CARLOS A. DAVILA VIVAS

(832) 603.9347 • davilacg@yahoo.com • Richmond, TX • linkedin.com/in/carlosdavilavivas/

SENIOR GEOLOGIST | FIELD DEVELOPMENT & GEOMODELING

❑ *Field Development Support*: Matured EP Energy's La Salle & Permian Basin (Texas) and Duchesne / Uintah (Utah) assets. Integrated 3D subsurface characterizations at Elk Petroleum (Paradox Basin) via carbonate facies modeling for reservoir properties distribution, improving CO_2 sweep efficiency and CCS alternatives.

❑ *Unconventional Resource Expertise*: Developed extensive experience over 13 years in geomodeling, including 4 years at PDVSA and 12 years at Global Halliburton, focusing on unconventional plays. Engaged in pivotal projects at EP Energy (2019-2022), advancing unconventional resources in various geological basins.

❑ *Geology / Geomodeling Expertise*: Analyzed and integrated geological data into advanced geomodels, handling diverse depositional systems ranging from fluvial-deltaic to deepwater turbidites, with a focus on 60% unconventionals (organic mudstones, limestones) and 40% conventionals (siliciclastics, carbonates).

KEY SKILLS | AREA EXPERIENCE

Technical Strengths

- Data Integration: Integrates datasets at multiple scales (seismic, log, core)
- Geology / Geophysics: Subsurface evaluation / exploration experience and a technical delivery track record
- Subsurface Modeling: Advanced mapping, interpretation & modeling

Business Acumen

- Commercial Assessment: Basin, play, and prospect or field-scale
- Upstream Investment: Partners on portfolio rejuvenation / maturation
- Lead-to-Prospect Maturation, Prospect-to-Well Delivery, Lead Portfolio Generation, New Business

Team Support

- Collaboration: Work with geoscience disciplines (e.g. Specialists, Geophysics, Production), petroleum-, front & well- engineering Leadership: Adaptability & excellent English skills

Area Experience: Eagle Ford Shale, Austin Chalk, Barnett, Permian Basin (Texas); Uintah Basin, Uteland Butte, Wasatch, Castle Peak, Great Aneth (reef), Paradox Basin (Utah); Niobrara (Colorado); Grevling & Storskrymtem, South Viking Graben (North Sea); Norwegian fields; Chicontepec Basin (Mexico); Maracaibo Basin (Venezuela); Vaca Muerta (Argentina); Putumayo (Ecuador & Colombia); Ghurab and Bahrah (Middle East)

PROFESSIONAL WORK HISTORY

ELK PETROLEUM, Denver, CO (*Remote*)   10/2022 to 1/2023

Senior Geologist / Geomodeler – Great Aneth Field & Paradox Basin

Developed workflows for static models in Petrel for Utah's Great Aneth Field, simulated carbonate facies, estimated hydrocarbon reserves, and created STOIIP scenarios to evaluate CO_2 sweep efficiency for Desert Creek formation.

- **Enhancing reserves estimations:** Pioneered the simulation of carbonate facies in the Great Aneth Field, overcoming geological complexities to estimate hydrocarbon reserves with higher precision.
- **CO_2 & CCS strategies:** Engineered STOIIP scenarios to assess CO_2 sweep efficiency in the Desert Creek formation, driving advancements in dynamic simulation and carbon capture (CCS) strategies.

EP ENERGY, Houston, TX   10/2019 to 10/2022

Staff Development Geologist – Eagle Ford, Austin Chalk, Uintah Basin & Permian Basin

Enhanced oil recovery and reduced costs by developing predictive models for well performance and completion design, utilizing comprehensive geological and operational data from Texas and Utah assets.

- **Boosted Efficiency:** Identified key performance drivers, enhancing well design in Eagle Ford, leading to a 40% improvement in estimated ultimate recovery (EUR) via lithological and reservoir data analysis.

- **Optimized Resources:** In the Uintah Basin, applied complex geomodeling / regression analysis to predict well performance, influencing drilling and completion strategies and improving early-stage development outcomes.
- **Enhanced Production:** Developed innovative geomodels in the Eagle Ford formation, revealing non-linear relationships between rock properties / production, resulting in up to 0.7 correlation in performance prediction.
- **Improved Decision-Making:** Integrated comprehensive data analysis in the Lower Green River formation, leading to CEO-endorsed operational changes, increasing efficiency and predictability in well performance.
- **Advanced Modeling:** Created a multi-faceted model combining geology, petrophysics, geomechanics, and completions data, accurately predicting well performance in untested areas and guiding future drilling decisions.
- **Streamlined Operations:** Played a key role in operational planning, including well proposals and rig scheduling, leveraging geomodel insights to enhance productivity and cost-efficiency in field development.
- **Reduced Costs:** Recommended targeted completions in the Eagle Ford shale, potentially cutting expenses by 20-30% in underperforming wells, optimizing resource allocation and economic viability.

HALLIBURTON, Houston, TX   10/2007 to 10/2019

Development Geologist Advisor / Geomodeler (10/2011 to 10/2019)
L48: Eagle Ford, Barnett Shale, Permian Basin, Marcellus / Utica
Global: North Sea, Vaca Muerta, Putumayo, Bahrah, Ghurab, Chicontepec

Elevated geomodelling expertise from 2011 to 2019 at HAL, significantly contributing to various projects, integrating geological data into models, optimizing well performance, and driving business development across global teams.

- **Asset Optimization:** Worked with Devon CYPHER in the Barnett region, sold Landmark licenses, co-authored URTec/SPE papers, and improved Landmark software, leading to continued engagements in the EGFD.
- **Enhanced Project Understanding:** As a subject matter expert in 3D geomodeling, overhauled both onshore / offshore projects, enhancing productivity, field planning, appraisal, data acquisition, and investment strategies.
- **Drove Integrated Solutions:** Partnered with multi-product Service Lines and CYPHER®, developing unconventional assets for global / L48 operators via integrated solutions that increased market share.
- **Mentored and Developed Talent:** Interviewed, coached, and evaluated junior geoscientists, preparing them for deployment in various US Tech Teams, enriching their geomodelling skills and L48 business development.

EARLY CAREER

Development Geologist, Halliburton   10/2010 to 10/2011

- **Achieved a 10X production increase to 4,300 barrels / day** at Chicontepec PA-1565 via a comprehensive geological turbidites study, leading to +$500MM in revenue and a contract extension for asset development.

Reservoir Geologist, Halliburton   10/2007 to 10/2010

- **Realized enhanced hydrocarbon recovery;** conducted stratigraphic interpretations in fluvial sandstones, utilized Front End Loading for Field Development Planning, and improved waterflooding efficiency.

Development Geologist, PDVSA   10/1999 to 10/2004

- **Geosteered horizontal wells,** boosting production to 80,000 bbl/day, securing reserve certifications, and advancing reservoir characterizations via +1,500 hours of training / field work (Drilling, Reservoir & Production).

EDUCATION | CERTIFICATION | TECHNOLOGY

Bachelor of Science Degree (B.S.) in Geological Engineering, Universidad de Los Andes (Venezuela)

Data Science & Business Analytics Certification, UT McCombs School of Business

Technology: Petrel; IHS Petra; OW / Decision Space; Python; ArcGIS; Ikon iPoint; Geographix; Power BI; Microsoft Office Suite (Advanced Excel, Word, PowerPoint, Access, Outlook)