



# United States Department of the Interior

GEOLOGICAL SURVEY  
BOX 25046 M.S. 416  
DENVER FEDERAL CENTER  
DENVER, COLORADO 80225

IN REPLY  
REFER TO

August 13, 1984

Seth Coplan  
High-Level Waste Management  
Development Branch  
Division of Waste Management  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

84 AUG 20 AM 1:45

WM DOCKET CONTROL  
CENTER

Through: William W. Dudley, Jr. *WWD*

Dear Mr. Coplan:

Enclosed is an itemized response to the request of NRC for specific hydrologic data. This list was generated during the NNWSI Hydrology Data Review held at USGS office, Denver, July 24-27, 1984, and was presented to me by Syvie Olney of your staff.

I hope this response meets your needs for now. Please contact me if you have questions.

Sincerely yours,

*William E. Wilson*  
William E. Wilson  
Chief, Nuclear Hydrology  
Program

cc: R. Blankennagel, USGS  
L. Benson, USGS  
J. Downey, USGS  
P. Montazer, USGS  
J. Robison, USGS  
F. E. Rush, USGS  
R. Waddell, USGS  
W. Wilson, USGS  
W. Dudley, USGS

WEW/dvg

WM Record File

102.2

WM Project 11

Docket No. \_\_\_\_\_

PDR ☒

LPDR ☒

Distribution:

SCoplan

(Return to WM, 623-SS)

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PDR WASTE  
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PDR

USGS RESPONSE TO  
NRC REQUESTS FOR HYDROLOGIC DATA,  
DATA REVIEW, JULY 24-27, 1984

1. Statistical summary of unsaturated-zone parameters (porosity, moisture content, saturation).

Comment: Data are preliminary and not contained in any formal report.

Response: Compilation will be provided by 8/31.

2. Examples of plots of moisture-characteristics curves and relative permeability-moisture tension curves; list of such plots in files.

Comments: List will have to be compiled.

Response: Information will be provided by 8/31.

3. Sandia report (SAND-83-7474).

Response: Please obtain from Sandia National Laboratories.

4. Copy of video (TV) log of USW UZ-1.

Comment: Two tapes available.

Response: Copies of both tapes will be provided by 8/31.

5. USW UZ-1 blueprint.

Comment: Blueprint prepared by Holmes and Narver, Inc. (DOE contractor).

Response: Copy will be provided by 8/31.

6. Isotopic map

Comment: Map is part of a report in review.

Response: Map will be provided following USGS approval of report, probably September or October, 1984.

7. Computer printout of water-quality analyses in and around Yucca Mountain.

Response: Water-quality analyses will be provided by 8/31.

8. Details of a typical installation of a continuous water-level monitoring station using a pressure transducer.

Comment: No such drawing exists.

Response: USGS Quality Assurance Procedure HP-25 describes our general procedure for measuring water levels with transducers. It is enclosed.

9. Construction records and periodic water-level measurements.

Comment: Construction records are prepared by Fenix and Scisson, Inc. (contractor to DOE); USGS files are incomplete. Hydrographs are preliminary and do not have all corrections made to water levels.

Response: Please obtain construction records from F&S, inc., through DOE. Hydrographs are enclosed.

10. Geologic description and hole construction records for WT holes.

Response: See item 9, above, for construction records. Geologic descriptions have not been completed. Completion schedule is uncertain.

11. Map of Franklin Lake Playa showing well locations.

Response: Copy of map will be provided by 8/31.

12. Geologic map of Scott

Comment: Map is approved and in final drafting.

Response: Copy will be provided when drafting is complete (probably September).

13. Hydrotesting index

Response: Request was completed during review.

14. Montazer thesis

Response: Copy will be provided by 8/31.

15. Weeks and Wilson Open-File Report

Comment: Report is approved as WRI 84-4193. Manuscript is in final typing.

Response: Copy will be provided when available, probably September.

16. Letter and data from H&N to Montazer 10-4-83.

Response: Copy will be provided by 8/31.

17. All geologic logs and geophysical logs for all H-holes and WT-holes.

Comment: Fenix and Scisson, Inc. has the originals of geophysical logs.

Response: Please make request to F&S, through DOE. Suggest you indicate you want only logs that were run after hole was completed. Be aware that volume of logs is substantial; request for specific logs probably would be more favorably received.

16. Pictorial summary of geophysical and geologic logs or geologic

description for WT 25c-1, 2, 3; UE 25p#1, and WT 25b#1.

Response: No pictorial summaries are available. Lithologic logs will be sent when available.

19. Information concerning  $H_0$  in mV for injection tests.

Response: Suggest that person interested in the information contact Gene Rush in Nuclear Hydrology Program to discuss the information requested.