

Publications by Selim S. Shaker

Reservoir vs. Seal Pressure Gradients: Perception and pitfalls.

- Canadian Society of Exploration geophysicists, RECORDER, April issue 2012.

Drilling Challenges due to the Disparity between Reservoir and Seal Pressure Gradients: Based on Case Histories from the Gulf of Mexico

- AAPG Annual Convention, April 2012 (AADE-12-FTCE-66)

The Deep Water Geopressure Drilling Tolerance Window: Walking a Fine Line, Case Histories from GoM.

- AAPG Geosciences Technology Workshop, January 2012
- AAPG Annual Convention, April 2011.
- <http://www.hgs.org/en/art/2915/>
- Technofest, HGS, July 2011.
- HGS technical dinner presentation, October 10th, 2011.
<http://www.youtube.com/watch?v=E18f4kk3NKw>

The BOP is the last line of defense against Blowout: How to Circumvent the Next Oil Spill?

- Houston Geological Society, May 19, 2010,
<http://www.hgs.org/en/art/2584/>

Geopressure Impact on Seismic Interpretations: Case Histories from the Gulf of Mexico

- AAPG annual convention 2010, New Orleans

The Impact of Supra-Sub Salt Geomechanics on Trap's Integrity and Drilling

- AAPG Geoscience Technology Workshop 2010, Deep Water and Ultra-deep Water Reservoirs in the Gulf of Mexico, Houston.
- Houston Geomechanics Society, Schlumberger, Nov. 2011.

Velocities Crossover due to Geopressure: Implication to AVO Assessment

- SEG annual convention 2009, Houston, TX

Dirty vs. Clean Salt: Their Impact on the Sub-Salt Wilcox Deep Water Exploration Plays

- AAPG annual convention 2010, New Orleans
- GCAGS 2009 Convention, Transaction No. 59, pp.689-698

The Double Edged Sword:

The Impact of the Interaction between Salt and Sediment on Sub-salt Exploration Risk in Deep Water, from *Mahogany* to *Jack*

- Canadian Society of Exploration Geophysicists, Recorder, October 2007.
- AAPG Annual Convention, April 2008
- Houston Geological Society, General Dinner Meeting April 14th, 2008.
- GCAGS 2008 Convention (October 5th -9th)
- Oil World Magazine, Gulf Publishing Company, September, 2008.

The Strat-Geopressure Fairways: A new technique advances risk assessment and prediction of deeper potentials, case history from the Gulf of Mexico

- AAPG Annual Convention, April 2008
- GCAGS 2008 Convention (October 5th -9th)

Calibration of Predicted Pore Pressure: Perception and Pitfalls

- GCAGS 2008 Convention (October 5th -9th)

Loss of Circulation: Causes and Consequences in Geopressure System

- AADE (American Association of Drilling Engineers) Annual Convention, April 2008

The American Oil & Gas REPORTER, August 2008

NCT Key to Predicting Pore Pressure, MWD/LWD & Formation Evaluation

- The American Oil & Gas REPORTER, November 2007

Calibration of Geopressure Predictions using Normal Compaction Trend: Perception and Pitfall

- AADE (American Association of Drilling Engineers), Annual Convention, April 2007, Houston, Texas, Paper #51
- Canadian Society of Exploration Geophysicists, Recorder, January 2007

Geopressure Centroid: Perception and Pitfalls

- SEG International Exposition and Seventy-Fifth Annual Meeting, Houston, Texas (November 2005)

The Northern Gulf Of Mexico Exploration Potentials: From Structural Plays, Seismic Anomalies to Geopressure Compartmentalization

- Offshore Magazine (Penn Well publication), April, 2004, pp. 100-104

Geopressure Compartmentalization in Salt Basins: Their Assessment for Hydrocarbon Entrapment in the Gulf of Mexico

- 24th Annual GCSSEPM Research Conference, Houston, TX, December 2004

Trapping Vs. Breaching Seals in Salt Basins: A Case History of Macaroni and Mt. Massive, Auger Basin, Gulf of Mexico

- GCAGS 54th Annual convention, San Antonio, Texas 2004, pp. 647-654

Geological Perception of Pore and Fracture Prediction: Case Histories from the Gulf of Mexico

- GCAGS 54th Annual Convention, San Antonio, Texas 2004, pp. 635-646

The Prospective Deep Miocene in the Gulf of Mexico Shelf: Compartmentalization Knowledge of the Geopressed Depositional System Sheds Light on Immense Exploration Potential

- 23rd Annual GCSSEPM Research Conference, Houston, Texas, December, 2003

The Controversial Pore Pressure Conversion Factor: PSI to PPG MWE

- The Leading Edge (Society of Exploration Geophysicists), December 2003, Vol. 22
- Recorder (Canadian Society of Exploration Geophysicists), October 2003, Vol. 28

Drilling Challenges Related to Geopressure Compartmentalization

- Drilling, A supplement to Hart's E&P, December 2003, pp. 19-21
- AADE Annual Convention 2005, Houston, Texas

Exploration "Sweet Spots" in the Deep Shelf, Gulf of Mexico

- GCAGS Transaction 2003, Vol. 53, Baton Rouge, Louisiana

Pore Pressure Prediction: Geological Perceptions

- Houston Geological Society Bulletin, September 2002, Vol. 45, No. 1, pp. 24-29

Causes of Disparity between Predicted and Measured Pore Pressure

- The Leading Edge (Society of Exploration Geophysicists), August 2002, Vol. 21, No.8

Sequence Stratigraphy: Key to Geopressure Profile Assessment

- Recorder (Canadian SEG), September 2002, Vol. 27, No. 7

Geopressure Progression – Regression: An Effective Risk assessment tool in the Gulf of Mexico

- GCAGS Transaction 2002, Vol. 52 pp. 893-898

Predicted vs. Measured Pore Pressure: Pitfalls and Perceptions

- Published and presented at the OTC, Houston, Texas, May 2002

Pore Pressure Prediction in the Challenging Supra / Sub-Salt Exploration Plays in Deep Water, Gulf of Mexico

- Presented as Extended Abstract at the AAPG Convention, Houston, Texas, March 2002

Geopressure Compartmentalization in Keathley Canyon, Deepwater Gulf of Mexico

- GCAGS Transaction 2001, Vol. 51, pp. 293-304

Trap Integrity: An Exploration Risk in Deepwater Enclosed Mini-Salt Basins in the Gulf of Mexico

- Presented at the AAPG Convention, New Orleans, Louisiana, April 2000

Exploration in Geopressured Compartments

- Presented at the Geophysical Society of Tulsa (GST), September 1999

Geologic Models in Relation to Spill-points Position, Gulf of Mexico

- Presented at the AAPG Convention, New Orleans, Louisiana, April 1993

Local Geological and Groundwater Investigation of Sidi Kreir Nuclear Power Plant, Western Desert, Egypt

- Remote Sensing Research Project, Cairo, Egypt, 1978

Application of Landsat Imagery in the Geological and Soil Investigation the Central Western Desert, Egypt

Published in Twelfth International Symposium on Remote Sensing of Environment, Manila, Philippines, April 1978

Geological and Hydrological Investigation of the Site of Proposed Tunnel at Qantara (Suez Canal)

Remote Sensing Research Project, Cairo, Egypt, 1975

Geologic Interpretation of Landsat Satellite Images for West Nile Delta Area, Egypt

Remote Sensing Research Project, Cairo-Oklahoma State University, 1975

Rock Stratigraphy and Structural Features of the Area between Wadi El Natrun and Moghra Depression, Western Desert, Egypt

Geol. JB., Hanover, 1975

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Proficiency

From the Play Concept and Prospect to the Wellhead

Play Concept and Lead Evaluation:

- ✓ Basin setting and the source area appraisal
- ✓ Regional trends, deposition system, sequence stratigraphy and potential optimum exploration fairways
- ✓ Determine migration paths based on geopressure drive and carrier beds architecture (seismic)

Prospect Generation and Assessment:

- ✓ Appraise the potential lead and generate feasible prospects
- ✓ Map the prospect (2D/3D Seismic and Offset well correlations)
- ✓ Assess prospect's primary and secondary objectives based on seismic attributes, geopressure and seal effectiveness models
- ✓ Integrate seismic velocity, attribute analysis and offset well correlation to assess the proposed wildcat's subsurface compartmentalization and its impact on hydrocarbon entrapments
- ✓ Run the G.A.S. newly developed Strat-Geopressure mapping model (RMS velocities and wells) to evaluate success and failure for specific horizon closures
- ✓ Integrate seismic, potential stratigraphy and geopressure profile to highlight zones of drilling challenges
- ✓ Assess casing and mud programs appropriate for drilling the first well using the newly developed prediction geopressure model
- ✓ Run economic feasibility profile, including risk assessment
- ✓ Prepare AFE's

Testing the Prospect:

- ✓ Collaborate with the drilling department to select the safest and optimum well location to test the prospect
- ✓ Drilling follow up to calibrate the geopressure prediction model and create synthetic seismic for depth adjustment
- ✓ Suggest core and test zones (RFT's, MDT's, DST's)

Post drilling appraisal:

- ✓ Estimate of hydrocarbon limits from the first wild cat
- ✓ Top seal analysis to determine the top seal integrity and breached reservoirs
- ✓ Assess causes of success or failure
- ✓ Propose offset wells and design plan of exploitation
- ✓ In case of failure, what we have learned and can be avoided next time?