SOCIETY OF PETROLEUM ENGINEERS
Wyoming Petroleum Section
Marron Bingle-Davis, Secretary
P.O. Box 2154
Casper, WY 82602-2154

Section Website for Latest News:
http://wyoming.spe.org/

2022-2023 Wyoming Petroleum Section				
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Continuing Education	Vacant			
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UPCOMING AREA MEETINGS

WYOMING GEOLOGICAL ASSOCIATION & SPE – All in-person meetings at Occasions by Cory. Lunch Buffet served from 11:15 to 12:00 at a cost of $25.00. Contact the WGA office at 237-0027 or wygeology@gmail.com for more information or to RSVP. Reservations are mandatory and are due **Wednesdays by 12 PM** for that week's talk.

April 14, 2023 (SPE): Tim Sharp – NU Wave Industries – *Oil & Gas Applications of Waterjet Technology*

April 28, 2023 (SPE/SPEE): Blake Burget – Kimmeridge Energy – *Optimizing Completion Design and Well Spacing in the PRB Niobrara*

UPCOMING MONTHLY PRESENTATIONS FOR THE SPE WYOMING PETROLEUM SECTION

April 14, 2023 – Tim Sharp – NU Wave Industries – Oil & Gas Applications of Waterjet Technology

April 28, 2023 – SPE/SPEE – Blake Burget – Kimmeridge Energy – Optimizing Completion Design and Well Spacing in the PRB Niobrara

Society of Petroleum Engineers

Wyoming Petroleum Section
April 2023 Newsletter
http://wyoming.spe.org/

When: **April 14, 2023**

Where: Occasions by Cory

Time: 11:15 AM ($25 for buffet lunch)

RSVP at

wygeology@gmail.com

Event: **Tim Sharp – NU Wave Industries – Oil & Gas Applications of Waterjet Technology**

BIOGRAPHY:

Tim Sharp co-founded NuWave Industries in 2010 and has over 29 years of experience in the oil and gas services industry.

Prior to NuWave, Mr. Sharp co-founded T&T Oilfield Services in 2002. Mr. Sharp began his career on a surveying crew near Fox Creek, Alberta, and went on to earn his Grade "B" Pressure Welder Certificate from the Alberta Boilers Safety Association (ABSA). Mr. Sharp was endorsed by the Red Seal Program in 1993.

Mr. Sharp leads NuWave's business development efforts throughout North America and Globally. He continues to assist with new technology development and testing.

ABSTRACT:

NuWave Industries offers ultra-high-powered waterjet cutting technology as an efficient and economical solution to industrial grade cutting.

Our technology is remotely operated, compact and mounting. Our waterjet cutters are faster than traditional torch-cutting methods, they leave a dramatically smaller footprint and are a safer method of cutting for personnel all around.

Learn about the advantages of waterjet cutting in the cut-and-cap process of well abandonments. We save our clients money by providing a superior service.

When: **April 28, 2023** RSVP at

Where: Occasions by Cory wygeology@gmail.com

Time: 11:15 AM ($25 for buffet lunch)

Event: **SPE/SPEE – Blake Burget – Kimmeridge Energy – Optimizing Completion Design and Well Spacing in the PRB Niobrara**

BIOGRAPHY:

Blake Burget is currently the Director of Reservoir Evaluation at Kimmeridge Energy, where he has worked since 2019. He began his career as a Reservoir Engineer in 2012 with Newfield Exploration. In 2017 he began a Sr. Reservoir Engineering role at Cimarex Energy and worked on the Business Development and Acquisitions and Divestitures teams during his time there. He holds a BS in Petroleum Engineering from the University of Oklahoma.

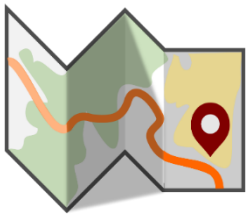
ABSTRACT:

