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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966)*

By

William Thordarson, R. A. Young, and I. J. Winograd

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This report is preliminary and has not been edited or reviewed for conformity with U. S. Geological Survey standards and nomenclature.

*Prepared on behalf of the U. S. Atomic Energy Commission.

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ABSTRACT

Hydrogeologic and construction data obtained from 119 test holes, wells, and emplacement holes at the Nevada Test Site and vicinity (through December 1966) are tabulated. The availability of cuttings, cores, lithologic logs, geophysical logs, formation-water analyses, hydraulic test data, and detailed construction data for each hole, as well as references to published reports for selected holes, are noted.

INTRODUCTION

The U. S. Geological Survey, in cooperation with the U. S. Atomic Energy Commission, has been collecting information on the quantity, quality, and temperature of ground water in wells and test holes drilled at the Nevada Test Site and surrounding areas, since November 1957. These holes were drilled for a variety of purposes: water supply, stratigraphic exploration, hydrologic exploration, physical property data, and for the emplacement of nuclear devices.

Purpose and scope

This report presents a tabulation of hydrogeologic data obtained through December 1966 for 119 holes drilled at NTS and vicinity. Some of these holes yielded a wealth of hydrogeologic data (table 1); other holes yielded only a measurement of the static water level or a water sample. Hydrogeologic data were not obtainable from dozens of large-diameter and instrument holes drilled in support of the U. S. Atomic Energy Commission's underground nuclear device testing program. The stratigraphic and physical property data from many of these holes will be presented in other reports planned by the Geological Survey.

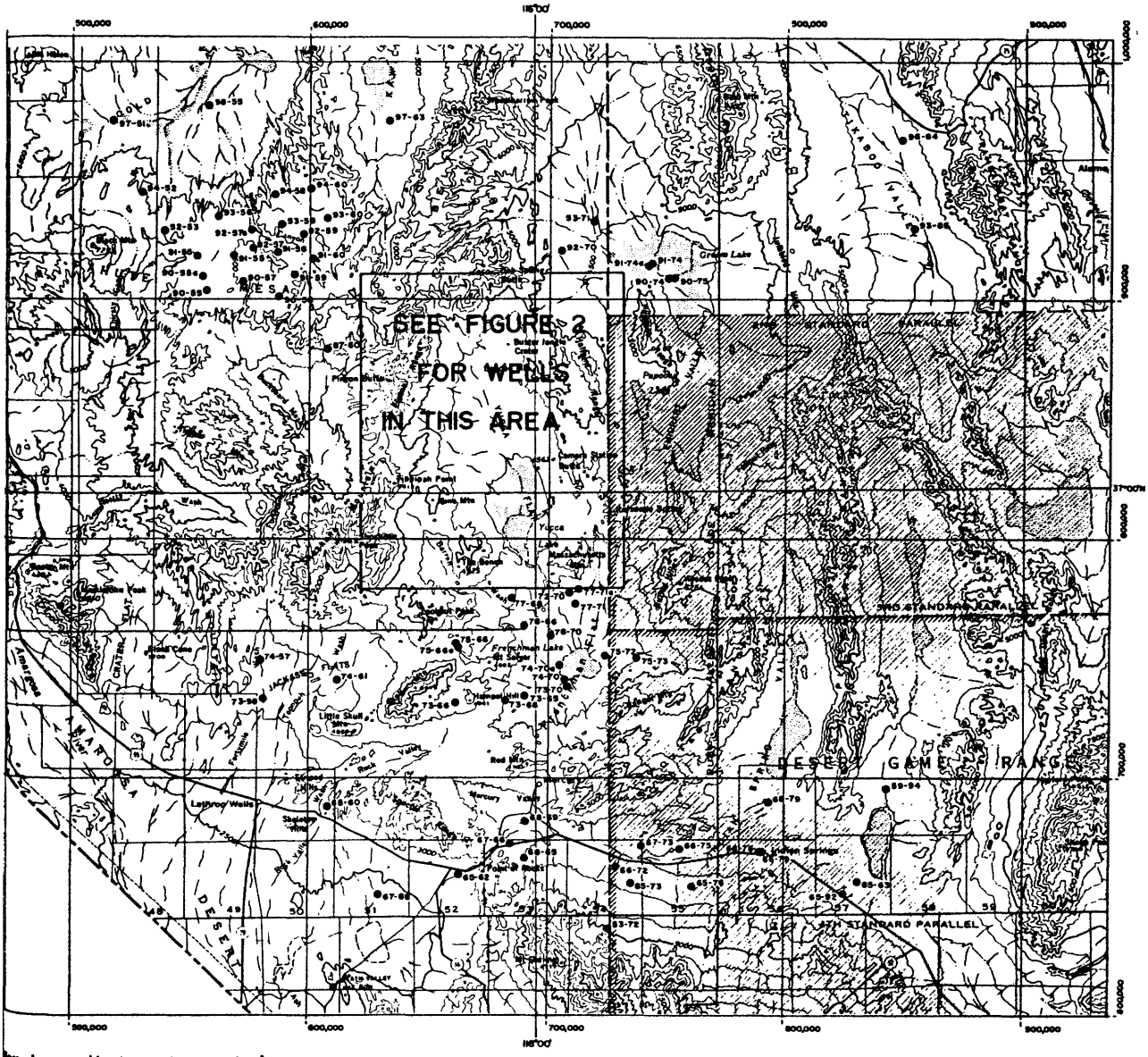
Data for wells in areas adjacent to the NTS--the Amargosa Desert, Oasis Valley, Indian Springs Valley, and Three Lakes Valley--are tabulated in reports by Walker and Eakin (1963), Malmberg and Eakin (1962), and Maxey and Jameson (1948). To avoid duplication, only records of deep wells pertinent to an understanding of the hydrogeology of the NTS have been taken from those reports. A few deep wells omitted from those reports or drilled since their publication are also included in this report.

LOCATION OF THE AREA

The area described in this report is in southeastern Nye County and adjacent parts of Clark and Lincoln Counties, Nevada (fig. 1). It includes the Nevada Test Site; the Amargosa Desert, lying to the south and southwest of the Nevada Test Site; Indian Springs Valley and Three Lakes Valley, lying to the southeast and east; the portion of Frenchman Flat outside the Nevada Test Site, lying to the east; Emigrant Valley, lying to the northeast; Kawich Valley, lying to the north; and Gold Flat, lying to the northwest. Indian Springs Valley and Three Lakes Valley are included to document several key wells recorded in a report now out-of-print (Maxey and Jameson, 1948) or in unpublished data in Geological Survey files. The wells in Gold Flat and Kawich Valley are included to supplement data from wells on Pahute Mesa. The locations of tabulated wells are plotted on figures 1 and 2.

SOURCES OF INFORMATION

The data in this report are taken principally from published and unpublished reports and files of the U. S. Geological Survey, Las Vegas and Mercury, Nevada, and from reports furnished by the Los Alamos Scientific Laboratory and the Lawrence Radiation Laboratory, Mercury, Nevada. Additional data were obtained from the files of Fenix and Scisson, Inc., Holmes and Narver, Inc., and the Reynolds Electrical and Engineering Company, Inc., and from reports of the Nevada Department of Conservation and Natural Resources.


