

## **OIL ANALYSIS REPORT**

# TRANE CFCC UNION STATION CH 2 COMP 1 (S/N U11L01954)

Refrigeration Compressor

Fluid TRANE 0048 (3 GAL)

### DIAGNOSIS

#### A Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

#### Wear

All component wear rates are normal.

#### Contamination

There is a trace of moisture present in the oil.

#### Fluid Condition

The AN level is at the top-end of the recommended limit. The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0801198	WCI2302645	WCI2307222
Sample Date		Client Info		24 Apr 2024	02 Feb 2021	25 Jan 2019
Machine Age	hrs	Client Info		26378	17735	14538
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	MARGINAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	2	<1	<1
Chromium	ppm	ASTM D5185m	>2	0	0	<1
Nickel	ppm	ASTM D5185m		0	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>3	0	<1	<1
Lead	ppm	ASTM D5185m	>2	0	<1	<1
Copper	ppm	ASTM D5185m	>8	<1	<1	<1
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	1	<1	4	3
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	<1
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	0	<1	0	0
Calcium	ppm	ASTM D5185m	0	0	0	0
Phosphorus	ppm	ASTM D5185m	5	14	17	14
Zinc	ppm	ASTM D5185m	0	45	0	0
Sulfur	ppm	ASTM D5185m	10	0	0	169
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	9	12	11
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water	%	ASTM D6304	>0.01	<b>A</b> 0.050	▲ 0.064	▲ 0.014
ppm Water	ppm	ASTM D6304	>100	<b>6</b> 508	▲ 646.3	<b>1</b> 40
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.09	<b>A</b> 0.152		0.076

Sample Rating Trend



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VISUAL method limit/base history1 history2 current NONE White Metal \*Visual NONE NONE NONE scalar Yellow Metal NONE NONE NONE NONE scalar \*Visual Precipitate scalar \*Visual NONE NONE NONE NONE Silt scalar \*Visual NONE NONE NONE NONE NONE Debris \*Visual NONE NONE NONE scalar Sand/Dirt NONE scalar \*Visual NONE NONE NONE NORML Appearance \*Visual NORML NORML NORML scalar Odor \*Visual NORML NORML NORML scalar NORML **Emulsified Water** scalar \*Visual >0.01 NEG NEG NEG Free Water scalar \*Visual NEG NEG NEG **FLUID PROPERTIES** method limit/base curren history history2 Visc @ 40°C cSt ASTM D445 68 53.7 57.4 62.63 SAMPLE IMAGES method limit/base history2 current history1 Color D

Bottom



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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