

Geotechnical Engineering Program  
Civil Engineering Department

Colorado State University  
Fort Collins, Colorado  
80523

May 12, 1980

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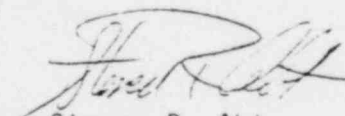
Mr. Glen Brown  
U.S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Dr., Suite 1000  
Arlington, Texas 76011

Dear Glen:

During my inspection of the Morton Ranch, UNC, Wyoming of 22 Apr 80, recommendations were made by this inspector concerning increased documentation and certification of the embankment construction. Enclosed is a report by the consulting engineer of initial work following the NRC inspection.

The entire documentation will be examined during the 10% inspection. Should any questions arise, please call me at (303)491-6081 or (303)491-6707.

Very truly yours,

  
Steven R. Abt

cc: Dr. J. D. Nelson

8007170308

May 6, 1980

UNC Mining and Milling Services, Inc.  
Post Office Box 2996  
Casper, Wyoming 82602

Attention: Mr. Tom Hiscox

Gentlemen:

REPORT OF CUTOFF TRENCH INSPECTION  
PROPOSED EVAPORATION POND EMBANKMENT  
MORTON RANCH PROJECT  
NEAR CASPER, WYOMING  
FOR UNC MINING AND MILLING SERVICES, INC.

INTRODUCTION

This letter presents a summary of the field observations made during the construction of the cutoff trench for the above-referenced evaporation pond embankment. The inspection services were recommended during a recent site visit, by Dr. Steven R. Abt, representing the Nuclear Regulatory Commission.

The field observations made during the construction operations were discussed with Dr. Abt during a previous telephone conversation.

CUTOFF TRENCH INSPECTION

On the morning of April 24, 1980, the site was inspected by Mr. Larry T. Murdock, the Dames & Moore Project Manager. At

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that time the cutoff trench excavation had been completed between Stations 17+00 and 24+00. This included the lower portions of the foundation excavation where seepage and soft soil conditions were a primary concern of Dr. Abt. The configuration of the trench generally conformed to the recommendations as presented in the plans and specifications\*.

During the construction operations, water was periodically pumped from the excavation and at the time of the inspection the trench was relatively dry with standing water limited to minor puddles within the lower areas. Seepage into the trench area was minor and generally confined to the bottom of the trench. At the request of Mr. Murdock, the trench was cleared of loose soils and a subsequent inspection indicated the trench was established within firm undisturbed material. The initial lift of clay was placed immediately upon completion of excavation operations. In-place density tests performed on this initial lift indicated conformance with the recommended compaction specifications.

#### CONCLUSIONS

It is our opinion that the construction of the cutoff trench conformed to the requirements as stated in the plans and specifications. The trench was established within firm and undisturbed materials and was maintained in a relatively dry state during placement of the core material.

\* \* \*

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\*Contract Specifications and Drawings For Evaporation Pond and Embankment, Near Casper, Wyoming, For United Nuclear Corporation, Morton Ranch Uranium Mine, Prepared by Dames & Moore, December 1978.

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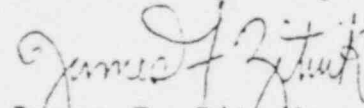
If you have questions pertaining to the information presented herein or require additional information, please contact us.

Very truly yours,

DAMES & MOORE



Larry T. Murdock  
Project Manager  
Professional Engineer #2852  
State of Wyoming



James F. Zitnik  
Project Engineer

LTM/JFZ:si

cc: Dr. Steve Abt  
Jerry M. Dogget  
N. C. Sorensen