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## Creation of the GCAGS Explore & Discover Website

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GCAGS Explore & Discover Article #00001

[http://www.gcags.org/exploreanddiscover/2016/00001\\_willis\\_and\\_willis.pdf](http://www.gcags.org/exploreanddiscover/2016/00001_willis_and_willis.pdf)

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### ABSTRACT

GCAGS hereby announces the creation of the *GCAGS Explore & Discover* website (<http://www.gcags.org/exploreanddiscover.html>) to provide a more complete archival record of presentations at its conventions, as a supplement to its *Transactions* and *Journal* volumes, to foster dissemination of its member society activities and presentations, and to serve as a general repository of Gulf Coast geoscience information.

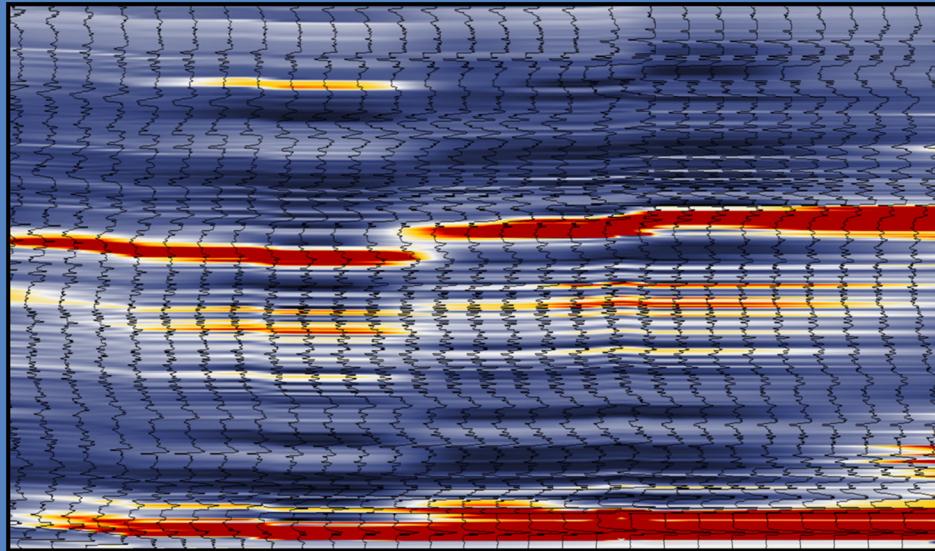
### INTRODUCTION

The lead author submitted a formal proposal to GCAGS in September 2015 to create the *GCAGS Explore & Discover* website. Mary J. Broussard presented the proposal on the author's behalf at the GCAGS Convention Board Meeting in Houston, Texas, on September 20, 2015. After excellent discussion involving aspects such as open-access format (i.e., free to the public), sponsorship potential, cost, and other factors, Mary made a motion for approval, seconded by Larry D. Bartell, and unanimously approved by the Board to create the *GCAGS Explore & Discover* website on a trial basis. We hope that the initial success of this website will lead to its permanent establishment, preferably remaining in an open-access format.

### PURPOSE

The primary purpose of the *GCAGS Explore & Discover* website as originally proposed is for GCAGS to more effectively host its own sourced material, thus providing a more complete archival record of presentations at its conventions, as a supplement to the existing and more formal *Transactions* and *Journal* publication volumes. All abstracts from both the 2016 *Transactions* (Fig. 1) and 2016 *Journal* (Fig. 2) are now posted on the website, with hyperlinks directing to the complete *Transactions* and *Journal* volumes available for purchase via the GCAGS Bookstore at the Bureau of Economic Geology ([www.beg.utexas.edu](http://www.beg.utexas.edu)), individual *Transactions* manuscripts (full papers and extended abstracts) available for purchase via AAPG Datapages, Inc. ([www.datapages.com](http://www.datapages.com)), and individual *Journal* papers available in open-access format via [www.gcags.org](http://www.gcags.org). Supplementing these abstracts, we now have 15 presentation materials appended to the respective abstract and posted on the website—this count is growing daily and we will be editing and posting further submissions on a daily basis up to and through the convention. Pre-convention submissions are preferred because it literally gives individuals the opportunity to view presentation materials prior to and/or during the actual presentation. Of course, as we write this article, we expect that many presenters are likely still working on their materials (and from my own experience surely some will be making changes until the last possible minute!) and thus we expect to receive a number of submissions during or after the convention itself.

