Extreme Sales and Rental
HVTX Firmware 3.255.10.37 Release
Revision 1

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Applicability: XEM
Issued By: Jack Rader
InTouch: 7985108

BACKGROUND INFORMATION

During the pre-run of an XEM job it was noticed that the Babel Fish probe had all values reading 0 when connected to an XEM string but all values read correctly when disconnected. Babel Fish had been previously used with XEM without issue. Further troubleshooting found that when the HVTX probe was connected to the female ROTC (Uphole connection of the BF probe) the values would then go to 0 even if several probes were between the BF and HVTX. Further testing was done, and it was found that Babel Fish with serial numbers BF0xxx exhibited this issue while probes with the serial number BF1xxx did not.

The root cause was found to be RS485 communication between the HVTX and Babel Fish. When an HVTX was connected to the BF via the female ROTC, even when probes were between the two, it would result in all BF data going to 0.

PROCESS IMPROVEMENTS

There were several solutions available but the least intrusive was to modify the HVTX firmware to eliminate the effects of bad communication caused by the RS485 lines. Since this communication type is not utilized in the XEM system the change would not affect the tool's performance.

Telemetry firmware 3.255.10.35 was edited to created 3.255.10.37 firmware that disabled these lines. When tested on the bench and in full string configurations the data issues with Babel Fish were no longer present.

MOVING FORWARD

- Fully bench test every configuration the HVTX could be used in before field testing.
- Locate and execute a pilot test of the firmware in the field.
- Once successful, plan on testing the new firmware in every standard field variation available for at least 3 runs before moving forward with 3.255.10.37 being the standard firmware for the Telemetry node.
- Update all shop notes to update all HVTX Telemetry nodes to the new firmware moving forward.