

PROBLEM SUMMARY

Sample Rating Trend

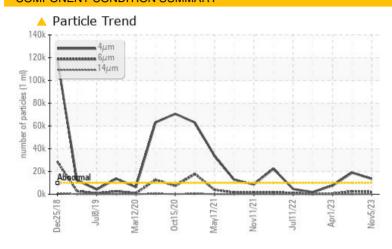


Machine Id **GEA TYSCMIS RCP-16 (S/N 01114-002-1-01-01)**

Refrigeration Compressor

USPI ALT-68 SC (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS									
Sample Status			ATTENTION	ATTENTION	NORMAL				
Particles >4µm	ASTM D7647	>10000	13543	<u>▲</u> 18904	7526				
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<u> </u>	21/18/12	20/16/11				

Customer Id: TYSCARMS Sample No.: USP0003257 Lab Number: 05999922 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

26 Jun 2023 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



01 Apr 2023 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



07 Dec 2022 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

GEA TYSCMIS RCP-16 (S/N 01114-002-1-01-01)

Component

Refrigeration Compressor

USPI ALT-68 SC (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

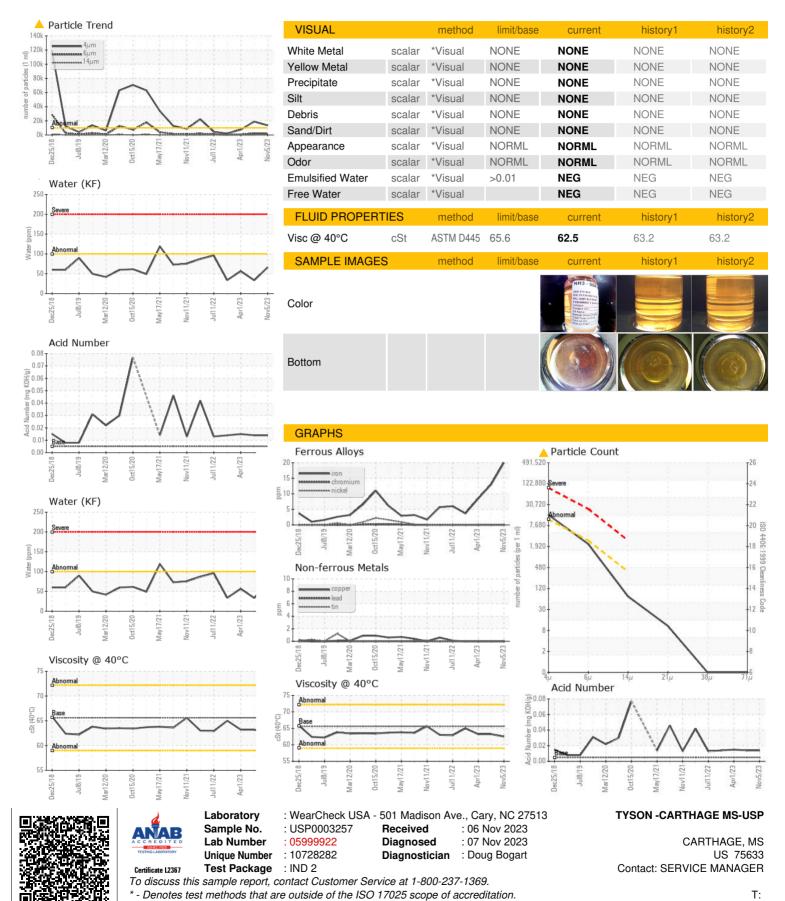
Fluid Condition

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

mež010 Juž019 Marž020 Oce2020 Minj021 Norž021 Juž022 Aprž023 Norž02								
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		USP0003257	USP247384	USP249675		
Sample Date		Client Info		05 Nov 2023	26 Jun 2023	01 Apr 2023		
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				ATTENTION	ATTENTION	NORMAL		
WEAR METALS		method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>8	20	13	8		
Chromium	ppm	ASTM D5185m	>2	0	0	0		
Nickel	ppm	ASTM D5185m		0	0	0		
Titanium	ppm	ASTM D5185m		0	0	0		
Silver	ppm	ASTM D5185m	>2	0	0	0		
Aluminum	ppm	ASTM D5185m	>3	<1	0	0		
Lead	ppm	ASTM D5185m	>2	0	0	0		
Copper	ppm	ASTM D5185m	>8	0	0	0		
Tin	ppm	ASTM D5185m	>4	0	0	0		
Vanadium	ppm	ASTM D5185m		0	0	0		
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		<1	0	0		
Zinc	ppm	ASTM D5185m		0	7	0		
Sulfur	ppm	ASTM D5185m	50	8	0	0		
CONTAMINANTS		method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>15	2	1	2		
Sodium	ppm	ASTM D5185m		0	0	0		
Potassium	ppm	ASTM D5185m	>20	0	<1	2		
Water	%	ASTM D6304	>0.01	0.006	0.003	0.005		
ppm Water	ppm	ASTM D6304	>100	66.2	33.4	56.3		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2		
Particles >4µm		ASTM D7647	>10000	13543	18904	7526		
Particles >6µm		ASTM D7647	>2500	1979	2470	527		
Particles >14μm		ASTM D7647	>320	63	22	11		
Particles >21µm		ASTM D7647	>80	9	1	1		
Particles >38μm		ASTM D7647	>20	0	0	0		
Particles >71μm		ASTM D7647	>4	0	0	0		
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<u> </u>	<u>\$\text{\Delta}\$ 21/18/12</u>	20/16/11		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.014	0.015		



OIL ANALYSIS REPORT



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

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