

Proxima advanced logging services

Safe. Fast. Accurate.
NO COMPROMISE.

When you're logging in complex drilling environments, challenging hole conditions or slimhole production sections, three things matter:

- Safety
- Speed
- Accuracy

But to get all three at the same time, you usually have to compromise. Not any longer. Baker Hughes **Proxima™ advanced logging services** are the no-compromise solution for your logging needs regardless of the operating environment, well condition or hole size.

Proxima logging services provide comprehensive solutions to meet any logging challenge. On land or offshore, Proxima advanced logging services safely and quickly get your critical logging data enabling you to make insightful operational decisions and meet or exceed your targets. Proxima logging services can be performed remotely at any location, significantly reducing the operations footprint at the wellsite.

Safety

Proxima advanced logging services provide the confidence to log in conventional or managed pressure

drilling and any hole condition with a full range of deployment capabilities:

- Conventional wireline
- Through drill pipe
- Coiled tubing
- Wireline tractor
- Slickline memory logging

For through-pipe logging services, Proxima provides two barriers for well control. The first barrier is the downhole safety valve in the BHA near the bit. For additional safety, there are two downhole valves, one primary, and a second valve for backup. These safety valves will isolate the bore in the event of any influx from downhole. The second well control barrier is the surface pressure control equipment that is used for tool deployment that provides complete control of the well to insure safe logging operations.

Whatever hazard you encounter with through-pipe logging, you are in complete control with the ability to reciprocate, circulate, and rotate with Proxima logging services.

Speed

There are no wasted runs with Proxima services. The logging assembly with the application specific Baker Hughes drill

Applications

- Open hole and cased hole
- Real-time and memory logging
- Conventional wells and unconventional wells
- Challenging wellbore conditions
 - Horizontal
 - Highly deviated
 - High temperature
 - High pressure
 - Hole collapse
 - Fluid losses
 - High dogleg severity
- Complex drilling environments
 - Near-balance
 - Underbalanced
 - Managed pressure drilling (MPD)

Benefits

- Two barriers for well control
- Complete drill string control
- Reduced NPT
- Reduced flat time for logging
- Quick operational decisions based on logs

bit gets you to total depth quickly. At total depth the logging string is verified in real-time so that you can be sure that every run is getting you the critical data you need.

You can log up to 60 feet per minute while getting full resolution, high quality log data.

The Proxima hardware platform uses on-the-fly data processing so that your data is complete and ready immediately after the logging run letting you make critical operational and production decisions quickly.

Accuracy

With Proxima logging services, your data is accurate, regardless of the holes size, wellbore environment, or conveyance method, with no compromises for tool size.

The Proxima logging tools are small in diameter and length but maintain the depth of investigation and vertical resolution of larger diameter logging

systems along with and 350° F (175° C) temperature and 20k psi (137.9 MPa) pressure ratings, making it the premier logging system in its class.

The advantage you get with a Proxima logging solution is safety, fast and efficient operations, and accurate data, every time.