SEE FIGURE 2
FOR WELLS
IN THIS AREA
DESERT GAME RANGE
37TH STANDARD PARALLEL
Yucca Flat
Frenchman Lake
Mercury
Lathrop Wells
Skeleton Hills
Little Skull Mtn.
Rock Valley
Jackass Flats
Cane Spring
Pahute Mesa
Oasis Valley
Timber Mtn.
Rainier Mesa
Shoshone Mtn.
Belted Range
Stonewall Mtn.
Stonewall Flat
Cactus Flat
Cactus Range
Kawich Range
Reveille Range
Pahranagat Range
Groom Lake
Papoose Lake
Emigrant Valley
Ash Meadows
Amargosa Desert
Alkali Flat
Penoyer Valley
Kawich Valley
Gold Flat
Crater Flat
Fortymile Canyon
Fortymile Wash
Beatty
Oasis
Atomic
Area 1
Area 2
Area 3
Area 4
Area 5
Area 6
Area 7
Area 8
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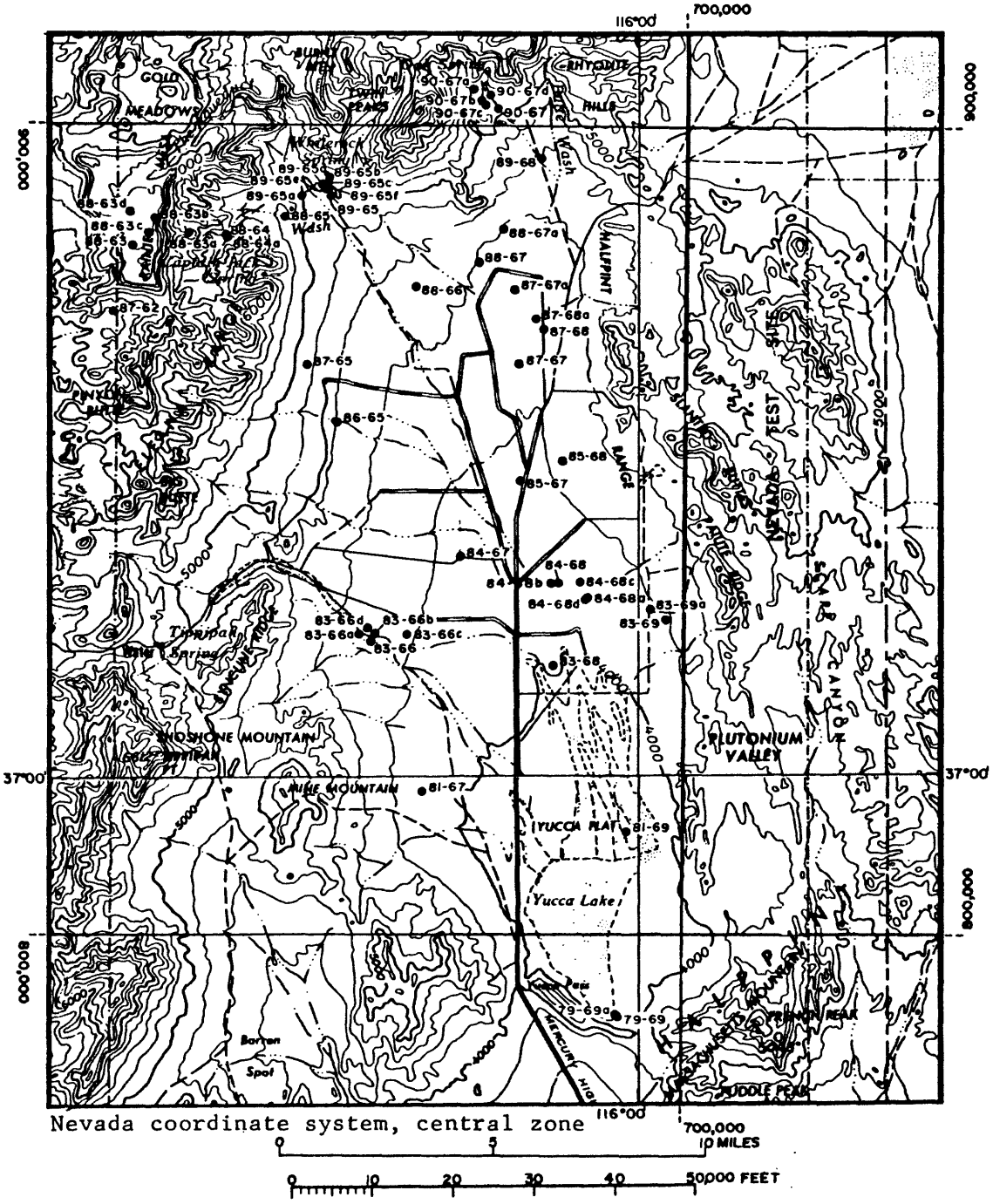

Figure 2.--Map of Yucca Flat showing location of wells and test holes.

For most of the water wells and test holes drilled within the Nevada Test Site, drilling histories, lithologic logs, geophysical logs, and chemical analyses of water are available for inspection either in published reports mentioned under "Remarks" in table 1 or in unpublished reports and files in the U. S. Geological Survey offices in Las Vegas and Mercury, Nevada. In addition, cores and cuttings from most of the test wells are available for inspection at the Atomic Energy Commission - U. S. Geological Survey core library in Mercury, Nevada.

EXPLANATION OF WELL TABLE

Table 1 lists construction, geologic, and hydrologic data for each well or test hole. An explanation of portions of the table is presented below.

Map numbers, well names and numbers, and Nevada coordinates, central zone

Each well or test hole is located with respect to the 10,000-foot grid of the Nevada coordinate system, central zone; these coordinates, in feet, are given in the second column of the table. To permit easy identification of the wells on maps, each well is assigned a map number derived from the Nevada coordinates. The map number consists of the first two digits of the north coordinate, a hyphen, and then the first two digits of the east coordinate. Thus U.S.G.S. test well 10, whose coordinates are N. 671,051 ft, E. 739,075 ft, is identified on maps by the number 67-73. The wells and test holes in the table are listed in increasing order of map numbers. Where several holes are in the same 10,000-foot grid, one is designated only by four numbers and all others by consecutive letters after the fourth number; for example, 84-68, 84-68a, 84-68b, and 84-68c. Moore (1961, 1962) used a slightly different designation system for numbering wells within the same 10,000-foot grid. Moore's system of numbering wells in the same 10,000-foot grid was to add letters after each number; for example, 88-63a, 88-63b, and 88-63c. The alphabetical designation does not necessarily indicate the sequence in which the holes were drilled. Fourteen wells along the periphery of the Test Site are also located with respect to township, range, and section (Mt. Diablo base line and meridian); these designations are listed in the third column of the table. All the townships are south and all the ranges are east of the Mt. Diablo base line and meridian; therefore, these geographic directions are not listed. Letters a, b, c, and d, which follow the section number, refer respectively to the northeast, northwest, southwest, and southeast quarter-sections. For example, well 16/51-27b is in the northwest quarter of section 27, T. 16 S., R. 51 E.

Casing

The casing sizes listed in column 7 are standard outside diameters. Available records for the older wells, however, list either inside diameter or a nominal casing size; these sizes are presented either unchanged or are converted to nominal outside diameters.

Well construction

Detailed information on well construction--for example, the quantity and position of cement behind casing, type of perforations, type of liner hanger, etc.--are not presented in the table because of space limitations; such data are available for most of the test wells drilled at the Test Site and are so noted in the "Remarks" column.

Formations tested

The formal geologic name of the water-bearing strata tapped and sampled by each well is abbreviated in column 10. The key for the abbreviations is given in a headnote to the table. Strata penetrated by a well, but not tested (for static level, water chemistry, specific capacity, or other data) are not listed.

Altitude

The altitude of the land-surface datum at the well is presented in column 11. Altitudes are given to the nearest foot where they are taken from standard surveys; altitudes estimated from topographic quadrangle sheets by interpolation between contours are followed by a plus and minus sign and the indicated error.

Static water level

Static water levels in column 14 have been corrected to land-surface datum and for the line error in the water-level measuring device. They have not been corrected for the deviation of the hole from the vertical, which in a few wells causes water levels to be as much as 1 to 3 feet deeper than the actual vertical distance from the surface to the water; such corrections are made on the potentiometric maps of the Test Site. Accuracy of the measuring devices used and calibration methods are discussed by Garber and Koopman (in press).

For many of the wells and test holes, numerous measurements of static water level have been made; space permits listing of only representative measurements in the table. In general, the static level given is representative of the static water level in the aquifer immediately after drilling or prior to extensive pumping from the aquifer. Where dewatering of several feet has occurred--as is apparently the situation at the site of water wells 81-67 and 83-68 in Yucca Flat--two or more static levels are listed. In several wells tapping two or more aquifers, static levels representative of each aquifer are presented. In other wells tapping more than one aquifer, the static level listed is a composite of the static level of each aquifer penetrated. In general, with the exceptions of wells on Pahute Mesa and a few wells elsewhere at the Test Site, the static levels given are representative only of the aquifer tapped.

A few holed tapped strata of such low transmissibility that a static water level was not attained in the time alloted for measurement of water-level recovery after bailing or swabbing; for such holes the depth to the water level is reported as "less than" (<) some figure. Conversely, in other holes drilled with mud or water the fluid level declined very slowly toward the bottom of the hole after cessation of drilling; the water level in such holes is described as "greater than" (>) some figure.

A discussion of several noninstrumental factors affecting the measurements of static water levels at the Test Site is presented by Winograd (unpublished manuscript). The reader intending to use the water-level data in the table for potentiometric contouring is advised to read that report and the drilling history of each test hole utilized for such contouring.

Yield and drawdown

Yield and drawdown figures for most of the water-supply wells or test wells that were pumped are presented in columns 16 and 17. The length of pumping time at the time of the drawdown measurement is also given when known. Due to frequent pump failure and subsequent replacement with pumps of differing yield, the yield and drawdown figures given may not be up-to-date. The yield listed is not necessarily maximum yield of the well; in many wells the yield reflects the capacity of the pump installed in the well during its initial pump test.

