



Jayme McBee
Geochemical Services Director
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EDUCATION

Texas A&M University, College Station, TX, M.S. Geology, 2014

Texas A&M University, College Station, TX, B.S. Geology, 2008

PROFESSIONAL EXPERIENCE

Fugro USA Marine, Inc., Houston, TX, Senior Geoscientist (April 2017-Present)

Oversee reporting and data management for Exploration Group. Participated as member of onboard geoscience crew in offshore piston coring and onboard geochemistry deployment.

- Serve as technical lead for post-acquisition phase of seep exploration campaigns
- Oversee and direct interpretation of data and guide group of geoscientists and geochemists to deliver integrated scientific reports
- Write, edit, and provide overall guidance for reporting purposes
- Responsible for oversight of data management from incoming acquired data to outgoing client data deliverables
- Spearhead group involvement in internal corporate initiative to optimize seep exploration processes on a global basis

Down Under Geosolutions, Houston, TX, Geophysics Intern (January 2017-March 2017)

Performed seismic interpretation for top of salt velocity modeling. Performed geologic background research for Bay of Campeche, offshore Mexico.

Fugro Marine Geoservices, Inc., Houston, TX, Staff Geoscientist (December 2015-December 2016)

Participated as member of onboard geoscience crew in multiple offshore deployments surveying the southern Gulf of Mexico (multibeam echo-sounder (MBES) bathymetry, backscatter, water column, and subbottom profiles). Analyzed 2- and 3D seismic data to perform geohazards assessments.

Proficient in GIS analysis. Initiated efforts to pair up with academic colleagues to pursue research grant funding.

- Member of ship-board scientific crew for multiple offshore deployments
- Responsible for coordinating with survey department
- Interpret geologic conditions from processed survey data
- Aid in interpretation of wide variety of data types: geophysical, bathymetric, geologic, water column, soil boring and CPT sounding logs, etc.
- Experienced in subsurface geologic interpretation of seismic data for shallow hazards, including shallow gas, faulting, etc.



- Support project team, interface with clients regarding technical questions
- Lead initiatives to collaborate with academia

Fugro Consultants, Inc., Norfolk, VA, Geologist/GIS Analyst (August 2011-October 2013)

Managed large quantities of data from raw engineering files to import into GIS for analysis. Responsible for creating database framework, which set the precedent for entire project. Creatively solved geospatial problems, and wrote programs to optimize efficiency and accuracy of analysis and reporting. Created maps and other deliverables. Edited and contributed to client reports.

Highlights:

- Performed analysis using a variety of datasets in ArcGIS (aerial imagery, bathymetric data)
- Use geospatial analysis to aid in creating coastal flooding model with estimated predicted damage assessments for various storm conditions
- Perform analysis of flooding model data to identify more vulnerable areas both spatially and temporally
- Analyze offshore bathymetric data for ground investigations for offshore wind turbines
- Created geologic cross sections, site maps, soil boring, and CPT sounding logs
- Aid in creating interpreted geologic sections for geohazards and site suitability studies
- Utilized basic ArcPy programming to automate geospatial analyses and processes
- Constructed framework and manage large datasets on engineering data
- Wrote computer code (VBA) to process large quantities of data

Lawrence Livermore National Laboratory, Livermore, CA, Intern (May 2010-August 2010)

Participated in “Environmental Sample Analysis for IAEA Safeguards” internship program. Performed independent research project. Received training in nuclear security radiogenic isotope geochemistry.

Highlights:

- Duties included: purifying U and Pu from bulk environmental samples, and measuring U and Pu isotope ratios by multi-collector ICP mass spectrometry
- Completed independent research project evaluating sequential extraction procedure to be used in conjunction with Pb isotopic analysis
- Presented poster in student research competition

PUBLICATIONS

“Advances in Hydrocarbon Seep Sampling Strategies using Real-time Offshore Geochemical Analyses” J. McBee, S. Ingle, J. Gharib, E. Kassabji, and P. García del Real, American Association of Petroleum Geologists – Hedberg Conference: The Evolution of Petroleum Systems Analysis: Changing of the Guard from Late Mature Experts to Peak Generating Staff, March 2019.

“Optimization of Hydrocarbon Seep Sampling Strategies through Integration of Geophysical and Geological Data with Real-Time Offshore Geochemical Analyses” P. García del Real, E. Kassabji, J. McBee (presenting author), J. Gharib, and S. Hulme, American Geophysical Union Annual Meeting, 2018.



“Seafloor Hydrocarbon Seep Detection – Remote Sensing using Multibeam Echo Sounder (MBES) and Sub-bottom Profiler (SBP) Technologies” J. McBee, G. Mitchell, J. Gharib, Recent Advances in Remote Sensing Technologies for Hydrocarbon Exploration and Environmental Evaluation Workshop, Society of Exploration Geophysicists Annual Meeting, 2018.

“Search for MH370: New Geologic Insights Revealed through the Integration of Multiple Geophysical Datasets” J. McBee, S. Ingle, J. Gharib, D. McConnell, Ocean Technology Conference, May 2018.

“Search for MH370: New Geologic Insights Gained from Integrating Multiple Geophysical Datasets” McBee, S., Ingle, S., and Gharib, J., American Geophysical Union Annual Meeting, December 2017.

“Use of Multibeam Echo Sounder (MBES) Backscatter and Bathymetry Data to Reveal New Insights into the Campeche Escarpment” McBee, J., Brumley, K., Mitchell, G., and Gharib, J., Ocean Technology Conference, May 2017.

“Use of multibeam echo sounder backscatter and bathymetry data to reveal new insights into the Campeche Escarpment” McBee, J., Brumley, K., Mitchell, G., & Gharib, J. (2017). *The Leading Edge*, 36(4), 304-310.

“New Insights into the Campeche Escarpment Post-Chicxulub Impact Using Multibeam Echo Sounder (MBES) Bathymetry and Backscatter Data” McBee, J., Mitchell, G., Brumley, K., Gharib, J., and Paull, C.K., American Geophysical Union Annual Meeting, December 2016.

“Identification And Distribution Of Anthropogenic And Natural Pb In A Former WWII Aerial Gunnery Range” McBee, J., Herbert, B., and Marcantonio, F., Geological Society of America Annual Meeting, November 2012.

“Evaluation of a modified BCR sequential extraction procedure for environmental sample analysis of Pb by Quadrupole ICP-MS and MC-ICP-MS” Foster, J., Williams, R., and Gaffney, A. Student Research Showcase, July 2010.