PLATE 32
WELL LOG USW UZ-1

Well: UZ-1
Yucca Mountain Project
Nye Co., Nevada

Location:
Nevada Coordinate System
N-771,276'
E-560,221'

Log measured from
ground level, 4426 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
36	97				
22	101				
17.5	1265				
15	1269				
9.25	1270				
		40	Vacuum	07-19-83	1253
		40		07-20-83	1257

BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg. min.	Drift direction deg. min.	True vertical depth (feet)	Rectangular coordinates (feet)
		(no data)		

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services, USGS- U.S. Geological Survey

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	07-19-83	97 -1254
1	TC	API	Total count, spectral gamma	DA	07-20-83	1 -1261
2	DBC	g/cc	Density, borehole compensated	BW	07-19-83	97 -1261
4	RILD	ohm-m	Resistivity, deep induction	BW	07-19-83	45 -1257
4	RDIEL	ohm-m	Resistivity, dielectric	DA	07-20-83	30 -1269
5	ENP	API	Epithermal neutron	BW	07-19-83	11 - 92
5	ENP			BW	07-19-83	93 -1261
5	DIEL	ratio	Dielectric	DA	07-20-83	30 -1269
6	K	%	Potassium, spectral log	DA	07-20-83	1 -1269
7	U	ppm	Uranium, spectral log	DA	07-20-83	1 -1269
7	TH	ppm	Thorium, spectral log	DA	07-20-83	1 -1269

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

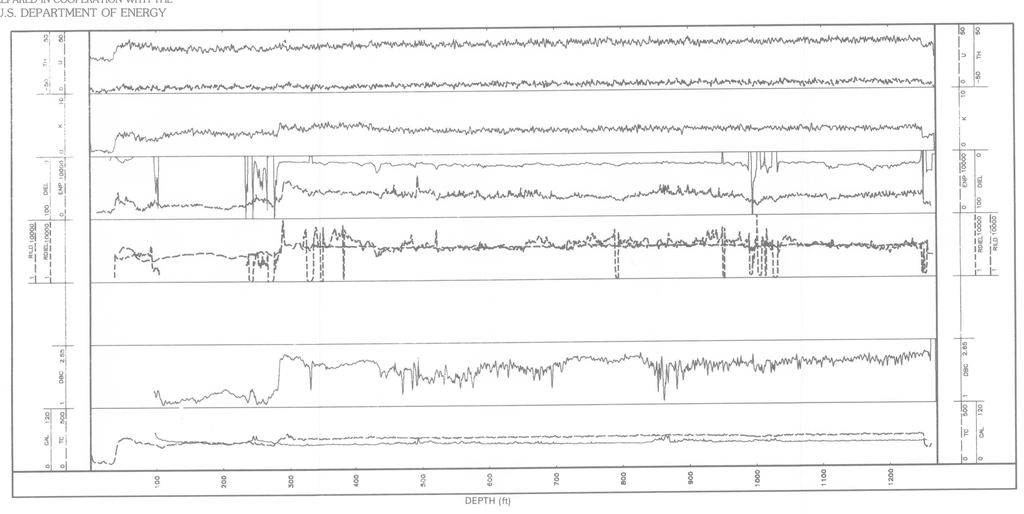


PLATE 33
WELL LOG USW UZ-6

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

Location:
Nevada Coordinate System
N-759,731'
E-558,325'

Log measured from
ground level, 4925 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
24	341				
17.5	1887				
		324	Vacuum	09-26-84	none
		324		09-27-84	
		324		09-28-84	

BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg.	min.	Drift direction deg.	min.	True vertical depth (feet)	Rectangular coordinates (feet)	
1000	0	28	N 36	5 E	999.97	4.11 N	4.64 E
1150	0	45	N 74	54 E	1149.96	4.79 N	6.22 E

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services, USGS- U.S. Geological Survey

