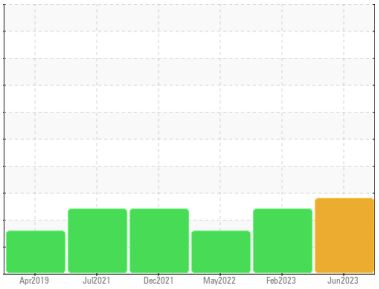
PROBLEM SUMMARY

Area
PLANT
Machine Id
B-2 (S/N 2015148)
Component
Refrigeration Compressor
Fluid
FRICK COMPRESSOR OIL #13 (--- GAL)

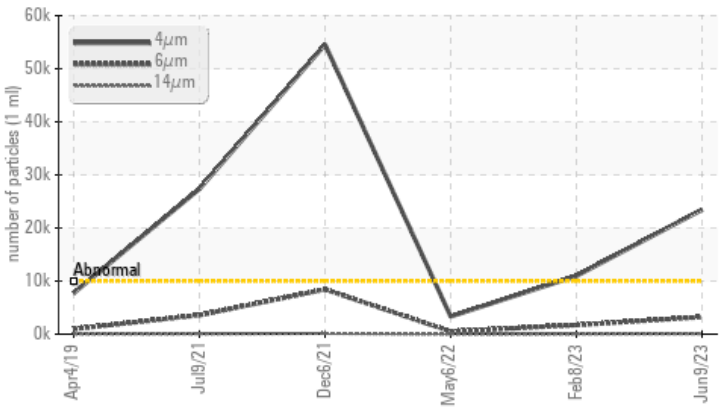
Sample Rating Trend



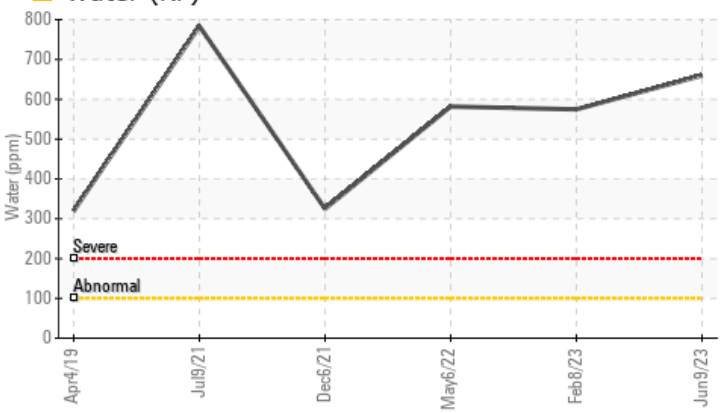
WATER

COMPONENT CONDITION SUMMARY

Particle Trend



Water (KF)



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ATTENTION	ABNORMAL
Water	%	ASTM D6304	>0.01	▲ **0.065**	▲ 0.057	▲ 0.058
ppm Water	ppm	ASTM D6304	>100	▲ **659.8**	▲ 574.6	▲ 581.8
Particles >4µm		ASTM D7647	>10000	▲ **23446**	▲ 10969	3322
Particles >6µm		ASTM D7647	>2500	▲ **3217**	1709	493
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ **22/19/13**	▲ 21/18/12	19/16/12

Customer Id: RACGAR
Sample No.: USP250813
Lab Number: 05879542
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

08 Feb 2023 Diag: Doug Bogart

WATER

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. There is a light concentration of water present in the oil. Confirmed. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

06 May 2022 Diag: Doug Bogart

WATER

Resample at the next service interval to monitor.All component wear rates are normal. There is a light concentration of water present 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.

view report

06 Dec 2021 Diag: Doug Bogart

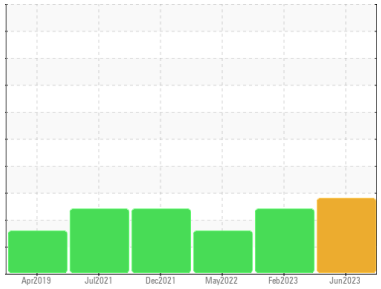
WATER

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. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
PLANT
Machine Id
B-2 (S/N 2015148)
Component
Refrigeration Compressor
Fluid
FRICK COMPRESSOR OIL #13 (--- 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 light concentration of water present in the oil.

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USP250813**	USP233733	USP236839
Sample Date		Client Info		**09 Jun 2023**	08 Feb 2023	06 May 2022
Machine Age	hrs	Client Info		**143926**	140685	135677
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	Not Changd	N/A
Sample Status				**ABNORMAL**	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	**<1**	<1	<1
Chromium	ppm	ASTM D5185m	>2	**0**	0	0
Nickel	ppm	ASTM D5185m		**<1**	0	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>3	**0**	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	<1
Antimony	ppm	ASTM D5185m		**---**	---	---
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	<1
Barium	ppm	ASTM D5185m		**1**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	0	0
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**	0	0
Sulfur	ppm	ASTM D5185m		**13**	8	0

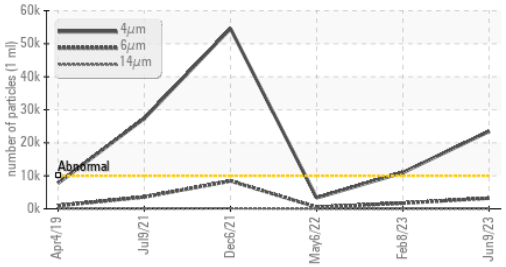
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	1	1
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**0**	1	0
Water	%	ASTM D6304	>0.01	▲ **0.065**	▲ 0.057	▲ 0.058
ppm Water	ppm	ASTM D6304	>100	▲ **659.8**	▲ 574.6	▲ 581.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ **23446**	▲ 10969	3322
Particles >6µm		ASTM D7647	>2500	▲ **3217**	1709	493
Particles >14µm		ASTM D7647	>320	**65**	33	22
Particles >21µm		ASTM D7647	>80	**12**	5	7
Particles >38µm		ASTM D7647	>20	**1**	0	1
Particles >71µm		ASTM D7647	>4	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ **22/19/13**	▲ 21/18/12	19/16/12

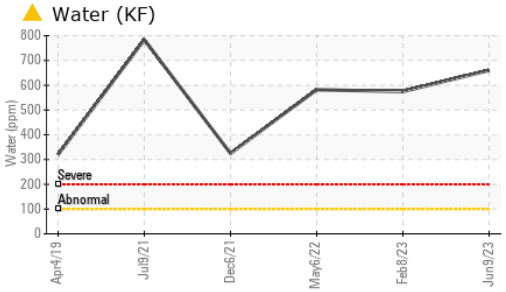
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974		**0.057**	0.015	0.086

OIL ANALYSIS REPORT

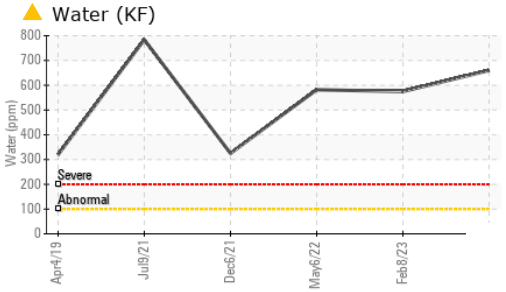
Particle Trend



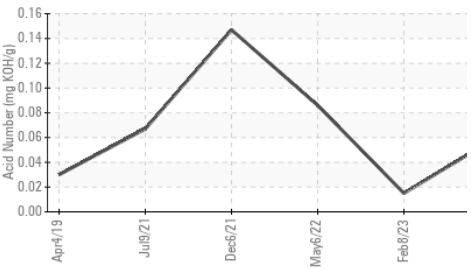
Water (KF)



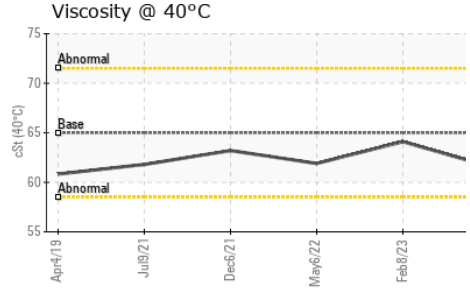
Water (KF)



Acid Number



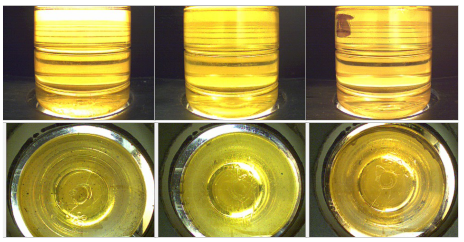
Viscosity @ 40°C



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	**LIGHT**	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

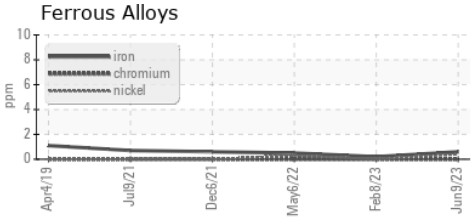
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.0	**61.6**	64.1	61.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

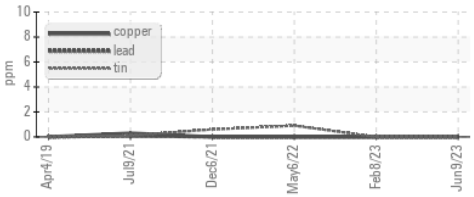


GRAPHS

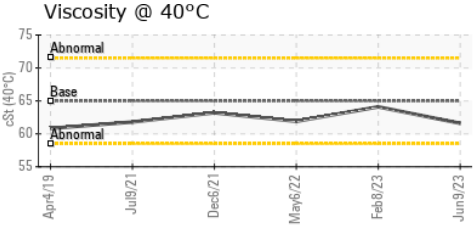
Ferrous Alloys



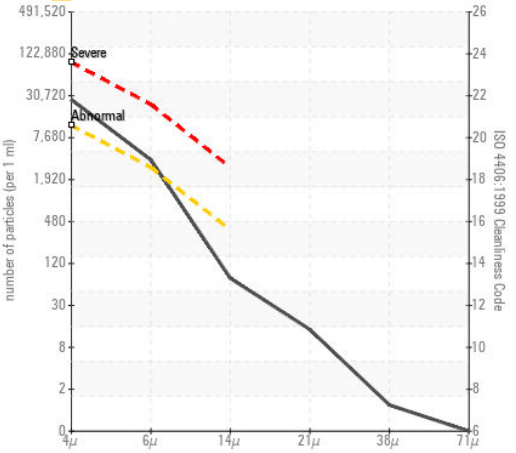
Non-ferrous Metals



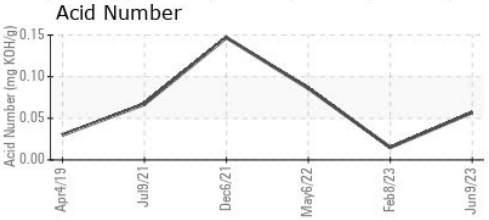
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP250813
Lab Number : 05879542
Unique Number : 10524645
Test Package : IND 2

Received : 21 Jun 2023
Diagnosed : 22 Jun 2023
Diagnostician : Doug Bogart

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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