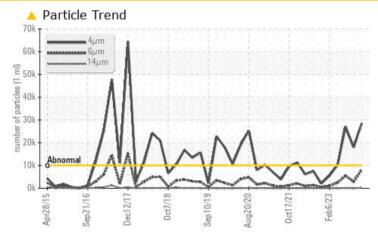


# **PROBLEM SUMMARY**

# FRICK C 14 (S/N F0127WFMNTHAA03)

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			ABNORMAL	ATTENTION	ABNORMAL				
Particles >4µm	ASTM D7647	>10000	<u> </u>	<b>1</b> 7973	<b>27048</b>				
Particles >6µm	ASTM D7647	>2500	<u> </u>	<u> </u>	<b>5</b> 541				
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<u> </u>	<b>A</b> 21/19/12	▲ 22/20/14				

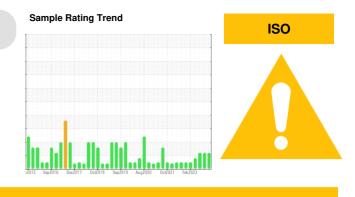
Customer Id: TYSFORMS Sample No.: USP0004251 Lab Number: 06029431 Test Package: IND 2



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 <u>customerservice@wearcheck.com</u>



### **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

#### **HISTORICAL DIAGNOSIS**

## 26 Sep 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.

#### 16 Jul 2023 Diag: Doug Bogart



Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. There is a trace of moisture 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.



view report







# Report Id: TYSFORMS [WUSCAR] 06029431 (Generated: 12/12/2023 01:17:49) Rev: 1



# **OIL ANALYSIS REPORT**

# FRICK C 14 (S/N F0127WFMNTHAA03)

Refrigeration Compressor

USPI ALT-68 SC (--- GAL)

## DIAGNOSIS

### A Recommendation

Resample at the next service interval to monitor.

#### Wear

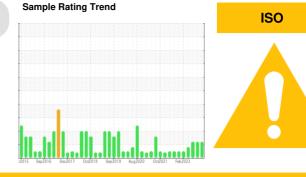
All component wear rates are normal.

### Contamination

There is a high 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.

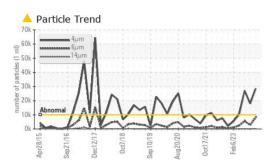


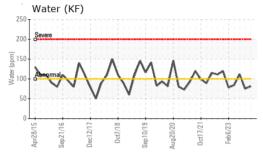
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0004251	USP0001863	USP243720
Sample Date		Client Info		07 Dec 2023	26 Sep 2023	16 Jul 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ATTENTION	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	0	0
Chromium	ppm	ASTM D5185m	>2	<1	0	0
Nickel	ppm	ASTM D5185m	~ _	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum		ASTM D5185m	>3	<1	0	0
Lead	ppm	ASTM D5185m	>2	0	0	0
	ppm		>2	0	<1	<1
Copper	ppm	ASTM D5185m		-		
Tin	ppm	ASTM D5185m	>4	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	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		0	<1	0
Magnesium	ppm	ASTM D5185m		0	<1	0
Calcium	ppm	ASTM D5185m		<1	<1	<1
Phosphorus	ppm	ASTM D5185m		0	0	1
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m	50	6	51	57
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	<1	0
Sodium	ppm	ASTM D5185m		<1	<1	0
Potassium	ppm	ASTM D5185m	>20	<1	1	<1
Water	%	ASTM D6304	>0.01	0.008	0.007	0.011
ppm Water	ppm	ASTM D6304	>100	81	75.4	112.1
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>A</b> 28498	<b>1</b> 7973	<b>2</b> 7048
Particles >6µm		ASTM D7647	>2500	<u> </u>	<u> </u>	<b>5</b> 541
Particles >14µm		ASTM D7647	>320	191	28	133
Particles >21µm		ASTM D7647	>80	19	6	23
Particles >38µm		ASTM D7647	>20	1	3	1
Particles >71µm		ASTM D7647	>4	0	1	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>A</b> 22/20/15	▲ 21/19/12	▲ 22/20/14
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.014	0.014

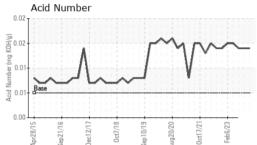


# **OIL ANALYSIS REPORT**

method







Water (KF)

lar12/

Viscosity @ 40°C

250

20

ud 15

10

5

7

cSt (40°C)

60 - Ab

nr28/

Water

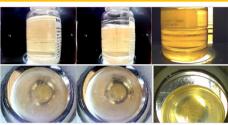


limit/base

current

Color

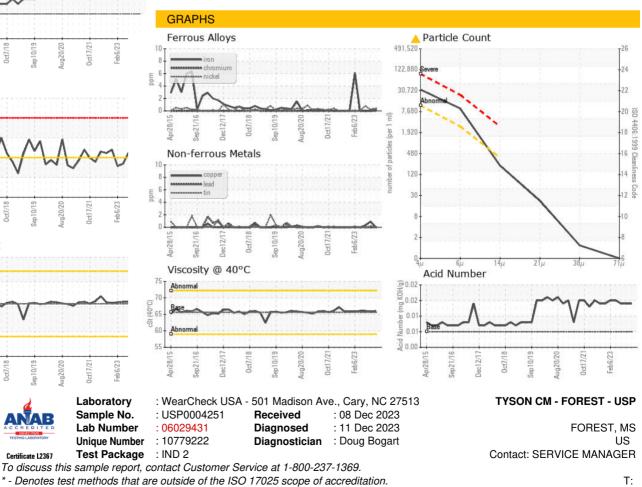
VISUAL



history1

history2

Bottom



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

Contact/Location: SERVICE MANAGER - TYSFORMS

F: