**DWAYNE C. PURVIS, P.E.**

1227 West Magnolia Ave, Suite 100 C: 817-939-6468

Fort Worth, TX 76104 dpurvis@dpurvisPE.com

**EXECUTIVE PROFILE: Oil and Gas Reservoir Engineering and Business Leadership**

* Reservoir engineering expertise built over 25 years of leading and participating technical studies and advising decision-makers.
* Entrepreneurial, management and executive experience over two decades in consulting and E&P businesses.
* Analyzed and defended opinions on a wide range of technical questions in hundreds of projects in the United States and abroad using engineering techniques from basic to advanced simulation. Often in interdisciplinary teams and often defending analyses in contested settings.
* Projects ranging from tens of thousands to ten of billions of dollars. Clients range from individual landowners to international companies and government agencies. Subjects include acquisitions, SEC reserves, field development/redevelopment, reasonably prudent operator standards, exploration, lease-line drainage, and many others.
* Created and taught both industry and academic courses for hundreds of professionals: cash flow analysis, decline curve analysis, software (PHDwin), and petroleum engineering for managers. Mentored young professionals both formally and informally.
* Extensive speaking and publication on both technical and business issues including shale reserves, decline curve analysis, reserve definitions, risk analysis and supply/demand dynamics.

**EXPERIENCE**

**INDEPENDENT CONSULTANT,** Fort Worth, TX 2015 – present

DWAYNE PURVIS, P.E. offers reservoir engineering consulting and advising services including reserves & economics, field studies and training services. More information at www.dpurvisPE.com.

**Selected highlights:**

* Analyzed potential acquisitions and sales from hundreds of thousands to hundreds of millions of dollars in numerous US basins. Performed reserve estimates for private and public companies.
* Analyzed both green and brown fields for further development, including technical analysis of Frio waterflood projects and of drilling an unconventional microdarcy reservoir on the Eastern Shelf.
* Provided engineering support for three capital raises, participated in two.
* Developed and sold prospects, led operations.
* Developed and taught industry courses for AAPL, PHDwin and SAGA Wisdom.
* Wrote and spoke on engineering and larger-scale issues facing the industry such as quantifying shale reserves, peaking oil demand, the changing natural gas market and the effect of climate awareness on E&P strategies.
* Delivered training and speeches to industry organization in Texas, Oklahoma, Louisiana, Colorado, Mississippi, Alabama, Alaska and Canada.
* Led formal and informal mentoring relationships by coaching and supervising the work of junior engineers.

**TEXAS CHRISTIAN UNIVERSITY,** Fort Worth, TX 2019 – present

TCU is an accredited doctoral university with a national reputation. Its Ralph Lowe Energy Management Program offers a graduate certificate while its Energy MBA program delivers an industry-focused masters degree.

**Adjunct Professor**

Developing and teaching graduate level *Petroleum Engineering for Managers* for students of RLEMP and Energy MBA programs.

**FIADOR RESOURCES,** Fort Worth, TX 2017 – present

Fiador is a privately owned exploration and production company with former operations in the Fort Worth Basin.

**President and Chief Technical Officer**

Led initial round of private fund-raising to pursue by-passed pay in the Fort Worth Basin. Initiated play concepts and led interdisciplinary team in regional studies of multiple plays. Developed strategic commodity price thesis. Co-led private equity raise and solicitation and negotiation of an unmarketed asset sale.

**JETTA OPERATING COMPANY,** Fort Worth, TX 2013 – 2015

Jetta is a privately-owned oil and gas producer with five major operating areas onshore US.

**Reservoir Engineering Manager, Reserves Manager and Reservoir Engineering Advisor**

Led interdisciplinary teams and/or individually performed technical analysis of all 11 plays plus acquisition opportunities, including both oil and gas and both conventional and unconventional. Supervised and participated in the technical aspects of reserves booking and management. Participated in executive management meetings and retreats. Mentored all younger reservoir engineers and organized training program.

**Selected highlights:**

* Guided strategic decisions to exit two major drilling programs.
* Identified previously misunderstood reservoir dynamics, and thus upside potential, in fields including a fractured carbonate, a gravity drainage dolomite, an abandoned waterflood and a mature waterflood.
* Simulated potential for horizontal well drilling to thin oil rims.
* Performed six types of engineering analyses to justify recovery from Third Bone Spring play.
* Explained the anomalous characteristics and performance in the Delaware Mountain Group.

**THE STRICKLAND GROUP, INC.,** Fort Worth, TX 2001 – 2013

The Strickland Group offers consulting services to the global oil and gas industry and legal community concerning matters of reservoir engineering. TSG provides field studies, cash flow analysis and litigation support. Analysis are often presented and defended in negotiation, arbitration, courts, and regulatory hearings. TSG provided expert testimony in high profile cases including the Macondo blowout and disputes between international companies and national governments.

**Executive Vice President**

Responsible for client relations, business management, organizing support staff and interdisciplinary teams, conducting engineering analyses and crafting reports. Analysis of wide range of topics such as drainage, well spacing, contract interpretation, acquisitions and divestitures, reserves classifications, reasonably prudent operator standard, fair market value, capital and operating costs, leasing analysis, commodity price expectations and future development plans.

Consulted on projects in Texas, Oklahoma, Louisiana, Kansas, Arkansas, New Mexico, North Dakota, Colorado, Pennsylvania, Gulf of Mexico, offshore California, Equatorial Guinea, Columbia, Algeria, Yemen, Nigeria, Papua New Guinea, Indonesia, Turkey and China.

Clients include government agencies, major oil companies, national oil companies, independents, service companies, private oil companies, insurance firms, investors, royalty owners, national and regional law firms as well as local and plaintiff firms.

**Selected Highlights:**

* Conducted dozens of field studies, recovery projections, fair market valuations and economic studies for the Barnett shale field since 2002. Other shales analyzed include Fayetteville, Delaware basin, Eagle Ford, Haynesville, Woodford, Monterey, Dadas. Performed *post mortem* analysis of a $500 million bankruptcy when a formerly successful Barnett Shale operator entered other shale plays.
* Conducted probabilistic evaluation of a giant gas discovery in the eastern GOM for the US government in a expropriation suit by a major. Settlement at 10% greater than our value announced by President George W. Bush on the south lawn of the White House.
* Organized expert team appointed by International Centre for Expertise related to a dispute between a major oil company and a national oil company related to a gas re-injection project in north Africa. Explained the failure of a massive redevelopment project and provided guidance for future development.
* Provided comprehensive technical due diligence for Japanese conglomerate in a series of proposed acquisitions in the Eagle Ford shale totaling over $3 billion. Client declined over-priced acquisition, and acquired a second deal at a more favorable price.
* Advised the SEC during its investigation of Shell’s 25% reserve write-down and the class-action plaintiff’s attorneys for El Paso’s 40% reserve write-down.
* Supplied analysis related to liability and discharge volume for blowout in the Gulf of Mexico.
* Assisted clients in acquisitions and divestitures in negotiated and auction settings. Regularly prepared fair market value analyses.
* Knowledgeable in international arbitrations, bankruptcies, regulatory hearings, tax court, and in state and federal courts. Provided expert opinions in a dozen cases.

**Enterprise Contributions:**

* Executive committee and major stockholder of The Strickland Group since formation out of Cawley, Gillespie & Associates in 2001. Company grew from 9 employees to 25. Involved in all strategic and management aspects of running the business including finances, personnel issues, compensation, contracts and branding/marketing.
* Managed a drilling fund that participated in over 25 wells mostly in the Barnett Shale; participated in the acquisition, development, and sale of those interests.
* Raised private equity for two management teams.
* Launched spin-off businesses including PartnerMetrics and Workforce Telemanagement in unrelated fields.

**CAWLEY, GILLESPIE & ASSOCIATES, INC.**, Fort Worth, TX 1995 – 2001

Cawley Gillespie provides petroleum engineering services including reserve reports, reservoir appraisal, field development planning and litigation support.

**Partner & Petroleum Consultant**

Served as an engineering consultant specializing in litigation, probabilistic methods, pressure transient interpretation, reserves determination, and reservoir simulation. Assisted with expert testimony for numerous legal proceedings in both state and federal courts, regulatory hearings, and mediation/arbitration panels.

**Selected Highlights:**

* Awarded partnership within 3 years.
* Consulted on projects across Texas, New Mexico, Oklahoma, Louisiana, Alaskan North Slope, Indonesia, France, Turkmenistan, Gulf of Mexico, and China.
* Supported international arbitrations in which an oil company sued for expropriation. One concession with three multi-zone oil fields and a second exploration trend for natural gas with one successful exploratory well. As a result of our work, awards in both cases were substantially lower than claims.

**EDUCATION, TRAINING**

**TEXAS A&M UNIVERSITY,** College Station, TX

B.S. Petroleum Engineering, Graduated *Magna Cum Laude* with University Honors, 1994

*Outstanding Achievement Award*, College of Engineering

* Denmark’s International Study Abroad Program/International Business. 1994 – 1995
* 197 total credit hours
* Phi Kappa Phi Honor Society, Pi Epsilon Tau petroleum engineering honor society.
* Walter W. Lechner Fellowship and departmental scholarships.
* Various officer positions in student organizations, including President of Residence Hall of the Year and Columnist for *The Battalion*.
* Summer internships at ARCO, Chevron and Cawley, Gillespie & Associates.

**Industry courses** on topics including Hydraulic Fracturing, Risk Analysis, Reserve Definitions, Magnetotellurics and others.

**AFFILIATIONS**

**Registered Professional Engineer**, State of Texas #87866

**Society of Petroleum Engineers**, 25-Year Member

* Advisory Board Member, Management and Information, *2019 to 2020*
* Specialty Coordinator, Assistant Specialty Coordinator (Management and Information), *2018 to 2019 ATCE*
* Program Committee Member, Chairman (Ethics, Training and Professionalism), *2016 to 2017 ATCE*
* Program Committee Member, *2013 and 2014 Unconventional Gas Conference*

**Society of Professional Evaluation Engineers**, Member

**Society of Exploration Geophysicists**, Associate Member

**American Association of Petroleum** **Geologists**, Member

**Society of Independent Professional Earth Scientists**, Member

**Lubbock Gas Gathering**, Advisory Board Member, *2015 to 2018*

**The Church in Cityview** and **LifeChurch.tv**, former home group leader and campus founding member

**Boy Scouts of America**, former Assistant Scout Master, Troop 43, *2012 to 2015*

**TCU Energy Institute and Ralph E. Lowe Energy Management Program**, Advisory Board Member, *2019 to present*

**PUBLICATIONS & PRESENTATIONS**

Strickland, R.F., Purvis, Dwayne C., Alexander, R.A., Quinn, M.A., *Coupling Probabilistic Methods and Finite Difference Simulation: Three Case Histories* paper SPE 38777 presented at the SPE Annual Technical Conference and Exhibition, San Antonio, TX, October 1997.

Purvis, Dwayne C., Strickland, R.F., *Problems Reconciling Probabilistic and Deterministic Reserve Classifications and Evaluations* paper SPE 68591 presented at the SPE Hydrocarbon Economics Evaluation Symposium, Dallas, TX, April 2001.

Purvis, Dwayne C., “Reserves”, *Encyclopedia of Petroleum Engineering*, 2001, 2008.

Purvis, D. C., *Judgment in Probabilistic Analysis* paper SPE 81996 presented at the SPE Annual Technical Conference and Exhibition, Denver, CO, October 2003.

Nickle, Brad, Purvis, Dwayne C., Strickland, R.F., *Resolving the Nightmare of Performance Reporting and Portfolio Management – A Web Based Approach* paper SPE 95164-PP presented at the SPE Hydrocarbon Economics and Evaluation Symposium, Dallas, TX, April 2005.

Strickland, R.F., Chong, E. and Purvis, D.C., *Finite Difference Simulation of the Barnett Shale* presented at the Barnett Shale Symposium II, Dallas, TX, June 2005.

Purvis, Dwayne C. and Strickland, R.F., Presentation at the Unconventional A&D – 2008 Round Table, *Barnett Shale—Was It Worth It?*, Denver, CO, March 2008.

Strickland, R., Purvis, D., and Blasingame, T., *Practical Aspects of Reserve Determinations for Shale Gas* paper SPE 144357, Presentation at the SPE North American Unconventional Gas Conference and Exhibition, The Woodlands, TX, June 2011. (reprinted in *Journal of Petroleum Technology*, January 2012)

Strickland, R., Purvis, D., and Blasingame, T., *Practical Aspects of Reserve Determinations for Shale Gas*, Presentation at the Eastern Section AAPG Meeting – Classic Rocks, Cleveland, OH, September 2012.

Purvis, D. with Dr. Curtis Whitson, *Practical Aspects of Shale Reserves*, presented at SPE sections in San Antonio (October 2015), Midland (November 2015), Wichita Falls (December 2015), Austin (January 2016), Fort Worth (February 2016), Bartlesville (February 2016), and Oklahoma City (October 2016).

Purvis, D., *Ethics and Shale Reserves*, workshop offered through SPE Calgary Section, CA, January 2016.

Purvis, D., *Evaluation of Shale Reserves and Resources in US Acquisitions*, to SPE Calgary Section, CA, January 2016.

Purvis, D. and Kuzma, H., *Evolution of Uncertainty Methods in Decline Curve Analysis* paper SPE 179980, Hydrocarbon Economics and Evaluation Symposium, Houston, TX, May 2016. Also presented to SPE section in Fort Worth (September 2016)

Purvis, D., *The Practice of Decline Curve Analysis*, paper SPE 179979, Hydrocarbon Economics and Evaluation Symposium, Houston, TX, May 2016. Also presented to SPE sections in Oklahoma City (August 2016), Dallas (April 2017), Wichita Falls (October 2017), and Midland (March 2018); and to Dallas Geological Society (January 2017).

Purvis, D., *Caveat Emptor in Acquisitions*, presented at SPE sections in Oklahoma City (August 2016), Dallas (December 2016), Austin (February 2017), Denver (March 2018) and at SM Energy internal conference (August 2018).

Purvis, D., *Evolution of Probabilistic Decline Curve Analysis*, presented at SPE section Reservoir Studies Group in Oklahoma City (August 2016) and the SPE section in Fort Worth (September 2016).

Purvis, D., *Preparing to become a manager*, guest column published in *The Way Ahead* , SPE magazine for young professionals (May 2017).

Purvis, D., *Engineering Methods and Advanced PHDwin* two-day training course presented in Houston (October 2016), Dallas (November 2016), Oklahoma City (January 2017), and Houston (March 2017 & November 2017).

Purvis, D., *Ethics of Brinkmanship*, presented at SPE section in Wichita Falls (November 2016), Gulf Coast Section Members in Transition (December 2017), and Dallas chapter of SPEE (November 2018).

Purvis, D., *Decline Curve Analysis, Year-end Reserves and Ethical Pitfalls*, Society of Independent Professional Earth Scientists, Fort Worth chapter (January 2017).

Young, J. and Purvis, D., *Changing Rules of Oil and Gas Reserve Audits*, presented to the Oklahoma City chapter of SPEE (October 2017).

Purvis, D., *Creating and Defending Shale Reserves in PHDwin* one-day training course presented in Dallas and Oklahoma City (October 2017); Midland, Austin, and Houston (November 2017); Midland and Denver (March 2018).

Purvis, D., *Myths and Misunderstandings of Reservoir Engineering*, presented at SPE section in Dallas (October 2017), Austin (November 2017), Denver (March 2018), and Fort Worth (May 2018); to Dallas Geological Society (November 2017), to New Orleans Geological Society (January 2018), and to SIPES in San Antonio (March 2018).

Purvis, D., *The Economics of Shale Plays*, presented at AAPL Field Landman Seminar (Fort Worth, June 2018), Fort Worth Petroleum Accounting Society (November 2018), and Society of Petroleum Engineers (Dallas, December 2018).

Purvis, D.,  *Engineer as Craftsman*, presented at SPE sections in Dallas (June 2018), Wichita Falls (December 2018), and Fort Worth (May 2019) and at the SIPES section in Oklahoma City (January 2019).

Purvis, D., *Understanding Petroleum Economics* one-day training course prepared and presented for AAPL in Fort Worth (August 2018), Washington, PA (January 2019), Birmingham (March 2019), Anchorage (April 2019), Midland (July 2019), Fort Worth (November 2019), Houston (February 2020), Tulsa (February 2020), webinar (June 2020, September 2020).

Purvis, D., *Geologic Components of Shale Production*, presented at AAPG SWS Annual Convention, Dallas, TX (April 2019), Petroleum Engineers Club of Dallas (November 2019).

Purvis, D., *Making Cash Flow*, presented at AAPL National Convention in Pittsburgh (June 2019), Young Professionals in Energy (Fort Worth, October 2019), Council of Petroleum Accounting Societies (Dallas, January 2020; Fort Worth, February 2020), Desk & Derrick (Dallas, February 2020), AAPL continuing education webinar (May 2020 and June 2021), and Dallas AAPL (October 2021).

Purvis, D., *New Dynamics of the Natural Gas Market* presented at private company (August 2019), Society of Independent Professional Earth Scientists (Fort Worth, September 2019), Dallas Geological Society (September 2019), East Texas Association of Professional Landman (November 2019), Society of Petroleum Engineers (Fort Worth, October and December 2019; Dallas, February 2020). Revised and updated delivered to national convention of Society of Independent Professional Earth Scientists (Fredericksburg, June 2021), Fort Worth Society of Petroleum Engineers (September 2021), Tyler SPE (scheduled December 2021), Houston Society of Professional Evaluation Engineers (scheduled December 2021), Fort Worth ADAM (scheduled January 2022).

Purvis, D., *Reading the Signs of Shale Declines* presented at Society of Independent Professional Earth Scientists (Midland, November 2019).

Purvis, D., *Value Proposition and Overview of PTA, RTA* and *Risk Factor for Productivity Loss* presented at webinar panel discussion hosted by Reservoir Data Systems and SAGA Wisdom (May 2020).

Purvis, D., *Risks and Opportunities Created by Shutting In* presented for the Dallas chapter of SIPES (May 2020) and for the Dallas section of Society of Petroleum Engineers (May 2020).

Purvis, D., *COVID, Climate, and Careers: A look at a changing industry* presented for the Fort Worth section of SPE (September 2020), Dallas section of COPAS (Oct 2020), Fort Worth chapter of AAPL (October 2020), Fort Worth chapter of SIPES (October 2020), the Petroleum Engineers Club of Dallas (October 2020), Mississippi Area Petroleum Landmen (November 2020), COPAS minor societies (November 2020), Washington D.C. and Wichita Falls of section of SPE (December 2020), Dallas and Midland sections of SPE (January 2021), and the Oklahoma City chapter of SPEE (January 2021).

Purvis, D. and Sabatka, S., *Log analysis and dynamics of the southern Delaware Mountain Group*, presented at AAPG SWS Annual Convention, Fort Worth, TX (June 2021), Dallas Geological Society (October 2021), Fort Worth Geological Society (November 2021).

Purvis, D., *Decline Curves and Economics* a three-day online training course delivered through SAGA Wisdom training platform.

Purvis, D., *PHDwin 3.0 Basic Training*, a two-day training course delivered online through SAGA Wisdom and in person through TRC Consultants. (in production, release estimated December 2021)

Purvis, D., *Winning Strategies for the Next Decade*, presented at Dallas Society of Petroleum Engineers (September 2021), Dallas Council of Petroleum Accounting Societies (September 2021), SIPES Symposium (October 2021), Tyler ADAM (October 2021), Fort Worth COPAS (scheduled January 2021).

Jacks, D and Purvis, D, *Annual Ethics Meeting: Ethics of ARO*, Oklahoma City SPEE (November 2021).

Various articles on OilPrice.com ([http://oilprice.com/contributors/Dwayne-Purvis/articles)](http://oilprice.com/contributors/Dwayne-Purvis/articles%29)

Numerous articles on LinkedIN ([https://www.linkedin.com/in/dpurvispe/recent-activity/posts/)](https://www.linkedin.com/in/dpurvispe/recent-activity/posts/%29)