

### **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# HSC-5 (S/N 24979-001-1-01-11)

Refrigeration Compressor

USPI 1009-68 SC (--- 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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0012305	USP0007816	USP0004650
Sample Date		Client Info		14 Jul 2024	04 Apr 2024	03 Jan 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	<1	0	1
Chromium	ppm	ASTM D5185m	>2	0	0	<1
Nickel	ppm	ASTM D5185m		0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>3	0	0	1
Lead	ppm	ASTM D5185m	>2	0	0	0
Copper	ppm	ASTM D5185m	>8	0	0	0
Tin	ppm	ASTM D5185m	>4	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	1
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		0	0	<1
Calcium	ppm	ASTM D5185m		0	0	<1
Phosphorus	ppm	ASTM D5185m		0	0	0
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m	50	0	0	0
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	<1	1
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	<1	0	<1
Water	%	ASTM D6304	>0.01	0.003	0.001	0.003
ppm Water	ppm	ASTM D6304	>100	37	13	36
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	565	5272	1607
Particles >6µm		ASTM D7647	>2500	171	876	272
Particles >14µm		ASTM D7647	>320	8	33	8
Particles >21µm		ASTM D7647	>80	1	10	3
Particles >38µm		ASTM D7647	>20	0	0	0
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	16/15/10	20/17/12	18/15/10
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.014	0.014



Δ

0

250

200 Ē 150 Water 5

0

80

75 Abnorma

() 7 40°C

53 6!

60

55

12

f particles (1 ml)

÷ 4k

F

8k

6

21

0

Sep18/23

Sep 18/23

Sep1

Base

Abnorma

ep.]

Water (KF)

## **OIL ANALYSIS REPORT**

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scalar

scalar

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scalar

scalar

scalar

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NONE

NONE

NONE

NONE

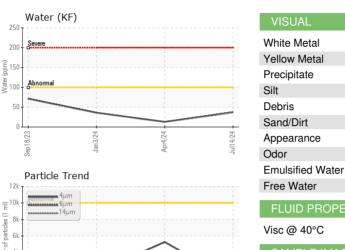
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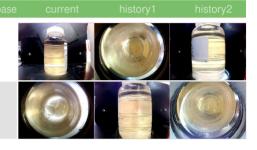
NORML

NORML

>0.01







NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

69.8

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

70.7

NONE

NONE

NONE

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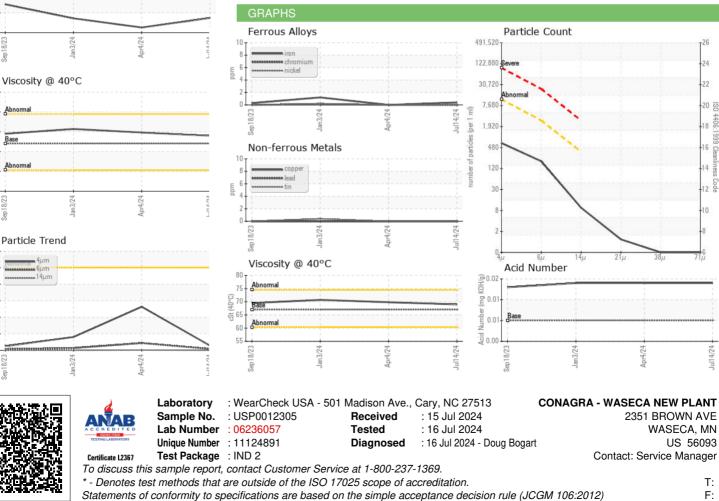
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69.0



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Contact/Location: Service Manager - CAGWAS Page 2 of 2