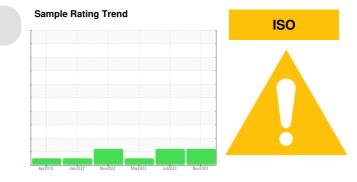


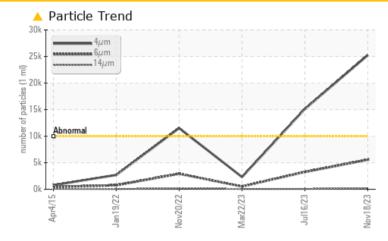
PROBLEM SUMMARY



B-3 FRICK (S/N REF1210)

Refrigeration Compressor Fluid USPI ALT-68 SC (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status			ABNORMAL	ATTENTION	NORMAL		
Particles >4µm	ASTM D7647	>10000	<u> </u>	🔺 15134	2310		
Particles >6µm	ASTM D7647	>2500	6 5568	<u> </u>	520		
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<u> </u>	1 21/19/13	18/16/13		

Customer Id: CARBEAIL Sample No.: USP0003679 Lab Number: 06010922 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 <u>dougb@wearcheckusa.com</u>

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

16 Jul 2023 Diag: Doug Bogart



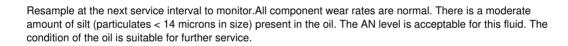
Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

22 Mar 2023 Diag: Doug Bogart



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.

20 Nov 2022 Diag: Doug Bogart







view report



OIL ANALYSIS REPORT

Sample Rating Trend

ISO

B-3 FRICK (S/N REF1210)

Refrigeration Compressor Fluid 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 high amount of silt (particulates < 14 microns in size) present in the oil. There is a trace of moisture present in the oil.

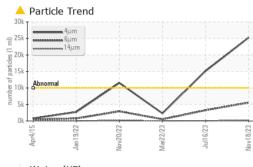
Fluid Condition

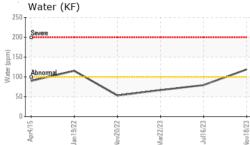
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

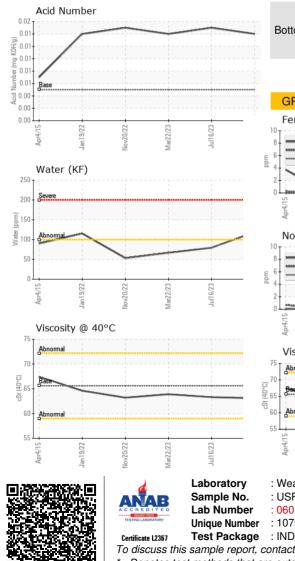
		Apr2015	Jan2022 Nov2023	2 Mar2023 Jul2023	Nov2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0003679	USP255367	USP249476
Sample Date		Client Info		18 Nov 2023	16 Jul 2023	22 Mar 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ATTENTION	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	0	0
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	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	0
Vanadium	ppm	ASTM D5185m		0	<1	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		0	0	<1
Phosphorus		ASTM D5185m		1	0	0
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm ppm	ASTM D5185m	50	15	0	2
CONTAMINANTS		method	limit/base	-	history1	history2
Silicon		ASTM D5185m	>15	9	8	9
Sodium	ppm	ASTM D5185m	>10	9	0	0
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Water	ppm %	ASTM D5185III ASTM D6304		0.011	0.007	0.006
ppm Water		ASTM D6304 ASTM D6304	>0.01	119.0	79.4	66.8
	ppm					
FLUID CLEANLIN	NESS	method	limit/base		history1	history2
Particles >4µm		ASTM D7647	>10000	A 25242	▲ 15134	2310
Particles >6µm		ASTM D7647		▲ 5568	▲ 3260	520
Particles >14µm		ASTM D7647	>320	154	59	51
Particles >21µm		ASTM D7647		18	8	16
Particles >38µm		ASTM D7647	>20	0	0	0
Particles >71µm		ASTM D7647		0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<u> </u>	<u> </u>	18/16/13
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.014	0.015	0.014



OIL ANALYSIS REPORT

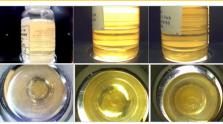




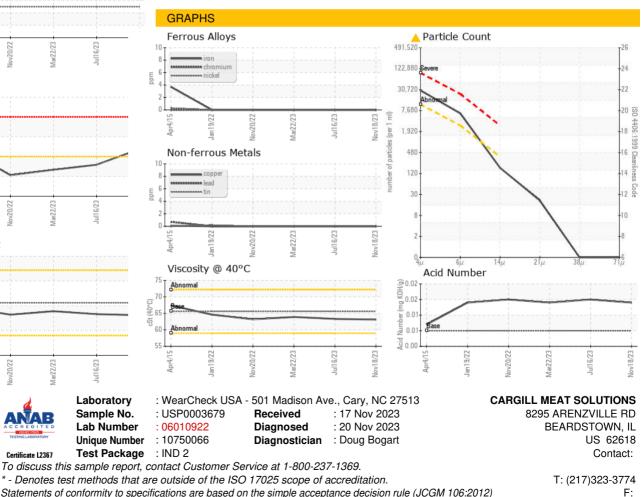


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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	65.6	63.1	63.3	63.9
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
					ad as	d Frick

Color



Bottom



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