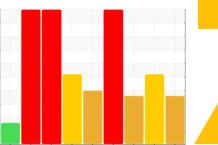


## **GREASE ANALYSIS**

Sample Rating Trend





Machine Id

# TURBINA 18 - FRONT BEARING (S/N 101292)

Grease

KLUBER KLUBERPLEX BEM 41-141 (--- LTR)

### **DIAGNOSIS**

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

All component wear rates appear stable.

#### **Grease Condition**

The condition of the grease is acceptable for the time in service.

#### Contaminants

There is no indication of any contamination in the grease.

SAMPLE INFORMATION method       limit/base       current       history1       history1         Sample Number       Client Info       WC0881119       WC0419932       WC05582         Sample Date       Client Info       03 May 2024       22 Aug 2023       24 Mar 20         Machine Age       yrs       Client Info       12       11       6         Grease Age       yrs       Client Info       N/A       N/A       N/A         Grease Serviced       Client Info       N/A       N/A       N/A       N/A         Sample Status       MARGINAL       ABNORMAL       ABNORMAL       ABNORMAL         CONTAMINATION       method       limit/base       current       history1       history1         Water       WC Method       >0.1       NEG       NEG       NEG         WEAR METALS       method       limit/base       current       history1       history1         PQ       ASTM D8184       >200       18688       18267       15915	2758 022 1AL
Sample Date         Client Info         03 May 2024         22 Aug 2023         24 Mar 20           Machine Age         yrs         Client Info         12         11         6           Grease Age         yrs         Client Info         1         1         0           Grease Serviced         Client Info         N/A         N/A         N/A           Sample Status         MARGINAL         ABNORMAL         ABNORMAL           CONTAMINATION         method         limit/base         current         history1         history1           Water         WC Method         >0.1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history1	)22 1AL
Machine Age         yrs         Client Info         12         11         6           Grease Age         yrs         Client Info         1         1         0           Grease Serviced         Client Info         N/A         N/A         N/A         N/A           Sample Status         MARGINAL         ABNORMAL         ABNORMAL         ABNORMAL         ABNORMAL           CONTAMINATION         method         limit/base         current         history1         history1           Water         WC Method         >0.1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history1         history1	1AL
Grease Age yrs Client Info 1 1 0 Grease Serviced Client Info N/A N/A N/A N/A Sample Status MARGINAL ABNORMAL ABNORM  CONTAMINATION method limit/base current history1 history Water WC Method >0.1 NEG NEG NEG WEAR METALS method limit/base current history1 history	
Grease Serviced Client Info N/A N/A N/A ABNORMAL Sample Status MARGINAL ABNORMAL ABNORMAL CONTAMINATION method limit/base current history1 history  Water WC Method >0.1 NEG NEG NEG WEAR METALS method limit/base current history1 history1 history1	
Sample Status  MARGINAL  ABNORMAL  ABNORMAL  CONTAMINATION  method limit/base current history1 history  Water  WC Method >0.1  NEG  NEG  NEG  WEAR METALS  method limit/base current history1 history	
CONTAMINATION     method     limit/base     current     history1     history1       Water     WC Method     >0.1     NEG     NEG     NEG       WEAR METALS     method     limit/base     current     history1     history1	
Water WC Method >0.1 NEG NEG NEG WEAR METALS method limit/base current history1 history	ry2
WEAR METALS method limit/base current history1 history	
•	
ACTM D0104 - 200	ry2
FQ A31W D0104 >200 A 10000 A 10207 A 15915	
<b>Iron</b> ppm ASTM D5185m >250 ▲ <b>8409</b> ▲ 8432 ▲ 7183	
Chromium         ppm         ASTM D5185m         >10         ▲ 193         ▲ 177         ▲ 94	
Nickel         ppm         ASTM D5185m         >5         0         0         0	
Cadmium         ppm         ASTM D5185m         0         0         0	
Titanium         ppm         ASTM D5185m         2         2         2	
VanadiumppmASTM D5185m21<1	
<b>Lead</b> ppm ASTM D5185m >25 <b>0</b> 0	
Copper         ppm         ASTM D5185m         >75         24         23         18	
Tin         ppm         ASTM D5185m         >5         0         0         0	
Silver         ppm         ASTM D5185m         >5         0         0         0	
ADDITIVES method limit/base current history1 history	ry2
Boron         ppm         ASTM D5185m         193         206         188	
Magnesium         ppm         ASTM D5185m         <1	
Manganese         ppm         ASTM D5185m         44         42         38	
Molybdenum         ppm         ASTM D5185m         3401         3027         2169	
Phosphorus         ppm         ASTM D5185m         594         530         365	
Zinc         ppm         ASTM D5185m         284         187         131	
Antimony ppm ASTM D5185m	
THICKENER/SOAP method limit/base current history1 history	ry2
Aluminum         ppm         ASTM D5185m         0         0         8	
Barium         ppm         ASTM D5185m         0         0         0	
Calcium         ppm         ASTM D5185m         117         116         139	
Calcium         ppm         ASTM D5185m         117         116         139           Sodium         ppm         ASTM D5185m         25         22         18	
Calcium         ppm         ASTM D5185m         117         116         139           Sodium         ppm         ASTM D5185m         25         22         18           Lithium         ppm         ASTM D5185m         2784         2636         2023	
Calcium         ppm         ASTM D5185m         117         116         139           Sodium         ppm         ASTM D5185m         25         22         18	
Calcium         ppm         ASTM D5185m         117         116         139           Sodium         ppm         ASTM D5185m         25         22         18           Lithium         ppm         ASTM D5185m         2784         2636         2023	<mark>y2</mark>
Calcium         ppm         ASTM D5185m         117         116         139           Sodium         ppm         ASTM D5185m         25         22         18           Lithium         ppm         ASTM D5185m         2784         2636         2023           Sulfur         ppm         ASTM D5185m         5603         6091         5546	ry2
Calcium         ppm         ASTM D5185m         117         116         139           Sodium         ppm         ASTM D5185m         25         22         18           Lithium         ppm         ASTM D5185m         2784         2636         2023           Sulfur         ppm         ASTM D5185m         5603         6091         5546           CONTAMINANTS         method         limit/base         current         history1         history1	ry2
Calcium         ppm         ASTM D5185m         117         116         139           Sodium         ppm         ASTM D5185m         25         22         18           Lithium         ppm         ASTM D5185m         2784         2636         2023           Sulfur         ppm         ASTM D5185m         5603         6091         5546           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >150         319         494         143	
Calcium         ppm         ASTM D5185m         117         116         139           Sodium         ppm         ASTM D5185m         25         22         18           Lithium         ppm         ASTM D5185m         2784         2636         2023           Sulfur         ppm         ASTM D5185m         5603         6091         5546           CONTAMINANTS         method         limit/base         current         history1         history1         history           Silicon         ppm         ASTM D5185m         >150         319         ▲ 494         143           Potassium         ppm         ASTM D5185m         6         4         2	
Calcium         ppm         ASTM D5185m         117         116         139           Sodium         ppm         ASTM D5185m         25         22         18           Lithium         ppm         ASTM D5185m         2784         2636         2023           Sulfur         ppm         ASTM D5185m         5603         6091         5546           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >150         319         ▲ 494         143           Potassium         ppm         ASTM D5185m         6         4         2           GREASE CONDITION         method         limit/base         current         history1         history1	



## **GREASE ANALYSIS**







Certificate 12367

Laboratory Sample No.

: WC0881119

Lab Number : 06194932 Unique Number : 11057055

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

: 29 May 2024 **Tested** : 13 Jun 2024 Diagnosed

**EOLO DE NICARAGUA S.A.** DEL SEMAFORO DEL CLUB TERRAZA, 1 CUADRA AL SUR MANAGUA, ZZ

: 13 Jun 2024 - Doug Bogart Test Package : GRS 1 ( Additional Tests: KV40, SCREEN )

Contact: Rafael Bermudez

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: Rafael Bermudez - EOLOMAN

NI

T:

F: