

GIVE NRC DATA NOW

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APR 24 1989

Mr. Ralph Stein, Associate Director  
 Office of Systems Integration and Regulations  
 Office of Civilian Radioactive Waste Management  
 U. S. Department of Energy RW-24  
 Washington, D.C. 20545

Dear Mr. Stein:

I am responding to your March 13, 1989 letter to me in which you offered to generate a tape for the NRC of the Site and Engineering Properties Data Base (SEPDB) on a periodic basis. I request that you proceed to generate such a tape and transmit it, with appropriate documentation, to us in the near future.

I am also requesting that the specific geoscience information described in the enclosure to this letter be provided to us as quickly as possible. This information will aid the NRC staff in its review of the saturated groundwater flow system at Yucca Mountain. Please let me know if there are any questions regarding the attachments, in which event I will arrange for a telephone conference involving our technical staff and the appropriate personnel from your organization to clarify our needs.

In my January 19, 1989 letter to you I requested a meeting with your staff and contractors to discuss our data needs and timely access to the Yucca Mountain site data bases. Various scheduling problems have delayed this meeting, and you have addressed some of our concerns in your March 13, 1989 letter. In addition, the subject of access to and exchange of data will be briefly discussed at the April 25, 1989, joint NRC, DOE, State of Nevada and affected units of local government meeting on activities of the Center for Nuclear Waste Regulatory Analyses (CNWRA). However, we consider that a meeting dedicated to a discussion of our data needs and timely access to the Yucca Mountain site data base is still needed. At next week's meeting on CNWRA activities, or shortly thereafter, we will be contacting you to propose a date for this meeting.

Sincerely,

**ORIGINAL SIGNED BY**

John J. Linehan, Director  
 Repository Licensing and Quality  
 Assurance Project Directorate  
 Division of High-Level Waste Management

Enclosure: As stated

cc: C. Gertz, DOE/NV  
 R. Loux, State of Nevada  
 K. Turner, GAO  
 M. Baughman, Lincoln County  
 D. Bechtel, Clark County  
 S. Bradhurst, Nye County

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REQUEST FOR GEOSCIENCE DATA FROM THE YUCCA MOUNTAIN SITE AND VICINITY

1. Please provide digital water level data and plotted hydrographs for those wells listed in Table 3-24 of the SCP for which water level data have been collected. The digital data should be in the form of water level elevations and should not be provided as depths or pressures. Robison, et al. (1988) contains hydrographs, but those hydrographs generally include only the earlier manual measurements and do not include data collected recently using continuous downhole pressure measurements. In addition, those hydrographs were split into separate sections in adherence to the report's 8½" x 11" format. The hydrographs that are the subject of this request should be provided on large continuous sheets with no splitting, and should show the total period of record for each well, including potentiometric elevations from both manual measurements and pressure monitoring devices. Where feasible, hydrographs for more than one well may be shown on each sheet.

The hydrographs should show water levels as elevations in both feet and meters and should include the complete period of record for each well. Time scales should be the same on all hydrographs. Periods of missing or questionable data should be explicitly identified on the hydrographs and in the digital record. Times of various events, including regional earthquakes, nuclear tests, nearby well construction or testing, etc., should also be shown on the hydrographs. Expanded sections of hydrographs for continuously monitored wells should be provided to clearly show water level responses to underground nuclear tests at the Nevada Test Site.

Also, please provide digital water level data and plotted hydrographs of wells on the Nevada Test Site for which water levels have been regularly monitored.

The digital data should be supplied as read-only computer access to the data base on which these data reside along with the appropriate format and processing information.

2. Please provide digital and plotted barometric pressure data covering the period from beginning of record of the earliest well at Yucca Mountain to the present. Data should be provided from meteorological stations that are closest to the wells. The time scales of the plots should be the same as on the hydrographs so that changes in water levels can easily be compared to barometric transients.

3. Please provide a borehole summary chart that summarizes important information about the wells listed in Table 3-24 of the SCP. The summary chart for wells at Yucca Mountain should include at least the following information:

well name(s) or number(s)	latitude and longitude
name of driller	Nevada State Plane Coordinates
year (and month) drilled	approx. depth to water table
total well depth	horizon to which well screen
depths and diameters of well casings	is open
ground surface elevations	information on uncased borehole
well screen data	lengths
types of borehole logs run	
drilling method	

The chart should be accompanied by general comments: for example, key references for additional data on each well, information on changes in well construction (deepening, etc.), anomalous losses of drilling fluid, significant drilling deviations, elevations of major producing zones, wellbore obstructions, current status of well, etc. Also, the borehole summary chart should include a map of the Yucca Mountain site area with names and locations of wells.

4. Please submit a compilation of well construction data. This package should consist of detailed construction diagrams for each of the 31 wells listed in Table 3-24 of the SCP. Elevation scales, in both feet and meters, should be included in the diagrams. Reproductions of the as-built geoengineering diagrams for these wells would be acceptable.
5. Please provide data, in both tabular and digital form, from hydrologic pumping tests conducted at the Yucca Mountain site for which published reports exist. For example, Lobmyer et al. (1983) and Whitfield et al. (1984) provide field plots of pumping test drawdowns and recoveries for wells UE-25b#1 and USW H-4, respectively. However, the references do not include appendices that list the actual time-drawdown data in tabular form. Please provide tabular and digital records (with appropriate format information) of time-drawdown data (as water level elevations) for all pumping tests (both drawdown and recovery phases, where applicable) conducted at the Yucca Mountain site.

#### REFERENCES

- Lobmyer, D.H., M.S. Whitfield, Jr., R.R. Lahoud, and L. Bruckheimer, 1983. Geohydrologic Data for Test Well UE-25b#1, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey, Open-File Report 83-855, Denver, Colorado.

- Robison, J.H., D.M. Stephens, R.R. Luckey, and D.A. Baldwin, 1988. Water Levels in Periodically Measured Wells in the Yucca Mountain Area, Nevada, 1981-87: U.S. Geological Survey, Open-File Report 88-468, Denver, Colorado.
- Whitfield, M.S., Jr., W. Thordarson, and E.P. Eshom, 1984. Geohydrologic and Drill-Hole Data for Test Well USW H-4, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey, Open-File Report 84-449, Denver, Colorado.