	X	X	0	X	0	X

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
K3H(SO4)2		mineral	4	84har/mol	0	0	0	X	0	X
K8H4(CO3)6:3H2O		mineral	1	84har/mol	X	X	0	0	0	X
K8H4(CO3)6:3H2O		mineral	4	84har/mol	0	0	0	0	0	X
KAl(SO4)2		mineral	1	79rob/hem	X	X	0	X	0	0
KBr		mineral	2	82wag/eva	X	X	0	X	0	0
KMgCl3		mineral	2	82wag/eva	X	X	0	X	0	0
KMgCl3:2H2O		mineral	2	82wag/eva	X	X	0	X	0	0
KNaCO3:6H2O		mineral	1	84har/mol	X	X	0	0	0	X
KNaCO3:6H2O		mineral	4	84har/mol	0	0	0	0	0	X
KTcO4		mineral	1	83rar	X	X	0	0	0	0
KUO2AsO4		mineral	1	82wag/eva	X	X	0	X	0	0
KUO3		mineral	0	92gre/fug	0	0	0	0	0	0
Kainite	KMgClSO4:3H2O	mineral	1	84har/mol	X	X	0	X	0	X
Kainite	KMgClSO4:3H2O	mineral	4	84har/mol	0	0	0	X	0	X
Kalicinite	KHCO3	mineral	1	84har/mol	X	X	0	0	0	X
Kalicinite	KHCO3	mineral	4	84har/mol	0	0	0	0	0	X
Kalsilite	KAlSiO4	mineral	1	supcrt92**	X	X	X	0	0	0
Kaolinite	Al2Si2O5(OH)4	mineral	1	supcrt92**	X	X	X	0	0	0
Karelianite	V2O3	mineral	1	82wag/eva	X	X	0	0	0	0
Kasolite	Pb(UO2)SiO4:H2O	mineral	1	82hem	X	X	0	0	0	0
Katoite	Ca3Al2H12O12	mineral	1	82sar/bar	X	X	0	X	0	0
Kieserite	MgSO4:H2O	mineral	1	84har/mol	X	X	0	X	0	X
Kieserite	MgSO4:H2O	mineral	4	84har/mol	0	0	0	X	0	X
Klockmannite	CuSe	mineral	2	74mil	X	X	0	0	0	0
Kr(g)		mineral	1	supcrt92**	X	X	X	0	0	0
Kr(g)		mineral	2	89cox/wag	0	0	0	0	0	0
Krutaite	CuSe2	mineral	2	78vau/cra	X	X	0	0	0	0
Kyanite	Al2SiO5	mineral	1	supcrt92**	X	X	X	0	0	0
La		mineral	1	79rob/hem	X	X	0	X	0	0
Lammerite	Cu3(AsO4)2	mineral	1	82wag/eva	X	X	0	X	0	0
Lanarkite	Pb2(SO4)O	mineral	1	82wag/eva	X	X	0	X	0	0
Lansfordite	MgCO3:5H2O	mineral	1	82wag/eva	X	X	0	0	0	0
Larnite	Ca2SiO4	mineral	1	supcrt92**	0	0	0	0	0	0
Larnite	Ca2SiO4	mineral	2	82sar/bar	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Laumontite	CaAl2Si4O12:4H2O	mineral	1	supcrt92**	X	X	X	0	0	0
Laurite	RuS2	mineral	1	85rar 1	X	X	0	0	0	0
Lawrencite	FeCl2	mineral	1	79rob/hem	X	X	0	X	0	0
Lawsonite	CaAl2Si2O7(OH)2:H2O	mineral	1	supcrt92**	X	X	X	0	0	0
Leonhardite	Ca2Al4Si8O24:7H2O	mineral	1	supcrt92**	0	0	0	0	0	0
Leonite	K2Mg(SO4)2:4H2O	mineral	1	84har/mol	X	X	0	X	0	X
Leonite	K2Mg(SO4)2:4H2O	mineral	4	84har/mol	0	0	0	X	0	X
Li		mineral	2	89cox/wag	X	X	0	X	0	0
Li(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Li2Se		mineral	2	74mil	X	X	0	0	0	0
Li2SiO3		mineral	3	81wag	0	0	0	0	0	0
Li2U2O7		mineral	0	92gre/fug	0	0	0	0	0	0
Li2U3O10		mineral	0	92gre/fug	0	0	0	0	0	0
Li2UO4		mineral	2	92gre/fug	X	X	0	X	X	0
Li4UO5		mineral	0	92gre/fug	0	0	0	0	0	0
LiUO2AsO4		mineral	1	82wag/eva	X	X	0	X	0	0
LiUO3		mineral	0	92gre/fug	0	0	0	0	0	0
Lime	CaO	mineral	1	supcrt92**	X	X	X	X	0	0
Lime	CaO	mineral	2	89cox/wag	0	0	0	0	0	0
Linnaeite	Co3S4	mineral	1	78vau/cra	X	X	0	X	0	0
Litharge	PbO	mineral	1	82wag/eva	X	X	0	X	0	0
Lopezite	K2Cr2O7	mineral	1	76del/hal	X	X	0	X	0	0
Lu		mineral	1	79rob/hem	X	X	0	X	0	0
Magadiite	NaSi7O13(OH)3:3H2O	mineral	3	74tru/jon	0	0	0	0	0	0
Magnesiochromite	MgCr2O4	mineral	2	82wag/eva	X	X	0	X	0	0
Magnesiohastingsite	NaAl2Ca2FeMg4Si6O22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Magnesioriebeckite	Na2Fe2Mg3Si8O22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Magnesite	MgCO3	mineral	1	supcrt92**	X	X	X	0	0	0
Magnesite	MgCO3	mineral	4	84har/mol	0	0	0	0	0	X
Magnetite	Fe3O4	mineral	1	supcrt92**	X	X	X	0	0	0
Malachite	Cu2CO3(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
Manganite	MnHO2	mineral	1	65bri	X	X	0	X	0	0
Manganosite	MnO	mineral	1	supcrt92**	X	X	X	X	0	0
Margarite	CaAl4Si2O10(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Massicot	PbO	mineral	1	82wag/eva	X	X	0	X	0	0
Matlockite	PbFCl	mineral	0	67rob/bet	0	0	0	0	0	0
Matlockite	PbFCl	mineral	3	80bal/nor	X	X	0	X	0	0
Maximum Microcline	KAlSi3O8	mineral	1	supcrt92**	X	X	X	0	0	0
Mayenite	Ca12Al14O33	mineral	1	82sar/bar	X	X	0	X	0	0
Melanterite	FeSO4:7H2O	mineral	1	79rob/hem	X	X	0	X	0	0
Mercallite	KHSO4	mineral	1	84har/mol	X	X	0	X	0	X
Mercallite	KHSO4	mineral	4	84har/mol	0	0	0	X	0	X
Merwinite	MgCa3(SiO4)2	mineral	1	supcrt92**	X	X	X	0	0	0
Mesolite	Na.676Ca.657Al1.99Si3.01O10:	mineral	1	89db 6	X	X	0	0	0	0
Mesolite	Na.676Ca.657Al1.99Si3.01O10:	mineral	2	83joh/flo	0	0	0	0	0	0
Metacinnabar	HgS	mineral	1	supcrt92**	X	X	X	0	0	0
Metasilicate-Na	Na2SiO3:9H2O	mineral	0	82wag/eva	0	0	0	0	0	0
Mg		mineral	2	89cox/wag	X	X	0	X	0	0
Mg(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Mg1.25SO4(OH)0.5:0.5H2O		mineral	1	82jan	X	X	0	0	0	0
Mg1.5SO4(OH)		mineral	1	82jan	X	X	0	0	0	0
Mg2V2O7		mineral	1	82wag/eva	X	X	0	0	0	0
Mg3(AsO4)2		mineral	3	64sil/mar	X	X	0	X	0	0
MgBr2		mineral	2	73bar/kna	X	X	0	X	0	0
MgBr2:6H2O		mineral	1	82wag/eva	X	X	0	X	0	0
MgCl2:2H2O		mineral	1	82wag/eva	X	X	0	X	0	0
MgCl2:4H2O		mineral	1	82wag/eva	X	X	0	X	0	0
MgCl2:H2O		mineral	1	82wag/eva	X	X	0	X	0	0
MgOHCl		mineral	2	73bar/kna	X	X	0	X	0	0
MgSO4		mineral	1	82wag/eva	X	X	0	X	0	0
MgSeO3		mineral	2	77bar/kna	X	X	0	0	0	0
MgSeO3:6H2O		mineral	1	74nau/ryz	X	X	0	0	0	0
MgU3O10		mineral	0	92gre/fug	0	0	0	0	0	0
MgUO4		mineral	0	chemval*	0	0	0	0	0	0
MgUO4		mineral	2	92gre/fug	X	X	0	X	X	0
MgUO4		mineral	3	chemval*	0	0	0	0	0	0
MgV2O6		mineral	1	82wag/eva	X	X	0	0	0	0
Millerite	NiS	mineral	1	82wag/eva	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Minium	Pb3O4	mineral	1	82wag/eva	X	X	0	0	0	0
Minnesotaite	Fe3Si4O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Minnesotaite	Fe3Si4O10(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Mirabilite	Na2SO4:10H2O	mineral	1	79rob/hem	X	X	0	X	0	0
Mirabilite	Na2SO4:10H2O	mineral	4	84har/mol	0	0	0	0	0	X
Misenite	K8H6(SO4)7	mineral	1	84har/mol	X	X	0	X	0	X
Misenite	K8H6(SO4)7	mineral	4	84har/mol	0	0	0	X	0	X
Mn		mineral	1	79rob/hem	X	X	0	X	0	0
Mn(OH)2(am)		mineral	1	82wag/eva	X	X	0	X	0	0
Mn(OH)3		mineral	3	76plu/jon	X	X	0	0	0	0
Mn3(AsO4)2		mineral	0	73don	0	0	0	0	0	0
Mn3(AsO4)2		mineral	3	64sil/mar	X	X	0	X	0	0
Mn3(PO4)2		mineral	0	86jen	0	0	0	0	0	0
Mn3(PO4)2		mineral	3	76plu/jon	X	X	0	X	0	0
MnCl2:2H2O		mineral	1	82wag/eva	X	X	0	X	0	0
MnCl2:4H2O		mineral	1	82wag/eva	X	X	0	X	0	0
MnCl2:H2O		mineral	1	82wag/eva	X	X	0	X	0	0
MnHPO4		mineral	3	76plu/jon	X	X	0	X	0	0
MnO2(gamma)		mineral	1	65bri	X	X	0	X	0	0
MnSO4		mineral	1	79rob/hem	X	X	0	X	0	0
MnSe		mineral	2	74mil	X	X	0	0	0	0
MnSeO3		mineral	3	76smi/mar	X	X	0	0	0	0
MnSeO3:2H2O		mineral	1	74nau/ryz	X	X	0	0	0	0
MnV2O6		mineral	1	76isr/mei	X	X	0	0	0	0
Mo		mineral	1	79rob/hem	X	X	0	0	0	0
MoSe2		mineral	2	74mil	X	X	0	0	0	0
Modderite	CoAs	mineral	1	74nau/ryz	X	X	0	0	0	0
Molybdomenite	PbSeO3	mineral	0	82wag/eva	0	0	0	0	0	0
Molysite	FeCl3	mineral	1	79rob/hem	X	X	0	0	0	0
Monohydrocalcite	CaCO3:H2O	mineral	1	79rob/hem	X	X	0	0	0	0
Monteponite	CdO	mineral	2	89cox/wag	X	X	0	X	0	0
Monticellite	CaMgSiO4	mineral	1	supcrt92**	X	X	X	0	0	0
Montmor-Ca	Ca.165Mg.33Al1.67Si4O10(OH)2	mineral	1	88db 3	X	X	0	0	0	0
Montmor-Cs	Cs.33Mg.33Al1.67Si4O10(OH)2	mineral	1	88db 4	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Montmor-K	K.33Mg.33Al1.67Si4O10(OH)2	mineral	1	88db 3	X	X	0	0	0	0
Montmor-Mg	Mg.495Al1.67Si4O10(OH)2	mineral	1	88db 3	X	X	0	0	0	0
