

M&P LAB COMPONENT ANALYSIS

		Request #:		536	
Requester	Phillip Grice	Department:	Analytical	Date:	5/4/2015
Component Information:					
Component Part #:	655771	Part Name:	exhaust valve		
Component Serial #:	NA	Aircraft Registration #:	N180GK		
Engine Serial #:	049549	Hours in Service:	603		
☒ Photo Documentation ☐ Full Analysis (Destructive) ☐ Other:					
Engine Type:	0	-	470	-	K
Details:					
An exhaust valve and rotocoil from the above serialized engine was submitted for analysis under analytical exhibit 1240.					

Data Observations:

The valve fractured at the transition of the stem to the valve, and had post separation damage. Figures 1 and 2 show the fractured stem. The fracture started at the outer surface and grew in fatigue.

Conclusions:

1) The valve fractured in fatigue.

Investigator:	Mike Byrnes	Report Number:	
☒ Investigation Complete	Date:	5/4/2015	ML049549
☐ Technical Report Written		Keywords:	
Supervisor:			
☐ Project Complete	Date:		



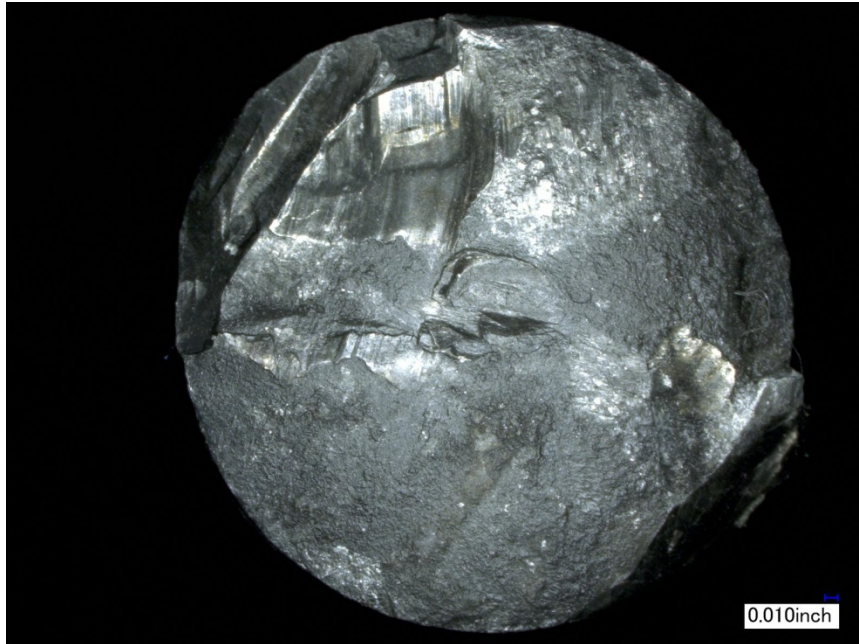


Figure 1. Valve stem fracture surface



Figure 2. Edge of fracture

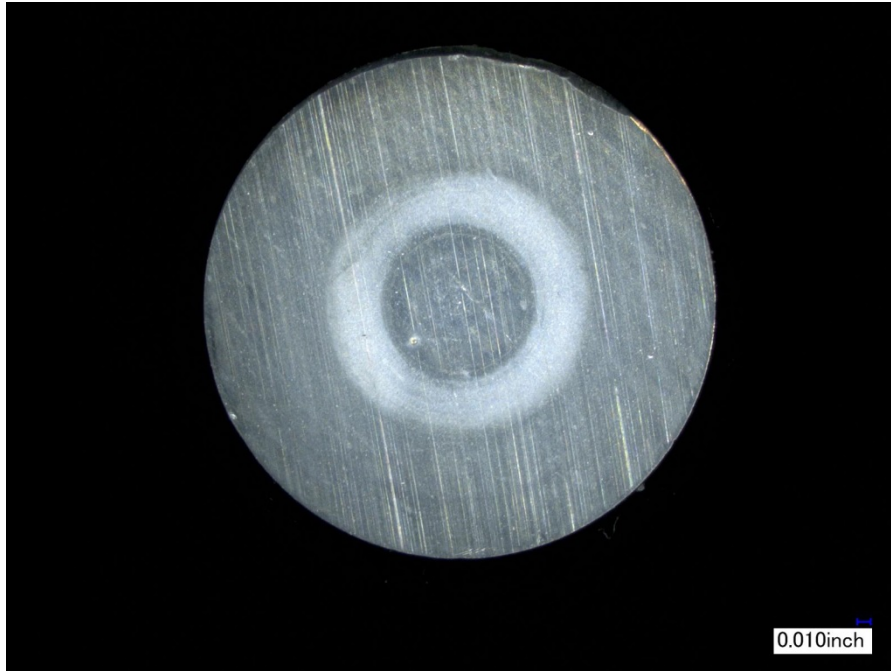


Figure 3. Valve stem tip.