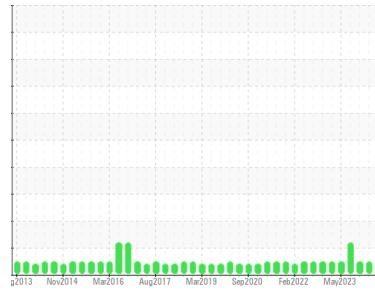




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**FES N6 FES HS2 (S/N 9843704C)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**FES 2 (--- 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>USP0006539</b>	USP243349	USP243350
Sample Date	Client Info		<b>20 Apr 2024</b>	23 Jan 2024	27 Oct 2023
Machine Age	hrs	Client Info	<b>115287</b>	114398	113292
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>17</b>	12	12
Chromium	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	0	<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	0
Lead	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m >8	<b>4</b>	3	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</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>	<1	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	1
Calcium	ppm	ASTM D5185m	<b>0</b>	1	1
Phosphorus	ppm	ASTM D5185m	<b>0</b>	0	1
Zinc	ppm	ASTM D5185m	<b>&lt;1</b>	5	<1
Sulfur	ppm	ASTM D5185m	<b>0</b>	10	16

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>6</b>	6	6
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304 >0.01	<b>0.004</b>	0.002	0.004
ppm Water	ppm	ASTM D6304 >100	<b>43</b>	25	40.9

## FLUID CLEANLINESS

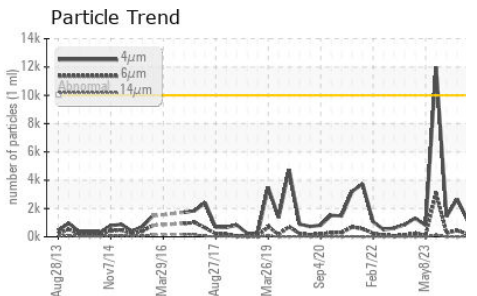
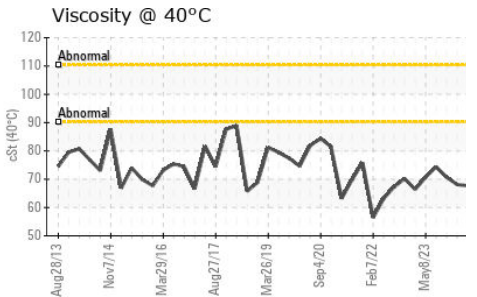
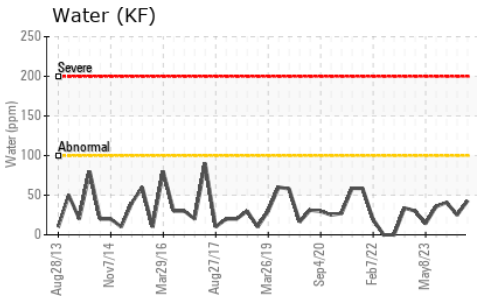
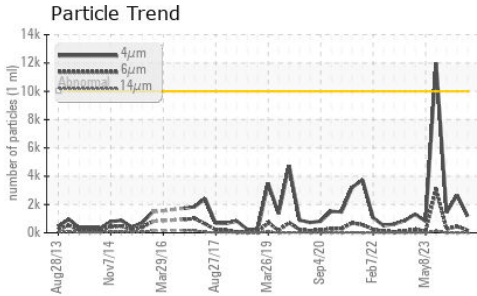
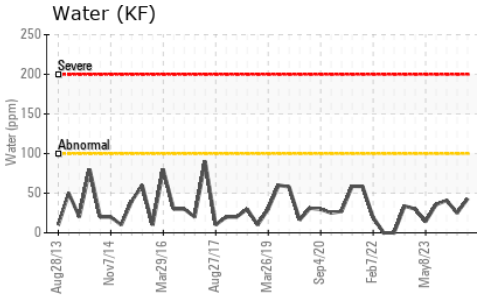
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>1180</b>	2669	1436
Particles >6µm	ASTM D7647	>2500	<b>173</b>	452	268
Particles >14µm	ASTM D7647	>320	<b>11</b>	15	12
Particles >21µm	ASTM D7647	>80	<b>3</b>	4	2
Particles >38µm	ASTM D7647	>20	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>17/15/11</b>	19/16/11	18/15/11

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	<b>0.082</b>	0.098	0.03



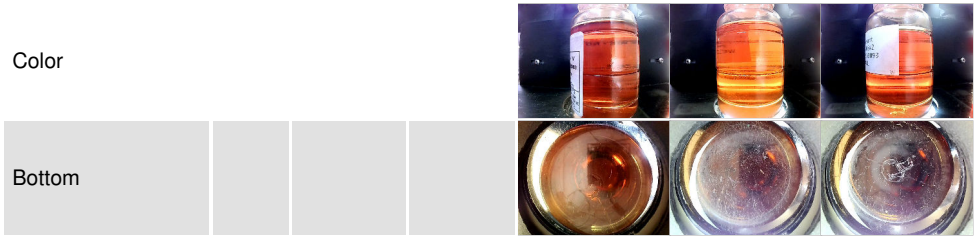
# OIL ANALYSIS REPORT



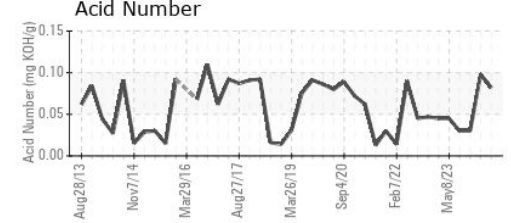
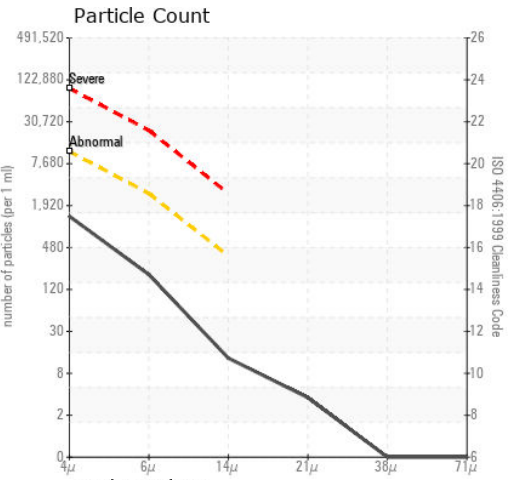
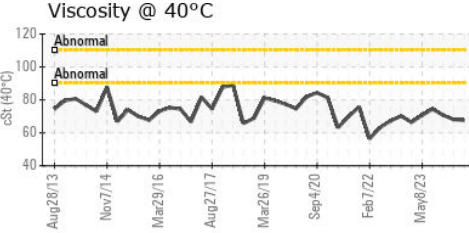
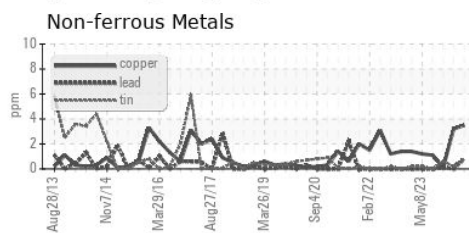
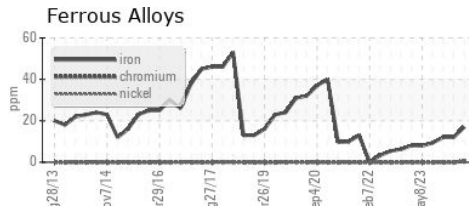
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	67.7	68.1	70.7

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. : USP0006539  
 Lab Number : 06160439  
 Unique Number : 10995862  
 Test Package : IND 2

Received : 25 Apr 2024  
 Tested : 26 Apr 2024  
 Diagnosed : 30 Apr 2024 - Doug Bogart

JACOBS TECHNOLOGIES

ALLEN PARK, MI  
 US  
 Contact:

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:  
 F: