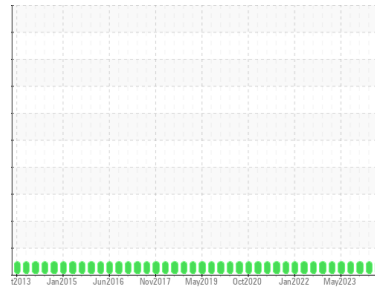




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**FES TYSOLA B-1 (S/N 003-124399)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI 1009-68 SC (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination 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>USP0012680</b>	USP0007562	USP0003830	
Sample Date	Client Info	<b>24 May 2024</b>	22 Feb 2024	18 Nov 2023	
Machine Age	hrs	Client Info	<b>160551</b>	158371	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>1</b>	0	1
Chromium	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m >2	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m >8	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Calcium	ppm	ASTM D5185m	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m	<b>0</b>	0	0
Zinc	ppm	ASTM D5185m	<b>&lt;1</b>	4	0
Sulfur	ppm	ASTM D5185m 50	<b>0</b>	2	0

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>1</b>	1	1
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	1
Water	%	ASTM D6304 >0.01	<b>0.004</b>	0.006	0.001
ppm Water	ppm	ASTM D6304 >100	<b>40</b>	64	0

## FLUID CLEANLINESS

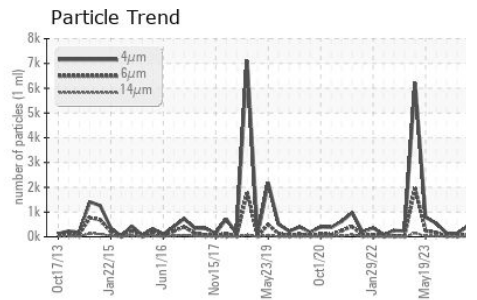
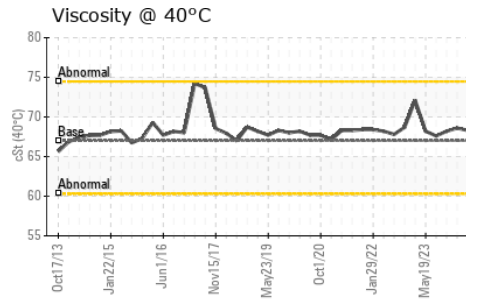
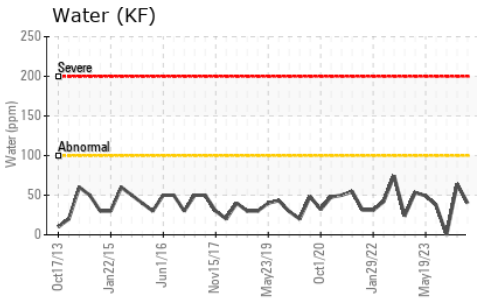
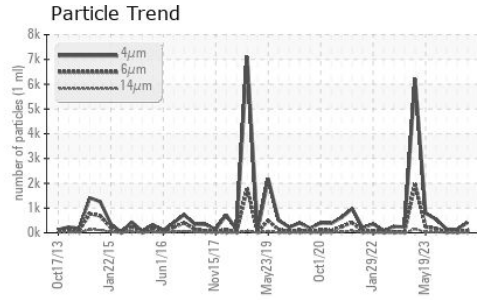
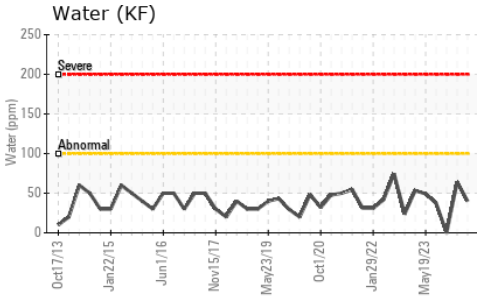
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>416</b>	139	148
Particles >6µm	ASTM D7647 >2500	<b>101</b>	33	43
Particles >14µm	ASTM D7647 >320	<b>11</b>	1	5
Particles >21µm	ASTM D7647 >80	<b>4</b>	0	2
Particles >38µm	ASTM D7647 >20	<b>1</b>	0	0
Particles >71µm	ASTM D7647 >4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/18/15	<b>16/14/11</b>	14/12/7	14/13/10

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974 0.005	<b>0.013</b>	0.014	0.014



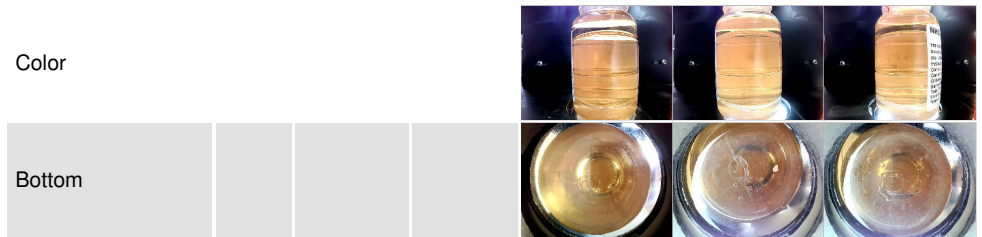
# OIL ANALYSIS REPORT



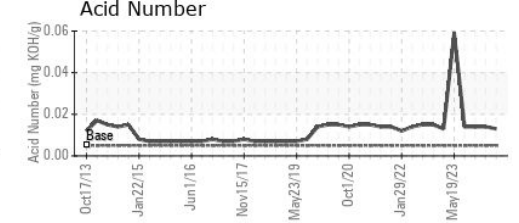
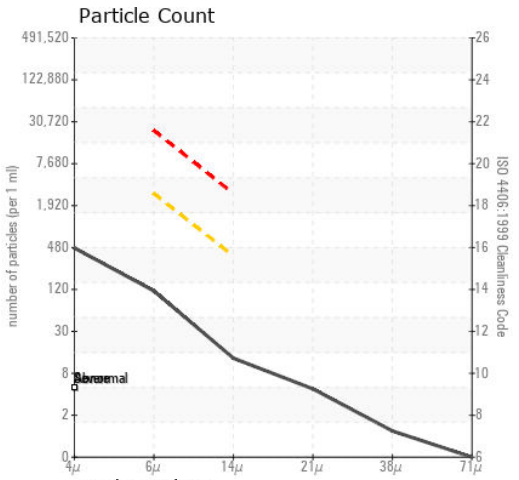
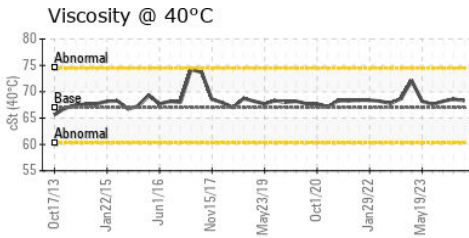
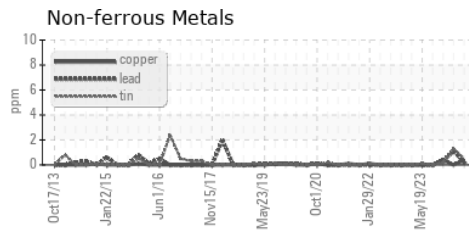
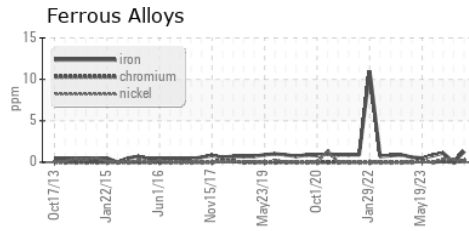
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	67	68.3	68.6

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



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USP0012680  
 Lab Number : 06198232  
 Unique Number : 11060355  
 Test Package : IND 2

Received : 03 Jun 2024  
 Tested : 06 Jun 2024  
 Diagnosed : 06 Jun 2024 - Doug Bogart

**TYSON DC -OLATHE-USP**  
 OLATHE, KS  
 US  
 Contact: ROCKY DENNIS

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)