PLATE 20
WELL LOG UE-25 WT#4

Well: WT-4
Yucca Mountain Project
Nye Co., Nevada

Location: Area 25
Nevada Coordinate System
N-768,512'
E-568,040'

Log measured from ground level, 3835 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
8.75	1580	48	Air and soap	06-02-83	
				06-03-83	1438
				06-05-83	1437

BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg.	min.	Drift direction deg.	min.	True vertical depth (feet)	Rectangular coordinates (feet)
1000	3	30	S 51	0 W	999.40	13.75 S 26.02 W
1540	2	45	S 25	0 W	1538.38	38.24 S 47.87 W

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services, USGS- U.S. Geological Survey, na- not applicable

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	06-02-83	48 -1561
1	SP	mv	Spontaneous potential	BW	06-05-83	1438 -1559
1	TC	API	Total count, spectral gamma	DA	06-02-83	1 -1570
2	DBC	g/cc	Density, borehole compensated	BW	06-05-83	51 -1566
2	SWL	na	Static water level	na	na	1440
4	SN	ohm-m	Resistivity, short normal	BW	06-05-83	1452 -1559
4	RILD	ohm-m	Resistivity, deep induction	BW	06-05-83	52 -1559
4	RDIEL	ohm-m	Resistivity, dielectric	DA	06-02-83	48 -1570
5	ENP	API	Epithermal neutron	BW	06-05-83	49 -1564
5	DIEL	ratio	Dielectric	DA	06-02-83	48 -1570
6	K	%	Potassium, spectral log	DA	06-02-83	1 -1570
7	U	ppm	Uranium, spectral log	DA	06-02-83	1 -1570
7	TH	ppm	Thorium, spectral log	DA	06-02-83	1 -1570

NOTE: Geologic unit symbols shown on this plate at the top of each formation are explained in table 4.

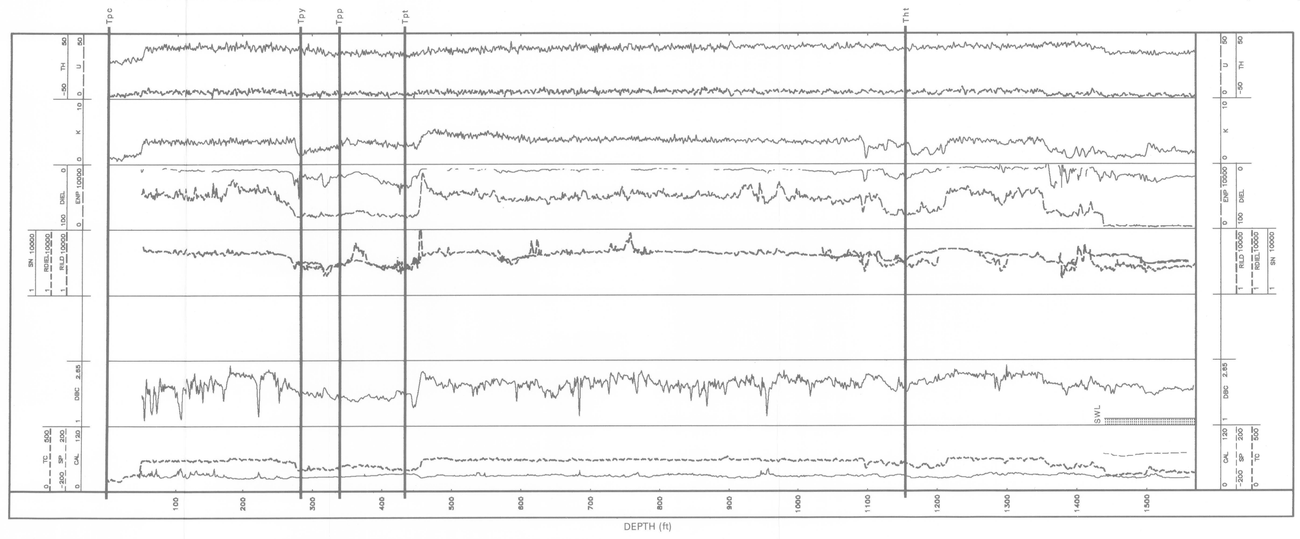


PLATE 21
WELL LOG UE-25 WT#6

Well: WT-6
Yucca Mountain Project
Nye Co., Nevada

Location: Area 25
Nevada Coordinate System
N-780,576'
E-564,524'

Log measured from ground level, 4312 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
6.75	1250	251	Air foam	06-27-83	
6.25	1256			06-28-83	874

BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg.	min.	Drift direction deg.	min.	True vertical depth (feet)	Rectangular coordinates (feet)
1000	4	45	N 28	0 E	999.09	26.93 N 17.76 E
1250	5	0	N 30	0 E	1248.15	45.68 N 28.54 E

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services, USGS- U.S. Geological Survey, na- not applicable

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	06-28-83	250 -1232
1	SP	mv	Spontaneous potential	BW	06-28-83	897 -1235
1	TC	API	Total count, spectral gamma	DA	06-28-83	1 -1242
2	DBC	g/cc	Density, borehole compensated	BW	06-28-83	251 -1240
2	SWL	na	Static water level	na	na	931
4	SN	ohm-m	Resistivity, short normal	BW	06-28-83	913 -1235
4	RILD	ohm-m	Resistivity, deep induction	BW	06-28-83	256 -1235
4	RDIEL	ohm-m	Resistivity, dielectric	DA	06-28-83	252 -1242
5	ENP	API	Epithermal neutron	BW	06-28-83	250 -1236
5	DIEL	ratio	Dielectric	DA	06-28-83	251 -1242
6	K	%	Potassium, spectral log	DA	06-28-83	1 -1242
7	U	ppm	Uranium, spectral log	DA	06-28-83	1 -1242
7	TH	ppm	Thorium, spectral log	DA	06-28-83	1 -1242

NOTE: Geologic unit symbols shown on this plate at the top of each formation are explained in table 4.

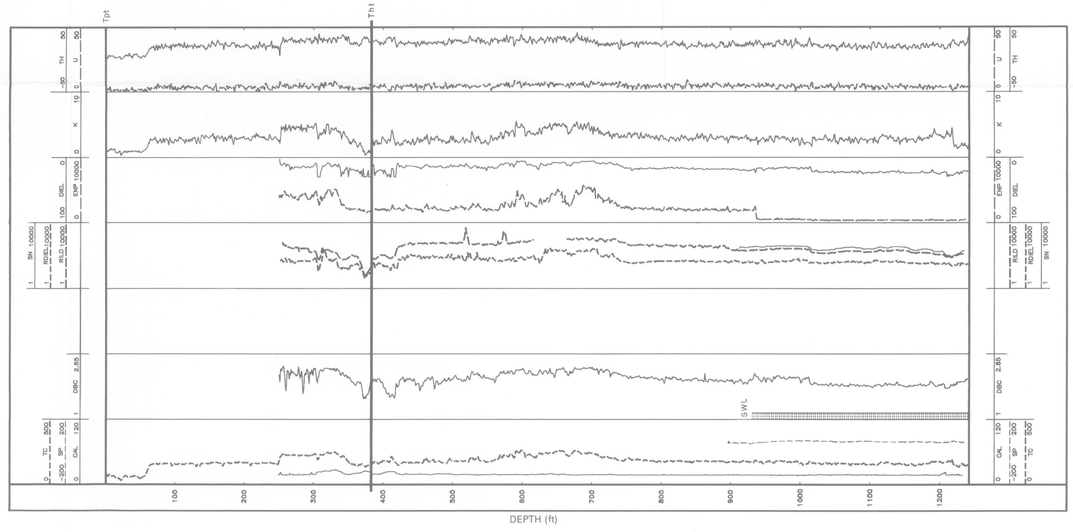


PLATE 22
WELL LOG USW WT-7

Well: WT-7
Yucca Mountain Project
Nye Co., Nevada

Location:
Nevada Coordinate System
N-755,570'
E-553,891'

