



**UNITED STATES**  
**NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

August 28, 2015

Principal Chief Bill John Baker  
Tribal Historic Preservation Officer  
Cherokee Nation  
P.O. Box 948  
Tahlequah, OK 74465

**SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION, CONTINUING  
PALEOLIQUEFACTION FIELD WORK ALONG SELECTED  
RIVER SEGMENTS IN ARKANSAS**

Dear Chief Baker:

The United States Nuclear Regulatory Commission (NRC) has performed the field work described in our National Historic Preservation Act (NHPA), Section 106 consultation letter sent to your office, dated February 15, 2013 (enclosed). The field work identified various paleoliquefaction features in Arkansas, Kentucky and Tennessee for the purpose of assessing seismic hazards to commercial nuclear power plants. The NRC's contractor conducted this field work along various river segments in Arkansas, Kentucky, and Tennessee (please see Figure 1 below for the location of the work conducted previously) during September through December of 2013 and 2014.

The NRC plans to continue the field work described in its letter of February 15, 2013 in Arkansas during the months of September through December 2015. Figure 2 shows additional river segments in northern Arkansas that may be the subject of the NRC's continuing field work. Due to the limited scope and minor disturbance of this field work, the NRC has determined that the expansion of the field work to these additional river segments will have no adverse effect on any historic properties or other cultural resources located along or in these river segments, assuming such properties or resources are present.

In the event that the NRC considers any particular site along any of the subject river segments to be a candidate site for a paleoliquefaction study, which may involve the excavation of a trench, the NRC will determine the area of potential effects and then initiate consultation with your office, the applicable State Historic Preservation Officer, and other interested consulting parties. The NRC considers such paleoliquefaction study, if pursued, to be a separate undertaking than the field work described in our letter of February 15, 2013.

B. Baker

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Please provide your comments on our determination of no adverse effect for the proposed field work at your earliest convenience. If you have any questions or require additional information, please contact Thomas Weaver by phone at (301) 415-2383 or by email at [Thomas.Weaver@nrc.gov](mailto:Thomas.Weaver@nrc.gov). All written correspondence should be sent to the NRC at the following address with attention to the Document Control Desk. We look forward to your feedback.

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Enclosures:  
As stated

Sincerely,

***/RA/ K. Brock for B. Thomas***

Brian E. Thomas, Director  
Division of Engineering  
Office of Nuclear Regulatory Research

B. Baker

-2-

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Division of Engineering  
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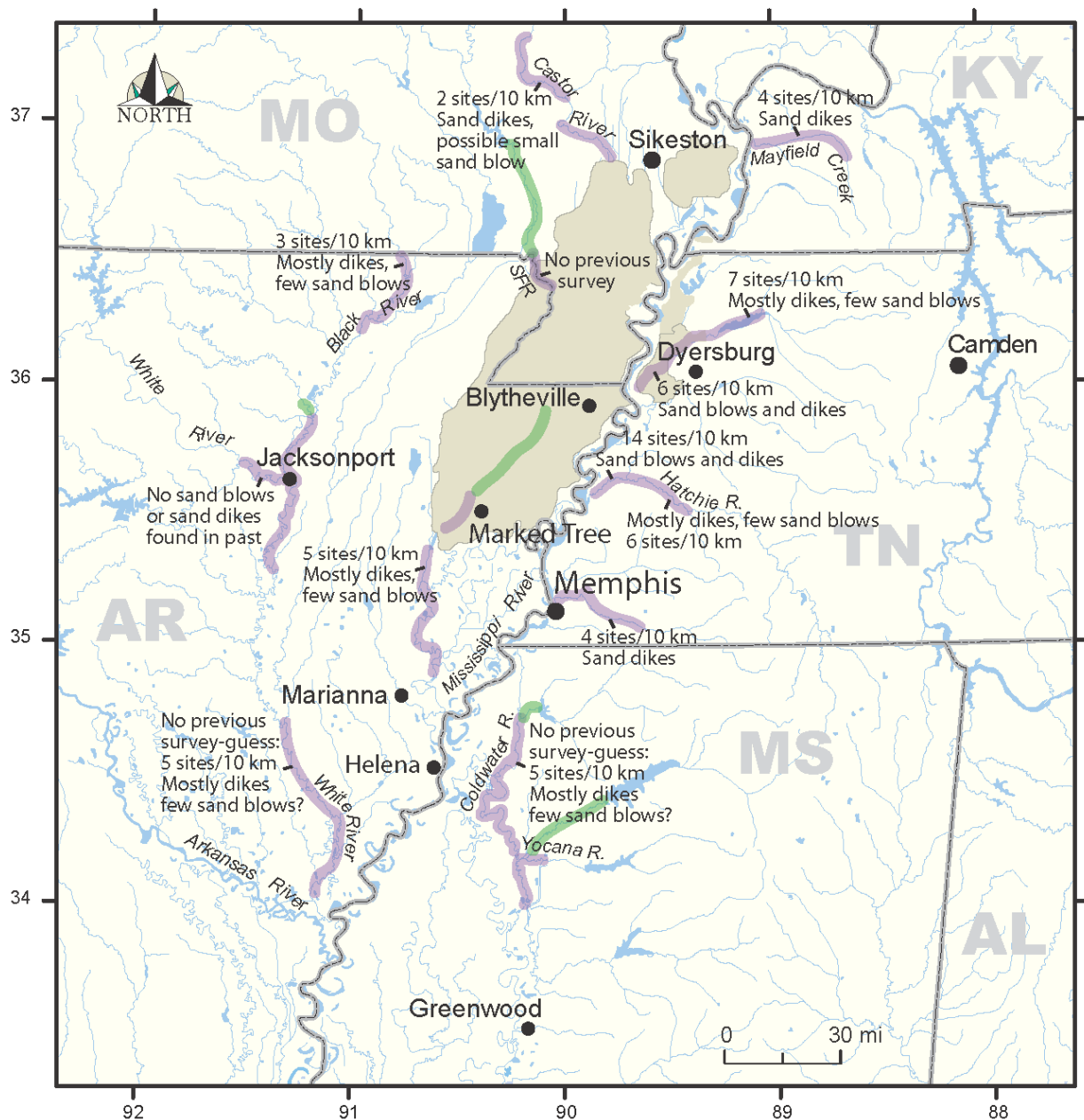
cc: Dr. Martitia Tuttle  
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128 Tibbetts Lane  
Georgetown, ME 04548

