

Halliburton Big Gun™ System

INCREASE FLOW AREA THROUGH THE FIRST CASING FOR WELL ABANDONMENT OF LARGE-DIAMETER PIPE

OVERVIEW

There is a growing need in the oil field for plug and abandonment (P&A) operations. A longtime challenge has been the ability to place an effective permanent barrier across a wellbore. Previously, section milling was the only acceptable method for placing a secure barrier. Now, there are more advanced options than perforating and squeezing cement.

Halliburton introduces the new-generation 9 $\frac{5}{8}$ -in. OD Big Gun™ system, which provides improved flow area and shot distribution for large 13 $\frac{3}{8}$ -in. casing, enabling successful plug and wash methods. This system was engineered to remove 2.5% of the 13 $\frac{3}{8}$ -in. 68 ppf P-110 casing with an average hole size of 0.92 in. This will change how wells are abandoned in the future when needing to displace annular fluids in large casings.

Perforate-wash-cement methods feature a combination of explosives, wash fluid jets, and cement stinger in one run, revolutionizing oilfield engineering for barrier placement. To ensure the annular space between the pipe and casing is free from debris and contamination, flow area for washing behind pipe must be increased. With more flow area comes a greater need to place a quality cement plug. Traditional gun systems are not intended for this purpose. The Big Gun system, however, can be used in perforate-wash-cement operations or in free pipe to produce a flow area for the cement plug.

BENEFITS

- » Ensures optimized perforation performance
- » Addresses older wells with construction not considered for abandonment when planned
- » Provides optimized perforating performance for perf-wash-cement procedures in large casing
- » Assures larger equal hole size (EHD) in the casing, which can help optimize the abandonment process

FEATURES

- » Perforates 13 $\frac{3}{8}$ -in. casing in perf-wash-cement P&A wells
- » Has a flow area of 11.3 in.²
- » Removes 2.5% of casing in 13 $\frac{3}{8}$ -in. casing
- » Uses conventional TCP firing heads
- » Ships via 1.4d shipping class

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com



13 $\frac{3}{8}$ -in. casing after perforation.

Dimensions and Ratings

Max Temperature	350°F (177°C)
Max OD	9 $\frac{5}{8}$ in. (244.6 mm)
Gun Body Length	16 ft (4.9 m)
Max Pressure	7,900 psi (54.5 MPa)
Average Hole Diameter	0.92 in. (23.4 mm)
Casing Loss Per Foot	2.5%

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