

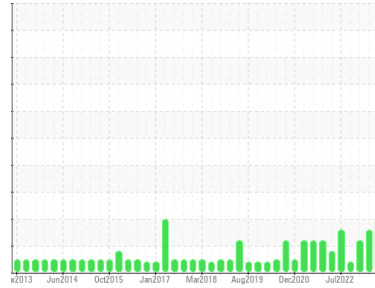


# PROBLEM SUMMARY

Sample Rating Trend

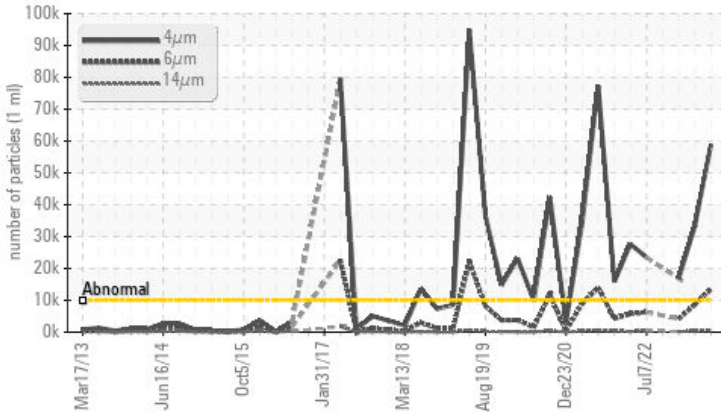
ISO

Area  
**FREEZER**  
 Machine Id  
**FRICK TYSAMAF 2 FR (S/N S-0008)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI 1009-68 SC (--- GAL)**



## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ABNORMAL	ATTENTION
Particles >4µm	ASTM D7647	>10000	▲ <b>58949</b>	▲ 33354	▲ 16829
Particles >6µm	ASTM D7647	>2500	▲ <b>13455</b>	▲ 8700	▲ 4209
Particles >14µm	ASTM D7647	>320	▲ <b>488</b>	▲ 345	166
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ <b>23/21/16</b>	▲ 22/20/16	▲ 21/19/15
Debris	scalar	*Visual	▲ <b>MODER</b>	LIGHT	LIGHT

Customer Id: TYSAMA  
 Sample No.: USP0000632  
 Lab Number: 05925476  
 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](mailto:dougb@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

### 15 May 2023 Diag: Doug Bogart

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 26 Jan 2023 Diag: Doug Bogart

ISO



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



### 02 Oct 2022 Diag: Doug Bogart

VIS DEBRIS



We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

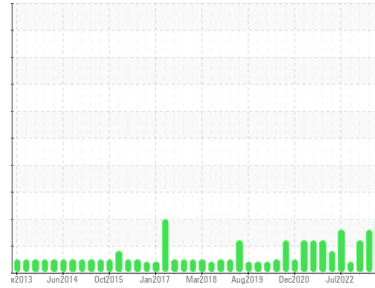
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**FREEZER**  
Machine Id  
**FRICK TYSAMAF 2 FR (S/N S-0008)**  
Component  
**Refrigeration Compressor**  
Fluid  
**USPI 1009-68 SC (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates 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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>USP0000632</b>	USP248057	USP245102
Sample Date	Client Info		<b>15 Aug 2023</b>	15 May 2023	26 Jan 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ATTENTION

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >3	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >8	<b>0</b>	0	0
Tin	ppm	ASTM D5185m >4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	1	0
Calcium	ppm	ASTM D5185m	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Zinc	ppm	ASTM D5185m	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m 50	<b>28</b>	19	1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	0
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	<1
Water	%	ASTM D6304 >0.01	<b>0.006</b>	0.003	0.002
ppm Water	ppm	ASTM D6304 >100	<b>66.6</b>	25.4	19.0

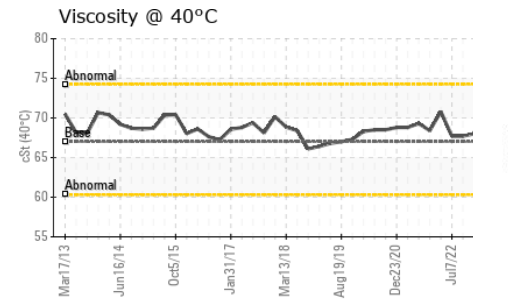
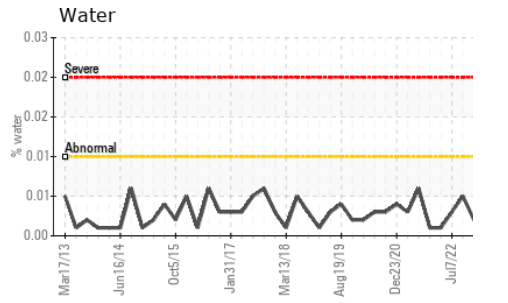
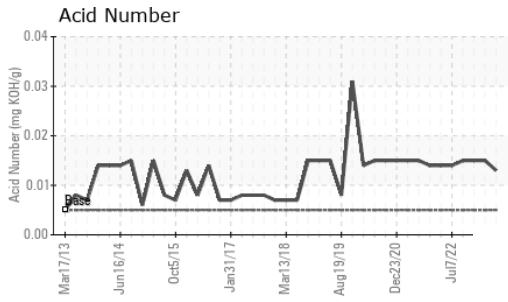
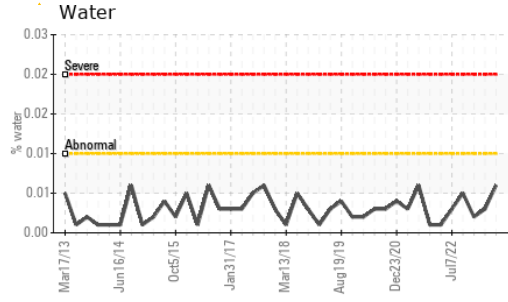
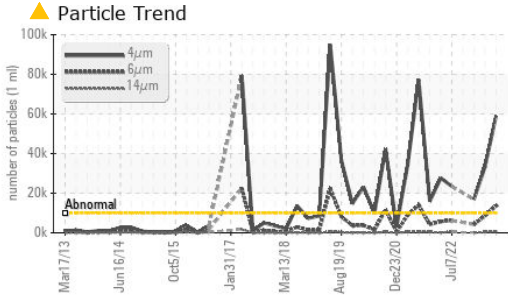
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>▲ 58949</b>	▲ 33354	▲ 16829
Particles >6µm	ASTM D7647	>2500	<b>▲ 13455</b>	▲ 8700	▲ 4209
Particles >14µm	ASTM D7647	>320	<b>▲ 488</b>	▲ 345	166
Particles >21µm	ASTM D7647	>80	<b>79</b>	53	22
Particles >38µm	ASTM D7647	>20	<b>1</b>	0	1
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>▲ 23/21/16</b>	▲ 22/20/16	▲ 21/19/15

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.005	<b>0.013</b>	0.015	0.015

# OIL ANALYSIS REPORT



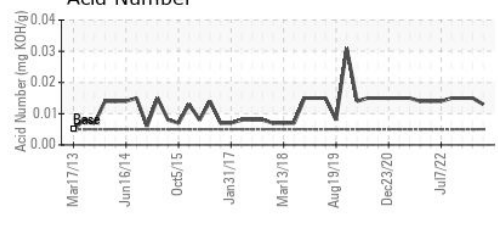
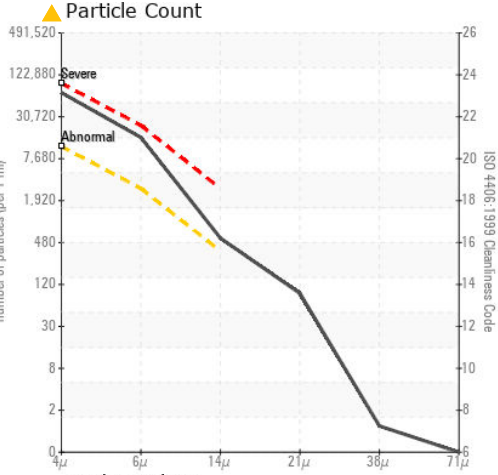
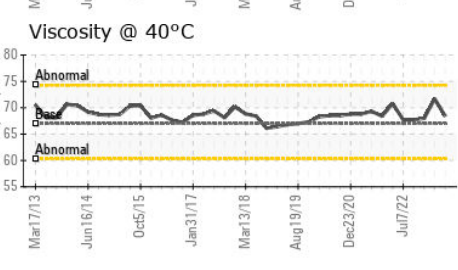
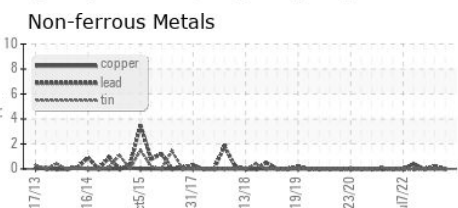
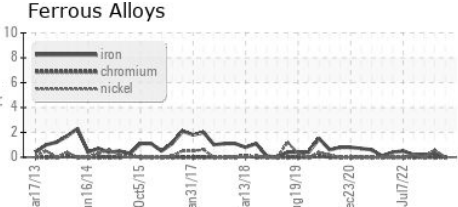
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ MODER	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 67	68.4	71.7	68.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0000632 **Received** : 15 Aug 2023  
**Lab Number** : 05925476 **Diagnosed** : 16 Aug 2023  
**Unique Number** : 10605423 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**TYSON -AMARILLO-USP**  
 AMARILLO, TX  
 US  
 Contact: RANDY INGRAM

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)

T: (806)355-7732  
 F: (806)352-6946