Dr. Thomas Weaver, P.E., NRC/RES/DE/SGSEB  
Mr. Andrew Pessin, Esq., NRC/OGC/GCLR/RMR  
Mr. Stuart Easson, NRC/NMSS/MSTR/FSTB

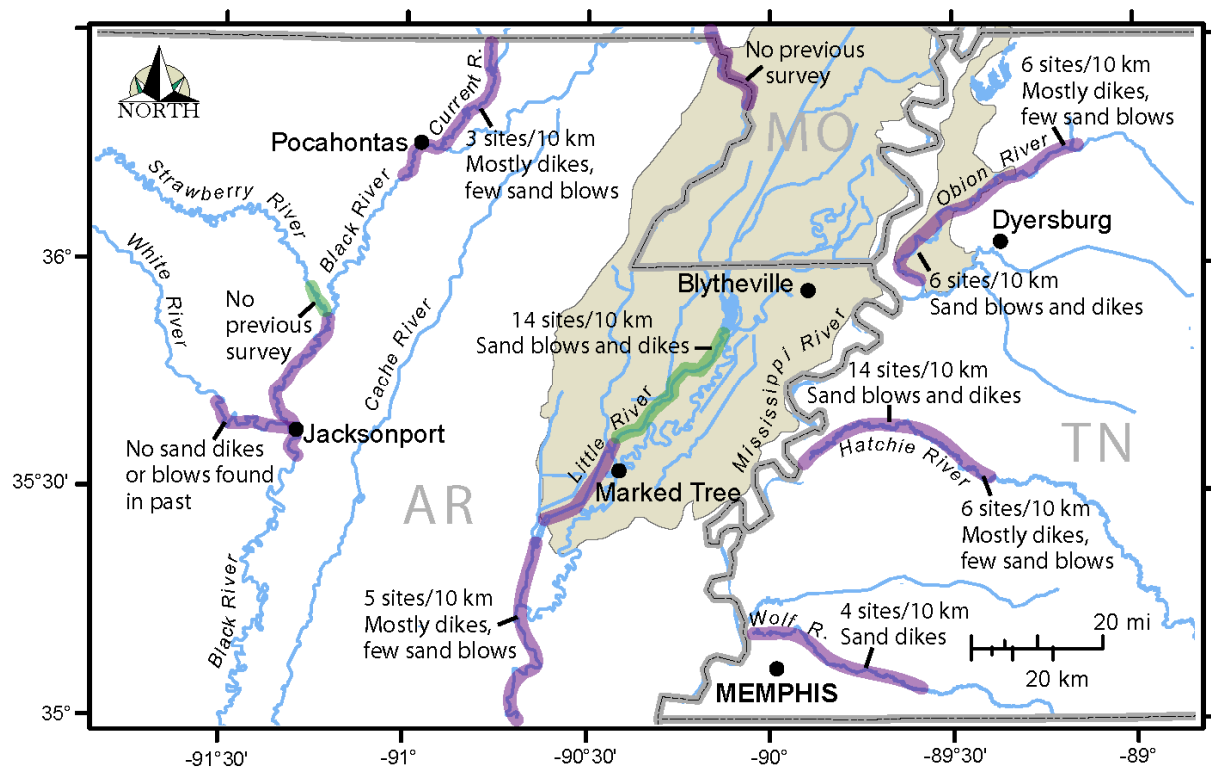
**ADAMS Accession No.: ML15239A410**

OFFICE	RES/DE/SGSEB	RES/DE/SGSEB	OGC (via email)	D: RES/DE
NAME	T. Weaver	J. Burke	A. Pessin	B. Thomas
DATE	08/27/15	08/28/15	07/23/15	08/ 28/15

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**Figure 1 Map of paleoliquefaction study area in the Central U.S. River segments identified in the NRC's letter of February 15, 2013 are delineated in purple. The NRC has conducted, and may continue, field work in these purple delineated river segments. Additional river segments where the NRC proposes to expand its field work are delineated in green.**



**Figure 2 Map of paleoliquefaction study area in northern Arkansas. River segments identified in the NRC's letter of February 15, 2013 are delineated in purple. The NRC has conducted, and may continue, field work in these purple delineated river segments. Additional river segments where the NRC proposes to expand its field work are delineated in green.**