

**K**evin B. Hill is a geophysical consultant with more than 39 years of broad U.S. and international experience in seismic earth imaging. He is president of Hill Geophysical Consulting in Shreveport, Louisiana.

Mr. Hill specializes in integrating state-of-the-art geophysical technologies with geology. He has designed, processed and interpreted numerous 2d, 3D and 4D seismic surveys throughout the world and found and developed many oil and gas fields.

Hill continues seismic rock property studies of the Hosston, Cotton Valley, Bossier and Haynesville of North Louisiana and East Texas. The studies involve the full integration of available engineering and well control with 2d and 3D seismic data. Results show "sweet spots" in the target formations can be brought out of the seismic data to design drilling programs to enhance the recovery of hydrocarbons. HGC's clients have put this seismic analysis to the test and have drilled better, less costly exploitation wells in their acreage.

Current work also includes imaging of near-surface geology, proprietary rock physics studies of carbonates, unconventional reservoir studies using 2d and 3D seismic analysis, solution mining and mine imaging, and geological studies of the Haynesville, Bossier and Barnett Shale trends. Hill also has been involved in diverse gas and oil storage projects. This work includes processing and detailed analysis of 2d and 3D seismic data for imaging of structural boundary positioning and rock properties.

Mr. Hill was involved in the original design of the PC-based seismic workstation software called Kingdom 3D-Pak. He has taught courses on using Seismic Micro-Technology, Inc., Kingdom software at schools worldwide. His schools include data loading, interpretation, mapping, post-stack processing, stratigraphic analysis, synthetics, modeling, 3D visualization, and presentation techniques.

Hill received a BS-Professional Degree in Geology in 1977 from Louisiana State University, Baton Rouge, LA, where he was president of Sigma Gamma Epsilon, and received the H.V. Howe award for outstanding geology graduate. Prior to becoming a consultant in 1987, he worked as Senior Exploration Geophysicist for Sonat Exploration in Shreveport, LA; Regional Exploration Geophysicist for Forest Oil Corporation in Lafayette, LA, and Jackson MS; and as a Senior Geophysicist for Cities Service Company in Tulsa, OK, and Jackson, MS. Hill has authored and presented numerous technical papers at Gulf Coast professional society meetings. In 2000 he received the Third Place Excellence of Presentation Award at the 50<sup>th</sup> GCAGS convention. At the 51<sup>st</sup> GCAGS convention, in 2001, he received the First Place Excellence of Presentation award and the A.I. Levorsen Award.

Mr. Hill is a Professional Geoscientist licensed by the State of Louisiana Board of Professional Geoscientists. He is a member of the Society of Exploration Geophysicists, American Association of Petroleum Geologists, the Solution Mining Research Institute, the Shreveport Geological Society, and the Houston Geological Society. He is Past President of the Shreveport Geological Society, and is a Grand Sénéchal in the Confrérie des Chevaliers du Tastevin.



## KEVIN B. HILL

President Hill Geophysical Consulting 415 Texas St., Suite 200 Shreveport, LA 71101 318.221.3329

Kevin@HillGeo.com

### **EXPERIENCE**

## Hill Geophysical Consulting

President/Owner

Shreveport, LA 1987 – Present

- Exploration and production seismic work for many clients
- Integrating Geophysical technology with Geology
- · Earth imaging and rock physics
- State-of-the-art seismic interpretation using PCs
- Teaching seismic exploration methods using PCs (International)
- 2d and 3D seismic design, acquisition, processing, and interpretation
- Expert witness
- Field unitization work for hearings using seismic and geology

### **Sonat Exploration**

Shreveport, LA

Senior Exploration Geophysicist

1985 - 1987

• Responsible for the exploration effort in south Arkansas and north Louisiana

## **Forest Oil Corporation**

Jackson, MS & Lafayette, LA

Regional Exploration Geophysicist

1981 - 1987

- Responsible for exploration effort in Mississippi, Alabama, Arkansas, and Louisiana
- Purchased large regional 2d seismic data bases in the Mississippi, Arkansas, and Louisiana salt basins
- Evaluation of hardware and software for the exploration/production group

## **Cities Service Company**

Tulsa, OK & Jackson, MS

Senior Geophysicist

1977 - 1981

- Exploration training program in Tulsa
- Geophysical exploration in Mississippi, Alabama, Arkansas, Louisiana, and Texas
- Helped design and participated in regional 2d seismic group shoots in Mississippi, Arkansas, and Louisiana
- Designed new field acquisition technique to image steeply dipping beds

### **EDUCATION**

# **Louisiana State University**

BS - Professional Degree - Geology

Baton Rouge, LA 1973 – 1977

## **SUMMARY OF QUALIFICATIONS**

- Using Rock Physics on 3D seismic in the Hosston, Cotton Valley, and Bossier in North Louisiana and Smackover of Arkansas, North Louisiana and Alabama
- Bossier sand/shale unconventional resource play regional trend work
- Haynesville shale unconventional resource play regional trend work
- Barnett Shale unconventional resource play seismic trend work
- James lime fractured carbonate unconventional resource play trend work
- Stratigraphic analysis of seismic data from regional to prospect scale
- Basin analysis using seismic and sub-surface data
- Gas storage cavern seismic analysis
- Responsible for 1st exploration 3D seismic program in Alabama
- Responsible for 1st exploration 3D seismic program in south Arkansas
- Responsible for 1st exploration 3D seismic program in north Louisiana
- Responsible for 1st exploration 3D seismic program in east Texas
- Participated in effort culminating in discovery of many large oil and gas fields in the Cretaceous and Jurassic of the upper Gulf coast
- Purchased, organized, interpreted, and mapped large regional 2d seismic databases in the upper US Gulf coast
- Statistical analysis of seismic and sub-surface data to determine correct time/depth relationship, bed thickness, and rock and reservoir characteristics
- Assembling geographic, well, and seismic data for workstation analysis
- Loaded hundreds of thousands of miles of 2d and 3D seismic data on various workstation platforms
- Presented papers at SEG, AAPG, GCAGS and SIPES conventions
- Numerous industry schools concerning exploration and production
- Prospect brochure assemblage and presentation using different software packages (Kingdom, Surfer, Spase, Cad, Word, Excel, PowerPoint, etc.)
- Prospect presentation using real-time computer graphics
- Teaching data loading, beginning, intermediate, and advanced interpretation methods, and power-user's school for Seismic Micro Technology's KINGDOM software
- Skilled in using almost every workstation platform used in the industry
- Spoken at numerous Geological, Geophysical, and SIPES meetings around the south
- Professional Geoscientist licensed by the State of Louisiana Board of Professional Geoscientists, License # 475

### **CLIENTS**

- Anderson Oil and Gas Shreveport, LA William Meaney
- Seismic Micro Technology Houston, TX Dr. Thomas Smith
- TMR Exploration Bossier City, LA Raymond Lasseigne
- PetroChem Shreveport, LA Larry Hock
- Cobra Oil and Gas Wichita Falls, TX Robert Osborne
- Forman Petroleum Corp New Orleans, LA Michael D. Emmerling
- Dragon Energy New Orleans, LA McLain Forman
- C. H. C. Gerard and Associates New York, NY Charles Gerard
- Wiser Oil Company (The) Dallas, TX Robert J. Kerian
- Paramount Petroleum Ridgeland, MS Bob Schneeflock
- Rudman Partnership (The) Dallas, TX James C. Trimble
- JN Resources Houston, TX Greg Halvatzis
- Pruet Oil Company Jackson, MS David Cate
- Hughes Exploration Jackson, MS Dudley J. Hughes
- Petroleum Technology Transfer Counsel Golden, CO Sandra Mark, PhD
- The Peavy Companies Shreveport, LA Scott Peavy
- Texas Brine Company, LLC Houston, TX Joel Warneke, PhD
- PB Energy Houston, TX David Dinwoodie
- Ratigan Engineering & Consulting Rapid City, SD Joe Ratigan, PhD
- Palmer Petroleum Inc. Shreveport, LA John Palmer
- RESPEC Rapid City, SD William Goodman, PhD
- Goodrich Petroleum Houston, TX Bret Hammett
- Nadel & Gussman Shreveport, LA Matthew Chumley
- Western Chief Operating Graham, TX Glenn Felderhoff
- Sage Land Company Austin, TX Peter Lamy
- Donner Properties Shreveport, LA Diana Chance
- EnergyQuest The Woodlands, TX Jack Carter
- Creedex LLC Tyler, TX Chris Reed
- Fossil Oil Company Houston, TX Dennis Kittler
- Saye Oil Company Shreveport, LA Jon Saye

### **PUBLISHED PAPERS**

- Using 3D Seismic Reflection Data, Vertical Seismic Profiles and Sub-Surface Well Control to Get the Real Picture of US Gulf Coast Salt Domes Solution Mining Research Institute Technical Conference Paper Fall 2013
- Is 3D Seismic Data The Bass-Finder of Oil and Gas? Examples of some "honey-holes" in Southwest Alabama GCAGS Transactions 2001 Annual Convention

- 3D Seismic Recognition of the Jurassic Smackover Reservoir of Grayson Field Using Leading Edge Reservoir Characterization Seismic Processing GCAGS Transactions 2001 Annual Convention
- Sand Thickness Prediction from 3D Seismic Data: A Case Study of the Upper Jurassic Frisco City Sand of Southwest Alabama
   The SEG's The Leading-Edge September 2001 & GCAGS Transactions 2000 Annual Convention
- The Grayson Field Smackover Lime Oil Reservoir, Columbia County Arkansas
   3D Seismic Case Histories from the Gulf Coast Basin A GCAGS Special Publication
   1998
- Tinsley Field, Yazoo County, Mississippi: A 3D Seismic Evaluation
   3D Seismic Case Histories from the Gulf Coast Basin A GCAGS Special Publication
   1998
- Tinsley Field, Yazoo County Mississippi: A Deeper Look at Mississippi's First Oil Field Using 3D Seismic GCAGS Transactions of the 47th Annual Convention

### PROFESSIONAL MEMBERSHIPS

- Society of Exploration Geophysicists
- American Association of Petroleum Geologists
- Solution Mining Research Institute
- Shreveport Geological Society (Past President)
- Confrérie des Chevaliers du Tastevin

## AWARDS AND HONORS

- Shreveport Geological Society Honorary Member, Inducted May 2017
- A.I. Levorsen Award 2001 GCAGS
- 2001 GCAGS Thomas A. Philpott 1ST Place Excellence of Presentation Award
- Sigma Gamma Epsilon
- H.V. Howe award for outstanding Geology graduate
- "Joe Geologist" award for top field camp student
- Numerous speaker awards