

## **OIL ANALYSIS REPORT**

Sample Rating Trend



#### Machine Id C2 (S/N 10241F76483585) Component

### **Refrigeration Compressor**

FRICK COMPRESSOR OIL #3 (36 GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

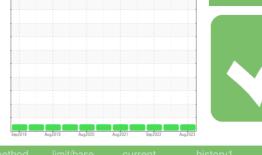
All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



Sample Number Client Info USP0000539 USP246239 USP2	
Sample Date         Client Info         20 Aug 2023         20 Feb 2023         04 Set	history2
	241634
Machine Age hrs Client Info <b>0</b> 0	ep 2022
, ,	
Oil Age         hrs         Client Info         0         0         0	
Oil Changed Client Info N/A N/A N/A	
Sample Status NORMAL NORMAL NOR	RMAL
WEAR METALS method limit/base current history1 h	history2
Iron ppm ASTM D5185m >8 2 1 2	
Chromium         ppm         ASTM D5185m         >2         0         0         0	
Nickel         ppm         ASTM D5185m         0         0         0	
Titanium         ppm         ASTM D5185m         <1	
Silver ppm ASTM D5185m >2 0 0	-
Aluminum         ppm         ASTM D5185m         >3         0         0         0	
Lead ppm ASTM D5185m >2 <b>0</b> 0 0	
Copper         ppm         ASTM D5185m         >8         0         0         0	
Tin         ppm         ASTM D5185m         >4         0         0         0	
Antimony         ppm         ASTM D5185m	-
Vanadium         ppm         ASTM D5185m         <1	
Cadmium         ppm         ASTM D5185m         0         0         0	
ADDITIVES method limit/base current history1 h	history2
Boron         ppm         ASTM D5185m         0         0         0	
Barium         ppm         ASTM D5185m         0         2         1	
Molybdenum         ppm         ASTM D5185m         0	
MorybackingppmASTM DS185m000ManganeseppmASTM D5185m000	
	1
Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1	1
Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1	
Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1	1
Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1	1
Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0         <1           Phosphorus         ppm         ASTM D5185m         0         0         0         <1           Zinc         ppm         ASTM D5185m         0         0         <1           Sulfur         ppm         ASTM D5185m         0         0         <1	1
Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         <1           Phosphorus         ppm         ASTM D5185m         0         0         <1           Zinc         ppm         ASTM D5185m         0         0         <1           Sulfur         ppm         ASTM D5185m         0         0         <1	1 1 1
Maganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         0         0         <1           Zinc         ppm         ASTM D5185m         0         0         <1           Sulfur         ppm         ASTM D5185m         26         11         21           CONTAMINANTS         method         limit/base         current         history1         H	1 1 1 history2
Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0         <1	1 1 1 history2
Marganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         <1	1 1 1 history2
Marganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0         <1	1 1 1 history2 1
Marganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         <1	1 1 1 history2 1 1 00
Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0         <1	1 1 history2 1 1 00 00
Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0         <1	1 1 1 history2 1 1 00 00 history2 265
Marganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0         <1	1 1 1 history2 1 1 00 00 history2 265
Maganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0         0           Phosphorus         ppm         ASTM D5185m         0         0         0         <1           Zinc         ppm         ASTM D5185m         0         0         <1         21           Sulfur         ppm         ASTM D5185m         0         0         <1         21           CONTAMINANTS         method         limit/base         current         history1         H           Silicon         ppm         ASTM D5185m         >15         <1         <1         1           Sodium         ppm         ASTM D5185m         >20         0         <1         0         <1           Potassium         ppm         ASTM D6304         >0.01         0.001         0.001         0.01         0.01         0.01           ppm Water         ppm         ASTM D6304         >100         10.8         14.6         0.01           ppm Water         ppm         ASTM D7647         10000<	1 1 1 history2 1 1 00 00 history2 265
Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0         0           Phosphorus         ppm         ASTM D5185m         0         0         0         <1           Zinc         ppm         ASTM D5185m         0         0         <1         21           Sulfur         ppm         ASTM D5185m         26         11         21           CONTAMINANTS         method         limit/base         current         history1         H           Silicon         ppm         ASTM D5185m         >15         <1         <1         1           Sodium         ppm         ASTM D5185m         >20         0         <1         0         <1           Potassium         ppm         ASTM D6304         >0.01         0.001         0.001         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01	1 1 1 history2 1 1 00 00 history2 265
Maganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0         0           Phosphorus         ppm         ASTM D5185m         0         0         0         <1           Zinc         ppm         ASTM D5185m         0         0         <1         21           Sulfur         ppm         ASTM D5185m         0         0         <1         21           CONTAMINANTS         method         limit/base         current         history1         H           Silicon         ppm         ASTM D5185m         >15         <1         <1         1           Sodium         ppm         ASTM D5185m         >20         0         0         <1           Vater         %         ASTM D6304         >0.01         0.001         0.001         0.01           ppm Water         ppm         ASTM D7647         >1000         10.8         14.6         0.01           Particles >4µm         ASTM D7647         >10000         365         916         12	1 1 1 history2 1 1 00 00 history2 265