Remarks

In the remarks column are listed the availability of sample cuttings, cores, geophysical logs, lithologic logs, drillers logs, chemical analyses of water, and reports for each well. If no reference is noted in the remarks column, the information given in the table for that well is taken from unpublished reports and the files of the Geological Survey.

Abbreviations

Explanation of the abbreviations and entries in the table is presented at the head of the table. In addition, several footnotes supplement data in table 1.

Table 1.--Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966).

EXPLANATION OF SOME TABLE HEADINGS

Coordinates: Nevada coordinates, central zone (10,000-foot grid), and township and range (Mt. Diablo base line and meridian).

User and name or number:
BLM, U. S. Bureau of Land Management;
LASL, Los Alamos Scientific Laboratory;
LRL, Lawrence Radiation Laboratory;
NASA-AEC, National Aeronautics and Space Administration and Atomic Energy Commission;
Sandia, Sandia Corporation;
U.S.A.F., U. S. Air Force;
U.S.G.S., U. S. Geological Survey;
Wells Stewart, Wells Stewart Construction Co., Inc.

Driller and method:
Allen, Allen Water Well Service Company;
Effinger, Effinger Drilling and Pump Service;
Mac Ex, Mac Exploration Drilling Company;
McKinney, S. R. McKinney and Sons, Inc.;
Mason, Silas Mason Company;
ME Co., Minerals Exploration Company;
REECo, Reynolds Electrical and Engineering Company;
C, cable tool;
R, standard rotary;
Ra, air rotary.

Depth of well:
r, reported depth;
other depths from official records.

Measuring point:
L, land surface;
Ta, top of access line;
Tc, top of casing;
Ep, entry port;
Rs, recorder shelf;
Height of point, given in feet, above or below land surface.

Water level:
r, reported;
all other measurements by U.S.G.S.;
<, less than;
>, greater than;
water levels not corrected for hole deviation.

Drawdown:
r, if reported;
other drawdowns measured;
(50), duration, in hours, of pumping test.

Use:
D, device or emplacement hole;
Dry, dry and abandoned;
E, exploratory hole;
I, industrial supply;
Irr, irrigation;
O, observation;
PS, public supply;
S, stock;
Sat, satellite hole.

Remarks: In addition to the data given in table, the following types of data are available through U.S.G.S. offices in Las Vegas and Mercury, Nevada:

A, chemical analysis of water;
Cr, core;
Cu, cuttings;
DL, drillers log;
GL, geophysical logs;
L, lithologic log;
Pc, pump test and detailed well construction data;
Ref., reference to published report on well listed in bibliography.

Formations tested:

CENOZOIC

Quaternary and Tertiary

QTal, valley fill

Tertiary

Tt, tuff, tuffaceous sediments, or lake beds of Tertiary age
Tp, bedded tuff of Piapi Canyon Group
Tbk, basalt of Kiwi Mesa
Tma, Ammonia Tanks Member of Timber Mountain Tuff
Tmr, Rainier Mesa Member of Timber Mountain Tuff (Pliocene)
Tpt, Topopah Spring Member of Paintbrush Tuff (Miocene
Ttp, rhyolite and tuff of Pahute Mesa
Til, altered bedded tuff of Indian Trail Formation
Twf, dacitic lava flows of Wahmonie Formation
Twtb, interbedded tuff, sandstone, and breccia of Wahmonie Formation
Ts, Salyer Formation
Ttc, tuff of Crater Flat
Tpa, rocks of Pavit Springs

MESOZOIC

MzPg, granitic stocks of Permian to early Mesozoic age

PALEOZOIC

Pzc, carbonate rocks of Paleozoic age

Permian and Pennsylvanian

PPt, Tippipah Limestone

Mississippian and Devonian

MDe, Eleana Formation

Devonian

Dc, carbonate rocks of Devonian age
Ddn, Devils Gate Limestone and Nevada Formation
DSOd, carbonate rocks of Ordovician, Silurian, and Devonian age

Silurian

Sc, carbonate rocks of Silurian age

Ordovician

Op, Pogonip Group
Oa, Antelope Valley Limestone of Pogonip Group

Cambrian

Cn, Nopah Formation (Upper Cambrian)
Cbk, Bonanza King Formation
Ccu, upper carbonate part of Carrara Formation
Ccl, lower clastic part of Carrara Formation
CpCcl, clastic rocks of Early Cambrian and Precambrian age

Precambrian

pCn, Noonday(?) Dolomite (California)

Table 1.--Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966)--Continued

Map number	Coordinates	User and name or number	Driller and method	Year completed	Depth of well (feet)	Casing: Outside diam. (inches)	Casing: Depth interval (feet)	Casing: Perforated zone (feet)	Formations tested	Altitude of land surface (feet)	Measuring pt.: Description	Measuring pt.: Height (feet)	Static water level: Depth below land surface (feet)	Static water level: Date	Yield (gpm)	Drawdown (feet) after ( )hours	Well head temp. (°F)	Status or use	Remarks (cuttings and core samples, lithologic and geophysical logs, water analyses, references, etc.)
3-72	N636,500 E725,000	BLM 17/54-3c	---	---	222	no cag	---	---	---	4,670±10	L	---	>222	1963	---	---	---	Dry	Dry when measured in 1963. Spoil pile indicates hole may have reached Paleozoic rock.
55-62	N650,780 E629,347	U.S.G.S. Amargosa Tracer No. 1 16/51-27b	Pease Drlg. Co., R, Re	1966	830	13 3/8 9 5/8	0- 625 690- 755 (liner)	none 695- 750	€bk, €cu	2,405	Tc	1.4	44.3	10-18-66	---	---	---	O	Cr, Cu, GL, L, PC. One of several wells in same 1/4 section. Carbonate aquifer in interval 618-830 ft.
65-66	N659,000 E663,000	Wells-Stewart 16/52-15a	Gilbert Drlg. Co., C	1964	800r	---	---	---	QTal?, Pzc?	2,818	L	0	454.3	4-29-64	80r	195r	85	I	A. Casing pulled, Oct. 1964; well destroyed.
65-73	N655,582 E735,160	Army 2	McKinney, C	1958	658r	o 5/8	0- 67	---	QTal	3,813	Ep	0.8	499.8	1-28-59	8r	---	---	O	A, Cu, GL, L. Ref. Moore (1961 and 1962). Driller reported limestone and dolomite in interval from 645-658 ft.
65-76	N654,163 E760,615	Army 3	McKinney, C	1958	826r	10 3/4	0- 453	310- 435	QTal Tt	3,617	Tc	0.86	288.3	8- 8-66	50r	28r	---	O	A, Cu, DL, GL, L. Ref. Moore (1961 and 1962). Driller reported gray limestone in interval from 818-826 ft.
65-82	N651,003 E825,003	Wells-Stewart 16/57-26c	Thompson Drlg. Co., C	1963	550r	no cag	---	---	QTal	3,181±5	Tc	1.0	97.9	4-22-63	300	>280r	71	1	Cu, L. Casing pulled, 1964; well destroyed.
65-83	N656,000 E831,000	U.S.A.F. 16/57-24c	U.S. Grasing Service?, C	---	151	4	---	---	QTal	3,088±5	Tc	2.0	120.8	1-15-63	---	---	---	O	Ref. Maxey and Jameson (1948, Appendix I).
66-69	N665,641 E690,214	Army 6A or Riess Well	Allen, R (?)		1,253r	12 10	0-1,185 1,157-1,228	none 1,157-1,228	€pEc1	3,445	Tc	.3	1,030.5	2-11-64	1-2	---	76	O	A, DL, GL, L. Ref. Moore (1961 and 1962).
66-72	N662,361 E728,628	BLM	J.L. Hogan, C	1951	587	8 5/8	---	---	QTal?	3,647	---	---	>587	1958	---	---	---	Dry	DL, GL. Ref. Moore (1961 and 1962).
66-75	N669,876 E755,217	U.S.G.S. T.W. 4	Western Republic, Re	1962	1,490	13 3/8 8 5/8 7 5/8	0- 750 716-1,067 1,067-1,391	none 751-1,067 1,197-1,390	€n	3,479	Tc	- 0.5	736.6	8-27-64	160	40.3 (36)	78	E,O	A, Cr, Cu, GL, L, PC.
66-78	N668,000 E789,000	U.S.A.F. No. 2, Indian Springs 16/56-8b	Thompson Drlg. Co. ?, C ?	1942	576r	6	0- 322	---	QTal Pzc?	3,129	Te?	1±	60.5	3-13-63	185r	30r	73	PS	DL. Same as well 16/56-8ab in Maxey and Jameson (1948, Appendix I); reference lists dozens of other wells at Indian Springs.
66-79	N668,000 E790,000	U.S.A.F. No. 1, Indian Springs 16/56-8a	---	1942	604r	8	0- 304r	245-304	QTal Pzc?	3,118	Te?	1±	33.9	3- 8-63	300r	---	---	PS	Same as well 16/56-5dd in Maxey and Jameson (1948, Appendix I).

Table 1.--Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966)--Continued

Map number	Coordinates	User and name or number	Driller and method	Year completed	Depth of well (feet)	Casing: Outside diam. (inches)	Casing: Depth interval (feet)	Casing: Perforated zone (feet)	Formations tested	Altitude of land surface (feet)	Measuring pt.: Description	Measuring pt.: Height (feet)	Static water level: Depth below land surface (feet)	Static water level: Date	Yield (gpm)	Drawdown (feet) after ( )hours	Well head temp. (°F)	Status or use	Remarks (cuttings and core samples, lithologic and geophysical logs, water analyses, references, etc.)
67-68	N670,902 E684,772	U.S.G.S. Army 1	McKinney, C Western Republic, Ra	1958 1962	1,946	13 3/8 10 3/4 7 5/8	0- 611 0-1,263 1,197-1,360	800-1,050 none	<Cn <Ck?	3,154	Ta	0.3	785.0	11- 7-63	454	84 (48)	92	E,PS	A, Cr, Cu, GL, L, PC. Drilled to 620 ft in 1958; reamed and deepened in 1962. Ref. Moore (1961 and 1962).
67-73	N671,051 E739,275	U.S.G.S. T.W. 10	Western Republic, C	1963	1,301	16 13 3/8 8 5/8	0- 995 944-1,200 1,173-1,301	none 975-1,200 1,173-1,321	<Ck	3,569	Tc	1.0	838.8	11- 6-63	400	90.6 (51)	81	E,O,I	A, Cu, GL, L, PC. Carbonate aquifer in interval 1,020-1,301 ft.
68-60	N627,431 E617,632	U.S.G.S. T.W. 5	Western Republic, Ra	1962	916	13 3/8 7	0- 166 0- 800	735- 800	<Cc1	3,053	Tc	2.1	673.9	12-10-63	<5	126	---	E,O	Cr, Cu, GL, L, PC.
68-65	N[illegible] E[illegible]	Army 6 (Camp Desert Rock)	McKinney, C	1951	1,220r	---	---	---	Tt	3,256	L	0	975r	Oct.1951	3	---	---	---	A, DL. Well destroyed. Ref. Moore (1961 and 1962). Water level probably represents residual drawdown after bailing of tuff aquitard.
68-79	N639,000 E793,000	McFarland Well 15/56-21 (?)	---, C?	before 1915	700r	---	---	---	QTal?	3,070±20	L	0	650r	---	---	---	---	---	Ref. Carpenter (1915). Well probably destroyed
69-84	N695,000 E642,500	"Alexander Well" 15/56-17 (?)	---	1930?	303r	---	---	---	QTal?	3,065±10	---	---	301r	1930?	---	---	---	---	Well destroyed; data from unpublished report of Soil Conservation Service. Water level reportedly measured with steel tape.
73-58	N723,509 E531,011	NASA-AEC J-12	Perry, C	1957	887	12 3/4	0- 887	793- 868	Tpt	3,128	Tc	3.0	741.4	1-27-60	370	2.5? (83)	78	PS,I	A, Cu, GL, L, PC. Ref. Moore (1961 and 1962).
73-66	N731,253 E661,153	U.S.G.S. T.W.F.	Mac Ex, R. Western Republic, Ra	1960 1962	1,871 3,400	12 3/4 8 5/8	0-1,200 0-3,140	none none	Ttc,Tps Sc	4,143	Tc Tc	2.04 1.2	531.2 1,734.6	10-25-61 1-24-63	<5 58	--- <3	--- 148	E,O	A, Cr, Cu, GL, L, PC. Only one of several perched water levels in tuff listed. Carbonate aquifer in interval 3,137-3,400 ft.
73-68	N732,500 E682,000	LRL Le5m	REECo, Ra	1966	1,504	---	---	---	Twtb or Te	3,500±	L	0	518±2	4- ?-66	---	---	---	E	Cr, Cu, L. Water probably perched in tuff aquitard.
73-69	N734,799 E697,124	Test hole 5	McKinney, C	1950	461r	10	0- 88	---	Tt	3,233±	---	---	>461r >448	1950 7-22-60	---	---	---	Dry	DL, GL, L. Ref. Moore (1961 and 1962).
73-75	N73[illegible],361 E707,514	Well 5A	McKinney, C	1951	910	12 10	0- 608 0-877	642- 877	Tpa?	3,093	Ta	2.8	695.9	10- 7-59	97	82	74	PS,I	A, DL, L, PC. Ref. Hood (1961) and Moore (1961).

Table 1.--Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966)--Continued

Map number	Coordinates	User and name or number	Driller and method	Year completed	Depth of well (feet)	Casing: Outside diam. (inches)	Casing: Depth interval (feet)	Casing: Perforated zone (feet)	Formations tested	Altitude of land surface (feet)	Measuring pt.: Description	Measuring pt.: Height (feet)	Static water level: Depth below land surface (feet)	Static water level: Date	Yield (gpm)	Drawdown (feet) after ( )hours	Well head temp. (°F)	Status or use	Remarks (cuttings and core samples, lithologic and geophysical logs, water analyses, references, etc.)
74-67	N[illegible] E579,651	U.S.G.S. T.W. 6 (now Well J-13)	Western Republic Ra	1963	3,486	18 13 3/8 11 3/4 5 1/2	0- 435 0-1,331 1,331-1,546 1,484-3,385	996-1,301 1,301-1,386 2,690-3,312	Tpt	3,318	Ta	1.4	928.0	2- 7-64	697	43.3 (96)	87	E,O,I	A, Cr, Cu, GL, L, PC. Welded tuff aquifer (Tpt) extends from 928-1,475 ft; tuff aquitards from 1,475 ft to total depth.
74-61	N740,368 E011,764	NASA-AEC J-11	Perry, C	1957	1,329	12 3/4	0-1,327	1,077-1,097 1,244-1,300	Tbk Tpt	3,443	Tc	3.0	1,039.1	1-27-58	105	41	96	O	A, Cu, GL, PC. Ref. Moore (1962).
74-70b	N741,644 E706,305	Well 5C	Mason, E	1954	1,200	12 10 1/	0- 20 0-1,187	887-1,187	QTal	3,081	L	0	689.1	5- 4-61	310	254 (1)	76	PS,I	A, GL, L, PC. Ref. Hood (1961) and Moore (1961). Pump was off for 133 days before water-level measurement.
74-73a	N747,359 E704,263	Well 5B	McKinney, C	1951	900	12 10 1/	0- 460 440- 900	700-900	QTal	3,092	Ta	1.1	682.6	8-26-59	260	75 (0.5)	76	PS,I	A, DL, GL, L, PC. Ref. Hood (1961) and Moore (1961).
75-66e	N756,262 E661,491	LRL Pluto 4	---, R	1962	261	4 1/2	0- 51	---	Twf	4,152	L	0	109.6	7-21-62	---	---	---	E	Cr, Cu, GL, L. Ref. Johnson and Ege (1964). One of several core holes tapping perched water.
75-66a	N754,697 E662,441	LRL Pluto 6	---, R	1962	1,000	---	---	---	Twf	4,091	L	0	166.4	7-21-62	---	---	---	E	Cr, Cu, GL, L. Ref. Johnson and Ege (1964). Water is perched.
75-72	N751,509 E723,349	Well 1	McKinney, C	1950	870r	10 8	0- 176.3 0- 870	602- 802	QTal?	3,100±	---	---	714r	12-17-50	55	37	76	---	DL. Well destroyed. Ref. Moore (1961 and 1962).
75-73	N750,189 E736,937	U.S.G.S. T.W. 3	Western Republic, Ra	1962	1,853	13 3/8 7	0- 163 0-1,517	1,192-1,516	Op	3,484	Tc	4.7	1,103.4	1- 25-63	48	97 (5)	100	E	A, Cr, Cu, GL, L, PC.
76-68	N763,910 E089,551	Test hole 4	McKinney, C	1950	172r	12	0- 8	---	Qtal Tc(?)	3,405	---	---	>172r	1950	---	---	---	Dry	DL. Ref. Moore (1961 and 1962).
76-70	N760,133 E700,997	LRL Ue5c	REECo, Re	1964	2,682	20 13 3/8	0- 77 0-1,682	1,100-1,300	QTal Twf	3,216	Ta Tc	17.6 1	804.5 824.6	10-14-64 2-17-66	--- 360 r	--- 200r	--- ---	E	Cr, Cu, GL, L. 1964 water level measured when hole was 1,257 ft deep; 1966 water level after hole ceased and deepened into tuff.
77-68	N775,000 E084,550	LRL Ue5j	REECo, Ra	1966	1,243	---	---	---	QTal Tma	3,580±	L	---	796±5	1966	---	---	---	E	Cr, Cu, L.
77-70	N777,130 E708,280	Sandia Uella	REECo, Ra	1965	1,400	20 10 3/4	0- 72 0- 599	---	Tmr	3,538	L	---	1,128	Oct.1965	---	---	---	E	Cr, Cu, GL, L.
77-71	N772,494 E713,931	Sandia Ue5f	REECo, Ra	1965	1,100	20	0- 83	---	QTal	3,301	L	---	890.4	6-15-65	---	---	---	E	Cr, Cu, GL, L.

Table 1.--Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966)--Continued

Map number	Coordinates	User and name or number	Driller and method	Year completed	Depth of well (feet)	Casing: Outside diam. (inches)	Casing: Depth interval (feet)	Casing: Perforated zone (feet)	Formations tested	Altitude of land surface (feet)	Measuring pt.: Description	Measuring pt.: Height (feet)	Static water level: Depth below land surface (feet)	Static water level: Date	Yield (gpm)	Drawdown (feet) after ( )hours	Well head temp. (°F)	Status or use	Remarks (cuttings and core samples, lithologic and geophysical logs, water analyses, references, etc.)
77-71a	N778,800 E712,300	Sandia Ue 11 b	REECo, Ra	1965	1,288	20 10 3/4	0- 79 0- 285	---	Tpt Ta	3,586	L		1,175.8	10-22-65	---	---	---	E	Cr, Cu, GL, L.
79-69	N790,011 E692,132	Well C-1	REECo, R, C	1962	1,650	24 16 5/8	0- 924 850-1,650	1,536-1,650	Ccu	3,921	Ta	2.0	1,542.72/ -	8-20-63	300	59 (1)	95	I,PS	A, Cu.
79-69a	N790,083 E692,061	U.S.G.S. T.W. C (now Well C)	Mac Ex, R,C	1961	1,701	12 3/4 10 3/4	0-1,373 1,281-1,621 3/	1,580-1,620	Ccu	3,921	Tc	1.6	1,541.3	1-29-62	212	<1 (5)	98	E,I, PS	A, Cr, Cu, GL, L, PC. Ref. Garber and Thordarson (1962).
81-67	N817,795 E677,762	Well 3	McKinney, C	1952	1,799	8 6	0-1,209 0-1,765	1,535-1,765	Tpt	3,969	Tc	1.0	1,569.0 1,585.1	2- 4-60 12-14-64	40	55 (48)	76	PS,I	A, GL, L, PC. Ref. Hood (1961) and Moore (1961). Water level reported at 1,530 ft when hole 1,575 ft deep; level 1,545 ft when hole completed in 1952.
81-69	N812,500 E693,010	U.S.G.S. T.W. B	Mac Ex, R,C	1961	1,675	12 3/4 10 3/4	0-1,539 1,375-1,675	1,432-1,452 1,512-1,656	Tpt	3,929	Tc	1.2	1,507.2	11-19-63	15	>49	78	E,O	A, Cr, Cu, GL, L, PC. Ref. Moore and Garber (1962).
83-66	N836,212 E661,373	LASL Ue 1 f	REECo, Ra	1964	703	10 3/4	0- 59	---	MDe	4,272±2	Tc	-0.5	628.5	4-16-64	---	---	---	E	Cr, Cu, GL, L. Hole caved at bottom of casing.
83-66a	N837,000 E660,000	LASL Ue 1 a	REECo, Ra	1964	957	10 3/4	0- 64	---	MDe Tc	4,299±2	Tc	2.5	543.6	10-15-64	---	---	---	E,O	Cr, Cu, GL, L.
83-66b	N837,000 E662,000	LASL Ue 1 b	REECo, Ra	1964	1,254	10 3/4	0- 76	---	MDe	4,272±2	Tc	1.9	644.2	10-15-64	---	---	---	E,O	Cr, Cu, GL, L.
83-66c	N837,000 E666,000	LASL Ue 1 c	REECo, Ra	1964	1,880	10 3/4	0- 70	---	PPt Tc	4,202±2	Tc	1.4	1,288.8 1,292.2	3-18-64 10-15-64	---	---	---	E,O	Cr, Cu, GL, L.
83-66d	N837,700 E661,050	LASL Ue 1 d	REECo, Ra	1964	857	10 3/4	0- 79	---	MDe? Tc	4,290±2	Tc	-0.5	535.9	4-16-64	---	---	---	E,O	Cr, Cu, GL, L. Hole caved at 530 ft.
83-68	N833,000 E684,000	U.S.G.S. T.W. A	Mac Ex, R,C	1960	1,870	12 3/4 10 3/4	0-1,555 1,547-1,870	1,608-1,870	QTal	4,006	Tc	1.0 1.5	1,604.8 1,614.4	1-13-61 9- 8-63	60	33	79	PS,O	A, Cu, GL, L, PC. Ref. Price and Thordarson (1961) and Moore (1961).
83-69	N838,689 E697,900	LASL Ex. 9 (now U3cw)	REECo, Ra	1963	1,953	10 3/4	0- 80	---	Os	4,176	Ta	10.75	<1,780	10-24-63	---	---	---	E	Cr, Cu, GL, L. Carbonate aquifer in interval 1,889-1,953 ft.

Table 1.—Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966)—Continued

Map number	Coordinates	User and name or number	Driller and method	Year completed	Depth of well (feet)	Casing: Outside diam. (inches)	Casing: Depth interval (feet)	Casing: Perforated zone (feet)	Formations tested	Altitude of land surface (feet)	Measuring pt.: Description	Measuring pt.: Height (feet)	Static water level: Depth below land surface (feet)	Static water level: Date	Yield (gpm)	Drawdown (feet) after ( )hours	Well head temp. (°F)	Status or use	Remarks (cuttings and core samples, lithologic and geophysical logs, water analyses, references, etc.)
83-69a	N839,989 E696,001	U.S.G.S. T.W.E.	Mac Ex, R,C Western Republic, Ra	1960 1961 1962	1,970 2,430 2,620	12 3/4 10 3/4 2 7/8	0- 580 560-1,970 0-2,600	 1,800-1,920 2,510-2,600	Til Op	4,171	Tc Ta	1.5 1.5 0.8	1,716.4 1,732.4 1,779.7	11-30-60 6-20-61 9- 6-63	—	—	—	E,O	A, Cr, Cu, GL, L, PC. Well deepened in 1961 and again in 1962. Well destroyed in September 1963. Carbonate aquifer in interval 2,362-2,600 ft.
84-67	N846,600 E672,600	U.S.G.S. T.W. D	Mac Ex, R,C	1961	1,950	12 3/4 10 3/4	0-1,700 1,650-1,900	 1,772-1,882	MDe?	4,150	—	—	1,732.0	1-13-61	20±	84±	78	O	A, Cu, GL, L, PC. Ref. Thordarson and others (1962) and Moore (1961).
84-68	N843,192 E684,654	Test hole 7	Mason, R	1954	2,272	16 12 9	0- 40 0-2,014 1,977-2,251	 1,710-1,720 1,925-1,935 1,970-2,014 1,977-2,251	Til	4,063	Tc	2.2	1,667.8	11-30-60	<10	>300	78	O	A, GL, L. Water levels post-April 1962 affected by underground detonations. Ref. Moore (1961).
84-68a	N841,600 E688,200	LASL U3cn-1	REECo, Ra	1963	2,461	10 3/4	0-2,000	—	Til	4,074	Tc	0.6	1,669.7	6-14-63	—	—	—	Sat	GL. Test hole destroyed.
84-68b	N843,160 E683,662	LASL U3an-3	REECo, Re	1963	3,550	18 10 3/4	0- 50 0-1,493	—	Pzc Cbk?	4,061	Ta	11.0	1,685±4 [4/]	12- 1-63	—	—	—	E	GL. Carbonate aquifer in interval 3,240-3,550 ft. Test hole destroyed.
84-68c	N843,348 E687,198	U.S.G.S. U3cn-4	REECo, Ra	1963	2,295	18 10 3/4	0- 101 0-2,020	1,737-1,757 1,787-1,807 1,837-1,857 1,887-1,907 1,937-1,957 1,987-2,007	Til	4,084	Tc	1.4	1,680.1	9- 6-63	—	—	—	E,O	Cu, GL. Casing is collapsed at 1,354 ft.
84-68d	N841,255 E687,998	U.S.G.S. U3cn-5	REECo, Ra	1966	3,026	13 5/8 9 5/8 6 5/8	0-1,418 0-2,385 2,321-2,832	 none none	Dc?	4,012	—	2.63 —	1,625.4	4-20-66	—	—	—	E	A, Cr, Cu, GL, L, PC. Carbonate aquifer in interval 2,821-2,924 ft; quartzite to 3,026 ft.
85-67	N855,966 E679,741	LASL De4a	REECo, R	1961	3,028	8 5/8 2 7/8	0- 856 0-2,650	1,550-1,600 1,750-1,800 2,000-2,050 2,500-2,550	Cbk?	4,155	—	—	1,740±30	11-18-61	—	—	—	E,O	Cr, Cu, L. Water level determined by downhole pressure gage during drill-stem test. Carbonate aquifer in interval 2,993-3,028 ft.
85-68	N858,615 E684,998	LRL U7a	REECo, Re	1963	2,699	—	—	—	DSOd	4,255	L	—	1,868.4	8-26-63	—	—	—	D	Cr, Cu, GL, L. Carbonate aquifer in interval 2,640-2,699 ft. Test hole destroyed.

