

Advanced Multiconductor Openhole Jar

Delivers Safe, Efficient Logging Without Tool Loss, Saves Expense of Costly Fishing Operation

Objectives

- Minimize risk of toolstring sticking during formation dynamics tester (MDT) logging runs.
- Avoid costly fishing operations and lost-in-hole (LIH) charges.
- Ensure acquisition of critical pressure and fluid sample data.
- Reduce nonproductive time (NPT) and environmental exposure.

Our Approach

- Engineers from the operator and Weatherford conducted a comprehensive sticking risk assessment using ImpactPro™ jar-setting software to model impact forces and calculate optimal jar settings.
- Weatherford recommended the Impact Selector® Advanced Multiconductor Openhole Jar (AMJ), which is a hybrid mechanical/hydraulic wireline jar. When activated, the AMJ uses the energy stored in a cable overpull to generate a controllable upward impact force. By utilizing the hydraulic delay feature, the impact force can be adjusted in-hole, allowing a precise jarring force to be applied to the stuck toolstring. The jar is reset by slacking off wireline tension, allowing multiple impacts when required.
- For each wireline run, field personnel have the flexibility to either jar immediately when sticking is detected or use the time delay feature to use maximum available wireline overpull to free the toolstring.

Value to Customer

- During the first logging run, the toolstring stuck. Thanks to the time-delay setting for the advanced multiconductor openhole jar, the operator applied over 13,000 lb of surface tension, generating 10,000 lb of head tension—freeing the toolstring without firing the jar.
- Using the AMJ minimized NPT, avoided fishing operations and LIH charges, and preserved valuable logging tools and data.
- The environmental risks and additional exposure time typically associated with extended fishing operations was mitigated, enhancing overall operational safety and efficiency while safeguarding the environment.
- Comprehensive logging data protected critical revenue for the operator by preventing tool losses and eliminating the downtime needed to manufacture replacements.



The advanced multiconductor jar is an openhole wireline jar for use in extreme applications, avoiding stuck toolstring outcomes and expensive fishing operations.

LOCATION

Norwegian North Sea

WELL TYPE

Exploration

FORMATION

Open hole

HOLE SIZE AND ANGLE

8-1/2 in., 4°

DEPTH

6,859 ft (2,090 m)

PRODUCTS/SERVICES

- Impact Selector advanced multiconductor openhole jar
- ImpactPro jar-setting software
- Wireline services

