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NOTE TO: Paul Hildenbrand, BWIP Project Manager
Repository Projects Branch
Division of Waste Management

FROM: Michael F. Weber, WMGT
Division of Waste Management

SUBJECT: RESPONSE TO PARRY'S MEMORANDUM OF SEPTEMBER 23, 1986

Please find enclosed a table and map that provide some of the information requested by Sidney J. S. Parry in his memorandum to Wayne Walker dated September 23, 1986. The table provides total depths of boreholes drilled at the Hanford site since 1983 based on information available to the NRC staff. The enclosed map indicates the locations of the boreholes relevant to the Reference Repository Location. This note, however, does not respond to Mr. Parry's request to summarize testing results from these boreholes. The effort required to summarize testing information acquired in boreholes drilled since 1983 would be very large and of questionable utility for the ACRS. In addition, DOE-RL's collection and analysis of test data from these boreholes is continuing. One of the objectives of the December 1986 NRC-DOE Hydrology Data Review is to access and analyze the results of recent and ongoing testing at Hanford. Therefore, I have not attempted to respond to Mr. Parry's request to provide information on the results of tests in these boreholes. If deemed appropriate by WMRP, however, we could invite Mr. Parry to the December Data Review where he could personally review the results of recent tests.

The last paragraph of Mr. Parry's memorandum poses two rhetorical questions: (1) why has DOE not made the tests recommended by the USGS, and (2) why has there been a major reduction in drilling activity at the site over the past three years. These questions might be more appropriately relayed to DOE-RL because they interrogate DOE's motives rather than facts about the Hanford characterization program. From NRC's perspective, however, DOE's delays in site testing over the last three years can be justified by a number of interrelated reasons, including passage of the Nuclear Waste Policy Act, development of defensible testing strategies, and attempts to establish hydrologic baseline at the site. The Nuclear Waste Policy Act, which was signed into law in January 1983, restricted the types of drilling and testing that could be performed at a potential repository site prior to the release of the Site Characterization Plan for that site. Several of the activities that DOE-RL had planned for the Hanford site had to be postponed until after SCP release. In addition, DOE slowed the pace of site characterization activities to develop defensible testing strategies and quality assurance programs in response to comments from NRC (4/83) and other interested parties on the Site Characterization Report (11/82) and subsequent documents. Further, DOE

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generally adopted the hydrologic testing strategy presented in NRC's Site Technical Position 1.1, which requires the establishment of hydrologic baseline prior to initiating large-scale hydraulic stress testing at the site. DOE-RL recognized in 1984 that borehole drilling and other site activities interfered with the establishment of baseline conditions. Thus, DOE revised its site characterization activities to minimize perturbations on hydraulic heads monitored at facilities installed in 1983 (e.g., DC-19, -20, and -22). In response to a meeting with NRC in December 1985, DOE is now reassessing its strategy for hydrologic characterization of the Hanford site.

Please contact me if you wish to discuss the information contained in this note or the preparation of a response to Mr. Parry's memorandum.

/s/

Michael F. Weber
Geotechnical Branch
Division of Waste Management

Enclosures:
As Stated

DFC : WMGT <i>W</i>	:	:	:	:	:	:
NAME : MWeber	:	:	:	:	:	:
DATE : 86/11/20	:	:	:	:	:	:

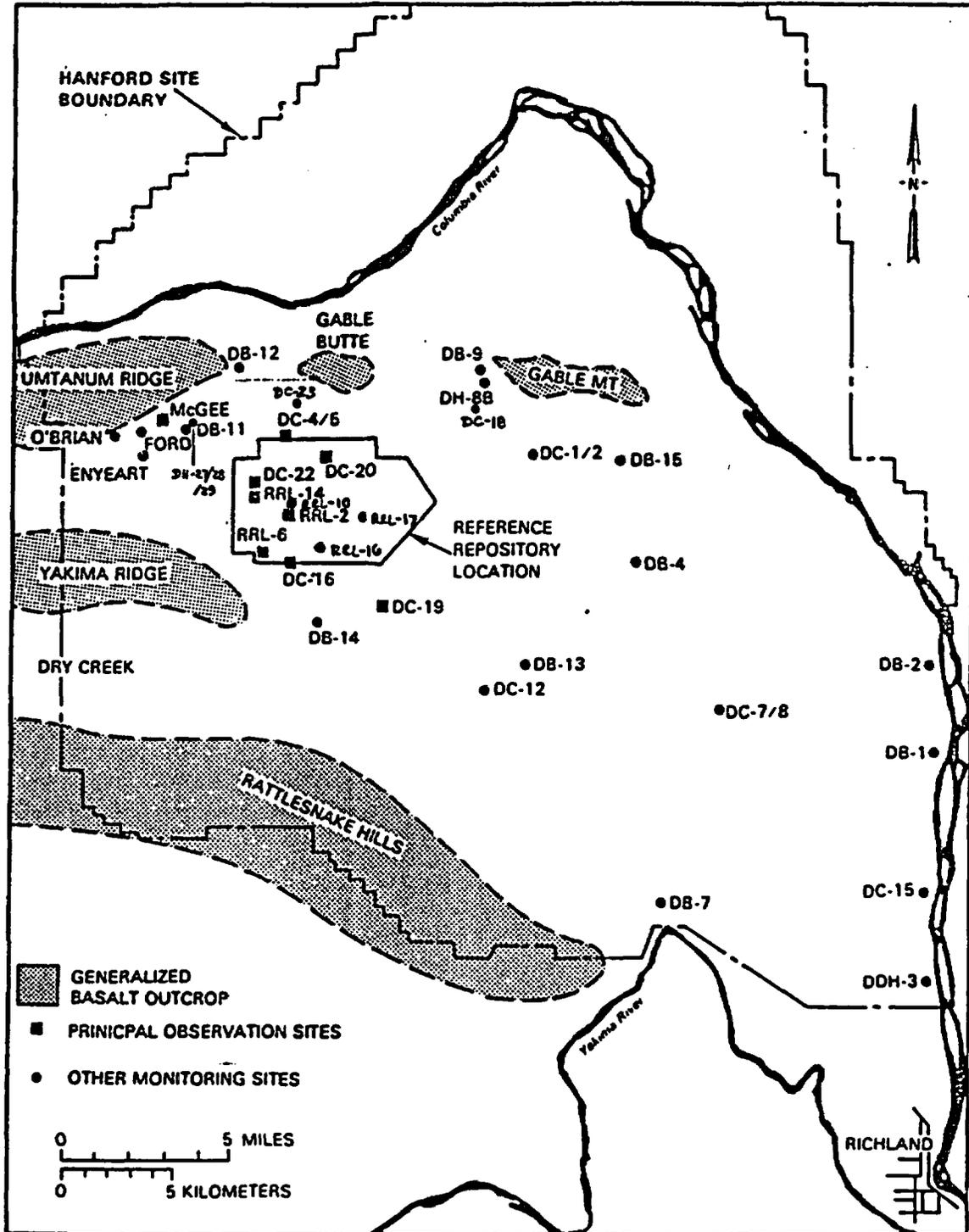
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BOREHOLES DRILLED AT BWIP
SINCE 1982

<u>Borehole</u>	<u>Year Completed</u>	<u>Purpose</u>	<u>Total Depth (feet)^o</u>	<u>Reference</u>
McGee Well	1983 (deepened)	Hydrologic	3123	BSCLM*
DH-27	1983	Geologic	517	BSCLM
DH-28	1983	Geologic	748	BSCLM
DH-29	1983	Geologic	15	BSCLM
			(Starter)	
DC-16A	1983	Hydrogeologic	4398	BSCLM
DC-16A1	1984	Geologic	(3725) (10 ft. deviated hole)	SD-BWI-TC-020
DC-18	Ongoing	Hydrogeologic	317+	BSCLM
DC-19A	1984	Hydrologic	804.2	BSCLM
DC-19C	1983	Hydrologic	3982	BSCLM
DC-19D	1983	Hydrologic	1551	BSCLM
DC-20A	1983	Hydrologic	755	BSCLM
DC-20B	1983	Hydrologic	1635	BSCLM
DC-20C	1983	Hydrologic	1495	BSCLM
DC-20D	1983	Hydrologic	3781	BSCLM
DC-22A	1984	Hydrologic	680	BSCLM
DC-22B	1983	Hydrologic	1805	BSCLM
DC-22C	1983	Hydrologic	3960	BSCLM
DC-22D	1984	Hydrologic	1629	BSCLM
DC-23W	1985	Hydrologic	(2200)	SD-BWI-TC-026
DC-23GR	1986	Hydrologic	(3500)	SD-BWI-TC-026
RRL-2B	1985	Hydrologic	2858	SD-BWI-TI-329
RRL-2C	1985	Hydrologic	3404	SD-BWI-TI-329
RRL-10	1983	Seismic	668	BSCLM
RRL-16	1983	Seismic	626	BSCLM
RRL-17	1986	Geologic	3337.3	DOE staff (86/11/17)

^o () indicates an approximate total depth as identified in drilling specifications.

*BSCLM = Borehole Status Chart and Location Map, Draft, 1/3/85.



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FIGURE 1. Location of Boreholes, Wells, and Piezometers on the Hanford Site Where Water-Level Data from Hydrogeologic Units in the Columbia River Basalt are Currently Being Obtained.