## PROFESSIONAL DEVELOPMENT HOURS (PDHs) CERTIFICATE

## Presented by Society of American Military Engineers Tulsa Post

## This certifies that

attended the below described presentation at the August Monthly Luncheon, sponsored by the SAME Tulsa Post on **August 20, 2019** at the USACE Tulsa District offices located at 2488 E 81st St, Tulsa, OK 74137. This program covered technical issues relevant to the engineering profession as outlined below. Speakers may double the PDHs for their topic.

The August 2019 lunch program presentation was on "Mosul Dam – Emergency Grouting and Bottom Outlet Repairs." Mosul Dam was considered one of the highest risk dams in the world due to deteriorating foundation conditions and both the life, economic, and water resource consequences should the dam fail. The U.S. Army Corps of Engineers, in partnership with the Government of Iraq Ministry of Water Resources, led a Task Force consisting of USACE, AECOM, Versar, and Trevi to repair multiple components of the dam and complete over two years of drilling and grouting to stabilize the dam. The success of the Mosul Dam Task Force illustrates how technical, contractual, security, resource, and cultural challenges may be overcome with the coordination of governments, agencies, engineering and construction companies, and security forces.

## Total PDHs awarded: 1.0 hours

Important: Each member is responsible for applying for his or her own PDH credits with their respective licensing/certification board. The Society of American Military Engineers cannot guarantee that all boards will accept all PDH credit; please check with your licensing board for more information.



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Wade Anderson, P.E. 2019 1<sup>st</sup> Vice President SAME Tulsa Post