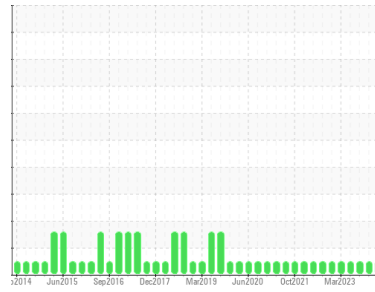




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**FRICK TYSCUM2-1 FRK (S/N TDSH233XL0124FL)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI ALT-68 SC (--- QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a trace of moisture present 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 INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>USP0012412</b>	USP0006902	USP0002740
Sample Date	Client Info	<b>09 Jun 2024</b>	15 Feb 2024	23 Oct 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>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >8	<b>5</b>	4	4
Chromium	ppm ASTM D5185m >2	<b>0</b>	0	0
Nickel	ppm ASTM D5185m	<b>0</b>	<1	<1
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>0</b>	0	0
Lead	ppm ASTM D5185m >2	<b>0</b>	<1	0
Copper	ppm ASTM D5185m >8	<b>0</b>	<1	0
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	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>&lt;1</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>0</b>	0	0
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm ASTM D5185m	<b>0</b>	<1	0
Calcium	ppm ASTM D5185m	<b>1</b>	1	2
Phosphorus	ppm ASTM D5185m	<b>1</b>	0	<1
Zinc	ppm ASTM D5185m	<b>0</b>	0	0
Sulfur	ppm ASTM D5185m 50	<b>48</b>	57	73

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Sodium	ppm ASTM D5185m	<b>1</b>	<1	0
Potassium	ppm ASTM D5185m >20	<b>2</b>	<1	<1
Water	% ASTM D6304 >0.01	<b>0.011</b>	0.009	0.009
ppm Water	ppm ASTM D6304 >100	<b>119</b>	97	93.7

## FLUID CLEANLINESS

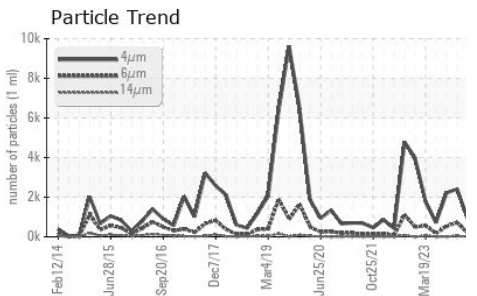
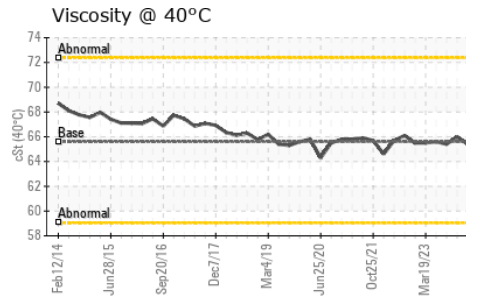
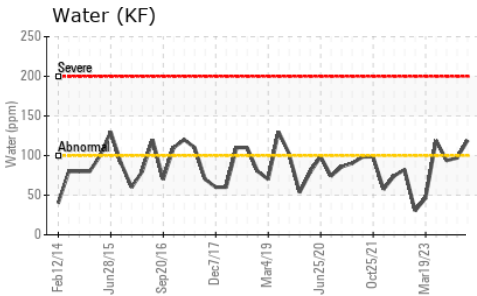
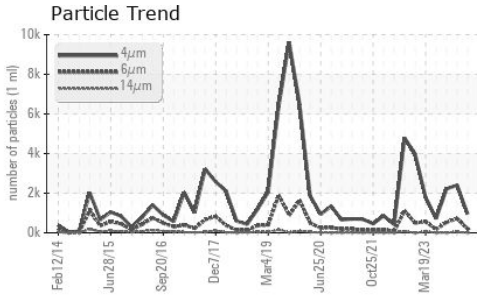
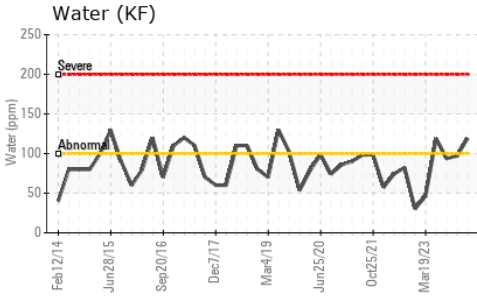
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>945</b>	2402	2223
Particles >6µm	ASTM D7647 >2500	<b>200</b>	721	531
Particles >14µm	ASTM D7647 >320	<b>11</b>	38	14
Particles >21µm	ASTM D7647 >80	<b>3</b>	7	3
Particles >38µm	ASTM D7647 >20	<b>1</b>	0	0
Particles >71µm	ASTM D7647 >4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/18/15	<b>17/15/11</b>	18/17/12	18/16/11

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974 0.005	<b>0.014</b>	0.014	0.015



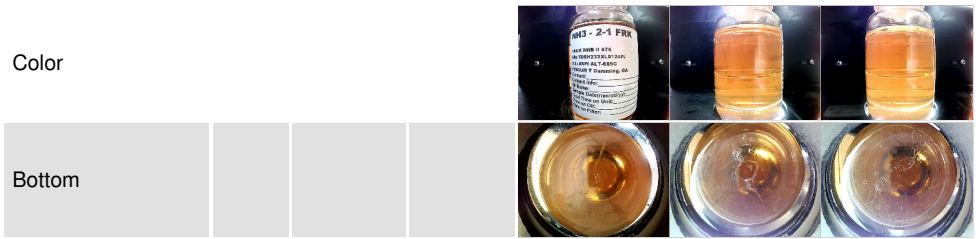
# OIL ANALYSIS REPORT



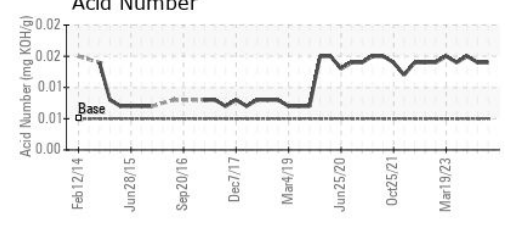
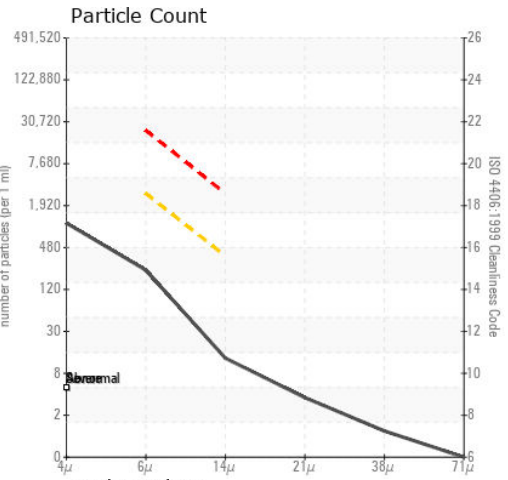
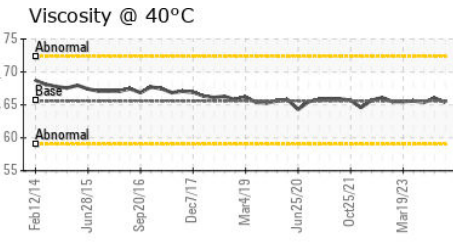
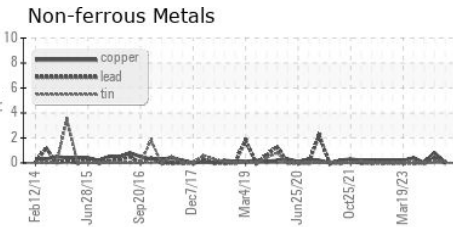
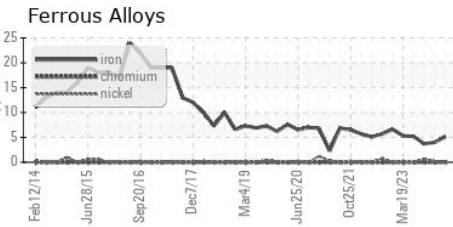
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	65.6	65.4	66.0

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0012412 **Received** : 10 Jun 2024  
**Lab Number** : 06205531 **Tested** : 13 Jun 2024  
**Unique Number** : 11072992 **Diagnosed** : 13 Jun 2024 - Doug Bogart  
**Test Package** : IND 2

**TYSON - CUMMING- USP**  
 CUMMING, GA  
 US 30130  
 Contact: BRENT SMITH

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)

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