A seven-step workflow to help subsurface teams establish an initial thesis for optimal completion design (cluster spacing, proppant per cluster) and well spacing in emerging / under-explored resource plays is proposed and executed for the Powder River Basin Niobrara unconventional oil play. The workflow uses Rate Transient Analysis (RTA) to determine the A_c*√k parameter and then walks the reader through how to sequentially decouple the parameter into its constituent parts (frac height (h), number of symmetrical fractures achieved (nf), permeability (k) and fracture half-length (xf)). Once these terms were quantified for each of the case study wells, they were used in a black oil reservoir simulator to compare predicted verses actual cumulative oil performance at 30, 60, 90,120 & 180 days. A long-term production match was achieved using xf as the lone history match parameter. xf verses proppant per effective half-cluster yielded an R2 value of >0.90. 28 simulation scenarios were executed to represent a range of cluster spacing, proppant per cluster and well spacing scenarios. Economics (ROR and/or NPV10/Net Acre) were determined for each of these scenarios under three different commodity pricing assumptions ($40/$2.50, $50/$2.50 and $60/$2.50). An initial thesis for optimal cluster spacing, proppant per designed cluster and well spacing were determined to be 12', 47,500 lbs and 8-14 wells per section (based on whether or not fracture asymmetry is considered) when WTI and Henry Hub are assumed to be $50 & $2.50 flat.

CALENDAR OF EVENTS and NEWS WYOMING PETROLEUM SECTION

Due to our excellent participation in past continuing education events, we will continue to offer these as they become available. Our web address is *http://wyoming.spe.org*

The SPE Wyoming Petroleum Section has sent out letters requesting scholarship sponsors for the 2023 year. Please consider helping out these deserving students in their academic pursuits. Scholarships will be awarded in the Spring of 2023. If you need further information please contact Sabrina Hamner at: sabrina.hamner@wyo.gov



All in-person meetings unless otherwise noted will be held at the Occasions by Cory.

OCCASIONS BY CORY
303 S. WOLCOTT ST.
CASPER, WY 82601

2022-2023 SCHOLARSHIP RECIPIENTS

Andrea Comer – University of Wyoming

Tatiana Lubashkina – University of Wyoming

Elaina Soellner – University of Wyoming

Nicholas Bryan – Colorado School of Mines

Nathan Wasylowich – Montana Tech

Brady Weber – Montana Tech

TOTAL AMOUNT AWARDED: $6,500

GREAT JOB – KEEP UP THE GOOD WORK!!

UPCOMING OPPORTUNITIES

Casper College is offering a 3-yr contract position through SME. Below is a link to the position.

https://phe.tbe.taleo.net/phe03/ats/careers/v2/viewRequisition?org=CASPER&cws=51&rid=1386

Position Description

Education Specialist - Society for Mining, Metallurgy, and Exploration (SME)
Department – Museums

Summary:
The part-time museum community outreach position is responsible for working with the Society of Mining and Metallurgy, and Exploration (SME) grant to be an advocate for the mining industry at Casper College. This person will organize field trips, schedule guest speakers, and conduct other events that will enhance the community's understanding of potential careers in the mining industry. Educational programming that focuses on Natrona County youth will also be an important part of this position to generate an interest in the mining sector.

Responsibilities:
The part time museum community outreach position will report to the Director of Museums at Casper College. The person will be very familiar with the mining industry and the SME grant that was awarded to Casper College. The person will be in charge of outreach to the community, the college, and to local schools to advocate for the mining industry and educate on the potential careers and opportunities in the mining industry.

Essential Duties:
- Communicate effectively with the public about the mining industry
- Coordinate lectures, tours, and presentations related to the mining industry
- Assist with the organization and implementation of open houses and special events throughout the year pertaining to the mining industry
- Assist the museum director with planning and implementing events pertaining to the mining industry
- Plans and supervises local and overnight field trip events and activities to provide opportunities for the community and student exposure to the mining industry

Work Environment:
Work is performed indoors in an office or museum environment. Employee will work frequently with students, faculty, staff, volunteers, community members and student work-study employees.

Physical Demands:
Employee must be able to stand for long periods of time, climb up and down stairs, speak, hear, use hands and fingers to handle materials and use computer, feel, and reach with hands and arms; and talk or hear. Frequent lifting/moving of up to 40 pounds and moving more with or without assistance.

Minimum Qualifications:
- Knowledge of:
    - Current or previous experience working in or around the mining industry
    - Office technology (computer, productivity software)
    - Ability to drive college vehicles including multiple passenger vehicles not requiring a commercial driver's license.

- Ability to:
    - Communicate effectively
    - Work with students, faculty, and community
    - Manage time effectively

Desired Qualifications:
- Associate's degree or higher from an accredited institution in an appropriate degree area. Mining, Geology, Engineering or related educational field preferred
- High level of communication ability
- Experience working with and managing groups of people, especially children
- Experience developing educational programs and activities