



OIL ANALYSIS REPORT

WEAR	MARGINAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CARRIER DETRIOT WAYNE JOINT BLDG AUTH CITY COUNTY CHILLER 1 (S/N 2443)

Component
Refrigeration Compressor

Fluid
{not provided} (--- GAL)

RECOMMENDATION

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

WEAR

The copper level is abnormal. All other component wear rates are normal.

CONTAMINATION

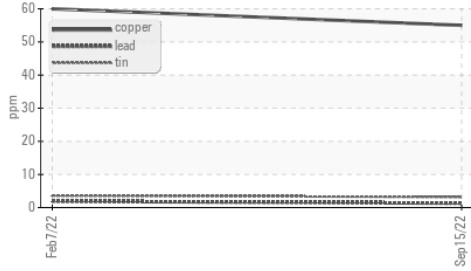
There is no indication of any contamination in the oil.

FLUID CONDITION

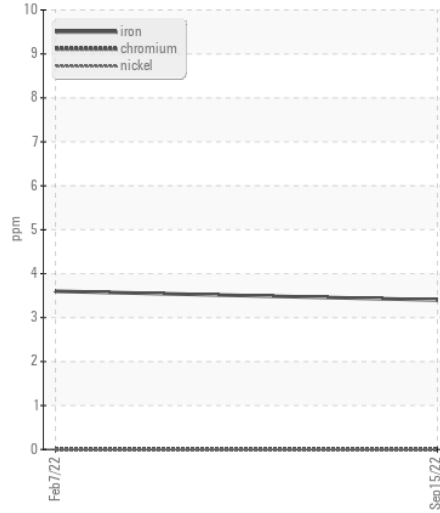
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0507739	WC0507740	---
Sample Date		Client Info		15 Sep 2022	07 Feb 2022	---
Machine Age	hrs	Client Info		4580	3935	---
Oil Age	hrs	Client Info		4580	0	---
Filter Age	hrs	Client Info		4580	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				MARGINAL	ABNORMAL	---
<hr/>						
Iron	ppm	ASTM D5185m	>50	3	4	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m		0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>10	0	0	---
Lead	ppm	ASTM D5185m	>10	1	2	---
Copper	ppm	ASTM D5185m	>50	▲ 55	▲ 60	---
Tin	ppm	ASTM D5185m	>10	3	4	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
<hr/>						
Silicon	ppm	ASTM D5185m	>15	4	5	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Water	%	ASTM D6304	>0.01	0.002	0.001	---
ppm Water	ppm	ASTM D6304	>100	17.9	14.1	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	VLITE	---
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	---
<hr/>						
Sodium	ppm	ASTM D5185m		<1	1	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		0	0	---
Calcium	ppm	ASTM D5185m		1	1	---
Phosphorus	ppm	ASTM D5185m		43	56	---
Zinc	ppm	ASTM D5185m		18	23	---
Sulfur	ppm	ASTM D5185m		939	1211	---
Acid Number (AN)	mg KOH/g	ASTM D974		0.014	0.013	---
Visc @ 40°C	cSt	ASTM D445		52.2	65.3	---

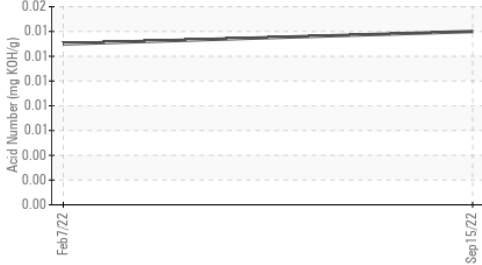
▲ Non-ferrous Metals



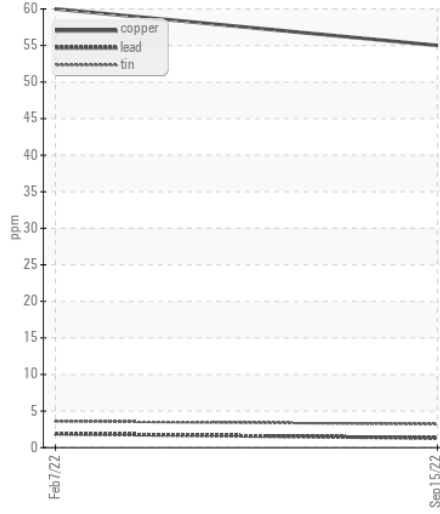
Ferrous Alloys



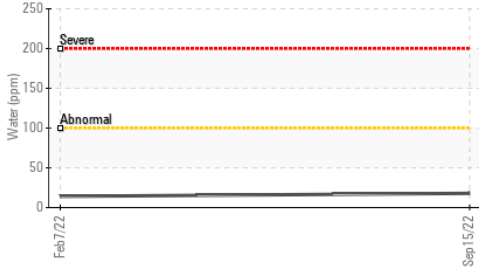
Acid Number



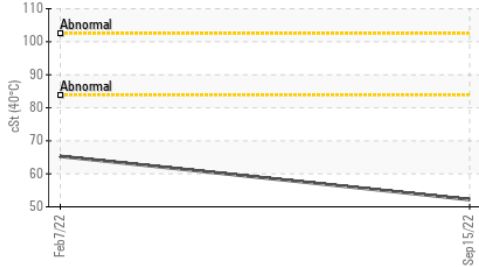
▲ Non-ferrous Metals



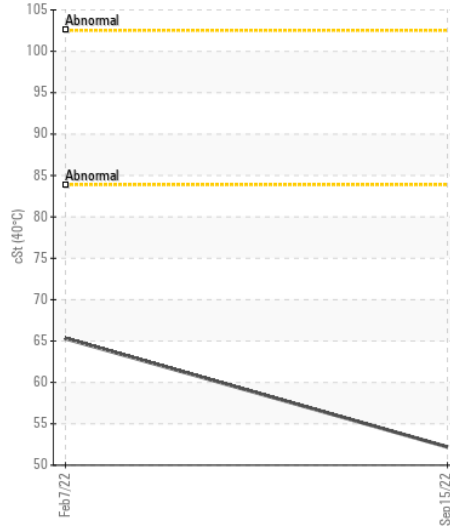
Water (KF)



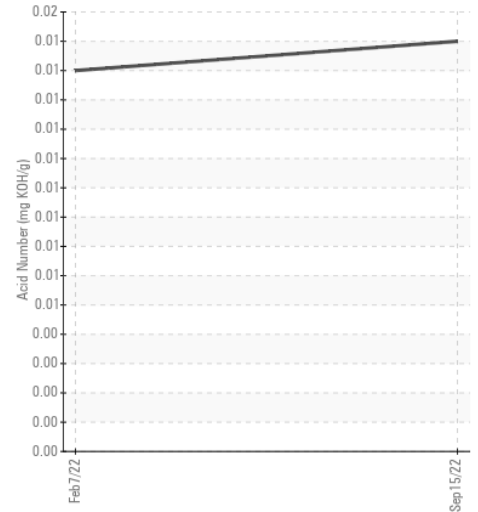
Viscosity @ 40°C



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0507739

Lab Number : 05646075

Unique Number : 10140614

Test Package : IND 2

Received : 20 Sep 2022

Tested : 21 Sep 2022

Diagnosed : 21 Sep 2022 - Doug Bogart

DAIKIN APPLIED - AUBURN HILLS

3955 PINNACLE COURT SUITE 300

AUBURN HILLS, MI

US 48326

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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)