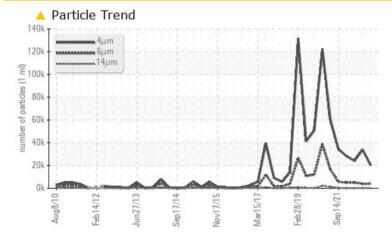


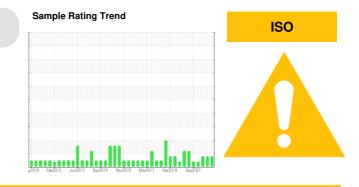
# **PROBLEM SUMMARY**

# FRICK C-10

Refrigeration Compressor Fluid USPI 1009-68 SC (--- LTR)

# COMPONENT CONDITION SUMMARY





# RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST R	ESULTS				
Sample Status			ATTENTION	ATTENTION	ATTENTION
Particles >6µm	ASTM D7647	>2500	<u> </u>	<b>A</b> 3836	<b>4</b> 973
Oil Cleanliness	ISO 4406 (c)	>/18/15	<b>A</b> 22/19/14	🔺 22/19/14	🔺 22/19/14

Customer Id: CARFRI Sample No.: USP0000434 Lab Number: 05936152 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

*To change component or sample information:* Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>

## **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

## HISTORICAL DIAGNOSIS

## 22 Mar 2023 Diag: Doug Bogart

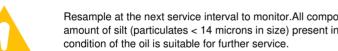


Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

#### 12 Sep 2022 Diag: Doug Bogart

Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

23 Feb 2022 Diag: Doug Bogart



Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The



view report







# **OIL ANALYSIS REPORT**

Sample Rating Trend

# ISO

# Machine Id FRICK C-10 Component

**Refrigeration Compressor** Fluid USPI 1009-68 SC (--- LTR)

# DIAGNOSIS

## A Recommendation

Resample at the next service interval to monitor.

## Wear

All component wear rates are normal.

## Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

# Fluid Condition

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



		g2010 Feb20	12 Jun2013 Sep2014	Nov2015 Mar2017 Feb2019	Sep2021	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0000434	USP05799720	USP240970
Sample Date		Client Info		27 Aug 2023	22 Mar 2023	12 Sep 2022
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ATTENTION	ATTENTION
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	<1	1	<1
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>3	0	<1	<1
Lead	ppm	ASTM D5185m	>2	0	0	0
Copper	ppm	ASTM D5185m	>8	0	0	0
Tin	ppm	ASTM D5185m	>4	0	0	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		<1	0	0
Calcium	ppm	ASTM D5185m		<1	0	0
Phosphorus	ppm	ASTM D5185m		<1	0	1
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m	50	0	0	0
CONTAMINANTS	\$	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	0	<1	<1
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water	%	ASTM D6304	>0.01	0.005	0.003	0.003
ppm Water	ppm	ASTM D6304	>100	57.1	34.8	34.6
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		20293	33816	24050
Particles >6µm		ASTM D7647	>2500	<b>4021</b>	▲ 3836	<b>4</b> 973
Particles >14μm		ASTM D7647	>320	125	81	149
Particles >21µm		ASTM D7647	>80	23	19	22
Particles >38µm		ASTM D7647	>20	0	0	0
Particles >71µm		ASTM D7647		0	0	0
Oil Cleanliness		ISO 4406 (c)	>/18/15	<b>A</b> 22/19/14	▲ 22/19/14	▲ 22/19/14
		1				

FLUID DEGRADATION Acid Number (AN)

mg KOH/g ASTM D974 0.005

method

history1 0.015 0.014

Report Id: CARFRI [WUSCAR] 05936152 (Generated: 08/29/2023 08:55:50) Rev: 1

0.015

current

limit/base

Contact/Location: MARK NEILL - CARFRI

history2



Acid Number

0.30

(B/HO)

# **OIL ANALYSIS REPORT**

scalar

scalar

scalar

scalar

scalar

scalar

scalar

VISUAL

White Metal

Yellow Metal

Precipitate

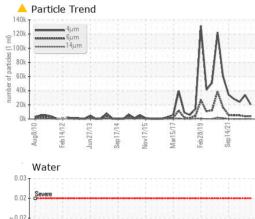
Silt

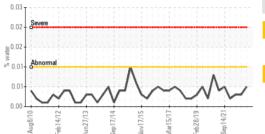
Debris

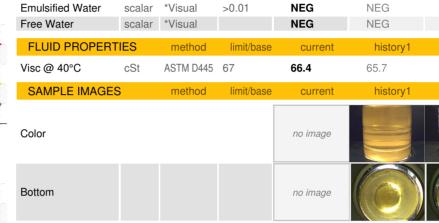
Odor

Sand/Dirt

Appearance







method

\*Visual

\*Visual

\*Visual

\*Visual

\*Visual

\*Visua

\*Visual

scalar \*Visual

limit/base

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

current

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

history1

NONE

NONE

NONE

NONE

LIGHT

NONE

NORML

NORML

history2

VLITE

NONE

NONE

NONE

LIGHT

NONE

NORML

NORML

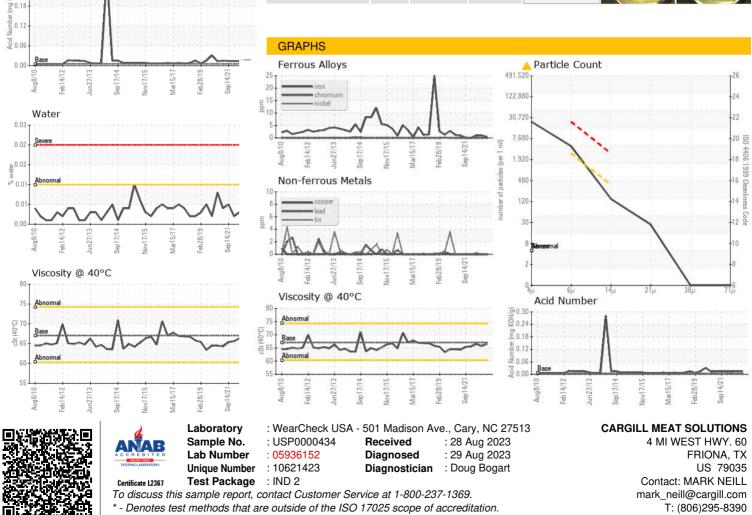
history2

history2

NEG

NEG

66.4



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: MARK NEILL - CARFRI

F: (806)295-8376