Log measured from ground level, 3927 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
8.75	1610	52	Air and soap	07-24-83	1380
				07-25-83	

BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg.	min.	Drift direction deg.	min.	True vertical depth (feet)	Rectangular coordinates (feet)
1000	0	45	S 37	30 W	999.93	8.62 S 2.76 E
1525	1	45	S 1	0 W	1524.83	16.72 S 1.82 E

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services, USGS- U.S. Geological Survey, na- not applicable

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	07-24-83	53 -1599
1	SP	mv	Spontaneous potential	BW	07-24-83	1381 -1586
1	TC	API	Total count, spectral gamma	DA	07-24-83	1 -1599
2	DBC	g/cc	Density, borehole compensated	BW	07-25-83	53 -1589
2	SWL	na	Static water level	na	na	1382
4	SN	ohm-m	Resistivity, short normal	BW	07-24-83	1398 -1586
4	RILD	ohm-m	Resistivity, deep induction	BW	07-24-83	56 -1586
4	RDIEL	ohm-m	Resistivity, dielectric	DA	07-24-83	57 -1594
5	ENP	API	Epithermal neutron	BW	07-25-83	52 -1585
5	DIEL	ratio	Dielectric	DA	07-24-83	53 -1594
6	K	%	Potassium, spectral log	DA	07-24-83	1 -1599
7	U	ppm	Uranium, spectral log	DA	07-24-83	1 -1599
7	TH	ppm	Thorium, spectral log	DA	07-24-83	1 -1599

NOTE: Geologic unit symbols shown on this plate at the top of each formation are explained in table 4.

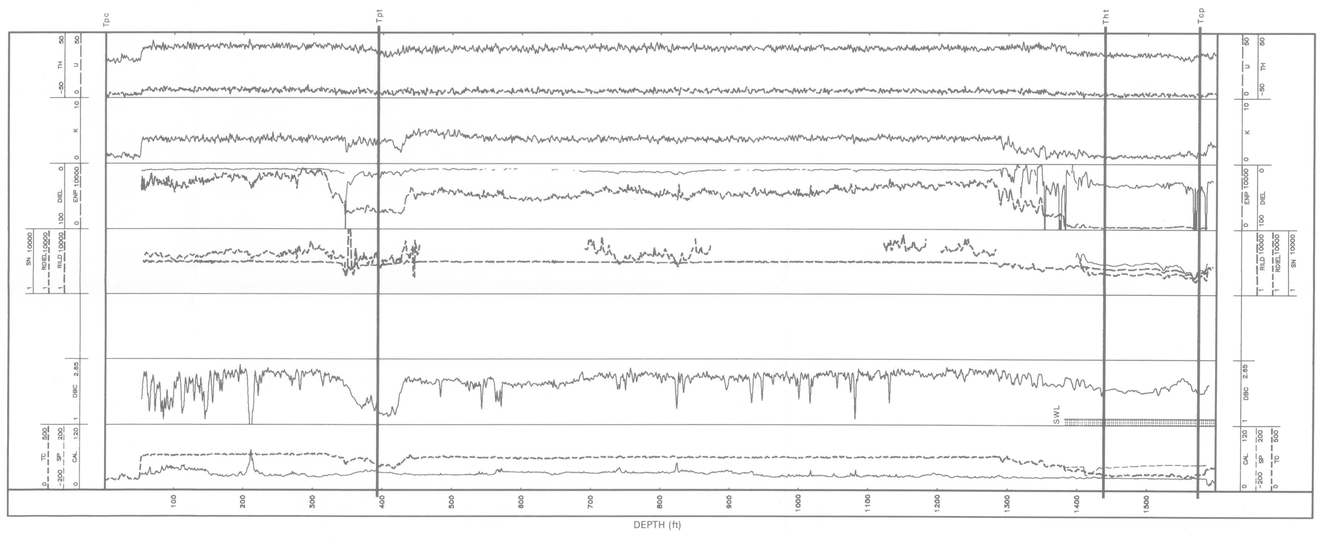


PLATE 23
WELL LOG USW WT-10

Well: WT-10
Yucca Mountain Project
Nye Co., Nevada

Location:
Nevada Coordinate System
N-748,771'
E-553,302'

Log measured from ground level, 3686 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
8.75	1413	114	Air foam	07-30-83	1141
				07-31-83	1140

BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg.	min.	Drift direction deg.	min.	True vertical depth (feet)	Rectangular coordinates (feet)
1000	1	16	N 82	28 W	999.95	4.02 S 3.60 W
1350	3	27	S 88	15 W	1349.64	4.31 S 17.23 W

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services, USGS- U.S. Geological Survey, na- not applicable

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	07-31-83	114 -1381
1	SP	mv	Spontaneous potential	BW	07-31-83	1146 -1379
1	TC	API	Total count, spectral gamma	DA	07-30-83	1 -1392
2	DBC	g/cc	Density, borehole compensated	BW	07-31-83	114 -1384
2	SWL	na	Static water level	na	na	1141
4	SN	ohm-m	Resistivity, short normal	BW	07-31-83	1156 -1379
4	RILD	ohm-m	Resistivity, deep induction	BW	07-31-83	119 -1394
4	RDIEL	ohm-m	Resistivity, dielectric	DA	07-30-83	114 -1394
5	ENP	API	Epithermal neutron	BW	07-31-83	114 -1385
5	DIEL	ratio	Dielectric	DA	07-30-83	142 -1394
6	K	%	Potassium, spectral log	DA	07-30-83	1 -1392
7	U	ppm	Uranium, spectral log	DA	07-30-83	1 -1392
7	TH	ppm	Thorium, spectral log	DA	07-30-83	1 -1392

NOTE: Geologic unit symbols shown on this plate at the top of each formation are explained in table 4.

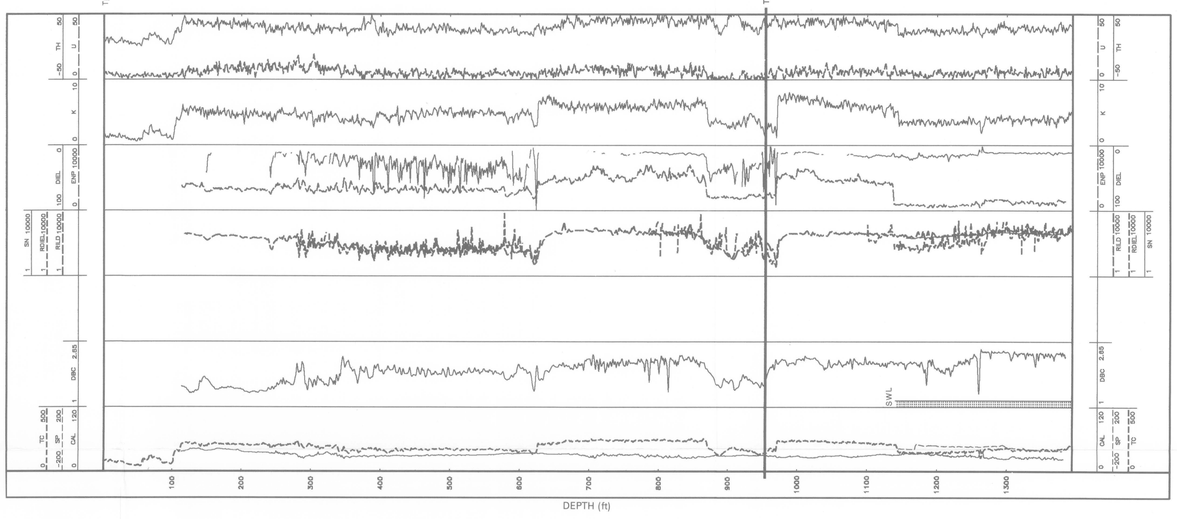


PLATE 24
WELL LOG USW WT-11

Well: WT-11
Yucca Mountain Project
Nye Co., Nevada

Location:
Nevada Coordinate System
N-739,070'
E-558,377'

Log measured from ground level, 3591 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
8.75	1446	45	Air and soap	08-07-83	1199
				08-08-83	1193

BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg.	min.	Drift direction deg.	min.	True vertical depth (feet)	Rectangular coordinates (feet)
1000	2	0	S 25	0 E	999.82	13.69 S 4.56 E
1375	3	15	S 28	0 E	1374.37	29.34 S 13.74 E

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services, USGS- U.S. Geological Survey, na- not applicable

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	08-08-83	45 -1436
1	SP	mv	Spontaneous potential	BW	08-08-83	1192 -1438
1	TC	API	Total count, spectral gamma	DA	08-07-83	1 -1444
2	DBC	g/cc	Density, borehole compensated	BW	08-08-83	44 -1443
2	SWL	na	Static water level	na	na	1194
4	SN	ohm-m	Resistivity, short normal	BW	08-08-83	1209 -1438
4	RILD	ohm-m	Resistivity, deep induction	BW	08-08-83	50 -1438
5	ENP	API	Epithermal neutron	BW	08-08-83	46 -1444
6	K	%	Potassium, spectral log	DA	08-07-83	1 -1444
7	U	ppm	Uranium, spectral log	DA	08-07-83	1 -1444
7	TH	ppm	Thorium, spectral log	DA	08-07-83	1 -1444

NOTE: Geologic unit symbols shown on this plate at the top of each formation are explained in table 4.

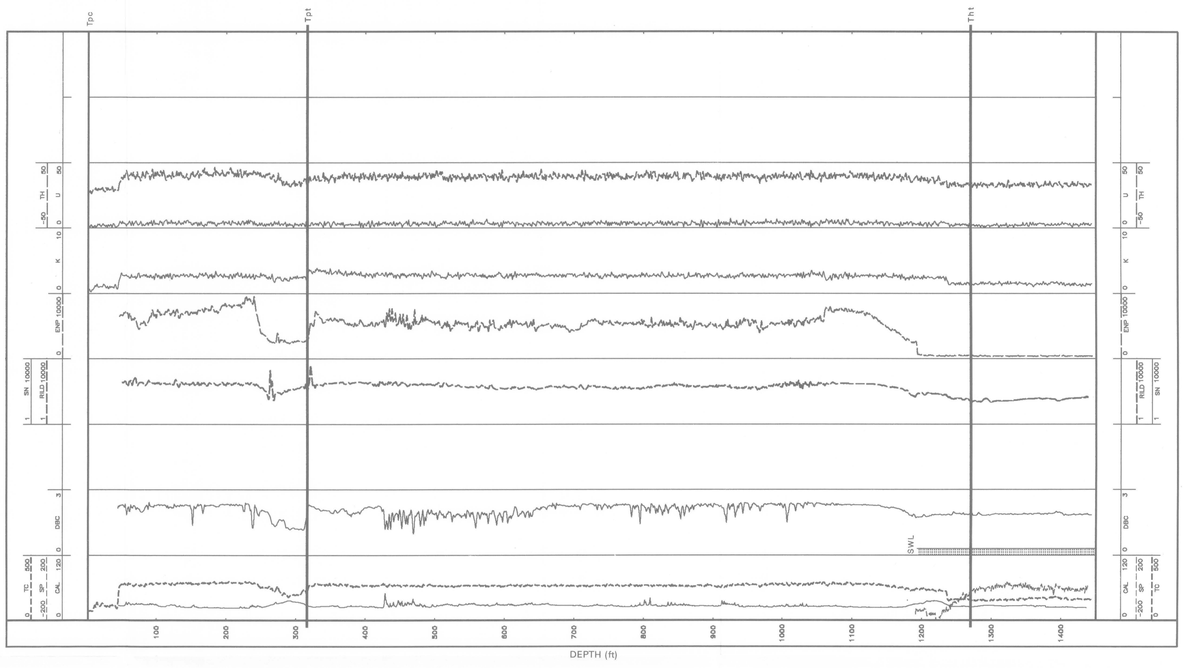


PLATE 25
WELL LOG UE-25 WT#12

Well: WT-12
Yucca Mountain Project
Nye Co., Nevada

Location: Area 25
Nevada Coordinate System
N-739,726'
E-567,011'

Log measured from ground level, 3527 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
8.75	1308	70	Air foam	08-15-83	1133

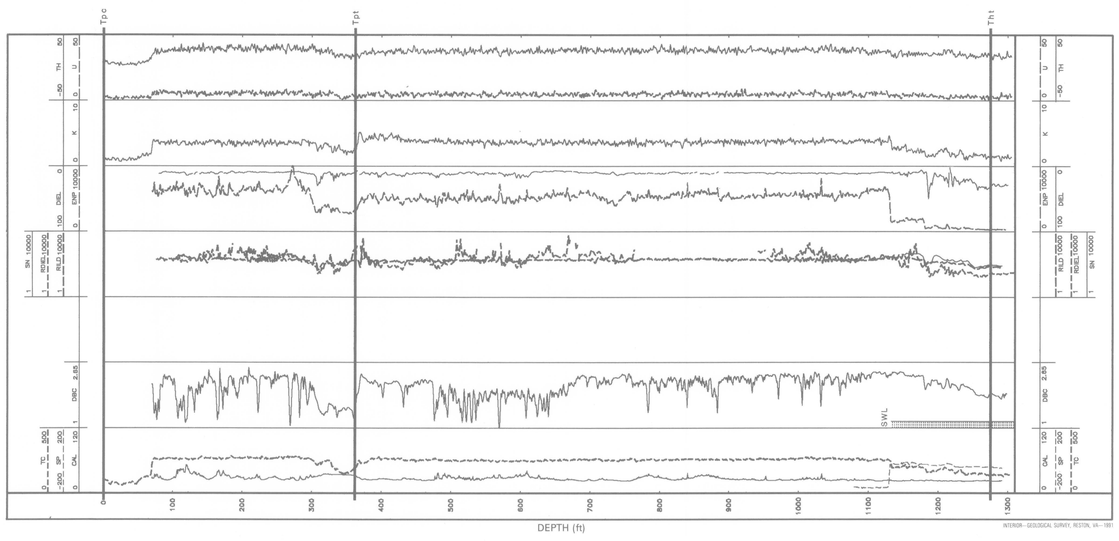
BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg.	min.	Drift direction deg.	min.	True vertical depth (feet)	Rectangular coordinates (feet)
1000	3	0	S 36	30 W	999.64	19.89 S 14.96 W
1230	4	0	S 38	0 W	1229.16	32.07 S 23.24 W

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services, USGS- U.S. Geological Survey, na- not applicable

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	08-15-83	70 -1291
1	SP	mv	Spontaneous potential	BW	08-15-83	1080 -1291
1	TC	API	Total count, spectral gamma	DA	08-15-83	1 -1305
2	DBC	g/cc	Density, borehole compensated	BW	08-15-83	70 -1298
2	SWL	na	Static water level	na	na	1133
4	SN	ohm-m	Resistivity, short normal	BW	08-15-83	1148 -1291
4	RILD	ohm-m	Resistivity, deep induction	BW	08-15-83	76 -1310
4	RDIEL	ohm-m	Resistivity, dielectric	DA	08-15-83	73 -1310
5	ENP	API	Epithermal neutron	BW	08-15-83	70 -1296
5	DIEL	ratio	Dielectric	DA	08-15-83	80 -1300
6	K	%	Potassium, spectral log	DA	08-15-83	1 -1305
7	U	ppm	Uranium, spectral log	DA	08-15-83	1 -1305
7	TH	ppm	Thorium, spectral log	DA	08-15-83	1 -1305

NOTE: Geologic unit symbols shown on this plate at the top of each formation are explained in table 4.



INTERIOR—GEOLOGICAL SURVEY, RESTON, VA—1991

GEOPHYSICAL LOGS AND CORE MEASUREMENTS FROM FORTY BOREHOLES AT YUCCA MOUNTAIN, NEVADA

By
Philip H. Nelson, Douglas C. Muller, Ulrich Schimschal, and Joyce E. Kibler

1991