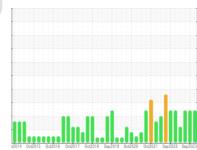


# **OIL ANALYSIS REPORT**

# ENG RM 4 4B3 (S/N 0136)

**Refrigeration Compressor** 

USPI ALT-68 SC (--- GAL)



Sample Rating Trend



# **DIAGNOSIS**

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## Wear

The iron level is abnormal.

### Contamination

There is a high amount of particulates present in the oil.

#### **Fluid Condition**

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

2014 0x2015 0x2016 0x2017 0x2018 \$m2019 0x2020 0x2021 \$m2022 \$m2023						
SAMPLE INFORMA	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0005033	USP0001645	USP255218
Sample Date		Client Info		02 Jan 2024	26 Sep 2023	27 Jun 2023
Machine Age	nrs	Client Info		0	0	66983
Oil Age	nrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron p	opm	ASTM D5185m	>8	<b>△</b> 55	<b>▲</b> 52	<u>4</u> 1
Chromium	opm	ASTM D5185m	>2	<1	0	0
Nickel	opm	ASTM D5185m		<1	<1	<1
Titanium	opm	ASTM D5185m		0	0	0
Silver	opm	ASTM D5185m	>2	0	0	0
Aluminum	opm	ASTM D5185m	>3	0	0	<1
Lead	opm	ASTM D5185m	>2	0	0	0
Copper	opm	ASTM D5185m	>8	<1	<1	0
Tin p	opm	ASTM D5185m	>4	0	0	0
Vanadium	opm	ASTM D5185m		0	0	0
Cadmium	opm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	opm	ASTM D5185m		0	0	0
Barium p	opm	ASTM D5185m		0	0	0
Molybdenum	opm	ASTM D5185m		0	0	0
Manganese	opm	ASTM D5185m		<1	<1	<1
Magnesium p	opm	ASTM D5185m		0	0	0
Calcium	opm	ASTM D5185m		0	0	0
Phosphorus	opm	ASTM D5185m		0	0	0
Zinc	opm	ASTM D5185m		0	0	0
Sulfur	opm	ASTM D5185m	50	0	0	3
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	opm	ASTM D5185m	>15	<1	<1	<1
Sodium	opm	ASTM D5185m		2	0	0
Potassium	opm	ASTM D5185m	>20	0	0	1
Water	%	ASTM D6304	>0.01	0.004	0.009	0.009
ppm Water	opm	ASTM D6304	>100	44	90.8	92.7
FLUID CLEANLINE	SS	method	limit/base	current	history1	history2
Particles >4μm		ASTM D7647	>10000	<b>141843</b>	<u></u> 59959	<u>▲</u> 85832
Particles >6µm		ASTM D7647	>2500	<u>▲</u> 32686	<u>^</u> 21691	<u>4</u> 24498
Particles >14μm		ASTM D7647	>320	<b>459</b>	<b>△</b> 691	<b>△</b> 457
Particles >21μm		ASTM D7647	>80	48	77	36
Particles >38μm		ASTM D7647	>20	1	2	0
Particles >71μm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>24/22/16</b>	<u>\$\text{23/22/17}\$</u>	<u>4</u> 24/22/16
FLUID DEGRADAT	ION	method	limit/base	current	history1	history2
Acid Number (AN)	na K∩U/a	ACTM DOZA	0.005	0.014	0.014	0.014

Acid Number (AN)

0.014

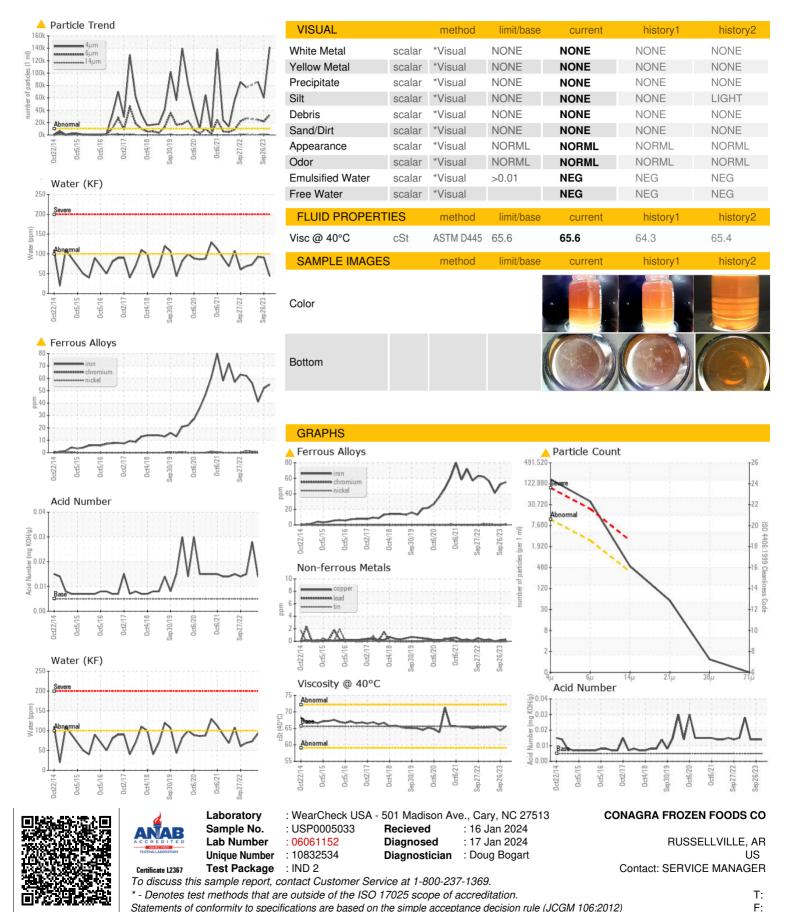
0.014

mg KOH/g ASTM D974 0.005

0.014



# OIL ANALYSIS REPORT



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