FLUID DEGRADATION
Acid Number (AN) mg KOH/g

mg KOH/g ASTM D974

**0.015** 0.014 0.013

Report Id: DOTBUL [WUSCAR] 05929644 (Generated: 08/22/2023 16:10:49) Rev: 1

Contact/Location: Service Manager - DOTBUL



# **OIL ANALYSIS REPORT**

scalar

scalar

scalar

scalar

scalar

scalar

scalar

scalar

cSt

\*Visual

\*Visual

\*Visual

\*Visual

\*Visual

\*Visual

\*Visual

\*Visual

ASTM D445

scalar \*Visual

scalar \*Visual

NONE

NONE

NONE

NONE

NONE

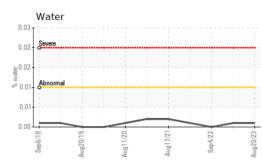
NONE

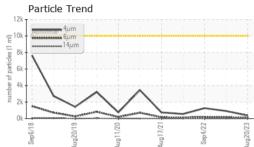
NORML

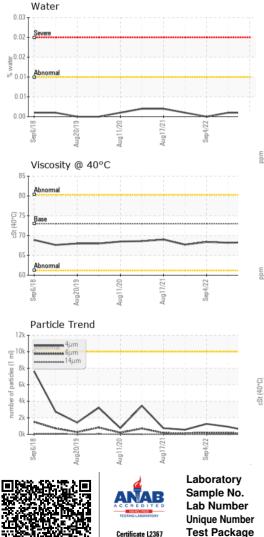
NORML

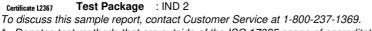
>0.01

73









\* - 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)

Report Id: DOTBUL [WUSCAR] 05929644 (Generated: 08/22/2023 16:10:49) Rev: 1

Bottom

Color

White Metal

Yellow Metal

Precipitate

Silt

Debris

Odor

Sand/Dirt

Appearance

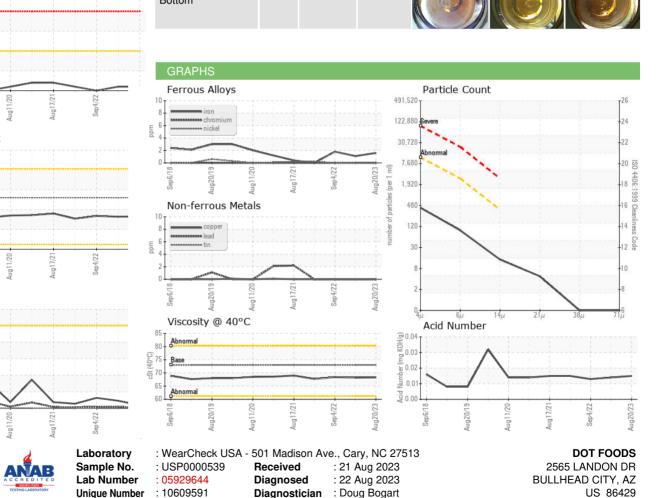
Free Water

Visc @ 40°C

**Emulsified Water** 

FLUID PROPERTIES

SAMPLE IMAGES





NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

68.2

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

68.4

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

68.3

T: F: