



Health & Safety ALERT

Alert Title:	BURST OF HYDROTEST HEADER DURING HYDROTEST AT ROW KM 54.5 ON 6 TH APRIL 2017
Alert Category(ies):	Lessons Learned – Hydro Tests – Pneumatic Tests
1.0	BACKGROUND
	<p>Pig Launcher (acting as hydrotest header) ruptured during hydrostatic pressure. The incident caused spillage of massive volume of hydrotest water to the environment.</p> <p>Potential Outcome:</p> <ul style="list-style-type: none"> • Fatality • Major injury/catastrophe/dangerous occurrence
2.0	SUMMARY OF FINDINGS & PICTURES
	<p>The hydro test header material was subjected to pressures exceeding the yield pressure designed for the material. This material, cut from the casing pipes, then ruptured causing the incident. The pressure at PS 2 increased beyond the one attained at PS 3 given the difference in elevations.</p> <p>Actual Outcome:</p> <ul style="list-style-type: none"> • Environmental pollution • Property damage
3.0	LESSONS LEARNED
	<ul style="list-style-type: none"> • Pressure gauge monitoring should be done at a distant during hydrotest. • No people should be at a radius of less than 50 metres during hydrotest. Such radius should be cordoned off. • The yield and failure strength of all materials under test should be determined before subjecting such materials to pressure test. • The low yield strength 24-inch diameter casing pipe should not have been used in fabricating any hydrotest component. • Inclusive consultation must be done during the onsite fabrication, change in design and the use of hydrotest components.
4.0	ACTIONS
	<ul style="list-style-type: none"> • Prohibiting the use of the low yield strength 24-inch casing pipe in fabricating hydrotest headers. • Replacing all hydrotest headers with correct ones fabricated from the high yield strength 20 inch mainline pipe. End caps to be used to reinforce their strength. • Pressure gauge monitoring during hydrotest to be done at a distant and taking the shortest time possible.
5.0	CONCLUSION
	<p>This notice is a safety warning to all potentially affected persons and should serve as a learning and turning point.</p>