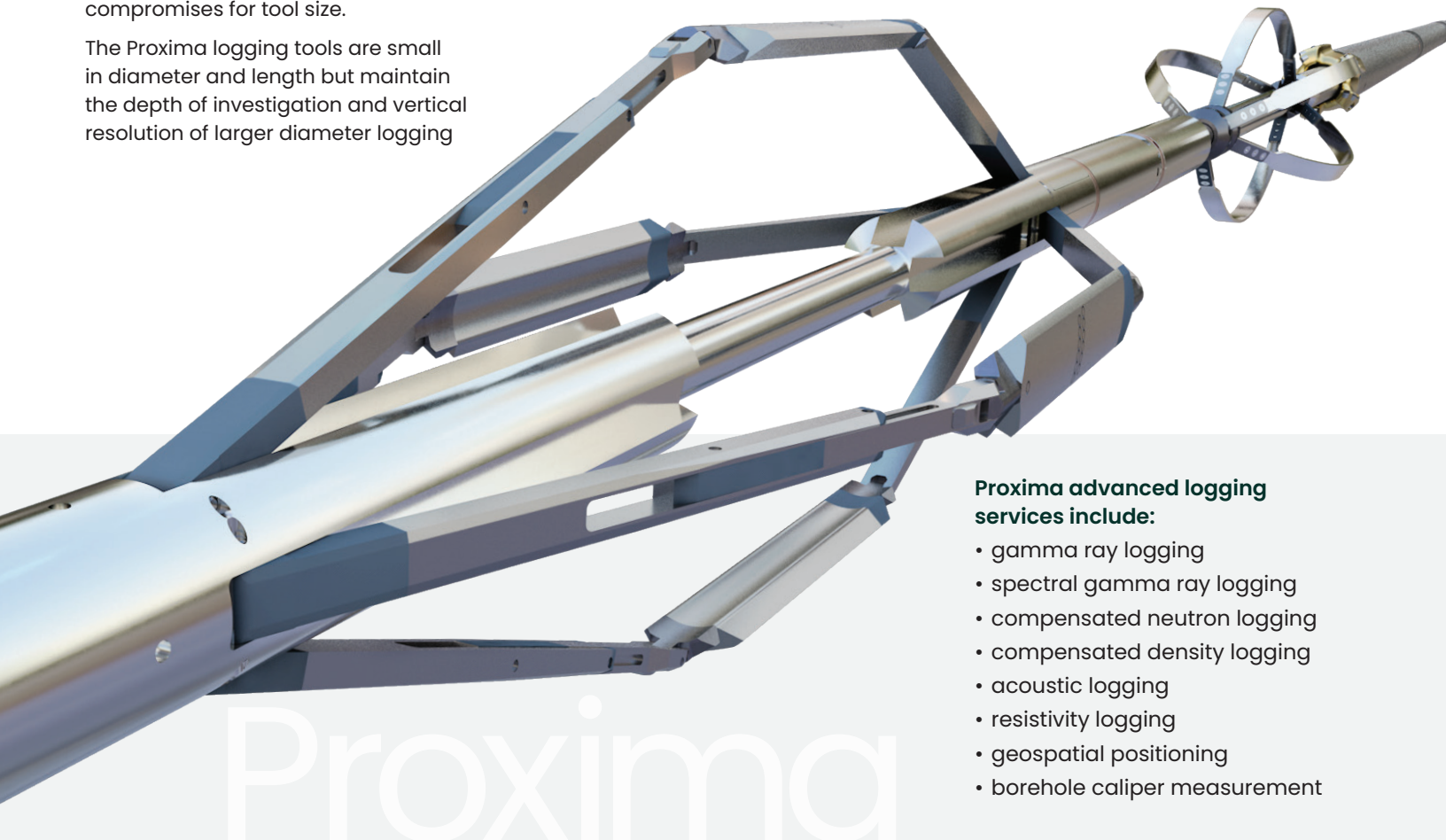
Conveyance versatility

With versatile conveyance options using electric wireline, tractor, slickline, coiled tubing, or drill pipe, Proxima logging services provides the ability to perform real-time or memory through-pipe operations, access ultra-slim boreholes, navigate through highly tortuous well trajectories and reach long horizontals keeping the logging tools fully protected during the entire run.

Remote logging

The **Log from Anywhere service** lets Baker Hughes personnel working remotely maintain full control of Proxima logging services while reducing costs and risks associated with travel to the well site. Remote logging facilitates real-time collaboration with your subject matter experts in different locations enabling you to make faster and better decisions for the next steps for your well and the development of your asset.

The comprehensive capabilities of Proxima advanced logging services provide you with the confidence to plan your logging program at the earliest stage of your drilling program knowing that you get safe, fast and efficient operations, and accurate data, every time.



Proxima advanced logging services include:

- gamma ray logging
- spectral gamma ray logging
- compensated neutron logging
- compensated density logging
- acoustic logging
- resistivity logging
- geospatial positioning
- borehole caliper measurement

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