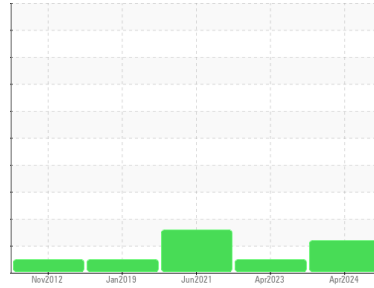




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

**UTILITIES**

Machine Id

**96UX08 YORK PROCESS GLYCOL CHILLER (S/N 10241A19417686)**

Component

**Refrigeration Compressor**

Fluid

**FRICK COMPRESSOR OIL #13 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

### 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>WC0907800</b>	WC0806779	WC0525122
Sample Date	Client Info		<b>01 Apr 2024</b>	04 Apr 2023	04 Jun 2021
Machine Age	hrs	Client Info	<b>78333</b>	70327	55235
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>ABNORMAL</b>	NORMAL	MARGINAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	<b>0</b>	0	15
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >8	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m >4	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	2
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	2
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	2	0
Calcium	ppm	ASTM D5185m	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	8	2
Zinc	ppm	ASTM D5185m	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m	<b>0</b>	0	13

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>6</b>	0	6
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>0.007</b>	0.006	▲ 0.012
ppm Water	ppm	ASTM D6304 >100	<b>77</b>	60.2	▲ 124.0

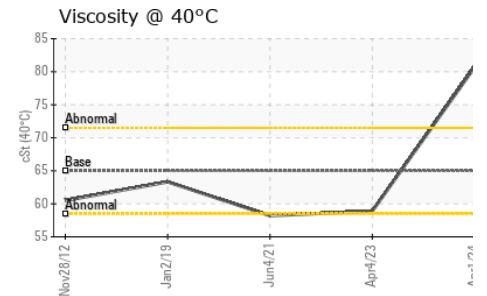
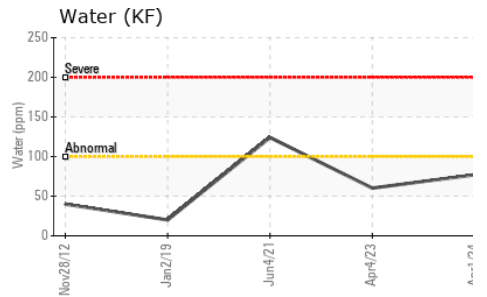
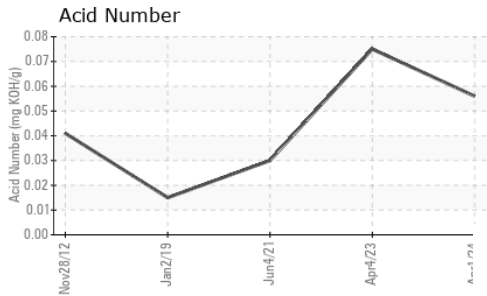
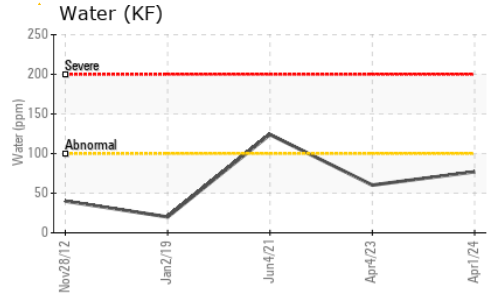
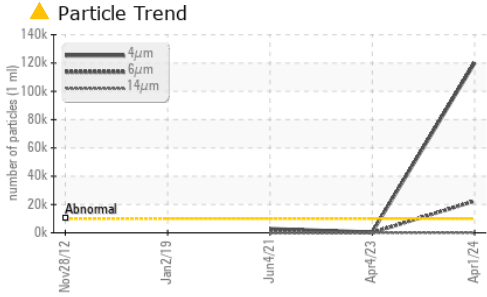
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ <b>119991</b>	471	2901
Particles >6µm	ASTM D7647	>2500	▲ <b>22363</b>	103	350
Particles >14µm	ASTM D7647	>320	<b>23</b>	7	12
Particles >21µm	ASTM D7647	>80	<b>2</b>	2	6
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>24/22/12</b>	16/14/10	19/16/11

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	<b>0.056</b>	0.075	0.03

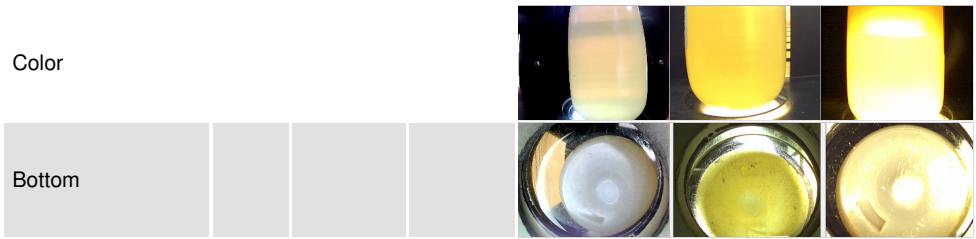
# OIL ANALYSIS REPORT



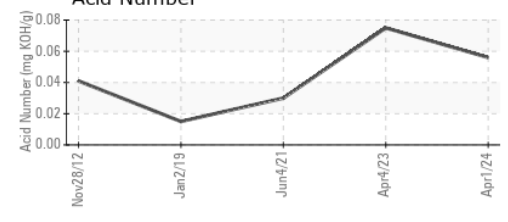
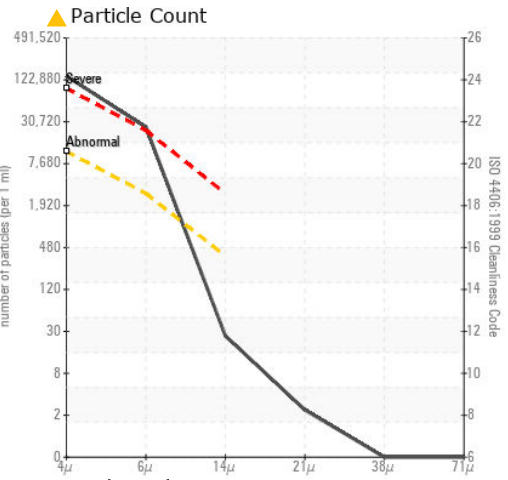
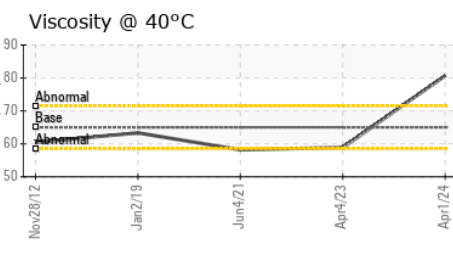
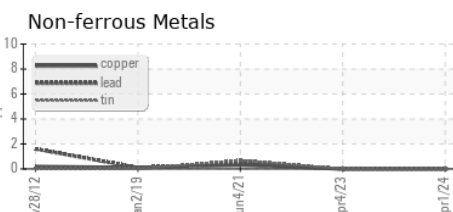
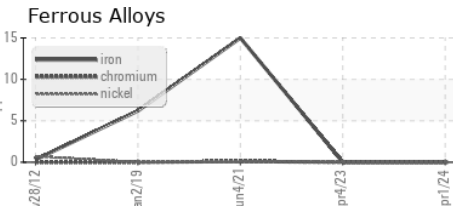
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	80.7	58.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0907800      **Received** : 02 Apr 2024  
**Lab Number** : 06136466      **Tested** : 04 Apr 2024  
**Unique Number** : 10955931      **Diagnosed** : 04 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**GRIFOLS TALECRIS PHARMACEUTICAL**  
 8368 US 70 WEST  
 CLAYTON, NC  
 US 27520  
 Contact: CODY BASS  
 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)