Table 1.--Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966)--Continued

Map number	Coordinates	User and name or number	Driller and method	Year completed	Depth of well (feet)	Casing: Outside diam. (inches)	Casing: Depth interval (feet)	Casing: Perforated zone (feet)	Formations tested	Altitude of land surface (feet)	Measuring pt.: Description	Measuring pt.: Height (feet)	Static water level: Depth below land surface (feet)	Static water level: Date	Yield (gpm)	Drawdown (feet) after ( )hours	Well head temp. (°F)	Status or use	Remarks (cuttings and core samples, lithologic and geophysical logs, water analyses, references, etc.)
86-65	N863,050 E657,180	LRL Ue2s	REECo, Ra	1964	1,970	20 13 3/8	0- 77 0-1,050	---	<Tbk	4,583	Ta	11.4	>1,942	12-16-64	---	---	---	E	Cr, Cu, GL, L. Water level was declining during period of measurement; static water level probably below bottom of hole.
87-60	N879,468 E609,999	U.S.G.S. T.W. 8 (now well 8)	Western Republic, Ra	1963	5,490	11 3/4 7 5/8	0-2,031 1,942-2,936	1,250-1,300 1,450-1,500 1,630-1,780 2,038-2,070 2,137-2,170	Ttp	5,695	Ta	10.1	1,067.8	1-10-63	400	7.8 (35)	85	E,I, PS	A, Cr, Cu, GL, L, PC. Cement plug set at 1,860 ft.
87-62	N876,855 E629,310	U.S.G.S. T.W. 1 (now well 1)	D.W. Falla Inc., R,C,	1961	3,731	11 3/4 8 5/8	0-1,615 1,563-3,700	1,910-1,950 2,030-2,050 2,100-2,160 2,230-2,270 2,370-2,430	Til	6,156	L Tc Ta	--- 3.1 0.5	411[5] 1,023.9[6] 1,440.5[7]	9-30-60 2-21-61 10-14-63	100	135.6 (8)	89	E,PS	A, Cr, Cu, GL, L, PC. Ref. Thordarson (1965). Carbonate aquifer in interval 3,700-4,198 ft.
			Western Republic, Ra	1962	4,198	---	---	---	Ddn	---	Ta	0.7	1,967.6[8]	10-14-63					
87-65	N870,200 E653,250	LRL Ue2u	REECo, Ra	1965	1,495	20	0- 68	---	Pzc	4,871.2	L	---	>1,339	5-29-65	---	---	---	E	Cr, Cu, GL. Water level was declining during period of measurement; static water level probably below bottom of hole.
87-67	N870,300 E679,650	LRL - U9ad	REECo, R	1962	1,805	36	0-1,630	---	Til	4,234	---	---	>1,620	8-11-64	---	---	---	D	Cu, GL. Well destroyed.
87-67a	N879,475 E679,030	LRL U10k-1	REECo, Ra	1964	2,275	7 5/8	0-1,983	none?	Til	4,272±1	Tc	1.1	1,863.5	1-19-65	---	---	---	E Sat	GL. Well destroyed.
87-68	N874,500 E682,600	LRL U10e	REECo, Ra	1962	1,675	36	0-1,630	---	Til	4,267	L	---	>1,639	8- ?-62	---	---	---	D	Water level measured prior to casing. Well destroyed.
87-68a	N875,918 E681,559	LRL U10L-1	REECo, Ra	1964	2,208	17 3/8 10 3/4	0- 78 0-1,375	---	Til Pzc	4,264	Tc	2.2	1,842.3	1-19-65	---	---	---	E Sat	Cu, GL.
88-63	N885,038 E631,776	LRL U12e.06-1	REECo, R	1962	3,180	2 7/8	0-3,178	0-3,114	Ddn	7,573	L	---	>2,930	5-23-62	---	---	---	O	Cr, Cu, GL. Carbonate rock in interval 2,415-3,114 ft. Ref. Thordarson (1965).
88-63a	N886,712 E638,632	LRL Dolomite Hill hole	Mac Ex, R	1959	1,200	6	0- 40	---	Ddn	6,399	Tc	---	>1,124	1-29-60	---	---	---	E,O	Cr, GL, L. Ref. Schoff and Winograd (1961), Thordarson (1965), and Moore (1961).

Table 1.--Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966)--Continued

Map number	Coordinates	User and name or number	Driller and method	Year completed	Depth of well (feet)	Casing: Outside diam. (inches)	Casing: Depth interval (feet)	Casing: Perforated zone (feet)	Formations tested	Altitude of land surface (feet)	Measuring pt.: Description	Measuring pt.: Height (feet)	Static water level: Depth below land surface (feet)	Static water level: Date	Yield (gpm)	Drawdown (feet) after ( )hours	Well head temp. (°F)	Status or use	Remarks (cuttings and core samples, lithologic and geophysical logs, water analyses, references, etc.)
88-63b	N888,264 E634,269	LRL U12e.03-1	REECo, R	1959	855	6 4 3	0- 5 0- 509 0- 702	none	Til Ddn	6,150[2]	Tc	---	Flowing >710	7- 9-59 9-30-59	---	---	70	E	Cr, L. Ref. Thorderson (1965) and Moore (1961). Water in Til is perched. Carbonate aquifer in interval 722-855 ft.
88-63c	N886,644 E633,532	LRL U12e.M1	REECo, R	1960	1,501	3 3/8	0- 854	none	Til Ddn	6,158[2]	Tc ---	---	Flowing >1,485	10-27-50 2-25-60	---	---	---	E	A, Cr, GL, L. Water in Til is perched. Ref. Schoff and Winograd (1961), Thorderson (1965), and Moore (1961). Carbonate aquifer in interval 974-1,501 ft.
88-63d	N889,190 E631,132	LRL Hagestad 1	Hagestad, R	1957	1,941	5 1/2	0-1,941	675- 685 990-1,000 1,600-1,620 1,750-1,770 1,885-1,895 1,905-1,915	Til	7,485.3	Tc	- 0.5	1,438.6 1,572.4	9- 3-59 9-26-63	---	---	60±5	O,E	A, Cr, GL. Water level decline attributed to drainage by drift in the U12e tunnel. Ref. Thorderson (1965) and Moore (1961).
88-64b	N886,283 E643,089	Effinger 2	Effinger, C	1959	80	6	0- 10	---	QTal	5,598	---	---	>80	1959	---	---	---	Dry	Cu, GL, L. Ref. Moore (1961 and 1962).
88-64a	N886,025 E643,216	Effinger 4	Effinger, C	1959	76	5 5/8	0- 70	---	QTal	5,603	---	---	>76	1959	---	---	---	Dry	Cu, GL, L. Ref. Moore (1961 and 1962).
88-65	N888,562 E650,404	Effinger 1	Effinger, C	1959	180	6	0- 10	---	QTal	5,152	---	---	>180	1959	---	---	---	Dry	Cu, GL, L. Ref. Moore (1961 and 1962).
88-66	N880,000 E668,720	U.S.G.S. T.W. 2 (now well 2)	D. W. Falls, Inc. R, C REECo, R	1961 1962	2,535 3,422	11 3/4 8 5/8 6 5/8	0-1,465 0-2,550 2,500-3,422	none 2,700-2,950 3,164-3,412	Til Op	4,470 ---	Te Te	 4.3	1,915 2,053.7	3-28-61 3-23-62 12- 4-64	--- 60 120	--- 178 655	--- 93	E,I, Ps	A, Cr, Cu, GL, L, PC. Ref. Moore and others (1963). Carbonate aquifer in interval 2,550-3,422 ft.
88-67	N883,000 E674,700	LRL U10b-3	REECo, Re	1964	1,460	30 13 3/8	0- 62 0- 677	---	Cbk	4,375	---	---	>1,397	8-11-64	---	---	---	Sat	Cu, GL.
88-67a	N887,000 E670,600	LRL Ue10j	REECo, Re	1965	2,383	20	0- 55	---	Cbk	4,574	L	0	2,162.8	6-15-65	---	---	85	E	A, Cr, Cu, GL, L.
89-65	N891,000 E656,300	Whiterock Springs 4	REECo, R	1959	71	---	---	---	Til	4,999	L	0	48.6	7-28-59	---	---	---	O	GL. Hole destroyed; tapped perched water.
89-65a	N891,026 E652,714	Effinger 3	Effinger, C	1959	200	5 5/8	0- 200	---	QTal	5,032	---	---	>200	1959	---	---	---	Dry	Cu, GL, L. Ref. Moore (1961 and 1962).

Table 1.--Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966)--Continued

Map number	Coordinates	User and name or number	Driller and method	Year completed	Depth of well (feet)	Casing: Outside diam. (inches)	Casing: Depth interval (feet)	Casing: Perforated zone (feet)	Formations tested	Altitude of land surface (feet)	Measuring pt.: Description	Measuring pt.: Height (feet)	Static water level: Depth below land surface (feet)	Static water level: Date	Yield (gpm)	Drawdown (feet) after ( )hours	Well head temp. (°F)	Status or use	Remarks (cuttings and core samples, lithologic and geophysical logs, water analyses, references, etc.)
89-65b	N893,200 E656,100	Whiterock Springs 2	REECo, R	1959	84	---	---	---	Tvl	5,085	L	0	50.1	7-27-59	---	---	---	O	GL. Well destroyed; tapped perched water. Ref. Moore (1961).
89-65c	N892,600 E655,700	Whiterock Springs 1	REECo, R	1959	72	5 3/4	0- 2	---	Tvl	5,075	Ra	1.6	21.4	7-28-59	---	---	---	O	GL. Well destroyed; tapped perched water. Ref. Moore (1961).
89-65d	N892,700 E655,200	U.S.G.S. shot hole	U.S.G.S., R	1958	105	---	---	---	Tvl	5,116	---	---	87	12- 2-58	---	---	---	O	Well destroyed; tapped perched water. Ref. Moore (1961).
89-65e	N892,000 E655,700	Whiterock Springs 3	REECo, R	1959	41	---	---	---	Tvl	5,060	L	0	7.6	7-28-59	---	---	---	O	Well destroyed; tapped perched water. Ref. Moore (1961).
89-65f	N892,100 E656,000	Whiterock Springs 3A	REECo, R	1959	10	---	---	---	Tvl	5,060	L	0	8.1	7-28-59	---	---	---	O	Well destroyed; tapped perched water. Ref. Moore (1961).
89-68	N895,709 E682,084	LASL Ue15d (now well Ue15d)	REECo, R	1962	5,940 10/ 12 8 5/8 7 4 1/2	 0- 24 0- 763 0-1,784 1,667-5,400	 none ?	Tcp Tcc1 pCn	4,586	Ta	2.5	667.2	10- 2-63	78	294 (36)	94	E, Irr	A, Cr, Cu, GL, L, PC. Interval tested 1,773-5,940 ft; production chiefly from fault zone (5,300± ft) between formations.
90-55	N903,204 E556,763	LRL Ue20c	Morrison Bros., Ra	1964	5,348	20 13 3/8	0- 33 0- 650	---	Ttp	6,283	Ta	14.4	2,126	2-28-64	---	---	---	D	Cr, Cu, GL, L, PC. Well destroyed.
90-55a	N909,200 E554,300	LRL Ue20d	Morrison Bros., Ra	1964	4,500	10 3/4	0-2,446	none	Ttp	6,252	Ta Tc	12.0 1.1	2,072.0 2,075.1	8-19-64 1-14-65	---	---	---	E	Cr, Cu, GL, L. PC.
90-57	N907,395 E571,439	LASL U20a-2 (now well 20a2)	REECo, Ra	1964	4,500	18 13 3/8 8 5/8	0- 80 0- 860 0-2,356	 none	Ttp	6,472	Tc Ta	1.0 3.8	2,065.0 2,066.0	3-30-64 2-11-65	186	23 (29)	100	I	A, Cr, Cu, GL, L, PC.
90-58	N900,905 E587,084	LASL Ue19fa	Brinkerhoff, R, Ra	1965	6,950	13 3/8 9 5/8	0-2,565 4,415-4,632	none	Ttp	6,735	L	0	2,306	8-17-65	130	30 (24)	99	E	Cr, Cu, GL, L, PC. 9-5/8-inch casing pulled. Hole plugged with cement from 2,480 ft to T.D.
90-67e	N901,907 E676,827	LRL Granite hole	Boyles, Cr	1959	1,200	8 3	0- 13 953-1,041	---	MzPg	5,113	---	---	1877	1962?	---	---	---	E,O	A, Cr, GL, L. Ref. Moore (1961), Price (1959), and Walker (1962). Water tapped is perched. One of several holes drilled into Climax stock.
90-67a	N904,480 E673,758	Marble 4 or ME4	ME Co, Cr	1959	1,187	8	0- 7	---	Op	5,490	---	---	>942	9- 1-59	---	---	---	E,O	Cr, GL, L. Ref. Moore (1961) and Schoff and Winograd (1961).
90-67b	N903,096 E674,866	Marble 3 or ME3	ME Co, Cr	1959	978	4	0- 20	---	Op	5,316	Tc	0	477	2-18-59	5	---	71	E,O	A, Cr, L. Ref. Moore (1961) and Schoff and Winograd (1961). Water is probably perched.

Table 1.--Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966)--Continued

Map number	Coordinates	User and name or number	Driller and method	Year completed	Depth of well (feet)	Casing: Outside diam. (inches)	Casing: Depth interval (feet)	Casing: Perforated zone (feet)	Formations tested	Altitude of land surface (feet)	Measuring pt.: Description	Measuring pt.: Height (feet)	Static water level: Depth below land surface (feet)	Static water level: Date	Yield (gpm)	Drawdown (feet) after ( )hours	Well head temp. (°F)	Status or use	Remarks (cuttings and core samples, lithologic and geophysical logs, water analyses, references, etc.)
90-67c	N902,475 E675,331	Marble 1 or ME1	REECo, Cr	1959	378	3 3/4 2 3/8	0- 15 0- 32	---	Op	5,210	---	---	336	9-22-59	---	---	---	E,O	Cr, L. Ref. Moore (1961) and Schoff and Winograd (1961). Water is probably perched.
90-67d	N903,676 E675,845	Marble 2 or ME2	REECo, Cr	1959	197	4	0- 14	---	Op	5,246	---	---	>166	1959	---	---	---	E,O	Cr, L. Ref. Moore (1961) and Schoff and Winograd (1961). Water is probably perched.
90-74	N909,046 E749,549	Watertown 1	Allen and Failing, R,C	1955	670	10 8	0- 417 0- 561	---	Tp?	4,441	---	---	490.4	6-24-55	12	15	78	PS	A, DL, GL, L. Ref. Moore (1961).
90-75	N909,062 E752,226	Watertown 2	Allen and Failing, R, C	1955	1,091	12 10 8	0- 346 ? - 804 ? -1,091	?	Tp?	4,437	---	---	896	Oct.1955	15	26	78	PS	A, DL, L, GL. Ref. Moore (1961 and 1962).
91-55	N917,825 E552,007	LRL Ue20f	Parker Drlg. Co., Ra	1964	13,686	13 3/8 9 5/8	0- 735 0-4,456	none	Ttp	6,116	Ta Tc	19.2 0.7	1,772 1,776.6	6-10-65 1-13-65	100	210 (47)	132	E	A, Cr, Cu, GL, L, PC.
91-56	N918,015 E567,747	LRL Ue20h	Parker Drlg. Co., Ra	1964	7,207	13 3/8	0-2,506	none	Ttp	6,557	Ta Tc	15.0 1.0	2,107.8 2,104.6	8-20-64 1-13-65	423	51 (30)	93	E	Cr, Cu, GL, L, PC. Well destroyed.
91-58	N919,248 E586,326	LASL U19as	Loffland Bros. Ra	1964	3,584	48	---	---	Ttp	6,761	Tc	1.5	2,191.8	7-27-64	---	---	---	D	Cr, Cu, GL, L, PC.
91-59	N910,098 E593,107	LASL Ue19i	Moran Bros. Ra	1965	8,000	13 3/8	0-2,896	none	Ttp	6,839	L	0	2,258	9- 1-65	140	185 (17)	121	E	Cr, Cu, GL, L, PC.
91-60	N917,050 E601,027	LASL Ue19c	Parker Drlg. Co. Ra	1964	8,489	13 3/8	0-2,422	none	Ttp	7,033	Ta	17.8	2,345.4	4-30-64	59	10 (36)	---	E	Cr, Cu, GL, L, PC.
91-74	N914,990 E742,272	Watertown 3	Allen, C	1959	371	10 3/4	0- 366	160- 170 195- 200 243- 302 312- 322 346- 366	QTal	4,446	Tc	1.2	106.8	11-23-59	180	12	72	PS	A, DL, GL, PC. Ref. Moore (1961).
91-74s	N914,540 E741,224	Watertown 4	Allen, C	1964	542r	16 12 3/4 10 3/4	0- 15 8- 116 0- 542	117- 217 280- 360 400- 430 490- 542	QTal	4,447	---	---	114r	1964	430r	74r (48)	---	PS	DL.

Table 1.—Records of wells and test holes in the Nevada Test Site and Vicinity (through December 1966)--Continued

Map number	Coordinates	User and name or number	Driller and method	Year completed	Depth of well (feet)	Casing: Outside diam. (inches)	Casing: Depth interval (feet)	Casing: Perforated zone (feet)	Formations tested	Altitude of land surface (feet)	Measuring pt.: Description	Measuring pt.: Height (feet)	Static water level: Depth below land surface (feet)	Static water level: Date	Yield (gpm)	Drawdown (feet) after ( )hours	Well head temp. (°F)	Status or use	Remarks (cuttings and core samples, lithologic and geophysical logs, water analyses, references, etc.)
92-53	N928,306 E538,537	LRL Ue20j	Moran Bros., Ra, E	1964	5,690	13 3/8	0-1,740	none	Ttp	5,900	Te	13.8	1,270.4	10-23-64	56	2.6	104	E	Cr, Cu, GL, L, PC.
92-57	N921,104 E575,868	U.S.G.S. P.M. 1	Camay Drlg. Co. Moran Bros.	1963 1964	7,552 7,858	18 10 3/4	0- 946 0-7,550	none	Ttp	6,558	Tc	3.9	2,112.6	8-15-63	---	---	---	E	Cr, Cu, GL, L, PC.
92-57a	N929,043 E575,148	LRL U20g	Parker Drlg. Co., Ra	1964	4,200	74	---	---	Ttp	6,470	Te	26.8	2,017	10-30-64	---	---	---	D	Cr, Cu, GL, L, PC.
92-59	N927,300 E596,999	LASL Ue19a	Brinkerhoff, Ra	1964	6,005	13 3/8	0-2,475	none	Ttp	6,919	Ta Tc	13.0 1.0	2,218.3 2,217.1	9- 3-64 1-13-65	56	51 (24)	84	E	Cr, Cu, GL, L, PC.
92-70	N920,500 E704,225	Stewart 1	---	---	336	8	---	---	QTal?	4,634	Tc	.6	263	8- 8-60	---	---	---	O	GL.
93-56	N934,466 E560,958	LRL Ue20e-1	Moran Bros. Ra	1964	6,395	13 3/8	0-1,500	---	Ttp	6,297	Ta Tc	14.9 1.4	1,821.4 1,817.1	6- 4-64 1-14-65	88	12.7 (28)	117	E	A, Cr, Cu, GL, L, PC.
93-58	N931,338 E587,843	LASL Ue19g	Brinkerhoff, Ra	1965	7,500	13 3/8 8 5/8	0-2,650 4,113-4,349	none	Ttp	6,719	L	0	2,045	5- 6-65	185	37 (24)	107	E	Cr, Cu, GL, L, PC.
93-60	N933,700 E606,835	LASL Ue19b1	Brinkerhoff, Ra	1964	4,500	13 3/8	0-2,190	none	Ttp	6,802±	Ta Ta	14.5 2.0	2,117.1 2,117.3	6-19-64 1-13-55	97	<1	89	E,I	A, Cr, Cu, GL, L, PC. Well destroyed.
93-71	N932,942 E718,047	Stewart 2	---	---	221r	8 ?	---	---	QTal?	4,572	Tc	1.0	203.7	7-13-55	---	---	---	O	GL. Ref. Moore (1961).
93-85	N930,000 E853,000	John Wright 7/58-34?	Floyd Pump Co., C	1966	500	---	---	---	QTal?	4,150±50	---	---	>500r	1966	---	---	---	Dry	Driller reports well did not reach water table. Well location may be in error by several thousand feet.
94-52	N944,582 E528,655	U.S.G.S. P.M. 2	Moran Bros., Ra	1964	8,782	13 3/8 9 5/8	0-2,472 0-5,499	none	Ttp	5,589	Ta	---	<961	1966	---	---	---	E	Cr, Cu, GL, L, PC.
94-58	N943,901 E585,204	LASL Ue19h	Brinkerhoff, R, Ra	1965	3,705	13 3/8	0-2,370	none	Ttp	6,780	L	0	2,112	8- 9-65	215	4 (28)	88	E	Cr, Cu, GL, L, PC. 673 ft of 4-1/2-inch drill pipe left in hole. Well destroyed.
94-60	N945,991 E600,202	LASL Ue19d	Moran Bros. Ra	1964	7,689	13 3/8 10 3/4	0- 724 0-2,570	none	Ttp	6,861	Ta Tc	17.4 1.6	2,174.1 2,176.9	6-23-64 1-13-65	100	9.2[11] (22)	114	E	Cr, Cu, GL, L, PC. Well destroyed.

Table 1.--Records of wells and test holes in the Nevada Test Site and vicinity (through December 1966)--Continued

Map number	Coordinates	User and name or number	Driller and method	Year completed	Depth of well (feet)	Casing			Formations tested	Altitude of land surface (feet)	Measuring pt.		Static water level		Yield (gpm)	Drawdown (feet) after ( )hours	Well head temp. (°F)	Status or use	Remarks (cuttings and core samples, lithologic and geophysical logs, water analyses, references, etc.)
						Outside diam. (inches)	Depth interval (feet)	Perforated zone (feet)			Description	Height (feet)	Depth below land surface (feet)	Date					
96-84	N967,000 E848,000	M. Carberry 6/58-28	Phelps Pump & Equip. Co., R	1966	745	---	---	---	Tt?	4,350±30	---	---	>650r	1966	---	---	---	Dry	Driller reports no water entry after bailing out mud to depth of 650 ft. Well location may be in error by several hundrad feet.
97-51	N975,000 E516,500	Gold Flat No. 2 6/48-9dc	E. I. Ferguson, C	1947	290	5 3/4	0- 290	---	QTal?	5,200±10	Tc	0.0	233.3	2-24-63	---	---	65	O	DL, L.
97-63	N974,800 E632,600	Floyd Lamb 6/51½-15ed1	---	---	503±	8	---	---	QTal?	5,365±10	Tc	5.0	660r >498 12/	5- 1-58 6-14-60	---	---	---	S	GL. Ref. Moore (1961).
98-55	N981,000 E557,000	Gold Flat No. 1 6/49-2ca	E. I. Ferguson, C	1949	486	6	0- 250	---	Tt?	5,135±5	Tc	-5.9	472.3	2-24-63	---	---	50	S	DL, L.

1/ Probably inside diameter.
2/ Deviation survey indicates hole crookedness results in water level 3± feet deeper than plumb measurement.
3/ 10 3/4-inch casing pulled in January 1967; replacement pending as of 2-21-67.
4/ Measurement of fluid level in drill stem. Fluid was mixture of unknown density of drilling mud and formation water; level is several to 10 or more feet deeper than level at which formation water would stand.
5/ Static water level when hole was 560 feet deep.
6/ Static water level when hole was 1,880 feet deep and had been cased to 1,615 feet.
7/ Static water level of welded tuff in interval from 1,910 - 2,480 feet.
8/ Static water level of Devonian dolomite.
9/ Altitude of tunnel floor.
10/ Vertical depth from land surface; drilled depth, 6,001 feet.
11/ Greatest drawdown; pumping level rose as water temperature increased.
12/ Hole caved; was dry at depth of 498 feet on date shown.

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