



Department of Energy

Washington, DC 20585

JUN 17 1993

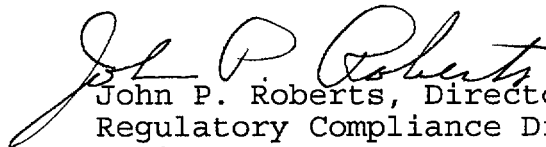
Mr. Joseph J. Holonich, Director
Repository Licensing & Quality Assurance
Project Directorate
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Holonich:

As requested in your April 15, 1993, letter, the U.S. Department of Energy (DOE) is providing you with specific documents and information (Enclosures 1-6). The FY '94 Annual Plan for Site Characterization will be transmitted to you late in fiscal year 1993, after approval by DOE.

Because Enclosures 2-4 are being furnished on electronic media, we are providing you one unique record consisting of computer hard disks and the requested videotape. The information on this media is unpublished and unchecked per the provision of Section 3a of the revised DOE/NRC procedural agreement, dated May 13, 1993. Since Enclosures 5 and 6 are paper records, these enclosures are also being sent to the State of Nevada and affected units of local government. The State of Nevada and interested affected units of local government may obtain a copy of the computer disks by contacting Tom Bjerstedt of the Yucca Mountain Site Characterization Project Office (YMPO) at (702) 794-7590; the videotape will be available to all interested parties in the YMPO library.

If you have any questions regarding this material, please contact Corinne Macaluso of my staff at (202) 586-2837.


John P. Roberts, Director
Regulatory Compliance Division
Office of Systems and Compliance
Office of Civilian Radioactive
Waste Management

Enclosures: *in the brief*

1. Ltr., May 20, 1993, Flint to Dyer, with enclosures
2. Neutron Well Log Data for USW UZN-79
3. Videotape of August 11, 1992, Storm
4. Precipitation Data from August 11, 1992, Storm
5. FY'93 Annual Plan
6. Report JAB-10733-TM6, US-703

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cc (w/enclosures 1, 5, and 6):

T. J. Hickey, Nevada Legislative Committee

R. Loux, State of Nevada

D. Bechtel, Las Vegas, NV

Eureka County, NV

Lander County, Battle Mountain, NV

P. Niedzielski-Eichner, Nye County, NV

W. Offutt, Nye County, NV

L. Bradshaw, Nye County, NV

C. Schank, Churchill County, NV

F. Mariani, White Pine County, NV

V. Poe, Mineral County, NV

J. Pitts, Lincoln County, NV

J. Hayes, Esmeralda County, NV

B. Mettam, Inyo County, CA



United States Department of the Interior



GEOLOGICAL SURVEY

HYDROLOGIC RESEARCH FACILITY
P.O. BOX 327, M/S 721
MERCURY, NV 89023

May 20, 1993

WBS 1.2.3.3.1.1.1
Information only

Mr. J. Russell Dyer, Director
Regulatory & Site Evaluation Division
Yucca Mountain Site Characterization
Project Office
Department of Energy
P.O. Box 98608
Las Vegas, Nevada 89193-8608

ENCLOSURE 1

Dear Mr. Dyer:

The data packages listed below are provided in response to the Nuclear Regulatory Commission's request of April 15, 1993:

1. Neutron well logging data (counts only from six different probes) for well USW UZN-79 from October 1985 to April 1993. Data are in three formats: Lotus 123, Paradox, and ASCII.

2. Video tape of the thunderstorm of August 11, 1993 that occurred at Yucca Mountain. One frame was exposed every 4 seconds to create a time-lapse effect. When replayed at normal speed (SP) the effect is to speed up the action 240 times.

3. Precipitation data from the storm of August 11, 1992. The data were collected from the storage gage network and from three of the nine automated tipping-bucket gage locations. The storm did not reach the other six automated gage sites. Also included are data from the weather station operated by the Weather Service Nuclear Support Office. These files are in Lotus 123 format.

If you have questions on the neutron hole data, please contact David Hudson (702) 295-5973. For questions on the meteorological data, call Dale Ambos at (702) 295-5826.

Sincerely,

Alan L. Flint, Chief
UZ Infiltration Project
Yucca Mountain Project

enclosures as stated
cc: See Attached List

ENCLOSURE 1

cc w/o enclosures: L.R. Hayes, USGS Denver
D.H. Appel, USGS Denver
D.C. Gillies, USGS Denver
P.W. McKinley, USGS Denver
M.P. Chornack, USGS Denver
USGS-YMP LRC

U.S. GEOLOGICAL SURVEY
WEATHER STATIONS AT
YUCCA MOUNTAIN, NEVADA

STATION	NORTHING ⁽¹⁾	EASTING ⁽¹⁾	ELEVATION ⁽²⁾
1	759011	567934	3815
2	743968	610564	3492
3	771482	560148	4432
4 (old)	760134	558356	4915
4 (new) ⁽³⁾	757500	555739	4890
5	782850	554986	5870

U.S. GEOLOGICAL SURVEY
AUTOMATED PRECIPITATION STATIONS
YUCCA MOUNTAIN, NEVADA

STATION	NORTHING	EASTING	ELEVATION
Busted Butte	742400	576300	3280
Fran Ridge	754015	573575	4062
G-3	751136	560265	4765
N-2	768606	566119	3947

NOTES: (1) Nevada State Coordinate System (feet)
 (2) Elevation (feet)
 (3) Moved June 8, 1990

Notes on Neutron Hole N79

1. There are three data files. N79.DB is from Paradox 4.0 and N79.WK3 is from Lotus 123 Rel 3.0., and N79.TXT is an ASCII file.
2. The data is in 5 columns of data labeled Date, Meter, Depth, Type, and Count and there are 3528 lines of data.
3. The measurements in the Date column are from 10/24/85 to 4/8/93. N79 was logged 56 times during this period. The measurement dates are given on an attached sheet.
4. The Meter column identifies the neutron probe that was used to take the measurements. Five different meters were used (2, 3, 4, 6, and 7). Two different meter software versions were used for meters 3 (3 and 3A) and 6 (6 and 6A).
5. The Depth column is the depth in meters from the top of the casing. The casing height for this hole is 0.6 m and the detector (measurement location) is ≈ 0.3 m below the top of the probe. The measurement depth from the ground surface can be calculated by subtracting 0.3 m from the depth from the top of the casing.

$$Depth_{Meas} = Depth_{Casing} - (0.6 - 0.3) = Depth_{Casing} - 0.3$$

N79 is logged from 0.6 m to 9.8 m from the top of the casing. The logging interval is 0.1 m in the top 5 m and 0.3 m below 5 m. The N79 measurement depth are given on an attached sheet.

6. The Type column identifies the type of measurement. CNT is a measurement and TSTD and BSTD are shielded standard counts taking on the top of the casing. TSTD's are taken immediately before the hole is logged and BSTD's are taken immediately after the hole is logged.
7. The Count column is the actual measurements. -999 in this column is a missing measurement.
8. **CAUTION** This data is unchecked and has not been through normal USGS review so it can only be used for fun.