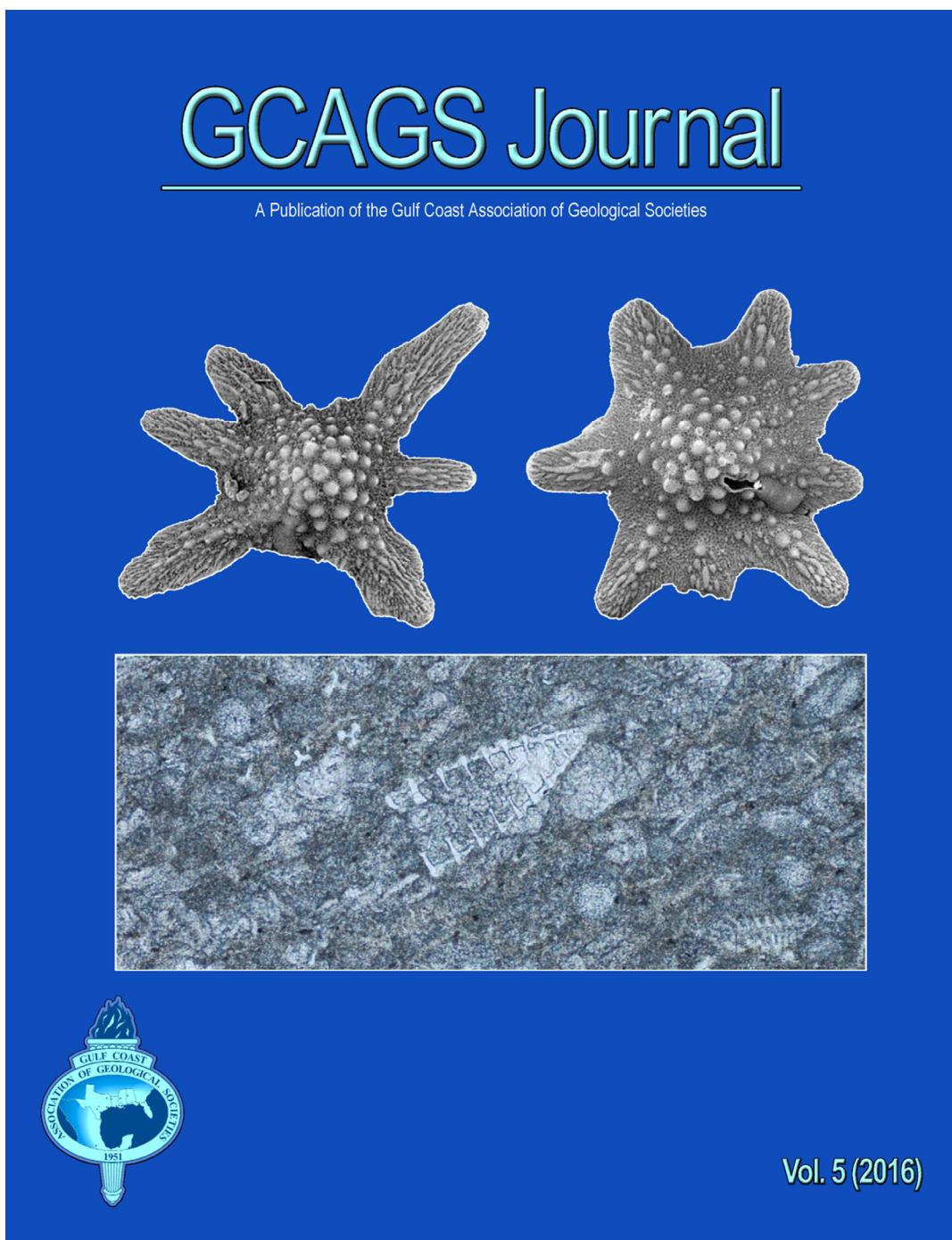
# Gulf Coast Association of Geological Societies and Gulf Coast Section SEPM



**TRANSACTIONS**  
**66<sup>TH</sup> ANNUAL CONVENTION**  
**CORPUS CHRISTI, TEXAS**  
**SEPTEMBER 18–20, 2016**

**Hosted by the Corpus Christi Geological Society**

**Figure 1.** Cover of the 66th volume (2016) of the *GCAGS Transactions*. Abstracts of all manuscripts are now posted on the *GCAGS Explore & Discovery* website, many of which are supplemented with presentation materials. The complete *Transactions* volume (including over 90 papers and extended abstracts, and over 1200 pages in length) is provided digitally for 2016 convention attendees, and available for purchase in hard-copy and/or digital format from the GCAGS Bookstore at the Bureau of Economic Geology ([www.beg.utexas.edu](http://www.beg.utexas.edu)). Individual *Transactions* manuscripts will be available for purchase via AAPG Datapages, Inc. ([www.datapages.com](http://www.datapages.com)) once processing is completed.



**Figure 2.** Cover of the 5th volume (2016) of the peer-reviewed *GCAGS Journal*. Abstracts of all 16 *Journal* manuscripts are now posted on the *GCAGS Explore & Discovery* website, with links to the open-access documents via [www.gcags.org](http://www.gcags.org). Please note that the final hyperlinked *Journal* articles will not be available until late October 2016 to allow additional time for sales of the printed *Journal* volume.

Posting of presentation materials provides several benefits in supplementing the overall GCAGS publication record. For example, space limitations and timelines associated with the *Transactions* and *Journal* volume may preclude publication of certain elements. Unfortunately each year, for various reasons, the *Transactions* volume ends up with a number of abstract-only submissions, which obviously provide limited contribution to the overall research ‘record.’ Inclusion of the presentation materials obviously enhances the usefulness of what might otherwise be otherwise just a short textual document. As an example, due to delays in receiving final corporate approvals, one author saw his work end up only as an abstract in the *Transactions* volume (the approvals finally came through the same day the *Transactions* went to press)—the author thankfully submitted his presentation for the *Explore & Discover* website, so instead of just a 155 word abstract (Walker and Anderson, 2016a), we now have access to an additional 30 high-quality presentation slides (Walker and Anderson, 2016b) (Fig. 3). Even for published full manuscripts or extended abstracts, often only the key illustrations are included, whereas the presentation materials can include additional materials as part of telling the overall story— inclusion thus effectively supplements the published record. Additionally despite a relatively rapid turnaround from GCAGS submission to final publication in the *Transactions* or *Journal*, there is nonetheless a temporal delay between press and the convention itself, and many authors diligently (and continuously) update their materials to enhance their final presentation—a full paper and later presentation submitted by Victor Mistretta (2016a, 2016b) illustrate this point (Fig. 4). We also have requested that *Explore & Discover* authors consider adding information to the presentation including notes and/or references—a number of submissions included those additional details. Authors have also been requested to ‘sanitize’ their presentation (e.g., by allowing overall posting but removing any material such as seismic data of which they may only have ‘show’ rights)—we are being particularly diligent to ensure that such materials are not posted without appropriate permissions, and note that some authors that some authors have made the additional effort to not just delete such information but rather to request and secure appropriate permissions, allowing a more complete archival record of their presentation.

