ANDREW STEARNS

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EDUCATION

University of Houston M.S. Geology Candidate, Stratigraphy and Sedimentology, GPA: 3.9 May 2021

UH Energy Upstream Data Analytics Program (NExT, Schlumberger)

UH Sustainable Energy Development Program May 2018

University of Texas at Austin B. S. Geology, GPA: 3.5

Business Foundations Certificate: High Honors (MBA Prerequisite) McCombs Summer Institute (8-week intensive summer program)

TECHNICAL SKILLS

Seismic Interpretation Tectono-Stratigraphic Analysis Well-Log Correlation Petroleum System Analysis

Post-Drill Analysis Lead and Prospect Generation Reservoir Characterization

Petrel Kingdom ArcGIS Petromod Structure Solver Adobe Suite Orange

WORK EXPERIENCE

University of Houston – *Graduate Teaching Assistant; Physical Geology*

Aug. 2019 - present

Shell: Tertiary Tectonostratigraphy of the Southern Mexican Perdido Foldbelt – *Intern*

Jun. – Jul. 2020

- Conducted a regional seismic interpretation and defined 10 local seismic facies from five wells to produce a comprehensive tectono-stratigraphic analysis of the Southern Mexican Perdido Area (rank frontier basin)
- Created five regional geoseismic sections and Wheeler diagram for integration with post-drill analysis from
 wells and petroleum system analysis outlining key risks for three plays to be tested in 2020-2021

UT GeoFluids Consortium – *Research Assistant*

Mar. – Jun. 2018

- Prepared 35 core plugs from the Wolfcamp Formation for high-pressure permeability testing
- o Collaborated in innovative technique to cut 25 frozen methane hydrate cores from the Gulf of Mexico

Texas BEG: Fracture Research and Application Consortium – *Research Assistant* Sept. 2017 – Mar. 2018

Performed high resolution imaging and physical sorting for 400 samples of Wolfcamp frac sands

ACADEMIC PROJECTS

Quantifying Hurricane Harvey Sediment Transport – MS Thesis; Dr. Julia Wellner

Dec. 2018 – present

- Quantified ~23,000,000 m³ of sediment transport during Hurricane Harvey in the Houston-Galveston region through elevation change analysis, pre- and post-Harvey satellite imagery, and sediment dredging reports
- Classified channels into artificially straightened and modified that bypass sediment downstream to navigable channel and natural channels that retain sediment within adjacent urban floodplains

2020 SEG EVOLVE: Hydrocarbon Prospectivity of the Northland Basin, New Zealand

Jan. - Oct. 2020

 Produced one of the top investment opportunities as a multidisciplinary team through integration of 2D/3D seismic data, post drill analysis of 20 key wells, and petroleum system analysis of a frontier basin Proposed economic development strategy with an FPSO for the Gandalf prospect: a four-way closure in a thrusted allochthon targeting deltaic sands with POS 20%, EUR P50 of 360 BCF, and NPV 10 of \$443 million

Imperial Barrel Award World Champion: Hydrocarbon Prospectivity of NW Shelf, Australia Jan. – May 2019

- Integrated 2D/3D seismic data, post-drill analysis of 6 wells, petroleum system analysis, and regional tectonostratigraphic framework as a multidisciplinary team resulting in a risked resource potential of 12 TCF
- Developed two prospects with Opal up-thrown fault closure at POS 26% and P50 EUR 7.8 TCF, and Irwin stacked play with both an up-thrown fault closure and angular unconformity POS 32%, P50 EUR 6.2 TCF

LEADERSHIP EXPERIENCE AND VOLUNTEER ACTIVITIES

AAPG Student Expo Committee – 2019 Volunteer, 2020 Committee Member

Jun. 2019 – Present

UH Earth and Atmospheric Sciences Faculty Search Committee − *Grad Student Member* Feb. 2019 − Present Conducted and evaluated sedimentology/stratigraphy faculty candidates in a group interview format

UH Earth and Atmospheric Sciences Student Research Conference – 2020 Conf. Chair

Jan. 2019 – Present

American Association of Petroleum Geologists Wildcatters – 2019-2020 Treasurer

Feb. 2017 – Present

FIELD EXPERIENCE

Sequence Stratigraphy of the Upper Cretaceous of the Green River Basin (WY)

Sept. 2019

Holocene Depositional Systems: Whidbey Island, Willapa Bay, and Channeled Scablands (WA-OR) May 2019

Proximal to Distal Lithofacies of the Paradox Basin (CO-UT)

Oct. 2018

Jackson School of Geosciences Field Camp (TX-NM-CO-WY-MT)

May – Jul. 2017

PUBLICATIONS

Kendall. K. P., A. Roesch, **A. Stearns**, C. Ramon-Duenas, S. Meyer, J. J. Kendall, and J.–C. Phillips, 2019, Flow archives of Hurricane Harvey in Buffalo Bayou, Houston, Texas: Part 1—Flood, adjust, and recover: GeoGulf Transactions, v. 69, p. 125–173.

Kendall. K. P., A. Roesch, **A. Stearns**, C. Ramon-Duenas, S. Meyer, J. J. Kendall, and J.—C. Phillips, 2019, Flow archives of Hurricane Harvey in Buffalo Bayou, Houston, Texas: Part 2—Hurricane Harvey archives in Buffalo Bayou Park: A field guide: GeoGulf Transactions, v. 69, p. 175–219.

HONORS AND AWARDS

Sheriff Lecture 1st Place Poster for Master's and Early PhDs

Nov. 2020

Houston Geological Society Calvert Memorial Scholarship

Aug. 2019 – May 2021

Department of Earth and Atmospheric Sciences Masters Excellence Scholarship

Aug. 2018 – May 2021

o Department of Earth and Atmospheric Sciences Alumni Scholarship

Aug. 2019 – May 2020

• Student Research Conference 1st Place Poster for Master's and Early PhDs

Apr. 2019