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	09-26-84	325 -1846
1	TC	API	Total count, spectral gamma	DA	09-28-84	1 -1856
2	DBC	g/cc	Density, borehole compensated	DA	09-28-84	325 -1856
4	RILD	ohm-m	Resistivity, deep induction	BW	09-26-84	332 -1849
4	RDIEL	ohm-m	Resistivity, dielectric	DA	09-28-84	332 -1852
5	ENP	API	Epithermal neutron	BW	09-28-84	325 -1851
5	DIEL	ratio	Dielectric	DA	09-28-84	327 -1852
6	K	%	Potassium, spectral log	DA	09-28-84	1 -1879
7	U	ppm	Uranium, spectral log	DA	09-28-84	1 -1879
7	TH	ppm	Thorium, spectral log	DA	09-28-84	1 -1879
8	MS	mSI	Magnetic susceptibility	USGS	10-01-84	330 -1860
9	MAGV	ut	Vertical magnetic field	USGS	10-24-84	300 -1850

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

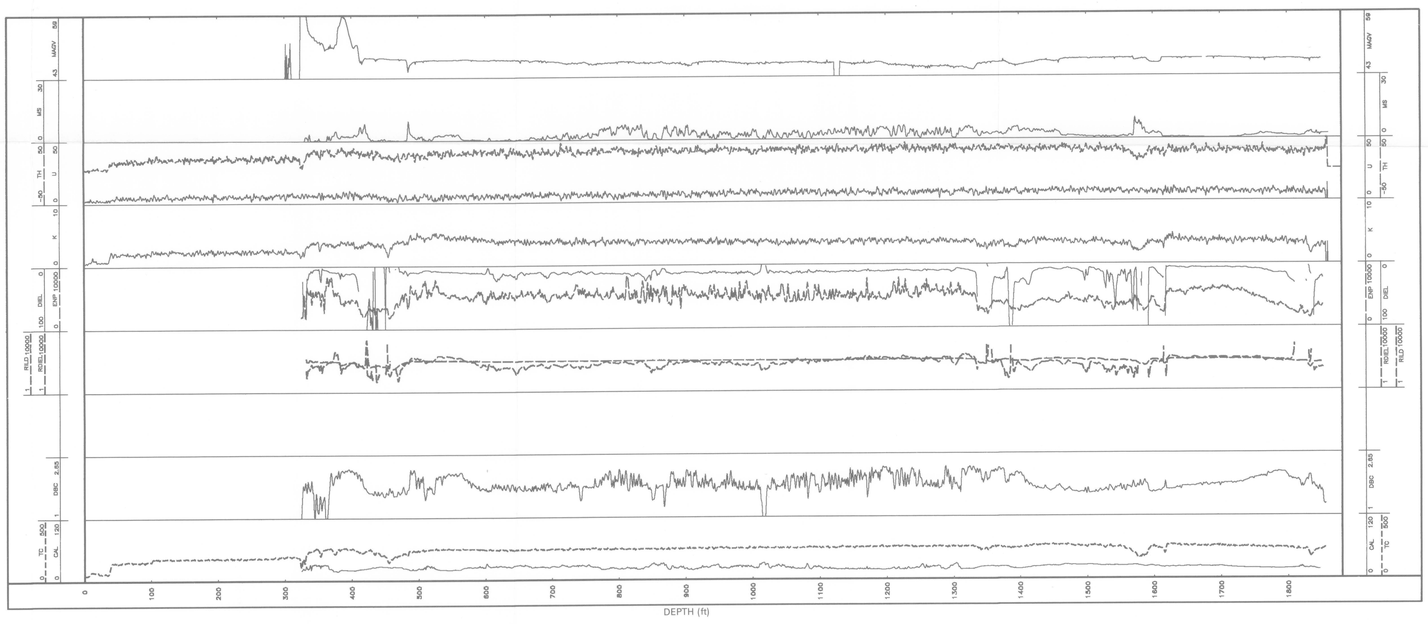


PLATE 34
WELL LOG UE-25a#4

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

Location: Area 25
Nevada Coordinate System
N-767,972'
E-564,472'

Log measured from
ground level, 4101 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
12.25	122				
		8	Air foam	07-06-79	full
		8		07-07-79	full
6.125	500				
		119	Bentonite mud	07-19-79	352
		119		07-20-79	
		119		09-11-79	
		119		09-13-79	
		119		09-14-79	
		119		09-15-79	

BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg. min.	Drift direction deg. min.	True vertical depth (feet)	Rectangular coordinates (feet)
		(no data)		

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services
USGS- U.S. Geological Survey,

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	07-06-79	10 - 118
1	CAL			BW	07-20-79	119 - 498
1	SP	mv	Spontaneous potential	BW	07-07-79	16 - 118
1	GR	API	Gamma ray	BW	07-06-79	10 - 118
1	GR			BW	07-19-79	119 - 500
2	DBC	g/cc	Density, borehole compensated	BW	07-06-79	10 - 118
2	DBC			BW	07-19-79	120 - 498
4	SN	ohm-m	Resistivity, short normal	BW	07-07-79	12 118
4	SN			BW	07-20-79	200 - 492
4	LN	ohm-m	Resistivity, long normal	BW	07-07-79	12 118
4	LN			BW	07-20-79	200 - 492
4	RILD	ohm-m	Resistivity, deep induction	BW	07-19-79	100 - 494
5	ENP	API	Epithermal neutron	BW	07-19-79	10 - 116
5	ENP			BW	07-19-79	120 - 498
8	MS	mSI	Magnetic susceptibility	USGS	09-14-79	30 - 461
8	IP	mv/v	Induced polarization	USGS	09-13-79	112 - 459

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

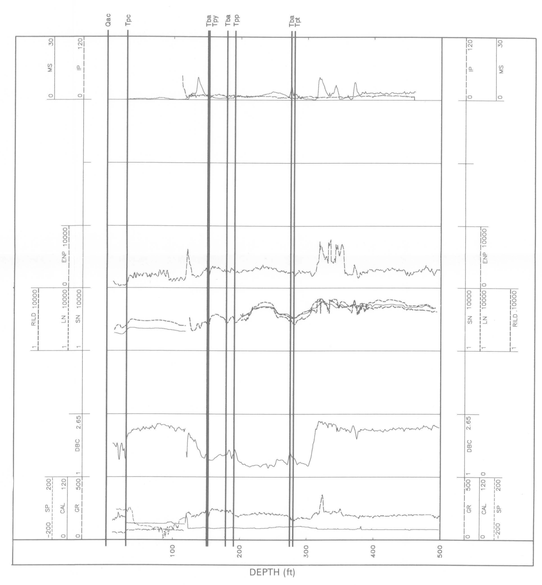


PLATE 35
WELL LOG UE-25a#5

Well: A-5
Yucca Mountain Project
Nye Co., Nevada

Location: Area 25
Nevada Coordinate System
N-766,956'
E-564,755'

Log measured from
ground level, 4057 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
12.25	123				
		10		06-28-79	full
		10		06-29-79	full
6.125	487				
		120	Revert mud/bentonite mud	07-11-79	247
		120		07-12-79	
		120		09-12-79	
		120		09-13-79	
		120		09-14-79	

BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg. min.	Drift direction deg. min.	True vertical depth (feet)	Rectangular coordinates (feet)
		(no data)		

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services
USGS- U.S. Geological Survey

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	06-28-79	14 - 119
1	CAL			BW	07-11-79	120 - 487
1	SP	mv	Spontaneous potential	BW	07-11-79	146 - 263
1	SP			BW	07-11-79	264 - 485
1	GR	API	Gamma ray	BW	06-28-79	10 - 119
1	GR			BW	07-11-79	120 - 487
2	DBC	g/cc	Density, borehole compensated	BW	06-28-79	12 - 119
2	DBC			BW	07-11-79	120 - 486
4	SN	ohm-m	Resistivity, short normal	BW	07-11-79	140 - 270
4	SN			BW	07-11-79	272 - 486
4	LN	ohm-m	Resistivity, long normal	BW	07-11-79	190 - 266
4	LN			BW	07-11-79	267 - 484
4	RILD	ohm-m	Resistivity, deep induction	BW	06-29-79	20 - 118
4	RILD			BW	07-11-79	120 - 480
5	ENP	API	Epithermal neutron	BW	06-28-79	26 - 118
5	ENP			BW	07-11-79	120 - 488
8	MS	mSI	Magnetic susceptibility	USGS	09-14-79	13 - 443
8	IP	mv/v	Induced polarization	USGS	09-13-79	180 - 449