A major benefit of the concurrent publication of the Convention Program Guide (a physical copy of which is provided for all convention attendees) and posting of the convention abstracts and many presentations on the *Explore & Discover* website is that we were able to expand the digital Program Guide (easily available via a QR code in the physical copy or available through the web at <http://www.gcags2016.com/2016.Digital.Program.Guide.pdf>) to include hyperlinks of each presentation listing in the Program Guide to its respective *Explore & Discover* article. Thus, someone interested in a given talk can at a minimum quickly read the abstract and in many cases see the actual presentation materials as well. Some individuals, depending upon their specific software for viewing PDF files, will also be able to directly annotate those files with comments and/or other notations, subsequently saving the files with annotations for future reference.

Beyond providing an archive of submitted convention presentation materials, additional opportunities and benefits exist. For example, additional postings can include general information about GCAGS and its Member Societies. We plan to prepare each month an *Explore & Discover* article that highlights the upcoming presentations and activities of the Member Societies, with hyperlinks to respective Member Society websites for additional details, including where applicable, abstracts, biographies, and presentations. We also envision posting select articles regarding Gulf Coast geoscience, where authors may not be able to attend a given convention (a requirement of publication in the *Transactions*)—for example, this year due to lack of funding an international student submitted a full manuscript but was unable to attend the convention thus the *Transactions* article was withdrawn. In situations like that, it is unfortunate that the work may be effectively ‘lost’ per se; now however the *Explore & Discover* website allows GCAGS to gain back that loss in a sense by publishing the work in an alternative venue.

## COST OF DEVELOPMENT AND IMPLEMENTATION

Most aspects of the preparation of the *Explore & Discover* articles are already incorporated contractually in our work with GCAGS, thus limiting any additional cost versus standard year-to-year procedures. The website is embedded within the parent [www.gcags.org](http://www.gcags.org) site, thus there are no additional domain name, host server, nor memory costs. For our contractual work, each year we already prepare the *Transactions* and *Journal* abstracts for publication on the convention website and/or for the AAPG *Search & Discovery* website. The only real difference now is that we have to append the submitted presentation materials after editing to the abstract document, a trivial task, but the benefit is that the *Explore & Discover* website now serves as the principal immediate and long-term host site, acting as its own portal to the articles but also with the convention website technical program linking to specific *Explore & Discover* articles in a more consistent year-to-year site location, while simultaneously keeping ‘ownership’ and all future citations of articles tied to GCAGS. Additionally, the Digital Program Guide, with hyperlinks to the *Explore & Discover* website, now becomes a very effective convention app, no longer requiring other third-party efforts. Although some work hours were necessary to append presentations to the abstract documents, to develop the website home page, and to perform some additional hyperlinking from the

**FROM THIS...**

## Simple and Efficient Representation of Faults and Fault Transmissibility in a Reservoir Simulator—Case Study from the Mad Dog Field, Gulf of Mexico

