

PROBLEM SUMMARY

Sample Rating Trend

g2014 Sep2015 May2017 Mar2018 Feb2019 Mar2020 Lau-fron 1

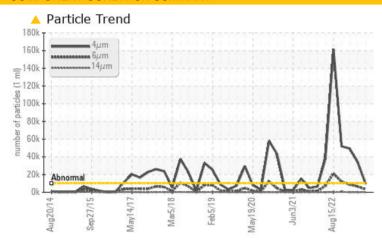


FES C20 (S/N 5112013)

Refrigeration Compressor

USPI ALT-68 SC (205 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS										
Sample Status			ATTENTION	ABNORMAL	ABNORMAL					
Particles >6µm	ASTM D7647	>2500	△ 3223	<u></u> 6562	<u></u> 8688					
Oil Cleanliness	ISO 4406 (c)	>20/18/15	20/19/14	22/20/14	23/20/14					

Customer Id: TYSFORMS Sample No.: USP243725 Lab Number: 05899922 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

13 Apr 2023 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 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.



06 Feb 2023 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 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.



31 Oct 2022 Diag: Doug Bogart

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



FES C20 (S/N 5112013)

Component

Refrigeration Compressor

USPI ALT-68 SC (205 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 < 14 microns in size) present in the oil.

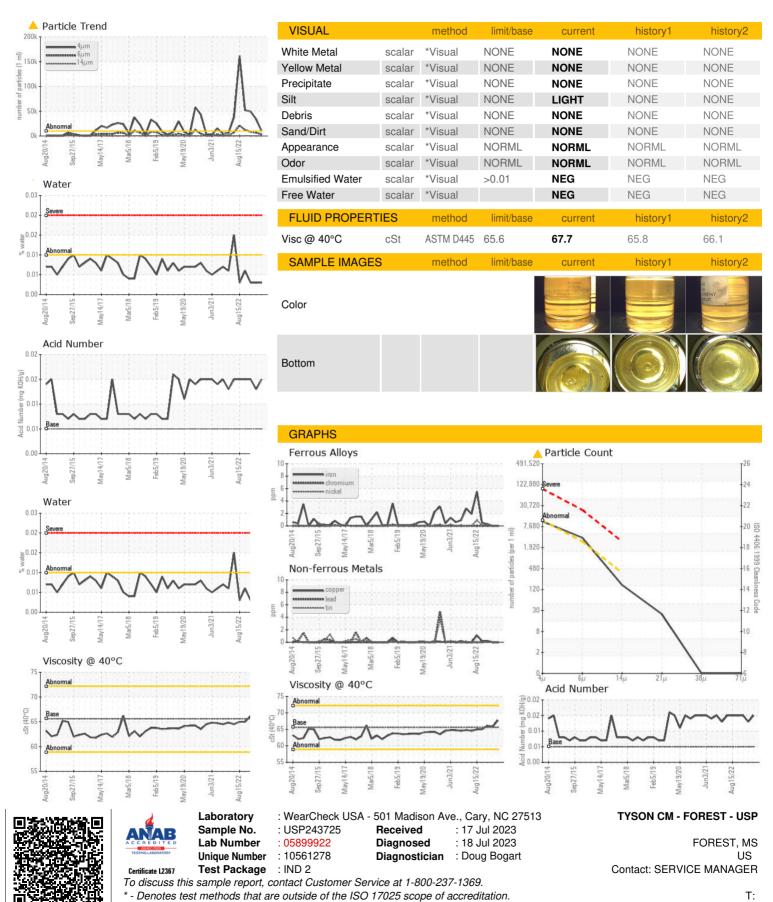
Fluid Condition

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

		g2014 Sep20	15 May2017 Mar2018	Feb2019 May2020 Jun2021	Aug2022	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP243725	USP248762	USP246701
Sample Date		Client Info		16 Jul 2023	13 Apr 2023	06 Feb 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	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	0	<1
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m		0	<1	0
Lead	ppm	ASTM D5185m	>2	0	0	<1
Copper	ppm	ASTM D5185m		0	0	<1
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	<1	0
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		1	0	0
Phosphorus	ppm	ASTM D5185m		0	0	0
Zinc	ppm	ASTM D5185m	=-	0	0	0
Sulfur	ppm	ASTM D5185m	50	30	0	22
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	<1	<1
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m		<1	0	0
Water	%	ASTM D6304		0.003	0.003	0.003
ppm Water	ppm	ASTM D6304	>100	28.5	38.6	28.7
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	9418	▲ 33957	△ 49402
Particles >6µm		ASTM D7647	>2500	△ 3223	<u>▲</u> 6562	<u>▲</u> 8688
Particles >14μm		ASTM D7647	>320	143	86	91
Particles >21µm		ASTM D7647	>80	21	7	15
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> 20/19/14	<u>22/20/14</u>	<u>\$\rightarrow\$ 23/20/14</u>
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.015	0.013	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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