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

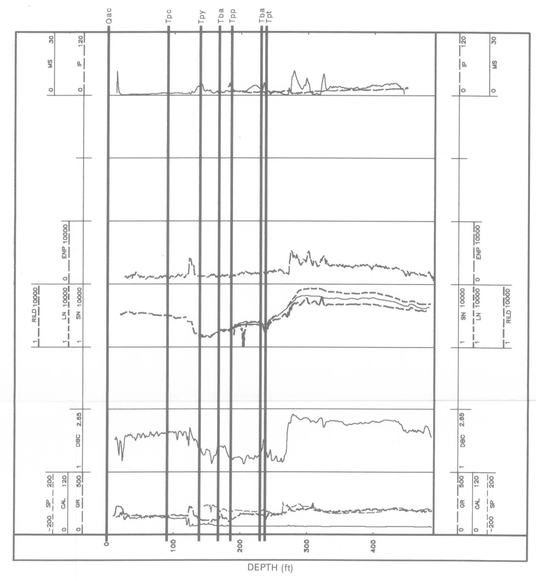


PLATE 36
WELL LOG UE-25a#6

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

Location: Area 25
Nevada Coordinate System
N-765,899'
E-564,501'

Log measured from
ground level, 4053 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
6.25	81				
6.125	107				
		57	Bentonite mud	07-23-79	
6.125	246				
5.5	500				
		107	Bentonite mud	07-31-79	
		107		08-01-79	
		107		08-08-79	354
		107		08-10-79	
		107		09-12-79	
		107		09-13-79	
		107		09-14-79	

BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg. min.	Drift direction deg. min.	True vertical depth (feet)	Rectangular coordinates (feet)
		(no data)		

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services
USGS- U.S. Geological Survey,

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	07-22-79	50 - 100
1	CAL			BW	07-41-79	107 - 499
1	SP	mv	Spontaneous potential	BW	08-10-79	120 - 493
1	GR	API	Gamma ray	BW	07-22-79	2 - 90
1	GR			BW	07-31-79	107 - 500
2	DBC	g/cc	Density, borehole compensated	BW	07-31-79	60 - 92
2	DBC			BW	07-31-79	107 - 500
4	SN	ohm-m	Resistivity, short normal	BW	08-10-79	122 - 493
4	LN	ohm-m	Resistivity, long normal	BW	08-10-79	124 - 493
4	RILD	ohm-m	Resistivity, deep induction	BW	07-22-79	40 - 96
4	RILD			BW	07-31-79	107 - 496
5	ENP	API	Epithermal neutron	BW	07-31-79	12 - 94
5	ENP			BW	07-31-79	107 - 499
8	MS	mSI	Magnetic susceptibility	USGS	09-14-79	17 - 475
8	IP	mv/v	Induced polarization	USGS	09-13-79	61 - 455

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

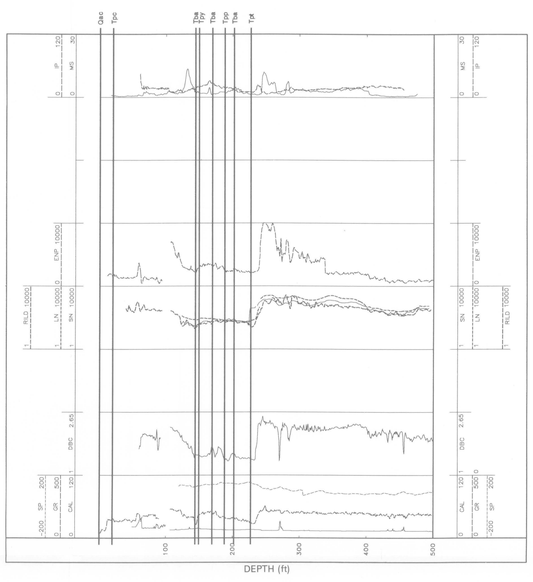


PLATE 37
WELL LOG UE-25a#7

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

Location: Area 25
Nevada Coordinate System
N-766,250'
E-565,469'