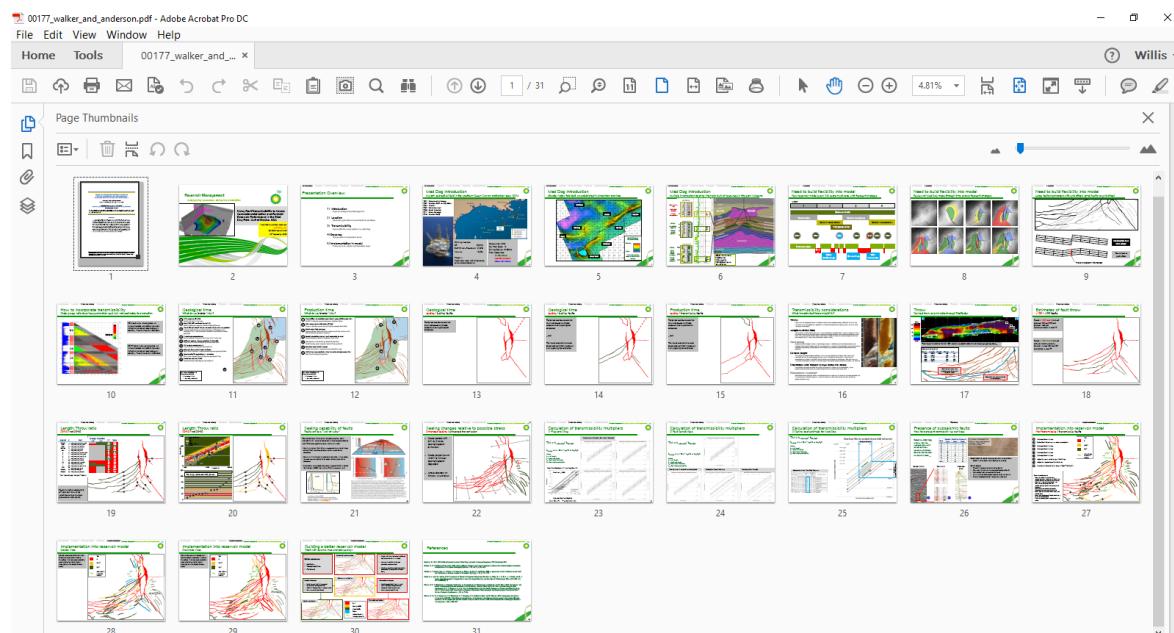
Christopher Walker and Glen Anderson

BP America, 501 Westlake Park Blvd., Houston, Texas 77079

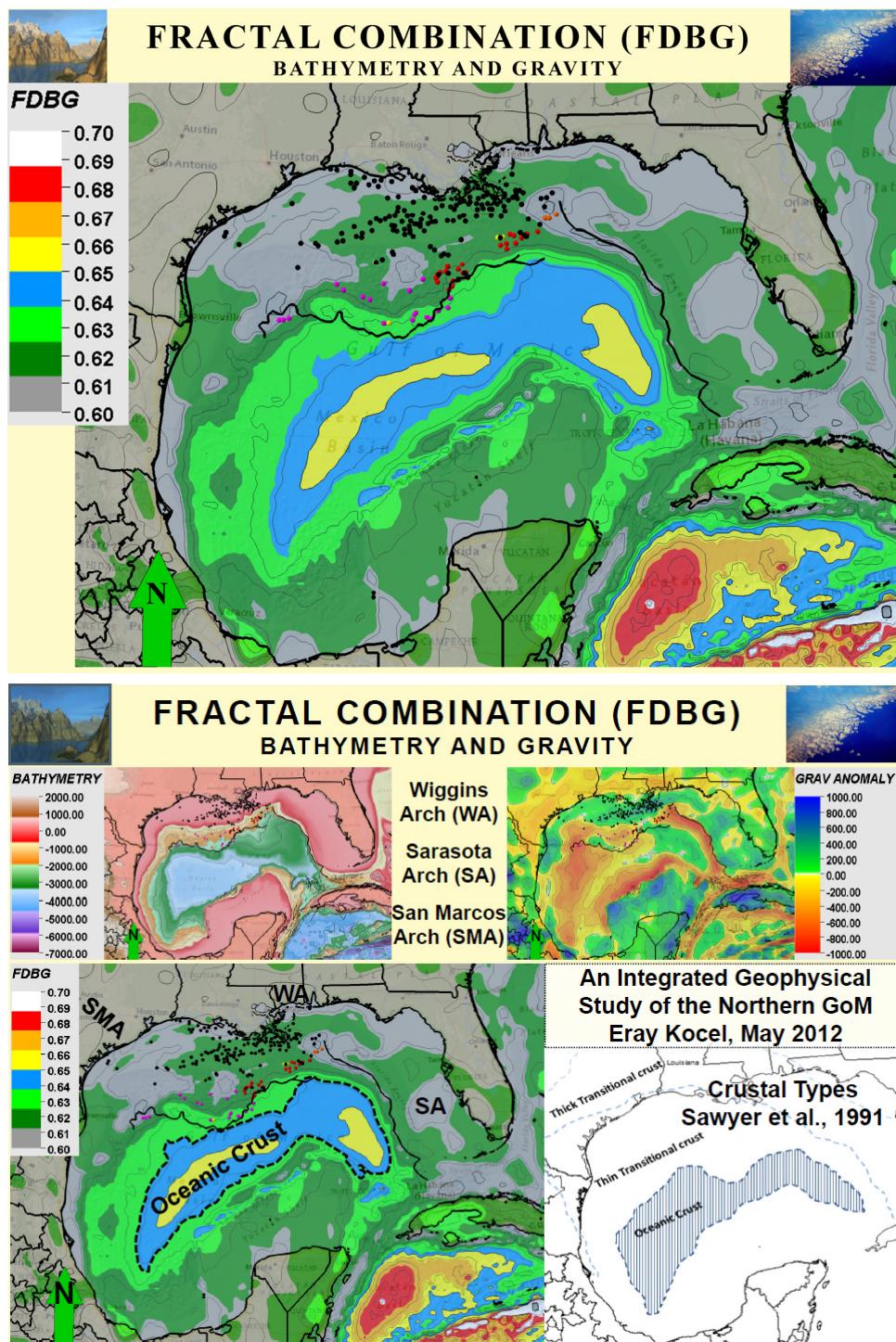
### ABSTRACT

The Mad Dog Field is one of BP's largest assets in the Gulf of Mexico. It was discovered in 1998 and came online in 2005. Further appraisal success has necessitated the Mad Dog 2 (MD2) development; with future production and injection wells tied back to a second floating facility. To create the predicted production profiles that underpin the planning for the MD2 development, the reservoir management team uses a full field reservoir simulation model. The simulation model is upscaled from the geomodel and reflects a snapshot of our integrated subsurface description at a point in time, with structure derived from seismic data and geologic and petrophysical properties derived from well results. The long cycle time of seismic processing, seismic interpretation, geomodel building, reservoir model building and history matching presents three challenges to the representation of faults in the dynamic simulator: Location, transmissibility and presence. This talk discusses how we've met these challenges in Mad Dog.

**TO THIS...**



**Figure 3.** An example of abstract-only publication in the *Transactions* due to delay in receiving final approvals (top, Walker and Anderson, 2016a) transitioning to that abstract supplemented with 30 additional high-quality slides (bottom, Walker and Anderson, 2016b, as shown in page thumbnail mode in Adobe Acrobat), an effective transition from a limited resource to a very valuable one.



**Figure 4.