

5.0 Discussion and Conclusions

The well cars which were both built after 1990 are modern designs meeting all current AAR structural requirements under loading conditions up to their load limit. This includes standard AAR load factors. In all cases, the loads induced by the ISO cryogenic container are significantly lower than the AAR requirements. This is due to the lower overall weight of the cryogenic container as well as the single-stack configuration. Therefore, the cars loaded with the cryogenic container will be subjected to 58% - 69% less stress at the container cones than what is induced by the live load in normal service.

The position of the single cryogenic container results in significant coverage of the container area by the car body structure. The car body is expected to provide significant resistance to objects which may potentially strike the tank of the cryogenic container.