Log measured from
ground level, 4005 ft

Bit size (inch)	Drill depth	Casing depth	Circulating media	Logging dates	Fluid level
12.25	80				
		10	Air foam	08-13-79	
		10		08-14-79	
12.25	138				
		10	Bentonite mud	08-17-79	full
5.5	500				
		134	Mud	08-30-79	
		134		08-31-79	420
		134		09-12-80	
		134		09-13-80	
		134		09-14-80	
3.875	1002				
		502	Polymer mud	10-02-80	592
		502		10-03-80	742

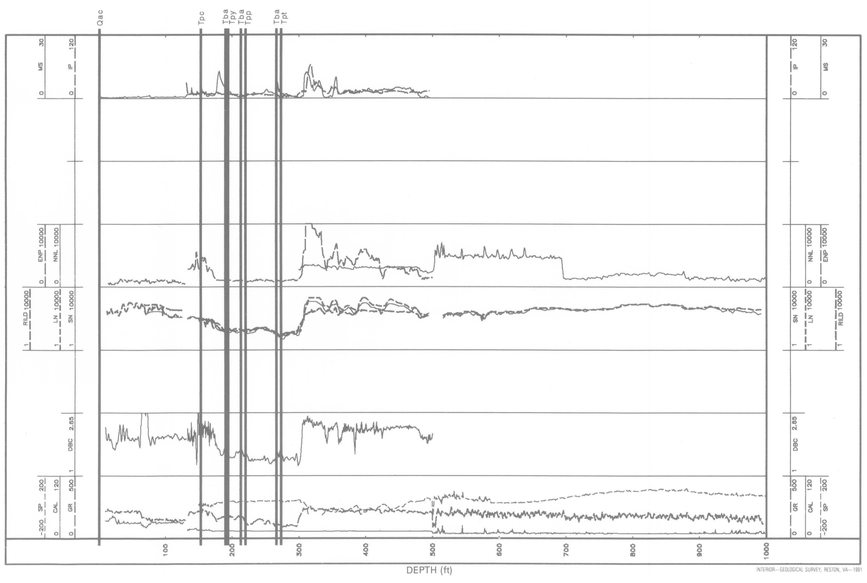
BOREHOLE DEVIATION

Measured depth (feet)	Drift angle deg. min.	Drift direction deg. min.	True vertical depth (feet)	Rectangular coordinates (feet)
		(no data)		

BW- Birdwell, DA- Dresser Atlas, GO- Gearhart Owen, LLNL- Lawrence Livermore National Laboratory, SW- Schlumberger Well Services
USGS- U.S. Geological Survey

T	Trace	Unit	Name or description	Log	Date	Depth (ft)
1	CAL	cm	Hole diameter, caliper	BW	08-17-79	10 - 128
1	CAL			BW	08-30-79	134 - 501
1	SP	mv	Spontaneous potential	BW	08-31-79	150 - 497
1	SP			BW	10-03-80	502 -1000
1	GR	API	Gamma ray	BW	08-17-79	10 - 130
1	GR			BW	08-30-79	135 - 500
1	GR			BW	10-03-80	506 - 995
2	DBC	g/cc	Density, borehole compensated	BW	08-17-79	10 - 130
2	DBC			BW	08-30-79	134 - 500
4	SN	ohm-m	Resistivity, short normal	BW	08-17-79	68 - 126
4	SN			BW	08-31 79	180 - 494
4	SN			BW	10-03 80	516 - 992
4	LN	ohm-m	Resistivity, long normal	BW	08-17-79	68 - 126
4	LN			BW	08-31-79	180 - 494
4	LN			BW	10-03-80	516 - 992
4	RILD	ohm-m	Resistivity, deep induction	BW	08-17-79	12 - 124
4	RILD			BW	08-31-79	170 - 494
5	NNL	API	Thermal neutron	BW	10-03-80	300 -1000
5	ENP	API	Epithermal neutron	BW	08-30-79	14 130
5	ENP			BW	08-30-79	135 - 500
8	MS	mSI	Magnetic susceptibility	USGS	09-14-79	1 - 495
8	IP	mv/v	Induced polarization	USGS	09-14-79	132 - 495

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



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

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