** Example of updated illustration from (top) *Transactions* submission to (bottom) *Explore & Discover* website submission, now including original source data, annotations, and a comparative illustration from a previous work. The *Transactions* paper stands as an important reference, especially with critical textual context of this innovative work, but the *Explore & Discover* posting includes a number of updated and additional illustrations (Mistretta, 2016a, 2016b).

homepage and Digital Program Guide, those efforts were well below our initial estimate in the 2015 proposal. We have therefore decided to waive these additional fees and are instead treating the *GCAGS Explore & Discover* website, including future article development and postings as a volunteer activity. As such, the year-1 cost of development and implementation of the *GCAGS Explore & Discover* website is effectively zero dollars (\$0).

## SUMMARY

We strongly feel that the *GCAGS Explore & Discover* will be an immediate success, especially with at-convention linking to abstracts and conventions from the Digital Program Guide, but will be a valuable archival resource of convention-related and additional Gulf Coast geoscience information.

## ACKNOWLEDGMENTS

We thank GCAGS for accepting our proposal to create and develop the *Explore & Discover* website. We also thank Mary J. Broussard for acting on our behalf at the 2015 Convention Board Meeting, and to the Board Members themselves for their discussion points and unanimous approval of this concept. It is an honor to be associated with GCAGS for over a decade, and to have the opportunity to see a concept go from initial thoughts, to proposal drafting, submission, and approval, to development and implementation, with authorship of *GCAGS Explore & Discover* Article #1!

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