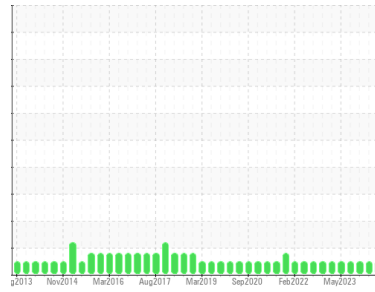




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**FES N7 FES HS2 (S/N 9843704A)**  
 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>USP0006534</b>	USP0005443	USP243370
Sample Date	Client Info		<b>20 Apr 2024</b>	31 Jan 2024	27 Oct 2023
Machine Age	hrs	Client Info	<b>86715</b>	0	85292
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	16
Chromium	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	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	0
Copper	ppm	ASTM D5185m >8	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	0
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>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	1
Calcium	ppm	ASTM D5185m	<b>0</b>	0	1
Phosphorus	ppm	ASTM D5185m	<b>0</b>	0	0
Zinc	ppm	ASTM D5185m	<b>0</b>	0	4
Sulfur	ppm	ASTM D5185m	<b>0</b>	0	0

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>3</b>	2	2
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304 >0.01	<b>0.003</b>	0.002	0.004
ppm Water	ppm	ASTM D6304 >100	<b>30</b>	25	40.5

## FLUID CLEANLINESS

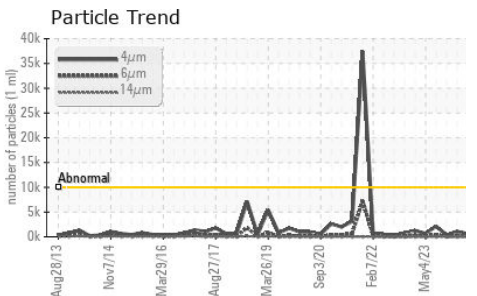
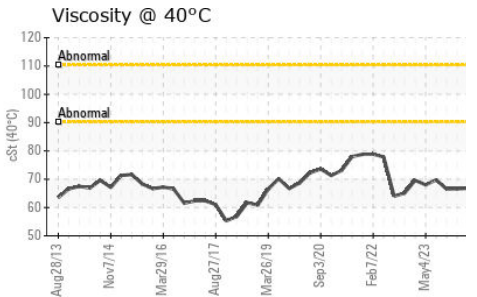
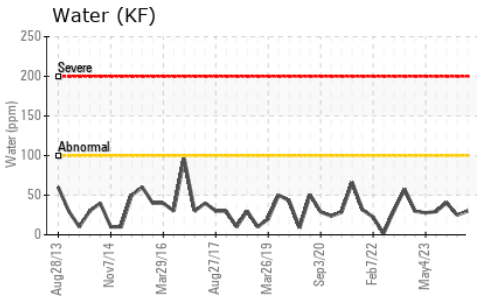
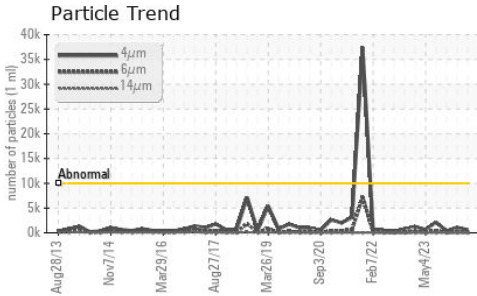
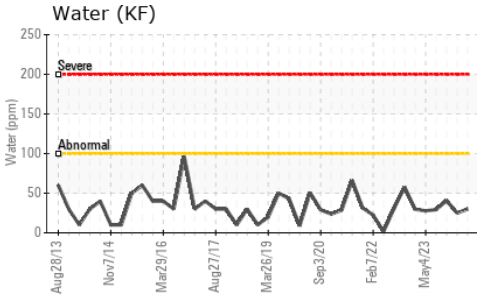
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>617</b>	1082	380
Particles >6µm	ASTM D7647	>2500	<b>114</b>	190	86
Particles >14µm	ASTM D7647	>320	<b>9</b>	10	8
Particles >21µm	ASTM D7647	>80	<b>2</b>	2	3
Particles >38µm	ASTM D7647	>20	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>16/14/10</b>	17/15/10	16/14/10

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	<b>0.055</b>	0.041	0.038



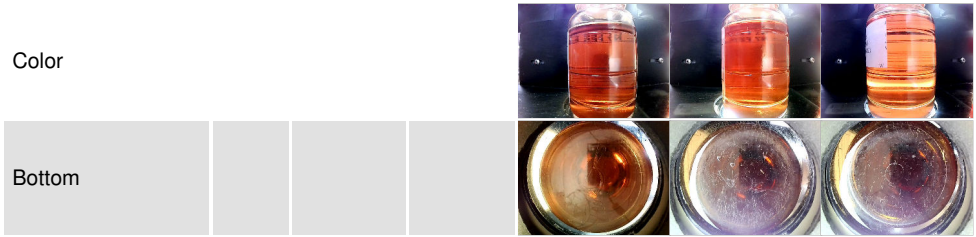
# OIL ANALYSIS REPORT



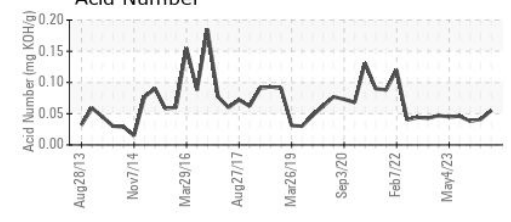
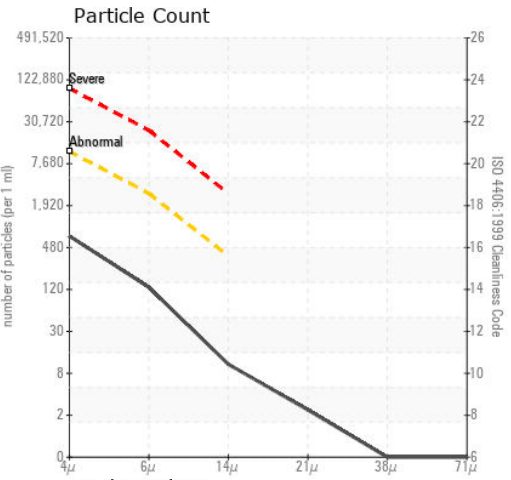
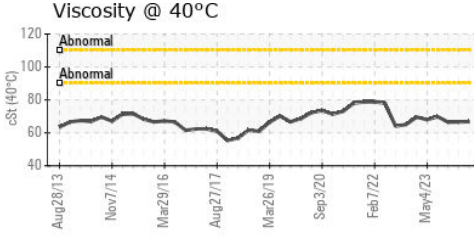
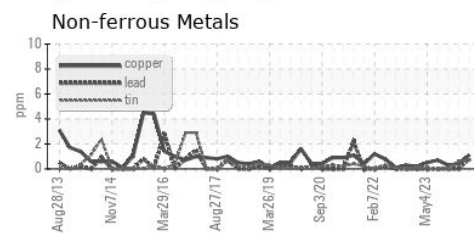
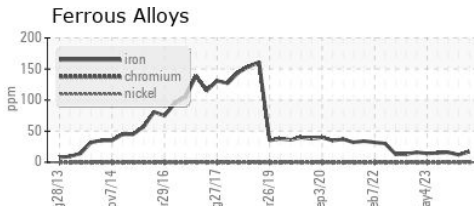
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	66.8	66.6	66.5

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0006534  
**Lab Number** : 06160432  
**Unique Number** : 10995855  
**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)