



**OIL
FILTRATION
SYSTEMS®**

A CLARK-RELIANCE COMPANY

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VARNISH STATUS

Normal

Lube Type: ChevronTexaco GST 32	Received: 10/06/2017	Unit 1 Gas Turbine - Varnish
Machine MFG: General Electric	Report: 10/13/2017 2:21:00PM	Ken Kaihlanen
Machine MOD: Frame 7	Sample No: 2518-85-2001	Crockett Cogen
Machine Type: Industrial Turbine		

Observations/Recommendations

The current test results indicate a low level of degradation by-products associated with varnishing. Please continue routine sampling to monitor the trend in the level.

SAMPLE DATE	10/05/2017	12/13/2016	05/10/2016	
LABID	2060309	1840097	1695391	
ULTRA CENTRIFUGE TEST				
UC VALUE				
MEMBRANE PATCH COLORIMETRY				
COLOR VALUE	8	8	23	
PHYSICAL PROPERTIES				
ACID NUMBER mg KOH/g				
KARL FISCHER WATER ppm				
RULER TEST				
AMINE				
PHENOLIC				
ZDDP				

Case Study

OFS installed a 10 GPM Varnish Removal System on this 6,200 Gallon Turbine Lube Oil Reservoir, which was showing elevated levels of varnish contamination as measured by MPC.

After six months of continual recirculation using OFS "Granular Adsorbent Media" at operating temperature, varnish levels dropped from MPC 23 to MPC 8.

After continual recirculation for another 10 months, the varnish level was maintained at MPC 8.