# UNC TETON EXPLORATION DRILLING, INC. 10-8791

unc

Subsidiary of United Nuclear Corporation
AUNC RESOURCES Company

PO Drawer A-1 Casper Wyoming 82602

November 4, 1982

CERTIFIED RETURN RECEIPT NO. 416849



Mr. John Linehan
Section Chief
Uranium Recovery Field Office
U.S. NUCLEAR REGULATORY COMMISSION
Mail Stop 461-SS
7915 Eastern Avenue
Silver Springs, Maryland 20910

RE: Docket No. 40-2781

Dear John:

Please find attached the additional information requested as a result of the public comment and review of the above referenced Draft Environmental Statement.

I am extremely pleased with the review and especially the limited number of comments requiring additional information. The NRC's review staff, and the Project Leader should be commended for this thorough review and well prepared statement.

The time required to complete this process, however, remains an issue at UNC Teton. We are hoping that the license may be completed and issued prior to January 1, 1983 or as soon thereafter as possible. I am confident that you and your staff will do everything you can to expedite the remaining process work. Please contact me at any time I may be of assistance. I am booking forward to meeting with you during the preparation of the final license conditions.

Sincerely yours,

UNC TETON EXPLORATION DRILLING, INC.

1 K. appul

Richard R. Appel

Coordinator

Permits and Licensing

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## QUESTION:

From the USEPA

Page 2-41. What is the purpose of the weep hole on Figure 2-5? Is it located in the tubing or casing? If located in the tubing then the injection pressure will be transmitted to the monitoring annulus and any annulus pressure will only be monitoring injection pressure. If the weep hole is in the casing and the packer fails the lixiviant will migrate through the weep hole into zones above the ore zone.

#### RESPONSE:

The weep hole shown in Figure 2-5 is one method of directing the cement from the well casing out into the annular space between the casing and the bore hole wall during well completion. Weep holes are drilled in the bottom of the well casing to provide an exit for the cement. If weep holes were used for cementing injection and recovery wells they would be located at the bottom of the casing which projects down into the production zone sands. Therefore, the introduction of lixiviant through a weep hole would not contaminate additional geologic strata. Well installation for production wells at the Leuenberger site will not employ the use of weep holes. However, general procedures would be to drill the well to the depth just above the production zone, cement the casing in place by forcing the cement through the bottom of the casing up into the annulus. After the cement has set the production zone is drilled out, underreamed, and the well screen set it place. It would be acceptable to UNC Teton if the weep hole were eliminated from Figure 2-5.

# QUESTION:

From the USEPA

Page 2-58. Has Teton determined to which licensed tailing facility solid waste from the evaporation ponds will be transported?

# RESPONSE:

UNC Teton has used the Exxon licensed tailing facility, approximately sixteen miles to the northeast of the UNC Teton site, for solid waste disposal during the R&D operation and its decommissioning. The licensed facility to be used during commercial operations and final restoration will depend on the availability of licensed facilities at that time. Since the commencement date

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## RESPONSE: (Continued)

of the UNC Teton Project is not firm and the project is scheduled for an eight year operating life, we feel that it is premature to anticipate the use of a disposal facility at this time.

## QUESTION:

From the Powder River Basin Resource Council

On page 3-31, the DES states that potentiometric elevations in wells penetrating the O2, N, and M aquifers were monitored "periodically" since the autumn of 1979. How often is "periodically"? Since this information was apparently used to construct the potentiometric maps which in turn indicate the direction of groundwater flow - and, to some degree, the separation of the aquifers involved - it would be interesting to know how much data the maps are based on.

Please provide data used to make the potentiometric maps.

# RESPONSE:

Periodic water level elevations taken from the various wells used to decribe and monitor hydrologic conditions in the aquifers involved in the UNC Teton Project refer to a large volume of data collected from the time a well was installed through the end of the R & D project. These periodic measurements include the initial elevation taken when the well was first drilled. Measurements taken thereafter were quarterly, monthly, weekly, and in some cases, daily, depending upon the need for data to evaluate the effects of various operating procedures, including excursion control indicators. UNC Teton's R & D License SUA-1373, Docket No. 40-8728, Table II, 6.02, shows well completion data for 21 wells including static water level elevations measured June 25, 1979 Potentiometric surfaces could be constructed using this data. License condition no. 19 of the above referenced License requires hydrologic monitoring on a weekly basis during operations and until the restoration of the zone begins. License condition no. 20 requires this information to be reported quarterly. In addition to the required records UNC Teton has maintained water level records on many other wells in the operating area as well as adjacent to it.

A potentiometric surface map could be constructed from this data for any time from the date of well completion through the end of operations, generally June, 1979 through December, 1981. The potentiometric surface maps U.S. Nuclear Regulatory Commission November 4, 1982 Page four



# RESPONSE: (Continued)

presented in the Environmental Report for the O, N, and M aquifers were prepared from the periodic data as described above. However, the maps are intended to give a general flow and gradient of the aquifers depicted. The UNC Teton staff hydrologist was attempting to present a general picture of these aguifers in a natural static state at a given time. The data points used to make the maps are shown on the maps presented to the NRC in the Environmental Report. These maps are based on more than three wells which are sufficient to define a surface. Standard hydrologic procedures were used. The maps were not intended to show an average aguifer condition over a long period of time. Aquifer conditions are affected from day to day by natural conditions, such as barometric pressure changes, and from one year to the next, due to natural recharge variations.

RRA/mdd