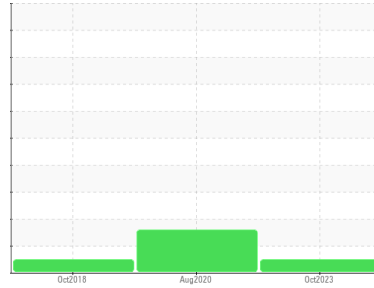




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**83AR99 (S/N 10241F42862429)**

Component  
**Refrigeration Compressor**

Fluid  
**FRICK COMPRESSOR OIL #13 (--- 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>WC0857844</b>	WC0483623	WCI2310802
Sample Date	Client Info			<b>03 Oct 2023</b>	27 Aug 2020	14 Oct 2018
Machine Age	hrs	Client Info		<b>48521</b>	30205	14738
Oil Age	hrs	Client Info		<b>48521</b>	0	0
Oil Changed	Client Info			<b>Not Chngd</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	MARGINAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	<b>4</b>	4	4
Chromium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m		<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
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>0</b>	<1	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	<1	1
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	<1
Barium	ppm	ASTM D5185m		<b>0</b>	2	7
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	0
Calcium	ppm	ASTM D5185m		<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185m		<b>2</b>	3	2
Zinc	ppm	ASTM D5185m		<b>0</b>	0	<1
Sulfur	ppm	ASTM D5185m		<b>0</b>	17	12

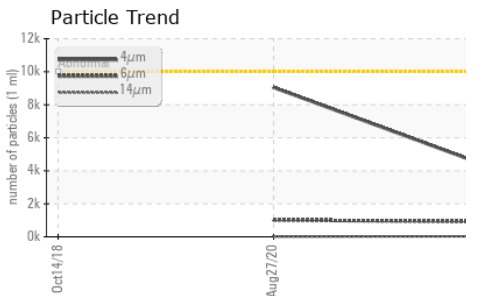
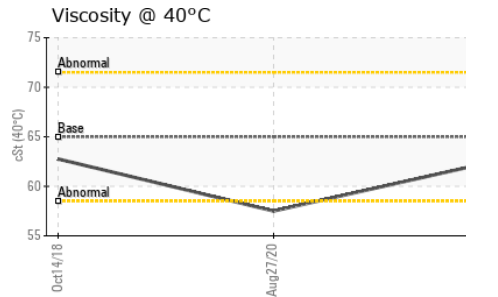
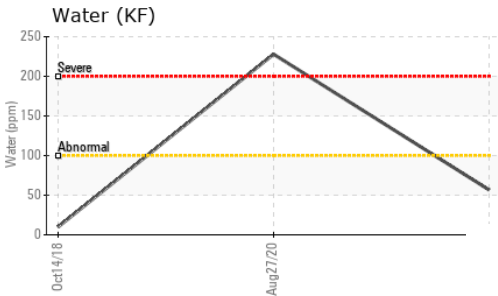
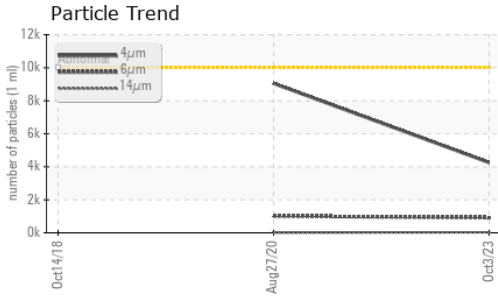
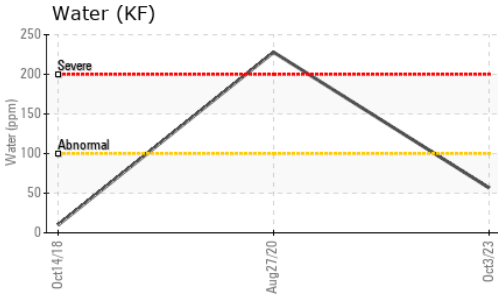
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>7</b>	6	9
Sodium	ppm	ASTM D5185m		<b>0</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Water	%	ASTM D6304	>0.01	<b>0.005</b>	▲ 0.022	0.001
ppm Water	ppm	ASTM D6304	>100	<b>56.7</b>	▲ 227.9	10

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>4255</b>	9046	---
Particles >6µm		ASTM D7647	>2500	<b>917</b>	1015	---
Particles >14µm		ASTM D7647	>320	<b>34</b>	13	---
Particles >21µm		ASTM D7647	>80	<b>6</b>	4	---
Particles >38µm		ASTM D7647	>20	<b>1</b>	2	---
Particles >71µm		ASTM D7647	>4	<b>0</b>	2	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>19/17/12</b>	20/17/11	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974		<b>0.012</b>	0.028	0.014



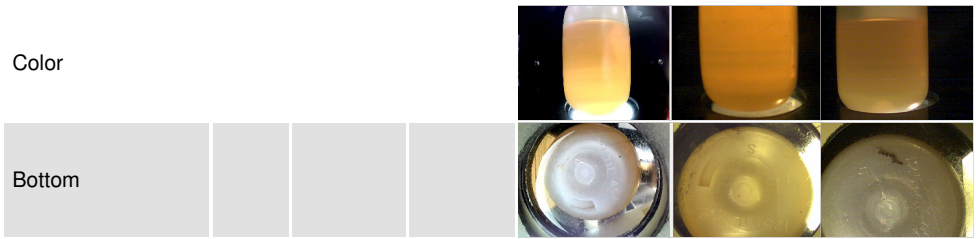
# OIL ANALYSIS REPORT



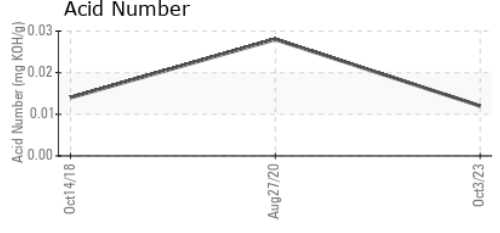
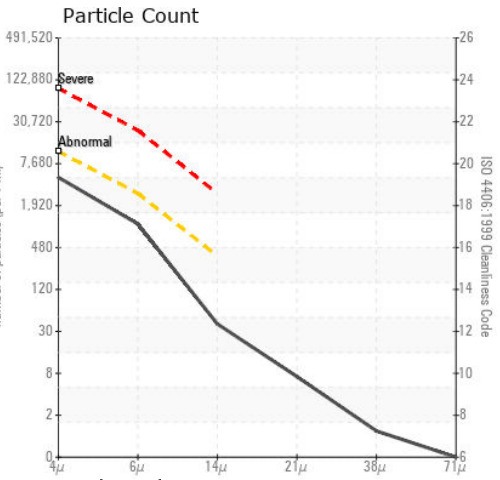
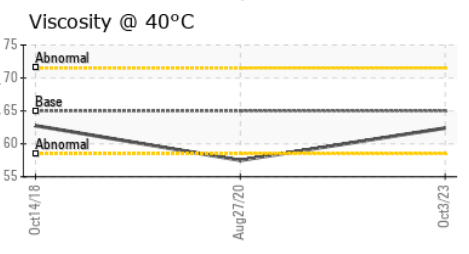
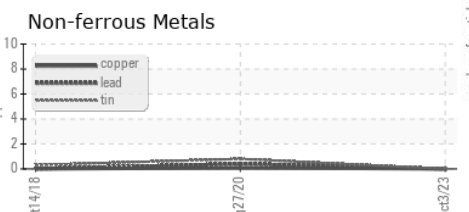
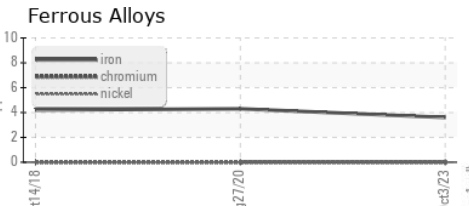
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	65.0	62.4	57.5	62.76

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0857844 **Received** : 04 Oct 2023  
**Lab Number** : 05969722 **Diagnosed** : 06 Oct 2023  
**Unique Number** : 10676273 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**GRIFOLS TALECRIS PHARMACEUTICAL**  
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 CLAYTON, NC  
 US 27520  
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 cody.bass@grifols.com  
 T:  
 F: (919)359-4767

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)