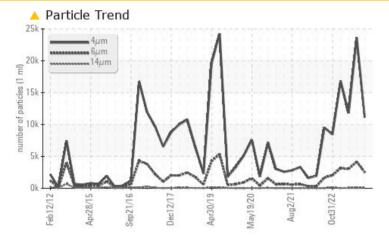


PROBLEM SUMMARY

FRICK C 12 (S/N F0160WFMNTHAA03)

Refrigeration Compressor Fluid USPI ALT-68 SC (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS								
Sample Status			ATTENTION	ATTENTION	ATTENTION			
Particles >6µm	ASTM D7647	>2500	🔺 2537	4 157	a 3043			
Oil Cleanliness	ISO 4406 (c)	>/18/15	A 21/19/13	🔺 22/19/13	🔺 21/19/13			

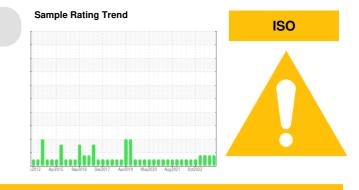
Customer Id: TYSFORMS Sample No.: USP0001872 Lab Number: 05961806 Test Package: IND 2



To manage this report scan the QR code

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

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



RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

16 Jul 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.

13 Apr 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.

06 Feb 2023 Diag: Doug Bogart



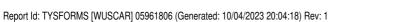
Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

view report







OIL ANALYSIS REPORT

FRICK C 12 (S/N F0160WFMNTHAA03)

Refrigeration Compressor

USPI ALT-68 SC (--- GAL)

DIAGNOSIS

A Recommendation

Resample at the next service interval to monitor.

Wear

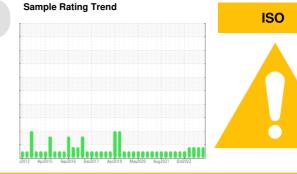
All component wear rates are normal.

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.



SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0001872	USP243718	USP248755
Sample Date		Client Info		26 Sep 2023	16 Jul 2023	13 Apr 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	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	0	<1	0
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>3	0	0	<1
Lead	ppm	ASTM D5185m	>2	0	0	0
Copper	ppm	ASTM D5185m		<1	0	0
Tin	ppm	ASTM D5185m	>4	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		1	0	<1
Calcium	ppm	ASTM D5185m		<1	1	0
Phosphorus	ppm	ASTM D5185m		0	1	0
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m	50	21	27	0
CONTAMINANTS	5	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	1	2	<1
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	2	0	0
Water	%	ASTM D6304	>0.01	0.001	0.002	0.003
ppm Water	ppm	ASTM D6304	>100	5.8	20.5	33.8
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		11117	23608	11803
Particles >6µm		ASTM D7647	>2500	<u> </u>	4157	A 3043
Particles >14µm		ASTM D7647	>320	71	63	65
Particles >21µm		ASTM D7647	>80	13	9	7
Particles >38µm		ASTM D7647	>20	3	0	1
Particles >71µm		ASTM D7647	>4	2	0	0
Oil Cleanliness		ISO 4406 (c)	>/18/15	A 21/19/13	2 2/19/13	▲ 21/19/13
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.015	0.015

Contact/Location: SERVICE MANAGER - TYSFORMS



Acid Number

0.04

0.04 (B/HO) 4 Bu,03 0.02 5 0.02 Point 0.01

0.0

0.00

250

20

E 150

100

Feb12/1

7

cSt (40°C)

60

At

nr28/

Water

Feb12/1 upr28/

OIL ANALYSIS REPORT

scalar

scalar

scalar

scalar

scalar

scalar

scalar

scalar

cSt

method

*Visual

*Visual

*Visua

*Visual

*Visual

*Visual

*Visual

*Visual

method

ASTM D445

method

scalar *Visual

scalar *Visual

limit/base

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

limit/base

>0.01

65.6

current

NONE

NONE

NONE

NONE

LIGHT

NONE

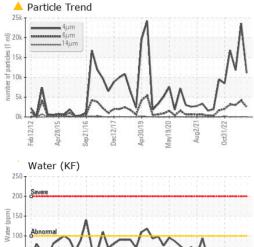
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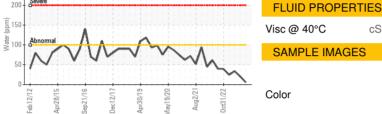
NORML

curren

NEG

NEG







VISUAL

White Metal

Yellow Metal

Precipitate

Silt

Debris

Odor

Sand/Dirt

Appearance

Free Water

Emulsified Water



history1

NONE

NONE

NONE

LIGHT

NONE

NONE

NORML

NORML

history

NFG

NEG

history2

NONE

NONE

NONE

NONE NONE

NONE

NORML

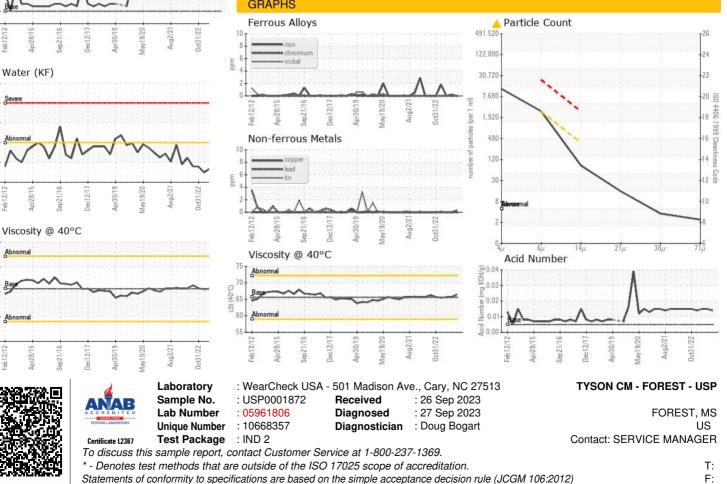
NORML

history2

NEG

NEG





Contact/Location: SERVICE MANAGER - TYSFORMS