Montmor-Na	Na.33Mg.33Al1.67Si4O10(OH)2	mineral	1	88db 3	X	X	0	0	0	0
Montroydite	HgO	mineral	2	89cox/wag	X	X	0	0	0	0
Mordenite	Ca.2895Na.361Al.94Si5.06O12:	mineral	1	91joh/tas	X	X	0	0	0	0
Mordenite-dehy	Ca.2895Na.361Al.94Si5.06O12	mineral	1	91joh/tas	X	X	0	0	0	0
Morenosite	NiSO4:7H2O	mineral	1	82wag/eva	X	X	0	X	0	0
Muscovite	KAl3Si3O10(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
N(g)		mineral	2	89cox/wag	0	0	0	0	0	0
N2(g)		mineral	1	supcrt92**	X	X	X	X	0	0
N2(g)		mineral	2	89cox/wag	0	0	0	0	0	0
NH3(g)		mineral	1	supcrt92**	X	X	X	X	0	0
NH3(g)		mineral	2	89cox/wag	0	0	0	0	0	0
NH4HSe		mineral	1	82wag/eva	X	X	0	0	0	0
Na		mineral	2	89cox/wag	X	X	0	X	0	0
Na(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Na2CO3		mineral	2	82wag/eva	X	X	0	0	0	0
Na2CO3:7H2O		mineral	1	82wag/eva	X	X	0	0	0	0
Na2CO3:7H2O		mineral	4	84har/mol	0	0	0	0	0	X
Na2Cr2O7		mineral	2	76del/hal	X	X	0	X	0	0
Na2CrO4		mineral	2	76del/hal	X	X	0	X	0	0
Na2Mg(SO4)2		mineral	0		0	0	0	0	0	0
Na2O		mineral	1	supcrt92**	X	X	X	X	0	0
Na2Se		mineral	2	74mil	X	X	0	0	0	0
Na2Se2		mineral	2	74mil	X	X	0	0	0	0
Na2SiO3		mineral	2	73bar/kna	X	X	0	0	0	0
Na2U2O7		mineral	2	92gre/fug	X	X	0	X	X	0
Na2UO4(alpha)		mineral	0	chemval*	0	0	0	0	0	0
Na2UO4(alpha)		mineral	2	92gre/fug	X	X	0	X	X	0
Na2UO4(alpha)		mineral	3	chemval*	0	0	0	0	0	0
Na2UO4(beta)		mineral	0	92gre/fug	0	0	0	0	0	0
Na3H(SO4)2		mineral	1	84har/mol	X	X	0	X	0	X
Na3H(SO4)2		mineral	4	84har/mol	0	0	0	X	0	X
Na3UO4		mineral	0	chemval*	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Na3UO4		mineral	2	92gre/fug	X	X	0	0	X	0
Na3UO4		mineral	3	chemval*	0	0	0	0	0	0
Na4Ca(SO4)3:2H2O		mineral	1	84har/mol	X	X	0	X	0	X
Na4Ca(SO4)3:2H2O		mineral	4	84har/mol	0	0	0	X	0	X
Na4SiO4		mineral	2	73bar/kna	X	X	0	0	0	0
Na4UO2(CO3)3		mineral	1	92gre/fug	X	X	0	0	X	0
Na4UO5		mineral	0	92gre/fug	0	0	0	0	0	0
Na6Si2O7		mineral	2	73bar/kna	X	X	0	0	0	0
Na6U7O24		mineral	0	92gre/fug	0	0	0	0	0	0
NaBr		mineral	2	82wag/eva	X	X	0	X	0	0
NaBr:2H2O		mineral	1	82wag/eva	X	X	0	X	0	0
NaFeO2		mineral	1	82wag/eva	X	X	0	0	0	0
NaNpO2CO3:3.5H2O		mineral	1	84lem	X	X	0	0	0	0
NaTcO4		mineral	1	83rar	X	X	0	0	0	0
NaUO3		mineral	0	chemval*	0	0	0	0	0	0
NaUO3		mineral	2	92gre/fug	X	X	0	X	X	0
NaUO3		mineral	3	chemval*	0	0	0	0	0	0
Nahcolite	NaHCO3	mineral	2	73bar/kna	X	X	0	0	0	0
Nahcolite	NaHCO3	mineral	4	84har/mol	0	0	0	0	0	X
Nantokite	CuCl	mineral	1	82wag/eva	X	X	0	X	0	0
Natrolite	Na2Al2Si3O10:2H2O	mineral	1	83joh/flo	X	X	0	0	0	0
Natrolite	Na2Al2Si3O10:2H2O	mineral	1	supcrt92**	0	0	0	0	0	0
Natron	Na2CO3:10H2O	mineral	1	82wag/eva	X	X	0	0	0	0
Natron	Na2CO3:10H2O	mineral	4	84har/mol	0	0	0	0	0	X
Natrosilite	Na2Si2O5	mineral	2	77bar/kna	X	X	0	0	0	0
Naumannite	Ag2Se	mineral	1	82wag/eva	X	X	0	0	0	0
Nb		mineral	1	79rob/hem	0	0	0	0	0	0
Nd		mineral	1	79rob/hem	X	X	0	X	0	0
Ne(g)		mineral	1	supcrt92**	X	X	X	0	0	0
Ne(g)		mineral	2	89cox/wag	0	0	0	0	0	0
Nepheline	NaAlSiO4	mineral	1	supcrt92**	X	X	X	0	0	0
Nesquehonite	MgCO3:3H2O	mineral	1	supcrt92**	X	X	X	0	0	0
Nesquehonite	MgCO3:3H2O	mineral	4	84har/mol	0	0	0	0	0	X
Ni		mineral	1	supcrt92**	X	X	X	X	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Ni(OH)2		mineral	1	82wag/eva	X	X	0	X	0	0
Ni2P2O7		mineral	1	82wag/eva	X	X	0	X	0	0
Ni2SiO4		mineral	1	74nau/ryz	X	X	0	0	0	0
Ni3(PO4)2		mineral	1	82wag/eva	X	X	0	X	0	0
NiCO3		mineral	1	82wag/eva	X	X	0	0	0	0
NiCl2		mineral	1	82wag/eva	X	X	0	X	0	0
NiCl2:2H2O		mineral	1	82wag/eva	X	X	0	X	0	0
NiCl2:4H2O		mineral	1	82wag/eva	X	X	0	X	0	0
NiCr2O4		mineral	0	76del/hal	0	0	0	0	0	0
NiF2		mineral	1	82wag/eva	X	X	0	X	0	0
NiF2:4H2O		mineral	1	82wag/eva	X	X	0	X	0	0
NiSO4		mineral	1	82wag/eva	X	X	0	X	0	0
NiSO4:6H2O(alpha)		mineral	1	82wag/eva	X	X	0	X	0	0
Nickelbischofite	NiCl2:6H2O	mineral	1	82wag/eva	X	X	0	X	0	0
Ningyoite	CaUP2O8:2H2O	mineral	1	78lan	X	X	0	0	0	0
Niter	KNO3	mineral	2	79rob/hem	X	X	0	X	0	0
Nitrobarite	Ba(NO3)2	mineral	1	82wag/eva	X	X	0	X	0	0
Nontronite-Ca	Ca.165Fe2Al.33Si3.67H2O12	mineral	1	78wol	X	X	0	0	0	0
Nontronite-Cs	Cs.33Si4Fe1.67Mg.33H2O12	mineral	1	88db 4	X	X	0	0	0	0
Nontronite-H	H.33Fe2Al.33Si3.67H2O12	mineral	1	78wol	X	X	0	0	0	0
Nontronite-K	K.33Fe2Al.33Si3.67H2O12	mineral	1	78wol	X	X	0	0	0	0
Nontronite-Mg	Mg.165Fe2Al.33Si3.67H2O12	mineral	1	78wol	X	X	0	0	0	0
Nontronite-Na	Na.33Fe2Al.33Si3.67H2O12	mineral	1	78wol	X	X	0	0	0	0
Np		mineral	1	84lem	X	X	0	0	0	0
Np(HPO4)2		mineral	1	84lem	X	X	0	0	0	0
Np(HPO4)2		mineral	3	84lem	0	0	0	0	0	0
Np(OH)4		mineral	1	84lem	X	X	0	0	0	0
Np(OH)4		mineral	3	84lem	0	0	0	0	0	0
Np2O5		mineral	1	84lem	0	0	0	0	0	0
Np2O5		mineral	3	84lem	X	X	0	0	0	0
NpO2		mineral	1	84lem	X	X	0	0	0	0
NpO2		mineral	3	84lem	0	0	0	0	0	0
NpO2(OH)2		mineral	1	84lem	X	X	0	0	0	0
NpO2(OH)2		mineral	3	84lem	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
NpO2OH(am)		mineral	1	84lem	X	X	0	0	0	0
NpO2OH(am)		mineral	3	84lem	0	0	0	0	0	0
O(g)		mineral	2	89cox/wag	0	0	0	0	0	0
O2		mineral	1	supcrt92**	X	X	X	X	0	0
O2		mineral	2	89cox/wag	0	0	0	0	0	0
O2		mineral	4	84har/mol	0	0	0	0	0	X
Okenite	CaSi2O4(OH)2:H2O	mineral	1	82sar/bar	X	X	0	0	0	0
Olivine	(Fe,Mg)2SiO4	mineral	1	ss***	0	0	0	0	0	0
Orpiment	As2S3	mineral	1	82wag/eva	X	X	0	0	0	0
Orthopyroxene	(Fe,Mg)SiO3	mineral	1	ss***	X	X	0	0	0	0
Os		mineral	1	79rob/hem	0	0	0	0	0	0
Otavite	CdCO3	mineral	1	84sve	X	X	0	0	0	0
Ottemannite	Sn2S3	mineral	2	79kub/alc	X	X	0	0	0	0
Oxychloride-Mg	Mg2Cl(OH)3:4H2O	mineral	1	84har/mol	X	X	0	X	0	X
Oxychloride-Mg	Mg2Cl(OH)3:4H2O	mineral	4	84har/mol	0	0	0	X	0	X
P		mineral	2	89cox/wag	X	X	0	X	0	0
P(am)		mineral	0	92gre/fug	0	0	0	0	0	0
P(g)		mineral	2	89cox/wag	0	0	0	0	0	0
P2(g)		mineral	2	89cox/wag	0	0	0	0	0	0
P4(g)		mineral	2	89cox/wag	0	0	0	0	0	0
Paragonite	NaAl3Si3O10(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
Paralaurionite	PbClOH	mineral	1	78ric/nri	X	X	0	X	0	0
Pargasite	NaCa2Al3Mg4Si6O22(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
Parsonsite	Pb2UO2(PO4)2:2H2O	mineral	1	78ric/nri	X	X	0	X	0	0
Pb		mineral	2	89cox/wag	X	X	0	X	0	0
Pb(H2PO4)2		mineral	3	73nri	X	X	0	X	0	0
Pb(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Pb2SiO4		mineral	1	82wag/eva	X	X	0	0	0	0
Pb3(PO4)2		mineral	1	72nri 2	X	X	0	X	0	0
Pb3SO6		mineral	1	78ric/nri	X	X	0	X	0	0
Pb4O(PO4)2		mineral	1	72nri 2	X	X	0	X	0	0
Pb4SO7		mineral	1	78ric/nri	X	X	0	X	0	0
PbCO3.PbO		mineral	1	82wag/eva	X	X	0	0	0	0
PbF2		mineral	1	82wag/eva	0	0	0	0	0	0
PbF2		mineral	3	76smi/mar	X	X	0	X	0	0
PbHPO4		mineral	1	74nri	X	X	0	X	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
PbSO4.2NH3		mineral	1	82wag/eva	X	X	0	X	0	0
PbSeO4		mineral	1	82wag/eva	X	X	0	0	0	0
Pd		mineral	1	79rob/hem	X	X	0	0	0	0
Pd-Oxyannite	KFe3AlSi3O10(OH)O-	mineral	1	78wol	0	0	0	0	0	0
Pd-Oxyannite	KFe3AlSi3O10(OH)O-	mineral	1	supcrt92**	0	0	0	0	0	0
Penroseite	NiSe2	mineral	2	74mil	X	X	0	0	0	0
Pentahydrite	MgSO4:5H2O	mineral	1	80har/wea	X	X	0	X	0	0
Periclase	MgO	mineral	1	supcrt92**	X	X	X	X	0	0
Periclase	MgO	mineral	2	89cox/wag	0	0	0	0	0	0
Petalite	LiAlSi4O10	mineral	1	82wag/eva	X	X	0	0	0	0
Phlogopite	KAlMg3Si3O10(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
Phosgenite	Pb2(CO3)Cl2	mineral	1	78ric/nri	X	X	0	0	0	0
Picromerite	K2Mg(SO4)2:6H2O	mineral	1	84har/mol	X	X	0	X	0	X
Picromerite	K2Mg(SO4)2:6H2O	mineral	4	84har/mol	0	0	0	X	0	X
Pirssonite	Na2Ca(CO3)2:2H2O	mineral	1	84har/mol	X	X	0	0	0	X
Pirssonite	Na2Ca(CO3)2:2H2O	mineral	4	84har/mol	0	0	0	0	0	X
Plagioclase	CaAl2Si2O8-NaAlSi3O8	mineral	1	ss***	X	X	0	0	0	0
Plattnerite	PbO2	mineral	1	82wag/eva	X	X	0	0	0	0
Plumbogummite	PbAl3(PO4)2(OH)5:H2O	mineral	0	86jen	0	0	0	0	0	0
Plumbogummite	PbAl3(PO4)2(OH)5:H2O	mineral	3	80bal/nor	X	X	0	X	0	0
Polydymite	Ni3S4	mineral	1	78vau/cra	X	X	0	0	0	0
Polyhalite	K2MgCa2(SO4)4:2H2O	mineral	1	84har/mol	X	X	0	X	0	X
Polyhalite	K2MgCa2(SO4)4:2H2O	mineral	4	84har/mol	0	0	0	X	0	X
Portlandite	Ca(OH)2	mineral	1	79rob/hem	X	X	0	X	0	0
Portlandite	Ca(OH)2	mineral	4	84har/mol	0	0	0	0	0	X
Pr		mineral	1	79rob/hem	X	X	0	X	0	0
Prehnite	Ca2Al2Si3O10(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
Przhevalskite	Pb(UO2)2(PO4)2	mineral	1	78lan	X	X	0	X	0	0
Pseudowollastonite	CaSiO3	mineral	2	77bar/kna	X	X	0	0	0	0
Pt		mineral	1	79rob/hem	0	0	0	0	0	0
Pu		mineral	1	86mor	X	X	0	0	0	0
Pu(HPO4)2		mineral	1	80lem/tre	X	X	0	0	0	0
Pu(HPO4)2		mineral	3	80lem/tre	0	0	0	0	0	0
Pu(OH)3		mineral	1	80lem/tre	X	X	0	0	0	0
Pu(OH)3		mineral	3	80lem/tre	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Pu(OH)4		mineral	1	80lem/tre	X	X	0	0	0	0
Pu(OH)4		mineral	3	80lem/tre	0	0	0	0	0	0
Pu2O3		mineral	1	80lem/tre	X	X	0	0	0	0
Pu2O3		mineral	3	80lem/tre	0	0	0	0	0	0
Pu2O3(alpha)		mineral	1	66oet	0	0	0	0	0	0
PuF3		mineral	1	80lem/tre	X	X	0	0	0	0
PuF3		mineral	3	80lem/tre	0	0	0	0	0	0
PuF4		mineral	1	80lem/tre	X	X	0	0	0	0
PuF4		mineral	3	80lem/tre	0	0	0	0	0	0
PuO2		mineral	1	80lem/tre	X	X	0	0	0	0
PuO2		mineral	3	80lem/tre	0	0	0	0	0	0
PuO2(OH)2		mineral	1	80lem/tre	X	X	0	0	0	0
PuO2(OH)2		mineral	3	80lem/tre	0	0	0	0	0	0
PuO2HPO4		mineral	1	80lem/tre	X	X	0	0	0	0
PuO2HPO4		mineral	3	80lem/tre	0	0	0	0	0	0
PuO2OH(am)		mineral	1	80lem/tre	X	X	0	0	0	0
PuO2OH(am)		mineral	3	80lem/tre	0	0	0	0	0	0
Pyrite	FeS2	mineral	0	chemval*	0	0	0	0	0	0
Pyrite	FeS2	mineral	1	supcrt92**	X	X	X	0	0	0
Pyrite	FeS2	mineral	3	chemval*	0	0	0	0	0	0
Pyrolusite	MnO2	mineral	1	79rob/hem	X	X	0	X	0	0
Pyromorphite	Pb5(PO4)3Cl	mineral	1	73nri	X	X	0	X	0	0
Pyromorphite-OH	Pb5(OH)(PO4)3	mineral	1	72nri 2	X	X	0	X	0	0
Pyrope	Mg3Al2(SiO4)3	mineral	1	supcrt92**	0	0	0	0	0	0
Pyrophyllite	Al2Si4O10(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
Pyrrhotite	FeS	mineral	1	supcrt92**	X	X	X	0	0	0
Quartz	SiO2	mineral	1	supcrt92**	X	X	X	0	0	0
Quartz	SiO2	mineral	2	89cox/wag	0	0	0	0	0	0
Ra		mineral	1	82wag/eva	X	X	0	0	0	0
Ra(NO3)2		mineral	1	82wag/eva	X	X	0	0	0	0
RaCl2:2H2O		mineral	1	82wag/eva	X	X	0	0	0	0
RaSO4		mineral	1	82wag/eva	X	X	0	0	0	0
Rankinite	Ca3Si2O7	mineral	2	77bar/kna	X	X	0	0	0	0
Rb		mineral	2	89cox/wag	X	X	0	X	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Rb(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Rb2U2O7		mineral	0	92gre/fug	0	0	0	0	0	0
Rb2UO4		mineral	2	92gre/fug	X	X	0	X	X	0
RbUO3		mineral	0	92gre/fug	0	0	0	0	0	0
Re		mineral	1	79rob/hem	X	X	0	0	0	0
Realgar	AsS	mineral	1	79rob/hem	X	X	0	0	0	0
Rh		mineral	1	79rob/hem	0	0	0	0	0	0
Rhodochrosite	MnCO3	mineral	1	supcrt92**	X	X	X	0	0	0
Rhodonite	MnSiO3	mineral	1	79rob/hem	X	X	0	0	0	0
Richterite	Na2CaMg5Si8O22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Riebeckite	Na2Fe5Si8O22(OH)2	mineral	1	supcrt92**	0	0	0	0	0	0
Ripidolite-14A	Mg3Fe2Al2Si3O10(OH)8	mineral	1	78wol	X	X	0	0	0	0
Ripidolite-7A	Mg3Fe2Al2Si3O10(OH)8	mineral	1	78wol	X	X	0	0	0	0
Rn(g)		mineral	1	supcrt92**	X	X	X	0	0	0
Romarchite	SnO	mineral	1	supcrt92**	X	X	X	0	0	0
Romarchite	SnO	mineral	2	89cox/wag	0	0	0	0	0	0
Ru		mineral	1	85rar 1	X	X	0	0	0	0
Ru(OH)3:H2O(am)		mineral	1	85rar 1	X	X	0	0	0	0
Ru(g)		mineral	1	85rar 1	0	0	0	0	0	0
RuBr3		mineral	1	85rar 1	X	X	0	0	0	0
RuCl3		mineral	1	85rar 1	X	X	0	0	0	0
RuCl3(g)		mineral	0	85rar 1	0	0	0	0	0	0
RuI3		mineral	1	85rar 1	X	X	0	0	0	0
RuO2		mineral	1	85rar 1	X	X	0	0	0	0
RuO2:2H2O(am)		mineral	1	85rar 1	X	X	0	0	0	0
RuO3(g)		mineral	0	85rar 1	0	0	0	0	0	0
RuO4		mineral	1	85rar 1	X	X	0	0	0	0
RuO4(g)		mineral	0	85rar 1	0	0	0	0	0	0
RuO4(l)		mineral	0	85rar 1	0	0	0	0	0	0
RuSe2		mineral	0	85rar 1	0	0	0	0	0	0
RuTe2		mineral	0	85rar 1	0	0	0	0	0	0
Rutherfordine	UO2CO3	mineral	1	92gre/fug	X	X	0	0	X	0
Rutile	TiO2	mineral	1	supcrt92**	X	X	0	0	0	0
Rutile	TiO2	mineral	2	89cox/wag	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
S		mineral	2	89cox/wag	X	X	0	0	0	0
S(g)		mineral	2	89cox/wag	0	0	0	0	0	0
S2(g)		mineral	1	supcrt92**	X	X	X	0	0	0
S2(g)		mineral	2	89cox/wag	0	0	0	0	0	0
SO2(g)		mineral	1	supcrt92**	X	X	X	X	0	0
SO2(g)		mineral	2	89cox/wag	0	0	0	0	0	0
Safflorite	CoAs2	mineral	1	74nau/ryz	X	X	0	0	0	0
Saleeite	Mg(UO2)2(PO4)2	mineral	1	78lan	X	X	0	X	0	0
Sanbornite	BaSi2O5	mineral	1	82wag/eva	X	X	0	0	0	0
Sanidine high	KAlSi3O8	mineral	1	supcrt92**	X	X	X	0	0	0
Sanidine-ss	(K,Na)AlSi3O8	mineral	1	ss***	X	X	0	0	0	0
Saponite-Ca	Ca.165Mg3Al.33Si3.67O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Saponite-Cs	Cs.33Si3.67Al.33Mg3O10(OH)2	mineral	1	88db 4	X	X	0	0	0	0
Saponite-H	H.33Mg3Al.33Si3.67O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Saponite-K	K.33Mg3Al.33Si3.67O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Saponite-Mg	Mg3.165Al.33Si3.67O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Saponite-Na	Na.33Mg3Al.33Si3.67O10(OH)2	mineral	1	78wol	X	X	0	0	0	0
Saponite-tri	(Ca.5,H,K,Mg.5,Na).33Mg3Al.3	mineral	1	ss***	X	X	0	0	0	0
Sb		mineral	1	82wag/eva	X	X	0	0	0	0
Sb		mineral	1	92gre/fug	0	0	0	0	0	0
Sb(OH)3		mineral	1	82wag/eva	X	X	0	X	0	0
Sb2O3		mineral	3	89spy/ree	X	X	0	0	0	0
Sb2O4		mineral	1	82wag/eva	X	X	0	0	0	0
Sb2O5		mineral	1	82wag/eva	X	X	0	0	0	0
Sb2S3		mineral	1	82wag/eva	0	0	0	0	0	0
Sb4O6(cubic)		mineral	1	82wag/eva	X	X	0	X	0	0
Sb4O6(orthorhombic)		mineral	1	82wag/eva	X	X	0	X	0	0
SbBr3		mineral	1	82wag/eva	X	X	0	X	0	0
SbCl3		mineral	1	82wag/eva	X	X	0	X	0	0
Sc		mineral	1	79rob/hem	X	X	0	X	0	0
Scacchite	MnCl2	mineral	1	82wag/eva	X	X	0	X	0	0
Schoepite	UO3:2H2O	mineral	1	88oha/lew	0	0	0	0	0	0
Schoepite	UO3:2H2O	mineral	2	92gre/fug	X	X	0	X	X	0
Schoepite-dehy(.393)	UO3:.393H2O	mineral	0	92gre/fug	0	0	0	0	0	0
Schoepite-dehy(.393)	UO3:.393H2O	mineral	2	88oha/lew	X	X	0	X	0	0
Schoepite-dehy(.648)	UO3:.648H2O	mineral	0	92gre/fug	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Schoepite-dehy(.648)	UO3:.648H2O	mineral	2	88oha/lew	X	X	0	X	0	0
Schoepite-dehy(.85)	UO3:.85H2O	mineral	2	88oha/lew	X	X	0	X	0	0
Schoepite-dehy(.9)	UO3:.9H2O	mineral	2	92gre/fug	X	X	0	X	X	0
Schoepite-dehy(1.0)	UO3:H2O	mineral	2	88oha/lew	X	X	0	X	0	0
Scolecite	CaAl2Si3O10:3H2O	mineral	1	83joh/flo	X	X	0	0	0	0
Se		mineral	1	79rob/hem	X	X	0	0	0	0
Se		mineral	1	92gre/fug	0	0	0	0	X	0
Se2O5		mineral	2	74mil	X	X	0	0	0	0
SeCl4		mineral	2	74mil	X	X	0	0	0	0
SeO3		mineral	2	74mil	X	X	0	0	0	0
Sellaite	MgF2	mineral	2	89cox/wag	X	X	0	X	0	0
Sepiolite	Mg4Si6O15(OH)2:6H2O	mineral	1	supcrt92**	X	X	X	0	0	0
Shcherbinaite	V2O5	mineral	1	82wag/eva	X	X	0	0	0	0
Si		mineral	2	89cox/wag	X	X	0	0	0	0
Si(g)		mineral	2	89cox/wag	X	X	0	0	0	0
SiF4(g)		mineral	2	89cox/wag	X	X	0	0	0	0
SiO2(am)		mineral	0	chemval*	0	0	0	0	0	0
SiO2(am)		mineral	1	supcrt92**	X	X	X	0	0	0
SiO2(am)		mineral	3	chemval*	0	0	0	0	0	0
Siderite	FeCO3	mineral	1	supcrt92**	X	X	X	0	0	0
Sillimanite	Al2SiO5	mineral	1	supcrt92**	X	X	X	0	0	0
Sinjarite	CaCl2:2H2O	mineral	2	82wag/eva	0	0	0	0	0	0
Sklodowskite	Mg(H3O)2(UO2)2(SiO4)2:4H2O	mineral	1	82hem	X	X	0	0	0	0
Sm		mineral	1	79rob/hem	X	X	0	0	0	0
Smd-Celad(Fe,Al)-Ca	CaAlFeSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Fe,Al)-Cs	CsAlFeSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Fe,Al)-K	KAlFeSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Fe,Al)-Li	LiAlFeSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Fe,Al)-Mg	MgAlFeSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Fe,Al)-Na	NaAlFeSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Fe,Al)-Sr	SrAlFeSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Mg,Al)-Ca	CaAlMgSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Mg,Al)-Cs	CsAlMgSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Mg,Al)-K	KAlMgSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Smd-Celad(Mg,Al)-Li	LiAlMgSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Mg,Al)-Mg	MgAlMgSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Mg,Al)-Na	NaAlMgSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Celad(Mg,Al)-Sr	SrAlMgSi4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Ferripyrophyllite	Fe2Si4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Al)-Ca	CaAl3Si3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Al)-Cs	CsAl3Si3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Al)-H	HAl3Si3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Al)-K	KAl3Si3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Al)-Li	LiAl3Si3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Al)-Mg	MgAl3Si3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Al)-Na	NaAl3Si3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Al)-Sr	SrAl3Si3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Fe)-Ca	CaFe2AlSi3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Fe)-Cs	CsFe2AlSi3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Fe)-H	HFe2AlSi3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Fe)-K	KFe2AlSi3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Fe)-Li	LiFe2AlSi3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Fe)-Mg	MgFe2AlSi3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Fe)-Na	NaFe2AlSi3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Muscovite(Fe)-Sr	SrFe2AlSi3O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smd-Pyrophyllite	Al2Si4O10(OH)2	mineral	3	viani	0	0	0	0	0	0
Smectite-Reykjanes	Mn.01K.03Na.33Ca.66Fe++.33Fe	mineral	0	78wol	0	0	0	0	0	0
Smectite-di	(Na,K,Ca.5,Mg.5).33(Al,Mg,Fe	mineral	1	ss***	X	X	0	0	0	0
Smectite-high-Fe-Mg	Ca.025Na.1K.2Fe++.5Fe+++.2Mg	mineral	1	78wol	X	X	0	0	0	0
Smectite-low-Fe-Mg	Ca.02Na.15K.2Fe++.29Fe+++.16	mineral	1	78wol	X	X	0	0	0	0
Smithsonite	ZnCO3	mineral	1	supcrt92**	X	X	X	0	0	0
Sn		mineral	1	supcrt92**	X	X	X	0	0	0
Sn		mineral	2	89cox/wag	0	0	0	0	0	0
Sn(OH)2		mineral	1	82wag/eva	X	X	0	0	0	0
Sn(SO4)2		mineral	2	79kub/alc	X	X	0	0	0	0
Sn(g)		mineral	2	89cox/wag	X	X	0	0	0	0
Sn3S4		mineral	2	79kub/alc	X	X	0	0	0	0
SnBr2		mineral	2	79kub/alc	X	X	0	0	0	0
SnBr4		mineral	1	82wag/eva	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
SnCl2		mineral	2	79kub/alc	X	X	0	0	0	0
SnSO4		mineral	2	79kub/alc	X	X	0	0	0	0
SnSe		mineral	2	79kub/alc	X	X	0	0	0	0
SnSe2		mineral	2	79kub/alc	X	X	0	0	0	0
Soddyite	(UO2)2(SiO4):2H2O	mineral	1	82hem	X	X	0	0	0	0
Spessartine	Al2Mn3(SiO4)3	mineral	1	supcrt92**	0	0	0	0	0	0
Sphaerocobaltite	CoCO3	mineral	1	84sve	X	X	0	0	0	0
Sphalerite	ZnS	mineral	1	supcrt92**	X	X	X	0	0	0
Spinel	Al2MgO4	mineral	1	supcrt92**	X	X	X	X	0	0
Spinel-Co	Co3O4	mineral	2	82wag/eva	X	X	0	X	0	0
Spodumene	LiAlSi2O6	mineral	1	82wag/eva	X	X	0	0	0	0
Sr		mineral	1	79rob/hem	X	X	0	X	0	0
Sr		mineral	1	92gre/fug	0	0	0	0	X	0
Sr(NO3)2		mineral	1	79rob/hem	X	X	0	X	0	0
Sr(NO3)2		mineral	2	92gre/fug	0	0	0	0	X	0
Sr(NO3)2:4H2O		mineral	1	82wag/eva	X	X	0	X	0	0
Sr(OH)2		mineral	1	85cha/dav	X	X	0	X	0	0
Sr2SiO4		mineral	1	82wag/eva	X	X	0	0	0	0
Sr2U3O11		mineral	0	92gre/fug	0	0	0	0	0	0
Sr2UO5		mineral	0	92gre/fug	0	0	0	0	0	0
Sr3(AsO4)2		mineral	1	82wag/eva	X	X	0	X	0	0
Sr3UO6		mineral	0	92gre/fug	0	0	0	0	0	0
SrBr2		mineral	1	82wag/eva	X	X	0	X	0	0
SrBr2:6H2O		mineral	1	82wag/eva	X	X	0	X	0	0
SrBr2:H2O		mineral	1	82wag/eva	X	X	0	X	0	0
SrCl2		mineral	1	82wag/eva	X	X	0	X	0	0
SrCl2		mineral	2	92gre/fug	0	0	0	0	X	0
SrCl2:2H2O		mineral	1	82wag/eva	X	X	0	X	0	0
SrCl2:6H2O		mineral	1	82wag/eva	X	X	0	X	0	0
SrCl2:H2O		mineral	1	82wag/eva	X	X	0	X	0	0
SrCrO4		mineral	1	76del/hal	X	X	0	X	0	0
SrF2		mineral	1	82wag/eva	0	0	0	0	0	0
SrF2		mineral	3	76smi/mar	X	X	0	X	0	0
SrHPO4		mineral	1	82wag/eva	X	X	0	X	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
SrI2		mineral	1	85cha/dav	X	X	0	X	0	0
SrO		mineral	1	82wag/eva	X	X	0	X	0	0
SrO		mineral	2	92gre/fug	0	0	0	0	X	0
SrS		mineral	1	82wag/eva	X	X	0	0	0	0
SrSe		mineral	0	74mil	0	0	0	0	0	0
SrSeO3		mineral	3	76smi/mar	0	0	0	0	0	0
SrSeO4		mineral	0	90crc	0	0	0	0	0	0
SrSeO4		mineral	3	76smi/mar	X	X	0	0	0	0
SrSiO3		mineral	1	82wag/eva	X	X	0	0	0	0
SrU4O13		mineral	0	92gre/fug	0	0	0	0	0	0
SrUO4(alpha)		mineral	2	92gre/fug	X	X	0	X	X	0
SrUO4(beta)		mineral	0	92gre/fug	0	0	0	0	0	0
SrZrO3		mineral	1	74nau/ryz	X	X	0	0	0	0
Starkeyite	MgSO4:4H2O	mineral	1	80har/wea	X	X	0	X	0	0
Staurolite	Fe2Al9Si4O24H	mineral	1	supcrt92**	0	0	0	0	0	0
Stibnite	Sb2S3	mineral	3	89spy/ree	X	X	0	0	0	0
Stilbite	Ca1.019Na.136K.006Al2.18Si6.	mineral	1	90how/joh	X	X	0	0	0	0
Stilbite	Ca1.019Na.136K.006Al2.18Si6.	mineral	1	supcrt92**	0	0	0	0	0	0
Stilleite	ZnSe	mineral	1	78vau/cra	X	X	0	0	0	0
Strengite	FePO4:2H2O	mineral	1	79rob/hem	X	X	0	0	0	0
Strontianite	SrCO3	mineral	0	chemval*	0	0	0	0	0	0
Strontianite	SrCO3	mineral	1	supcrt92**	X	X	X	0	0	0
Strontianite	SrCO3	mineral	3	chemval*	0	0	0	0	0	0
Sylvite	KCl	mineral	1	supcrt92**	X	X	X	X	0	0
Sylvite	KCl	mineral	4	84har/mol	0	0	0	0	0	X
Syngenite	K2Ca(SO4)2:H2O	mineral	1	84har/mol	X	X	0	X	0	X
Syngenite	K2Ca(SO4)2:H2O	mineral	4	84har/mol	0	0	0	X	0	X
Ta		mineral	1	79rob/hem	0	0	0	0	0	0
Tachyhydrite	Mg2CaCl6:12H2O	mineral	1	84har/mol	X	X	0	X	0	X
Tachyhydrite	Mg2CaCl6:12H2O	mineral	4	84har/mol	0	0	0	X	0	X
Talc	Mg3Si4O10(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
Tarapacaite	K2CrO4	mineral	2	76del/hal	X	X	0	X	0	0
Tb		mineral	1	79rob/hem	X	X	0	X	0	0
Tc		mineral	1	83rar	X	X	0	X	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Tc(OH)2		mineral	1	83rar	X	X	0	0	0	0
Tc(OH)3		mineral	1	83rar	X	X	0	0	0	0
Tc2O7		mineral	1	83rar	X	X	0	0	0	0
Tc2O7(g)		mineral	1	83rar	X	X	0	0	0	0
Tc2S7		mineral	2	83rar	X	X	0	0	0	0
Tc3O4		mineral	1	83rar	X	X	0	0	0	0
Tc4O7		mineral	1	83rar	X	X	0	0	0	0
TcF6		mineral	0	83rar	0	0	0	0	0	0
TcF6(g)		mineral	0	83rar	0	0	0	0	0	0
TcO2:2H2O(am)		mineral	1	83rar	X	X	0	0	0	0
TcO3		mineral	2	83rar	X	X	0	0	0	0
TcO3Cl(g)		mineral	0	83rar	0	0	0	0	0	0
TcOH		mineral	1	83rar	X	X	0	0	0	0
TcS2		mineral	2	83rar	X	X	0	0	0	0
TcS3		mineral	2	83rar	X	X	0	0	0	0
Te		mineral	1	79rob/hem	0	0	0	0	0	0
Te		mineral	1	92gre/fug	0	0	0	0	0	0
Tenorite	CuO	mineral	1	supcrt92**	X	X	X	X	0	0
Tephroite	Mn2SiO4	mineral	1	82wag/eva	X	X	0	0	0	0
Th		mineral	2	89cox/wag	X	X	0	X	0	0
Th(NO3)4:5H2O		mineral	1	82wag/eva	X	X	0	X	0	0
Th(OH)4		mineral	1	74nau/ryz	X	X	0	X	0	0
Th(SO4)2		mineral	1	82wag/eva	X	X	0	X	0	0
Th(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Th2S3		mineral	1	82wag/eva	X	X	0	0	0	0
Th2Se3		mineral	2	74mil	X	X	0	0	0	0
Th7S12		mineral	1	82wag/eva	X	X	0	0	0	0
ThBr4		mineral	1	82wag/eva	X	X	0	X	0	0
ThCl4		mineral	1	80lan/her	X	X	0	X	0	0
ThF4		mineral	1	80lan/her	X	X	0	X	0	0
ThF4:2.5H2O		mineral	1	82wag/eva	X	X	0	X	0	0
ThI4		mineral	1	82wag/eva	X	X	0	X	0	0
ThS		mineral	1	82wag/eva	X	X	0	0	0	0
ThS2		mineral	1	82wag/eva	X	X	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Thenardite	Na2SO4	mineral	1	79rob/hem	X	X	0	X	0	0
Thenardite	Na2SO4	mineral	4	84har/mol	0	0	0	0	0	X
Thermonatrite	Na2CO3:H2O	mineral	1	82wag/eva	X	X	0	0	0	0
Thermonatrite	Na2CO3:H2O	mineral	4	84har/mol	0	0	0	0	0	X
Thorianite	ThO2	mineral	2	89cox/wag	X	X	0	X	0	0
Ti		mineral	2	89cox/wag	X	X	0	0	0	0
Ti(g)		mineral	2	89cox/wag	X	X	0	0	0	0
TiCl4(g)		mineral	2	89cox/wag	X	X	0	0	0	0
Tiemannite	HgSe	mineral	2	78vau/cra	X	X	0	0	0	0
Titanite	CaTiSiO5	mineral	1	supcrt92**	X	X	0	0	0	0
Tl		mineral	1	79rob/hem	X	X	0	X	0	0
Tl2CrO4		mineral	0	76del/hal	0	0	0	0	0	0
Tm		mineral	1	79rob/hem	X	X	0	X	0	0
Tobermorite-11A	Ca5Si6H11O22.5	mineral	1	82sar/bar	X	X	0	0	0	0
Tobermorite-14A	Ca5Si6H21O27.5	mineral	1	82sar/bar	X	X	0	0	0	0
Tobermorite-9A	Ca5Si6H6O20	mineral	1	82sar/bar	X	X	0	0	0	0
Todorokite	Mn7O12:3H2O	mineral	1	83ker	X	X	0	X	0	0
Torbernite	Cu(UO2)2(PO4)2	mineral	1	78lan	X	X	0	X	0	0
Tremolite	Ca2Mg5Si8O22(OH)2	mineral	1	supcrt92**	X	X	X	0	0	0
Trevorite	NiFe2O4	mineral	1	79rob/hem	X	X	0	0	0	0
Tridymite	SiO2	mineral	1	82wag/eva	X	X	0	0	0	0
Troilite	FeS	mineral	1	79rob/hem	X	X	0	0	0	0
Trona	Na3H(CO3)2:2H2O	mineral	0	84har/mol	0	0	0	0	0	X
Trona	Na3H(CO3)2:2H2O	mineral	4	84har/mol	0	0	0	0	0	X
Trona-K	K2NaH(CO3)2:2H2O	mineral	1	84har/mol	X	X	0	0	0	X
Trona-K	K2NaH(CO3)2:2H2O	mineral	4	84har/mol	0	0	0	0	0	X
Tsumebite	Pb2Cu(PO4)(OH)3:3H2O	mineral	3	80bal/nor	X	X	0	X	0	0
Tyuyamunite	Ca(UO2)2(VO4)2	mineral	1	78lan	X	X	0	0	0	0
U		mineral	2	89cox/wag	X	X	0	X	0	0
U(CO3)2		mineral	1	92gre/fug	X	X	0	0	X	0
U(HPO4)2:4H2O		mineral	1	92gre/fug	X	X	0	0	X	0
U(OH)2SO4		mineral	1	92gre/fug	X	X	0	0	X	0
U(OH)3		mineral	3	80all/kip	0	0	0	0	0	0
U(OH)4		mineral	3	80all/kip	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
U(SO3)2		mineral	2	92gre/fug	X	X	0	0	X	0
U(SO4)2		mineral	2	92gre/fug	X	X	0	0	X	0
U(SO4)2:4H2O		mineral	2	92gre/fug	X	X	0	0	0	0
U(SO4)2:8H2O		mineral	2	92gre/fug	X	X	0	0	X	0
U(g)		mineral	2	89cox/wag	X	X	0	0	0	0
U2C3		mineral	2	92gre/fug	X	X	0	0	X	0
U2Cl10(g)		mineral	1	92gre/fug	X	X	0	0	X	0
U2Cl8(g)		mineral	2	92gre/fug	X	X	0	0	X	0
U2F10(g)		mineral	2	92gre/fug	X	X	0	0	X	0
U2F9		mineral	1	92gre/fug	X	X	0	0	X	0
U2O2Cl5		mineral	2	92gre/fug	X	X	0	0	X	0
U2O3F6		mineral	2	92gre/fug	X	X	0	X	X	0
U2S3		mineral	2	92gre/fug	X	X	0	0	X	0
U2S5		mineral	0	92gre/fug	0	0	0	0	0	0
U2Se3		mineral	2	92gre/fug	X	X	0	0	X	0
U3As4		mineral	2	92gre/fug	X	X	0	0	X	0
U3O5F8		mineral	2	92gre/fug	X	X	0	X	X	0
U3O7(alpha)		mineral	0	92gre/fug	0	0	0	0	0	0
U3O8		mineral	2	89cox/wag	0	0	0	0	0	0
U3O8(alpha)		mineral	0	chemval*	0	0	0	0	0	0
U3O8(alpha)		mineral	3	chemval*	0	0	0	0	0	0
U3P4		mineral	2	92gre/fug	X	X	0	0	X	0
U3S5		mineral	2	92gre/fug	X	X	0	0	X	0
U3Sb4		mineral	2	92gre/fug	X	X	0	0	0	0
U3Se4		mineral	2	92gre/fug	X	X	0	0	X	0
U3Se5		mineral	2	92gre/fug	X	X	0	0	X	0
U4F17		mineral	1	92gre/fug	X	X	0	0	X	0
U4O9		mineral	0	chemval*	0	0	0	0	0	0
U4O9		mineral	3	chemval*	0	0	0	0	0	0
U4Sb3		mineral	0	92gre/fug	0	0	0	0	0	0
U5O12Cl		mineral	2	92gre/fug	X	X	0	0	X	0
UAs		mineral	2	92gre/fug	X	X	0	0	X	0
UAs2		mineral	2	92gre/fug	X	X	0	X	X	0
UAsO5		mineral	0	92gre/fug	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
UAsS		mineral	0	92gre/fug	0	0	0	0	0	0
UAsSe		mineral	0	92gre/fug	0	0	0	0	0	0
UAsTe		mineral	0	92gre/fug	0	0	0	0	0	0
UBr(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UBr2(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UBr2Cl		mineral	2	92gre/fug	X	X	0	0	X	0
UBr2Cl2		mineral	2	92gre/fug	X	X	0	0	X	0
UBr2I2		mineral	0	92gre/fug	0	0	0	0	0	0
UBr3		mineral	2	92gre/fug	X	X	0	0	0	0
UBr3(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UBr3Cl		mineral	2	92gre/fug	X	X	0	0	X	0
UBr3I		mineral	0	92gre/fug	0	0	0	0	0	0
UBr4		mineral	2	92gre/fug	X	X	0	0	X	0
UBr4(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UBr5		mineral	2	92gre/fug	X	X	0	0	X	0
UBr5(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UBrCl2		mineral	2	92gre/fug	X	X	0	0	X	0
UBrCl3		mineral	2	92gre/fug	X	X	0	0	X	0
UBrI3		mineral	0	92gre/fug	0	0	0	0	0	0
UC		mineral	1	92gre/fug	X	X	0	0	X	0
UC1.94(alpha)		mineral	1	92gre/fug	X	X	0	0	X	0
UCl(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UCl2(g)		mineral	2	92gre/fug	X	X	0	X	X	0
UCl2F2		mineral	2	92gre/fug	X	X	0	0	X	0
UCl2I2		mineral	2	92gre/fug	X	X	0	0	X	0
UCl3		mineral	2	92gre/fug	X	X	0	0	X	0
UCl3(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UCl3F		mineral	2	92gre/fug	X	X	0	0	X	0
UCl3I		mineral	2	92gre/fug	X	X	0	0	X	0
UCl4		mineral	2	92gre/fug	X	X	0	0	X	0
UCl4(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UCl5		mineral	2	92gre/fug	X	X	0	0	X	0
UCl5(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UCl6		mineral	2	92gre/fug	X	X	0	X	X	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
UCl6(g)		mineral	2	92gre/fug	X	X	0	X	X	0
UClF3		mineral	2	92gre/fug	X	X	0	0	X	0
UClI3		mineral	2	92gre/fug	X	X	0	0	X	0
UF(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UF2(g)		mineral	2	92gre/fug	X	X	0	X	X	0
UF3		mineral	2	92gre/fug	X	X	0	0	X	0
UF3(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UF4		mineral	2	92gre/fug	X	X	0	0	X	0
UF4		mineral	3	80lem/tre	0	0	0	0	0	0
UF4(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UF4:2.5H2O		mineral	2	92gre/fug	X	X	0	0	X	0
UF5(alpha)		mineral	2	92gre/fug	X	X	0	0	X	0
UF5(beta)		mineral	2	92gre/fug	X	X	0	0	X	0
UF5(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UF6		mineral	2	92gre/fug	X	X	0	X	X	0
UF6(g)		mineral	2	92gre/fug	X	X	0	X	X	0
UH3(beta)		mineral	2	92gre/fug	X	X	0	0	X	0
UI(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UI2(g)		mineral	2	92gre/fug	X	X	0	X	X	0
UI3		mineral	2	92gre/fug	X	X	0	0	X	0
UI3(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UI4		mineral	2	92gre/fug	X	X	0	0	X	0
UI4(g)		mineral	2	92gre/fug	X	X	0	0	X	0
UN		mineral	2	92gre/fug	X	X	0	0	X	0
UN1.466(beta)		mineral	0	92gre/fug	0	0	0	0	0	0
UN1.59(alpha)		mineral	2	92gre/fug	X	X	0	0	X	0
UN1.606(alpha)		mineral	0	92gre/fug	0	0	0	0	0	0
UN1.674(alpha)		mineral	0	92gre/fug	0	0	0	0	0	0
UN1.73(alpha)		mineral	2	92gre/fug	X	X	0	0	X	0
UO(g)		mineral	2	92gre/fug	X	X	0	X	X	0
UO2(AsO3)2		mineral	2	92gre/fug	X	X	0	X	X	0
UO2(IO3)2		mineral	1	92gre/fug	X	X	0	0	X	0
UO2(NO3)2		mineral	2	92gre/fug	X	X	0	X	X	0
UO2(NO3)2:2H2O		mineral	1	92gre/fug	X	X	0	X	X	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUB	PIT	NEA	HMW
UO2(NO3)2:3H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UO2(NO3)2:6H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UO2(NO3)2:H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UO2(OH)2		mineral	0	chemval*	0	0	0	0	0	0
UO2(OH)2		mineral	3	chemval*	0	0	0	0	0	0
UO2(OH)2(beta)		mineral	2	92gre/fug	X	X	0	X	X	0
UO2(OH)2(beta)		mineral	3	80lem/tre	0	0	0	0	0	0
UO2(OH)2(gamma)		mineral	0	92gre/fug	0	0	0	0	0	0
UO2(OH)2(gamma)		mineral	3	80lem/tre	0	0	0	0	0	0
UO2(PO3)2		mineral	2	92gre/fug	X	X	0	X	X	0
UO2(am)		mineral	1	78lan	0	0	0	0	0	0
UO2(am)		mineral	1	92gre/fug	X	X	0	0	X	0
UO2(g)		mineral	2	92gre/fug	X	X	0	X	X	0
UO2.25		mineral	2	92gre/fug	X	X	0	0	X	0
UO2.25(beta)		mineral	2	92gre/fug	X	X	0	0	0	0
UO2.3333(alpha)		mineral	0	92gre/fug	0	0	0	0	0	0
UO2.3333(beta)		mineral	2	92gre/fug	X	X	0	0	X	0
UO2.6667		mineral	2	92gre/fug	X	X	0	0	X	0
UO2.86:.5H2O		mineral	0	92gre/fug	0	0	0	0	0	0
UO2.86:1.5H2O		mineral	0	92gre/fug	0	0	0	0	0	0
UO2Br2		mineral	2	92gre/fug	X	X	0	X	X	0
UO2Br2:3H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UO2Br2:H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UO2BrOH:2H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UO2CO3		mineral	0	chemval*	0	0	0	0	0	0
UO2CO3		mineral	1	92gre/fug	X	X	0	0	X	0
UO2CO3		mineral	3	chemval*	0	0	0	0	0	0
UO2Cl		mineral	2	92gre/fug	X	X	0	0	X	0
UO2Cl2		mineral	2	92gre/fug	X	X	0	X	X	0
UO2Cl2(g)		mineral	2	92gre/fug	X	X	0	X	X	0
UO2Cl2:3H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UO2Cl2:H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UO2ClOH:2H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UO2F2		mineral	2	92gre/fug	X	X	0	X	X	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
UO2F2(g)		mineral	2	92gre/fug	X	X	0	X	X	0
UO2F2:3H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UO2FOH		mineral	1	92gre/fug	X	X	0	X	X	0
UO2FOH:2H2O		mineral	1	92gre/fug	X	X	0	X	X	0
UO2FOH:H2O		mineral	1	92gre/fug	X	X	0	X	X	0
UO2HPO4		mineral	3	84tri	0	0	0	0	0	0
UO2HPO4:4H2O		mineral	1	92gre/fug	X	X	0	X	X	0
UO2OH		mineral	3	80all/kip	0	0	0	0	0	0
UO2SO3		mineral	2	92gre/fug	X	X	0	0	X	0
UO2SO4		mineral	0	chemval*	0	0	0	0	0	0
UO2SO4		mineral	2	92gre/fug	X	X	0	X	X	0
UO2SO4		mineral	3	chemval*	0	0	0	0	0	0
UO2SO4:2.5H2O		mineral	1	92gre/fug	X	X	0	X	X	0
UO2SO4:3.5H2O		mineral	1	92gre/fug	X	X	0	X	X	0
UO2SO4:3H2O		mineral	1	92gre/fug	X	X	0	X	X	0
UO2SO4:H2O		mineral	1	64owe/may	X	X	0	X	0	0
UO2SeO3		mineral	0	92gre/fug	0	0	0	0	0	0
UO2SeO4		mineral	0	92gre/fug	0	0	0	0	0	0
UO2TeO3		mineral	0	92gre/fug	0	0	0	0	0	0
UO3(alpha)		mineral	0	chemval*	0	0	0	0	0	0
UO3(alpha)		mineral	2	92gre/fug	X	X	0	X	X	0
UO3(alpha)		mineral	3	chemval*	0	0	0	0	0	0
UO3(am)		mineral	0	92gre/fug	0	0	0	0	0	0
UO3(beta)		mineral	2	92gre/fug	X	X	0	X	X	0
UO3(delta)		mineral	0	92gre/fug	0	0	0	0	0	0
UO3(epsilon)		mineral	0	92gre/fug	0	0	0	0	0	0
UO3(g)		mineral	2	92gre/fug	X	X	0	X	X	0
UO3(gamma)		mineral	0	chemval*	0	0	0	0	0	0
UO3(gamma)		mineral	2	89cox/wag	X	X	0	X	0	0
UO3(gamma)		mineral	3	chemval*	0	0	0	0	0	0
UO3:.393H2O		mineral	0	92gre/fug	0	0	0	0	0	0
UO3:.648H2O		mineral	0	92gre/fug	0	0	0	0	0	0
UO3:.85H2O(alpha)		mineral	0	92gre/fug	0	0	0	0	0	0
UO3:.9H2O(alpha)		mineral	2	92gre/fug	X	X	0	X	X	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
UO3:2H2O		mineral	0	chemval*	0	0	0	0	0	0
UO3:2H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UO3:2H2O		mineral	3	chemval*	0	0	0	0	0	0
UO4:2H2O		mineral	0	92gre/fug	0	0	0	0	0	0
UO4:4H2O		mineral	0	92gre/fug	0	0	0	0	0	0
UOBr2		mineral	2	92gre/fug	X	X	0	0	X	0
UOBr3		mineral	2	92gre/fug	X	X	0	0	X	0
UOCl		mineral	2	92gre/fug	X	X	0	0	X	0
UOCl2		mineral	2	92gre/fug	X	X	0	0	X	0
UOCl3		mineral	2	92gre/fug	X	X	0	0	X	0
UOF2		mineral	2	92gre/fug	X	X	0	0	X	0
UOF2:H2O		mineral	2	92gre/fug	X	X	0	0	X	0
UOF4		mineral	2	92gre/fug	X	X	0	X	X	0
UOF4(g)		mineral	2	92gre/fug	X	X	0	X	X	0
UOFOH		mineral	2	92gre/fug	X	X	0	0	X	0
UOFOH:.5H2O		mineral	2	92gre/fug	X	X	0	X	X	0
UOTe		mineral	0	92gre/fug	0	0	0	0	0	0
UP		mineral	2	92gre/fug	X	X	0	0	X	0
UP2		mineral	2	92gre/fug	X	X	0	X	X	0
UP2O7		mineral	2	92gre/fug	X	X	0	X	X	0
UP2O7:20H2O		mineral	1	92gre/fug	X	X	0	0	X	0
UPO5		mineral	2	92gre/fug	X	X	0	0	X	0
US		mineral	2	92gre/fug	X	X	0	0	X	0
US1.9		mineral	2	92gre/fug	X	X	0	0	X	0
US2		mineral	2	92gre/fug	X	X	0	0	X	0
US3		mineral	2	92gre/fug	X	X	0	0	X	0
USb		mineral	2	92gre/fug	X	X	0	0	0	0
USb2		mineral	2	92gre/fug	X	X	0	0	0	0
USe		mineral	2	92gre/fug	X	X	0	0	X	0
USe2(alpha)		mineral	2	92gre/fug	X	X	0	0	X	0
USe2(beta)		mineral	2	92gre/fug	X	X	0	0	X	0
USe3		mineral	2	92gre/fug	X	X	0	0	X	0
Umangite	Cu3Se2	mineral	2	74mil	X	X	0	0	0	0
Uramphite	(NH4)(UO2)(PO4):3H2O	mineral	1	78lan	0	0	0	0	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
Uraninite	UO2	mineral	0	chemval*	0	0	0	0	0	0
Uraninite	UO2	mineral	2	89cox/wag	X	X	0	X	0	0
Uraninite	UO2	mineral	3	chemval*	0	0	0	0	0	0
Uranocircite	Ba(UO2)2(PO4)2	mineral	1	78lan	X	X	0	X	0	0
Uranophane	Ca(UO2)2(SiO3)2(OH)2	mineral	1	78lan	X	X	0	X	0	0
V		mineral	1	79rob/hem	X	X	0	0	0	0
V2O4		mineral	1	82wag/eva	X	X	0	0	0	0
V3O5		mineral	1	82wag/eva	X	X	0	0	0	0
V4O7		mineral	1	82wag/eva	X	X	0	0	0	0
Vaesite	NiS2	mineral	1	78vau/cra	X	X	0	0	0	0
Vaterite	CaCO3	mineral	0	79rob/hem	0	0	0	0	0	0
Villiaumite	NaF	mineral	0	79rob/hem	0	0	0	0	0	0
Vivianite	Fe3(PO4)2:8H2O	mineral	1	87woo/gar	X	X	0	X	0	0
W		mineral	1	79rob/hem	X	X	0	0	0	0
Wairakite	CaAl2Si4O10(OH)4	mineral	1	supcrt92**	X	X	X	0	0	0
Weeksite	K2(UO2)2Si6O15:4H2O	mineral	1	82hem	X	X	0	0	0	0
Whitlockite	Ca3(PO4)2	mineral	1	79rob/hem	X	X	0	X	0	0
Wilkmanite	Ni3Se4	mineral	1	78vau/cra	X	X	0	0	0	0
Witherite	BaCO3	mineral	1	supcrt92**	X	X	X	0	0	0
Wollastonite	CaSiO3	mineral	1	supcrt92**	X	X	X	0	0	0
Wurtzite	ZnS	mineral	1	supcrt92**	X	X	X	0	0	0
Wustite	Fe.947O	mineral	1	82wag/eva	X	X	0	0	0	0
Xe(g)		mineral	1	supcrt92**	X	X	X	0	0	0
Xe(g)		mineral	2	89cox/wag	0	0	0	0	0	0
Xonotlite	Ca6Si6O17(OH)2	mineral	1	82sar/bar	X	X	0	0	0	0
Y		mineral	1	79rob/hem	X	X	0	X	0	0
Yb		mineral	1	79rob/hem	X	X	0	0	0	0
Zincite	ZnO	mineral	1	supcrt92**	0	0	0	0	0	0
Zincite	ZnO	mineral	2	89cox/wag	X	X	0	X	0	0
Zircon	ZrSiO4	mineral	1	79rob/hem	X	X	0	0	0	0
Zn		mineral	2	89cox/wag	X	X	0	X	0	0
Zn(g)		mineral	2	89cox/wag	X	X	0	X	0	0
Zn3(AsO4)2		mineral	1	82wag/eva	X	X	0	X	0	0
ZnCr2O4		mineral	1	76del/hal	X	X	0	X	0	0

SPECIES			DATA		EQ3/6 DATAFILES					
NAME	COMPOSITION	TYPE	TYPE	LIT.SOURCE	COM	ALT	SUP	PIT	NEA	HMW
ZnF2		mineral	1	82wag/eva	X	X	0	X	0	0
ZnSeO3:H2O		mineral	1	82wag/eva	X	X	0	0	0	0
Zoisite	Ca2Al3(SiO4)3OH	mineral	1	supcrt92**	X	X	X	0	0	0
Zr		mineral	1	79rob/hem	X	X	0	0	0	0
o-Phthalic acid	C8H6O4	mineral	2	70kar/kar	X	X	0	0	0	0

FOOTNOTES:

* Species contained in the chemval database are a special case in that the properties stored (logK data for electron-bearing dissociation reactions and standard molal enthalpies of these reactions) are unique for GEMBOCHS (and EQ3/6). Hence, the misleading appearance of a zero data type for the reaction enthalpy data. Chemval species are only output to a separate dedicated file.

** The reference for supcrt92 is Johnson, Oelkers, and Helgeson (1992) [92joh/oel].

*** The standard molal thermodynamic properties of these solid solutions are computed using various site mixing models together with data for their end-member components.

Table B2: GEMBOCHS references

SQUIBB REF	AUTHOR	TITLE	PUBLISHER	VOL.	PAGES
70abb	Abbasov, A.S.	Evaluation of the thermodynamic properties of some III-V compounds	Teddington, Natl. Phys. Lab., DSC Rep. 8		12p
76abr/ber	Abrahams, S.C., Bernstein, J.L., and Nassau, K.	Transition metal iodates. VII. crystallographic and nonlinear optic survey of the 4f-iodates	J. Solid State Chem.	16	173-184
63ada/kel	Adami, L., and Kelley, K.	Heats of formations of two crystalline hydrates of ferrous sulfate	U.S. Bur. Mines Rep. Inv. 6260		7
67ahr	Ahrland, S.	Enthalpy and entropy changes by formation of different types of complexes	Helv. Chim. Acta	50	306-318
71ahr/kul1	Ahrland, S., and Kullberg, L.	Thermodynamics of metal complex formation in aqueous solution. I. A potentiometric study of fluoride complexes of hydrogen, uranium(VI), and vanadium(IV)	Acta Chem. Scand.	25	3457-3470
71ahr/kul2	Ahrland, S., and Kullberg, L.	Thermodynamics of metal complex formation in aqueous solution. II. A calorimetric study of flouride complexes of hydrogen, uranium(VI), and vanadium(IV)	Acta Chem. Scand.	25	3471-3483
80all/kip	Allard, B., Kipatsi, H., and Liljenzin, J.O.	Expeqted species of Uranium, Neptunium and Plutonium in neutral aqueous solutions	J. Inorg. Nucl. Chem.	42	1015-1027
77and/new	Anderson, P.A.M., Newton, R.C., and Kleppa, O.J.	The enthalpy change of the andalusite-sillimanite reaction and the Al2SiO5 diagram	Amer. J. Sci.	277	585-593

SQUIBB REF	AUTHOR	TITLE	PUBLISHER	VOL.	PAGES
68arn	Arnek, R.	Thermochemical studies of hydrolytic reactions	Acta Chem. Scand.	4	1102-1106
82arn/sig	Arnorsson, S., Sigurdsson, S., and Svavarsson, H.	The chemistry of geothermal waters in Iceland. I. Calculation of aqueous speciation from 0 to 370degC	Geochim. Cosmochim. Acta	46	1513-1532
75aru	Aruga, R.	Thermodynamics of ion pairing of nitrate and chlorate with metal ions in aqueous solution	J. Chem. Soc. Dalton Trans.		2534-2538
68azi/lyl	Aziz, A., Lyle, S., and Naqvi, S.	Chemical equilibria in americium and curium sulphate and oxalate systems and an application of a liquid scintillation counting method	J. Inorg. Nucl. Chem.	30	1013-1018
69azi/lyl1	Aziz, A., and Lyle, S.	Equilibrium constants for aqueous fluoro complexes of scandium, yttrium, americium(III) and curium(III) by extraction into di-2-ethylhexyl phosphoric acid	J. Inorg. Nucl. Chem.	31	3471-3480
69azi/lyl2	Aziz, A., and Lyle, S.J.	Applications of the fluoride-sensitive electrode to the study of metal-fluoride ion association constants	Analyt. Chim. Acta	47	49-56
59bab/mch	Babushkin, W.I., and Mchedlov-Petrosyan, O.P.	Thermodynamics of the reactions in the systems: Ca(OH)2-SiO2-H2O,B-C2S-H2O and C3S-H2O under normal and hydrothermal conditions	Silikattechnik	10	605-609
76bae/mes	Baes, C.F.Jr., and Mesmer, R.E.	The hydrolysis of cations	Wiley-Interscience, New York		489p

SQUIBB REF	AUTHOR	TITLE	PUBLISHER	VOL.	PAGES
76bag/ram1	Bagawde, S.V., Ramakrishna, V.V., and Patil, S.K.	Aqueous TTA complexing of Np(IV) and Pu(IV)	J. Inorg. Nucl. Chem.	38	2085-2089
76bag/ram2	Bagawde, S.V., Ramakrishna, V.V., and Patil, S.K.	Complexing of tetravalent plutonium in aqueous solutions	J. Inorg. Nucl. Chem.	38	1339-1345
71bai/lar	Bailey, A.R., and Larson, J.W.	Heats of dilution and the thermodynamics of dissociation of uranyl and vanadyl sulfates	J. Phys. Chem.	75	2368-2372
79bal/jen	Ball, J.W., Jenne, E.A., and Nordstrom, D.K.	WATEQ2 - A computerized chemical model for trace and major element speciation and mineral equilibria of natural waters, in Jenne, E.A., ed., Chemical modeling in aqueous systems: Speciation, sorption, solubility, and kinetics	ACS Symp. Ser. 93, Amer. Chem. Soc., Washington		815-835
80bal/nor	Ball, J.W., Nordstrom, D.K., and Jenne, E.A.	Additional and revised thermochemical data and computer code for WATEQ2 - A computerized chemical model for trace and major element speciation and mineral equilibria of natural waters	U.S.G.S. Water Res. Inv. 78-116		109p
65bar	Barany, R.	Heats of formation of goethite ferrous vanadate, and manganese molybdate	U.S. Bur. Mines Rep. Inv. 6618		10
65bar/ada	Barany, R., and Adami, L.H.	Heats of formation of anhydrous ferric sulfate and indium sulfate	U.S. Bur. Mines Rep. Inv. 6687		8p

SQUIBB REF	AUTHOR	TITLE	PUBLISHER	VOL.	PAGES
77bar/kna	Barin, I., Knacke, O., and Kubaschewski O.	Thermochemical properties of inorganic substances. Supplement	Springer-Verlag, New York		
73bar/kna	Barin, I., and Knacke, O.	Thermochemical properties of inorganic substances	Springer-Verlag, New York		
81bar/lan	Barnes, H.L. and Langmuir, D.	Thermochemical data for substances at 25degC and 1 atm total pressure	Unpub. Bur. Mines Rep.		
60bar	Barton, P., and Bethke, P.	Thermodynamic properties of some synthetic zinc and copper minerals	Amer. J. Sci.	258-	21-34
70bas/smi	Baskin, Y., and Smith, S.D.	Enthalpy of formation data on compounds of uranium with groups Va and VIa elements	J. Nucl. Matl.	37	209-222
77bas	Bassett, R.L.	The geochemistry of boron in thermal waters	Unpub. Ph.D. Diss., Stanford Univ., Stanford, CA		290p
80bas	Bassett, R.L.	A critical evaluation of the thermodynamic data for boron ions, ion pairs, complexes, and polyanions in aqueous solution at 298.15 k and 1 bar	Geochim. Cosmochim. Acta	44	1151-1160
72bat/luk	Batsanova, L.R., and Lukina, L.V.	Structure of "hydrated" rare earth element trifuorides	Russ. J. Inorg. Chem.	17(5	629-631
81bau	Bauman, J.E.	Thermodynamic measurements of carbonate equilibria involving metal ions, in Gokcen, N.A., Mrazek, R.V., and Pankratz, L.B., eds., Techniques for measurement of thermodynamic properties	U.S. Bur. Mines Rep. Inv. 8853		268-274

SQUIBB REF	AUTHOR	TITLE	PUBLISHER	VOL.	PAGES
58bea/mct	Bear, J., and McTaggart, H.	The sulphides, selenides, and tellurides of titanium, zirconium, hafnium, and thorium	Austral. J. Chem.	11	458-470
79bel/dob	Belyaev, Y.I., Dobretsov, V.N., and Ustinov, V.A.	Enthalpy and heat capacity of Np2O5 over the temperature range 350-759K	Sov. Radiochem. (Engl. transl.)	21	386-387
76ben/ada	Bennett, A.C., and Adams, F.	Solubility and solubility product of dicalcium phosphate dihydrite in aqueous solutions and soil solutions	Soil. Sci. Soc. Amer. Jour.	40	39-42
60ber/new	Berman, H.A., and Newman, E.S.	Heat of formation of calcium trisulfoaluminate at 25degC	Proc. 4th Intl. Symp. Chem. Cement		247-257
88ber	Berman, R.G.	Internally-consistent thermodynamic data for minerals in the system Na2O-K2O-CaO-MgO-FeO-Fe2O3-Al2O3-SiO2-TiO2-H2O-CO2	J. Petrol.	29	445-522
86ber/eng	Berman, R.G., Engi, M., Greenwood, H.J., and Brown, T.H.	Deviation of internally-consistent thermodynamic data by the technique of mathematical programming: a review with application to the system MgO-SiO2-H2O	J. Petrol.	27	1331-1364
87bet/gou	Bettonville, S., Goudiakas, J., and Fuger, J.	Thermodynamics of lanthanide elements. III. Molar enthalpies of formation of Tb3+(aq), Ho3+(aq), Yb3+(aq), Yb2+(aq), TbBr3(cr), HoB3(cr), and YbBr3(cr) at 298.15K	J. Chem. Thermo.	19	595-604

SQUIBB REF	AUTHOR	TITLE	PUBLISHER	VOL.	PAGES
83bid/dep	Bidoglio, G., De Plano, A., and Chatt A.	Studies on speciation of americium, technecium and neptunium in simulated vitrified-waste leachates, in Brookins, G., ed., Scientific basis for nuclear waste management. VI. Proc. Mat. Res. Soc. Symp.	North-Holland, New York	15	373-382
82bil/sch	Bilinski, H., and Schindler, P.	Solubility and equilibrium constants of lead in carbonate solutions (25degC, I=0.3 mol/dm3)	Geochim. Cosmochim. Acta	46	921-928
73bil/stu	Bilinski, H., and Stumm, W.	Pb(II)-species in natural waters	Swiss Fed. Inst. Tech., EAWAG News no. 1		2-3
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76wag/par	Wagman, D., Parker, W., and Schumm, R.	Chemical thermodynamic properties of compounds of sodium, potassium and rubidium	U.S. Natl. Bur. Stds.	76	
76wag/eva	Wagman, D.D, Evans, W.H., Parker, V.B., and Schumm, R.H.	Chemical thermodynamic properties of compounds of sodium, potassium and rubidium: An interim tabulation of selected values	U.S. Natl. Bur. Stds. Int. Rep. 76-1034		
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77wag/sch	Wagman, D.D., Schumm R.H., and Parker, V.B.	A computer assisted evaluation of the thermochemical data of compounds of thorium	U.S. Natl. Bur. Stds. Int. Rep. 77-1300		93
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90crc	Weast, R.C. (ed.)	CRC Handbook of Chemistry and Physics	CRC Press, Boca Raton, FL, 70th ed.		
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69wel	Wells, C.F.	Reaction of Feaq2+ and FeClaq+ with hydrogen peroxide in perchlorate media at 25degC	J. Chem. Soc. A		2741-2743
57wes/gre	Westrum, E.F., and Grenier, G.J.	Heat capacities and thermodynamic properties fo crystalline and vitreous anhydrous sodium tetraborate from 6 to 350K	J. Amer. Chem. Soc.	79	1799-1802
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63wil	Willix, R.L.S.	Ferrous-ferric redox reaction in the presence of sulphate ion	J. Chem. Soc. Faraday Trans.	59	1315-1324
78wol	Wolery, T.J.	Some chemical aspects of hydrothermal processes at mid-oceanic ridges -- A theoretical study. I. Basalt-sea water reaction and chemical cycling between the oceanic crust and the oceans. II. Calculation of chemical equilibrium between aqueous solutions and minerals	Unpub. Ph.D. Diss., Northwestern Univ., Evaston, IL		263p
85wol	Wolery, T.J.	Notes	Personal Written Communication		23p
87woo/gar	Woods, T.L., and Garrels, R.M.	Thermodynamic values at low temperature for natural inorganic materials: An uncritical summary	Oxford Univ. Press, Oxford		
79zot/kot	Zotov, A.V., and Kotova, Z.Y.	Spectroscopic determination of the first hydrolysis constant of Fe+++ in the interval 80-200degC	Geokhim.	5	768-773

APPENDIX C

GEMBOCHS MODIFICATIONS AND ADDITIONS: 2nd QUARTER, FY 1994

During the second quarter of FY 1994, efforts were focused on completing development of two major software projects, augmenting GEMBOCHS with additional thermodynamic data, expanding the suite of datafiles generated for use with EQ3/6, and improving user access to EQ3/6 datafiles, which are described in the following paragraphs.

During the past year, considerable effort was devoted toward development of two critical software interfaces with GEMBOCHS. The first of these is the *jewel* program, a mouse-driven utility that facilitates point-and-click generation of thermodynamic datafiles for use with EQ3/6 (and other analogous modeling packages). More specifically, *jewel* reads reference-state and various coefficient data for a user-specific subset of GEMBOCHS species, extrapolates these data over the P-T range of interest using a variety of theoretical and empirical models, and outputs the requisite elevated P-T properties in a format suitable as input for various target modeling codes. *Jewel* can be used to generate a number of standard datafiles; more important is the program's extreme flexibility, which permits generation of customized datafiles based on major datasets, species subsets, bulk system composition, or any combination thereof. The *jewel* interface represents a dramatic improvement in both versatility and ease-of-use over its relatively inflexible, batch-mode predecessor. The code has been used and refined extensively over the past few months, and a user's manual is in the process of being completed.

The second interface under development is *facet*, another mouse-driven utility that permits review, revision, deletion, and addition of GEMBOCHS data. All updates to GEMBOCHS are incorporated using *facet*, which provides an auditing capability that explicitly documents all database modifications. Like *jewel*, *facet* represents a tremendous improvement over its predecessor, which required function-key navigation through a labyrinth of on-screen menus. Also in analogy with *jewel*, the *facet* development effort, including the documentation, is nearing completion and will be available in the near future. Recently, *facet* was used to upload reference-state standard molal thermodynamic data and equation-of-state parameters for a large number of aqueous species, including aqueous peptides, aldehydes, and metal acetate complexes (Shock, 1992, 1993; Schultz and Shock, 1993; Shock and Koretsky, 1993; Shock and McKinnon, 1993). These data improve significantly the ability to model aqueous organic/inorganic systems.

Also, a sixth member has been added to the standard suite of thermodynamic datafiles provided for use with EQ3/6. The new file, data0.alt, represents an alternate composite database in which aqueous Np, Pu, and Am species are represented exclusively by the compilation of reference-state dissociation constants given by Palmer et al. (1992). Otherwise, the file is identical to the composite datafile, data0.com, in which a smaller set of aqueous Np, Pu, and Am species is represented by data from a variety of published sources.

In an attempt to improve user accessibility to newly revised suites of GEMBOCHS datafiles for use with EQ3/6, an "anonymous" *ftp* account has recently been established on a local machine. This account permits off-site EQ3/6 users to keep abreast of recent GEMBOCHS updates and to acquire the latest suites of EQ3/6 datafiles in timely fashion via electronic transfer. The R23 suite will be the first available via the "anonymous" account, sometime during April 1994. At that time, interested parties will be informed as to the particulars of remote access procedures.

APPENDIX D

GENISES ADDITIONS: 2nd QUARTER, FY 1994

DATA TRACKING NO.	DATA ITEM DESCRIPTION
LA000000000051.001	LONG-TERM THERMAL STABILITY OF CLINOPTILOLITE: THE DEVELOPMENT OF A B PHASE
TM000000000001.037	METEOROLOGICAL MONITORING PROGRAM SUMMARY REPORT DECEMBER 1985 THROUGH DECEMBER 1991 (YMP/93-12-MMPSR)
GS920483117412.014	SEISMICITY AND FOCAL MECHANISMS FOR THE SOUTHERN GREAT BASIN OF NEVADA AND CALIFORNIA IN 1990 (USGS OFR 92-367)
GS920783117412.022	SEISMICITY AND FOCAL MECHANISMS FOR THE SOUTHERN GREAT BASIN OF NEVADA AND CALIFORNIA IN 1991 (USGS OFR 92-340)
GS920983117412.032	SEISMICITY AND FOCAL MECHANISMS FOR THE SOUTHERN GREAT BASIN OF NEVADA AND CALIFORNIA: 1987 THROUGH 1989 (USGS OFR 91-572)
GS910808312232.002	BOREHOLE AND GEOHYDROLOGIC DATA FOR TEST HOLE USW UZ-6, YUCCA MOUNTAIN AREA, NYE COUNTY, NEVADA (USGS OFR 92-28)
GS930731174101.003	1983-1988 LEVELING RESULTS, 1983-1988 QUADRILATERAL RESULTS AND VARIOUS EARLIER DATA
GS920508314212.005	PRINCIPAL FACTS FOR 16,000 GRAVITY STATIONS IN THE NEVADA TEST SITE AND VICINITY (USGS OFR 89-682 A, B, &C)
GS920108314213.001	GEOPHYSICAL AND CORE MEASUREMENTS FROM FORTY BOREHOLES AT YUCCA MOUNTAIN
GS930208318523.001	TEMPERATURE, THERMAL CONDUCTIVITY, AND HEAT FLOW NEAR YUCCA MOUNTAIN, NEVADA: SOME TECTONIC AND HYDROLOGIC IMPLICATIONS (USGS OFR 87-649)

DATA TRACKING NO.	DATA ITEM DESCRIPTION
GS930908314214.006	GEOLOGICAL AND MINERALOGICAL CONTROLS ON PHYSICAL PROPERTIES OF TUFFS AT YUCCA MOUNTAIN
GS930908314214.007	BULK POROSITY IN LITHOPHYSAL ZONES ABOVE THE STATIC WATER LEVEL AT YUCCA MOUNTAIN, NEVADA, CALCULATED FROM BOREHOLE GRAVITY AND GAMMA-GAMMA DENSITY LOGS