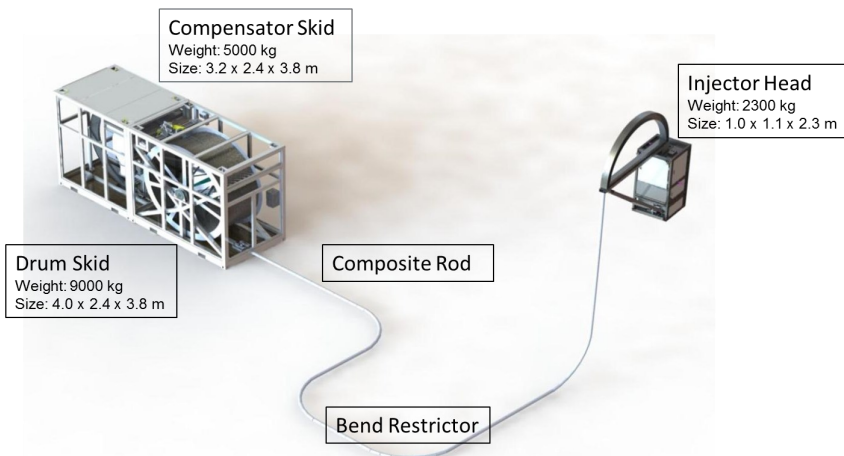




## ComTrac® - Innovation in Conveyance

### The System

*Reach into highly deviated, deep and extended wells*



### Flexibility gives operational benefits

Mechanical and logging capability

- No need to rig over between SL and e-line drums or units

Large and heavy BHA

- Straddles, perforation guns

Precise control of toolstring movement

- High quality logging data
- Controlled movement for milling/jetting

Ability to "push"

- Highly deviated wells with reduced or eliminated tractor needs

Low POB

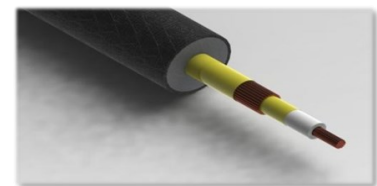
- Multi-skilled 3 man crew per shift

Flexible rig-up

- No need for "line of sight"
- Absence of high tension lines

### The Rod

*Why carbon composite?*



Slick and stiff rod

- Lower friction and increased rigidity gives longer reach
- simplified PCE without grease

Strength to weight

- Twice the strength at one third of the weight of regular wirelines

Less stretch give better depth accuracy

- One fifth of the stretch coefficient of regular cables

Electrical conductor

- Can convey mechanical intervention and electrical tool strings
- Large conductor allows high power tools

Sour service

- Resistant to H<sub>2</sub>S and CO<sub>2</sub>

# Archer

# ComTrac® - Innovation in Conveyance

On a recent field trial the ComTrac system successfully completed the World's first...

- ... intervention with a semi-stiff composite rod with monoconductor
- ... rig-up without line-of-sight or high tension lines using bend-restrictors
- ... jarring with a composite rod
- ... plug retrieval with a composite rod
- ... logging with Multifinger Caliper/GR/CCL on a composite rod
- ... suction/jetting intervention job with a composite rod

## Flexible, safe and secure rig-up



From the deck...

...to the well

Bend restrictors



- No "line-of-sight" required
- No high tension lines
- Rod protected from damage
- Enclosed system - no pinch points

## Operational highlights

- 633 operational hours
- Cumulative run in hole footage of over 90,000m in 28 runs
- Successful jarring with composite rod, 12 activations in one run
- Mechanical intervention and logging with composite rod
- High power, electro-hydraulic cleanout tools run with semi-stiff composite rod
- Rig-up without "line of sight" using innovative "bend restrictor" sections

## Run Record

- 2 Drift Runs with sample bailer
- 2 Hex plug retrieval runs, including heavy duty jars
- 5 additional runs with pulling strings
- 1 LIB investigation
- 6 hydrostatic bailer runs
- 1 Multifinger caliper logging run
- 11 runs with cleanout tools (suction and jetting)