

Report number: ML1034300	
Date: 2/12/2021	
 METALLURGICAL REPORT	<u>Distribution</u> 1] Phillip Grice
Subject: Camshaft fracture IO550N43B S/N: 1034300	

The fractured camshaft from the above serial engine (PN 654084 rev P, shop order 357472) was presented for analysis. The fracture occurred at one of the central oil grooves at the oil transfer hole. Figure 1 and 2 show the fatigue crack started at the surface and moved around the groove. Figures 3 and 4 show the edge where the fracture initiated. The edge of the hole was broken.

CONCLUSION:

- 1] The fracture initiated at the intersection of the oil groove outer diameter and the oil transfer hole.
- 2] The edge of the hole was broken.



Michael E. Bymes, PE

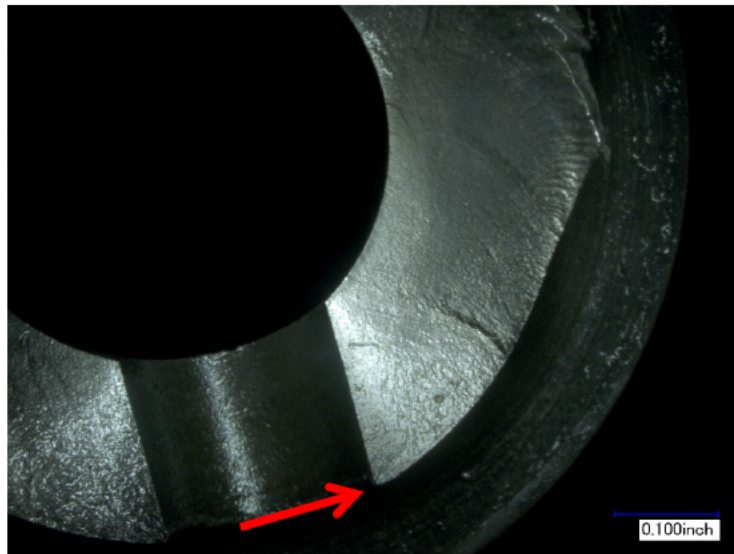


Figure 1 Fracture origin at edge of hole

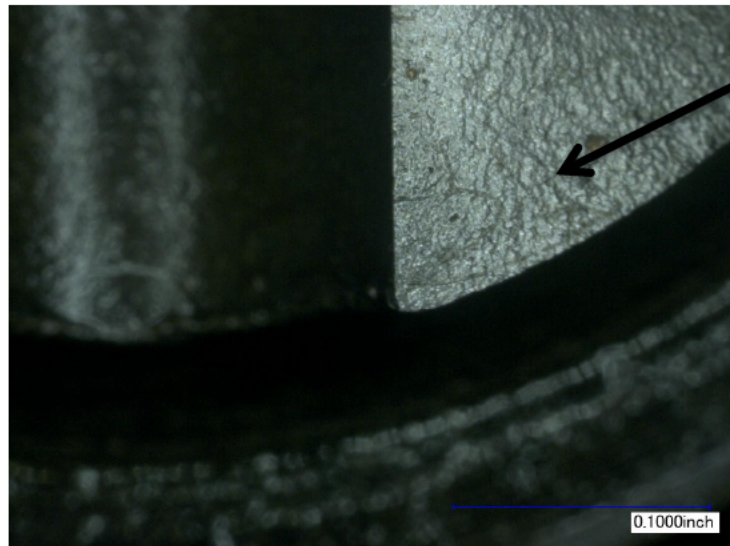


Figure 2 Beachmarks coming from origin of fracture

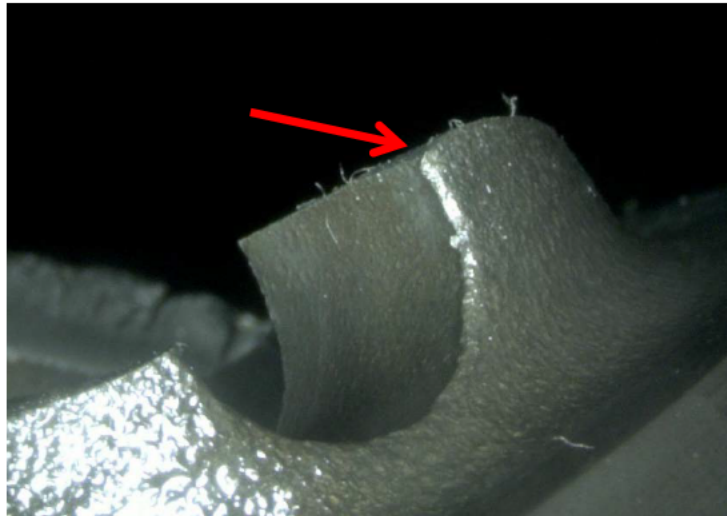


Figure 3 Side view of fracture origin

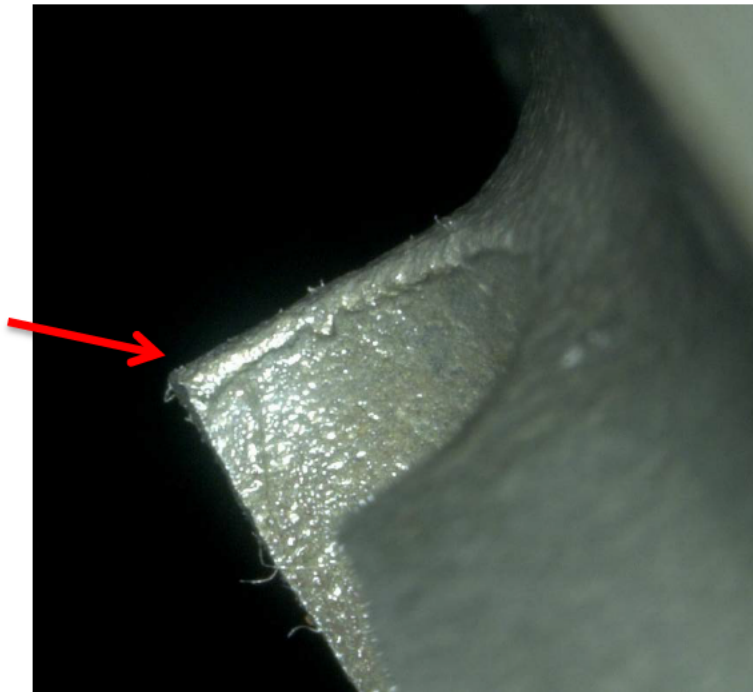


Figure 4 Edge of origin