

Expert Report Conclusion Section

Retained expert report, Rule 26(a)(2)(B) | Marked-up specimen

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A conclusions section rewritten to carry the cross-references, qualifiers and definitions already present earlier in the same report.

ORIGINAL, WITH EDITS MARKED

SPECIMEN, PREPARED BY EDITFAST FOR ILLUSTRATION. NOT A REAL RECORD.

Report of J. Halloran, P.E. - Meridian Forensic Group (fictitious)

EXTRACT FROM EARLIER SECTIONS (reproduced unchanged in both panels)

3.1 Fatigue morphology: beach marks and ratchet marks on a fracture surface.

4.2 Fracture surface at the bolt hole: beach marks and one ratchet mark observed.

4.5 Measured bolt torque as found: 31 foot-pounds.

5.1 Endurance limit used in analysis: 18 ksi.

5.3 Finite element model run at 55 foot-pounds: predicted stress range 14 ksi.

6.2 Installation instructions at Appendix C state a torque of 55 foot-pounds. They state no tightening sequence for the four bolts.

SECTION 7 - CONCLUSIONS

7.1 The bracket failed in fatigue.¹

7.2 The failure was caused by improper installation.²

7.3 Had the bracket been installed correctly, the incident would not have occurred.³

7.4 It is my opinion to a reasonable degree of engineering certainty that⁴ the manufacturer's instructions were inadequate.⁵

WHAT CHANGED, AND WHY

#	Was	Now	Reason
1	7.1 The bracket failed in fatigue.	7.1 The bracket failed in fatigue. Basis: the fracture surface observations at Section 4.2, read against the fatigue morphology at Section 3.1.	The opinion was already supported four pages earlier and the conclusions section did not say so. Two section numbers carried across from the extract save the reader from hunting for them.

#	Was	Now	Reason
2	7.2 The failure was caused by improper installation.	7.2 The failure was caused by improper installation. Basis: the as-found torque of 31 foot-pounds at Section 4.5, against the 55 foot-pounds specified in the instructions at Section 6.2.	A one-sentence conclusion with nothing on the page beneath it. The opinion is unchanged, word for word. The two figures are the two figures already recorded at Sections 4.5 and 6.2.
3	7.3 Had the bracket been installed correctly, the incident would not have occurred.	7.3 Had the bracket been installed correctly, the incident would not have occurred. Basis: the model at Section 5.3, run at 55 foot-pounds, predicts a stress range of 14 ksi against the endurance limit of 18 ksi at Section 5.1.	The opinion is unchanged. What was missing was the sentence saying which analysis it rests on, and both numbers appear in the extract.
4	It is my opinion to a reasonable degree of engineering certainty that	It is my opinion that	The certainty formula appears nowhere in Sections 3 through 6, and nothing in the report says what would make it true or false. Removing it leaves the opinion and drops a phrase the report does not support.
5	the manufacturer's instructions were inadequate.	the manufacturer's instructions were inadequate. Basis: Section 6.2, where the instructions state a torque but no tightening sequence for the four bolts. [Query to the author: inadequate is not defined anywhere in the report. Do you intend the opinion to be limited to the absence of a tightening sequence, or wider than that?]	Inadequate is undefined, and how wide the opinion runs is the engineer's judgment. The editor supplies the cross-reference the report already earned and raises the definition as a question.