

Successful Second Stage Cementation of a Multilateral Junction, After Floating in the Casing
[SPE 123849 - Aberdeen, Villahermosa](#)

This paper presents a practical solution for successfully floating in the casing and performing second stage cementing of a multilateral junction. The drilling and completion objectives required a successful cement job on the 9-5/8"x 10-3/4" casing that would:

- Isolate the reservoir at the 9-5/8" shoe.
- Isolate both production legs and provide a secondary barrier against future potential B annulus communication.
- Provide support for the 9-5/8" casing during exit window milling operations.

Due to the distance between the 9-5/8" shoe and the multilateral junction point it was identified early in the planning stages that the chances of success for a good single stage cement job over the whole interval, whilst maintaining ECDs below formation fracture gradient, was minimal.

With this in mind it was decided to perform the 9-5/8" cementing in 2 stages. The first stage was a conventional cement job with a total column length of 1500 ft. The next stage was conducted through a locking Port Collar with metal to metal (MTM) seals, situated at 4442ft MD. A successful cement job was achieved with a cement column of 1342ft, which was above the depth required to meet all of the objectives.

After displacement of the cement the operating tool was picked up to close and lock the Port Collar. A successful casing pressure test confirmed the Port Collar was closed. All objectives were met; a world first was achieved for this combined operation.

[Complete paper](#)