

# **OIL ANALYSIS REPORT**

# Sample Rating Trend



# Machine Id HSC-13 (S/N 20215240) Component

Refrigeration Compressor Fluid USPI 1009-68 SC (75 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.

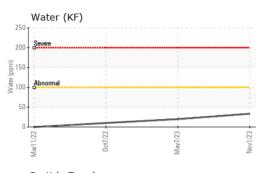
# Fluid Condition

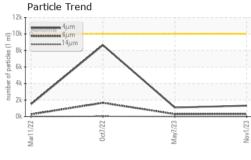
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

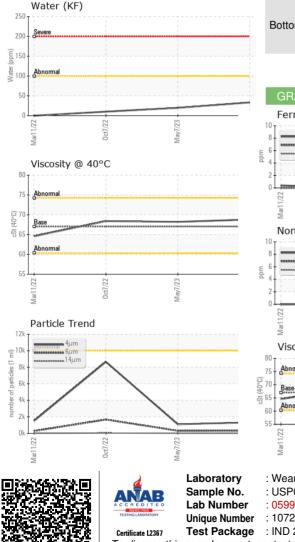
		Mar202	2 Oct2022	May2023 No	v2023	
SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0003070	USP249735	USP239887
Sample Date		Client Info		01 Nov 2023	07 May 2023	07 Oct 2022
Machine Age	hrs	Client Info		58547	54154	50779
Oil Age	hrs	Client Info		58547	54154	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	1	0
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		0	<1	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>3	0	<1	2
Lead	ppm	ASTM D5185m	>2	0	0	0
Copper	ppm	ASTM D5185m	>8	0	0	<1
Tin	ppm	ASTM D5185m	>4	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		0	0	0
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	0	<1	1
Sodium	ppm	ASTM D5185m		0	0	<1
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water	%	ASTM D6304	>0.01	0.003	0.002	0.001
ppm Water	ppm	ASTM D6304	>100	33.3	19.7	10.1
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	1321	1089	8657
Particles >6µm		ASTM D7647	>2500	318	304	1664
Particles >14µm		ASTM D7647	>640	11	10	38
Particles >21µm		ASTM D7647	>160	3	1	6
Particles >38µm		ASTM D7647	>40	0	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/16	18/15/11	17/15/10	20/18/12
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.015	0.015



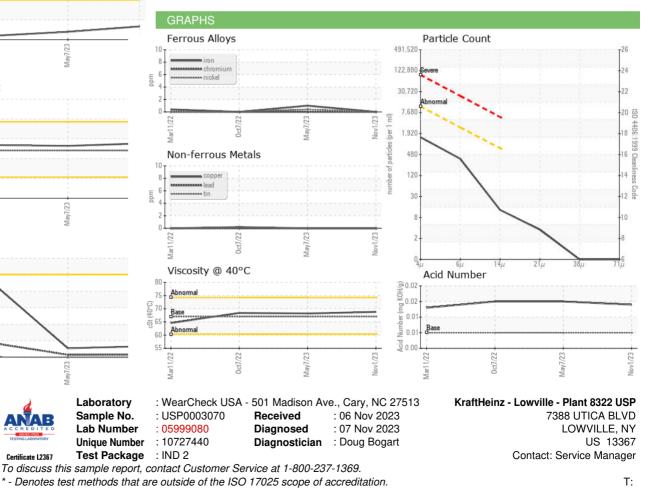
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VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67	68.8	68.2	68.4
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
Color						
Bottom						



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

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