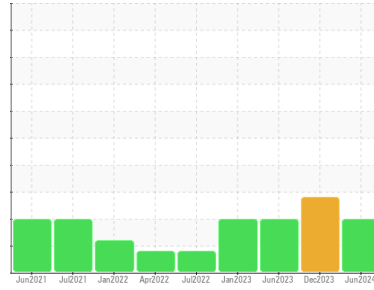




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
O.E.R.
 Machine Id
COMP 6 (S/N 27010601000)
 Component
Refrigeration Compressor
 Fluid
FRICK COMPRESSOR OIL #3 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data and diagnostic comment updates.

Wear

The iron level is abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USP244449	USP255171	USP217798
Sample Date	Client Info		04 Jun 2024	05 Dec 2023	20 Jun 2023
Machine Age	hrs	Client Info	68237	67900	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
PQ	ASTM D8184		17	---	---
Iron	ppm	ASTM D5185m >8	▲ 95	▲ 108	▲ 101
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	<1	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	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	1	0	0
Phosphorus	ppm	ASTM D5185m	0	0	<1
Zinc	ppm	ASTM D5185m	0	0	0
Sulfur	ppm	ASTM D5185m	44	0	22

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	1	0
Sodium	ppm	ASTM D5185m	<1	0	<1
Potassium	ppm	ASTM D5185m >20	0	0	<1
Water	%	ASTM D6304 >0.01	0.002	0.002	0.003
ppm Water	ppm	ASTM D6304 >100	17	24	30.4

FLUID CLEANLINESS

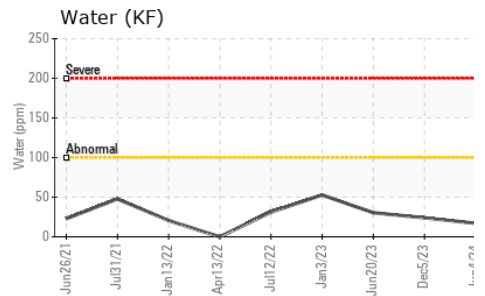
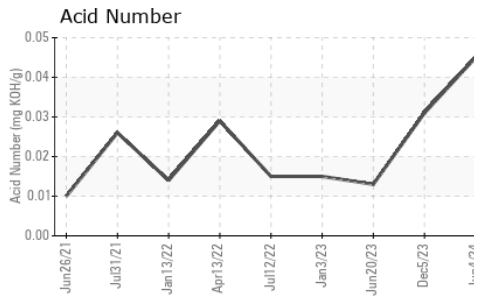
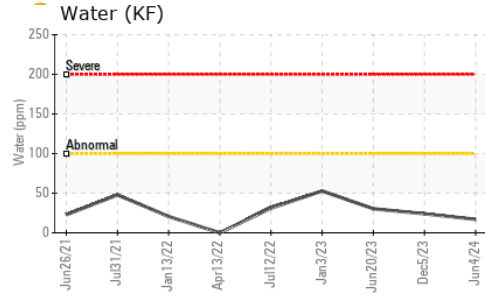
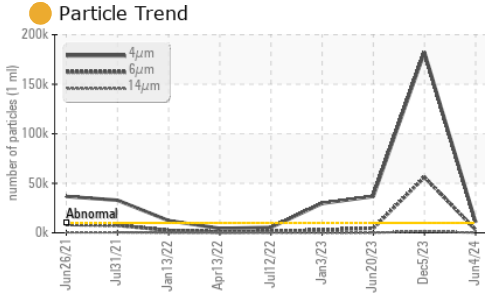
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	● 10920	▲ 182305	▲ 36760
Particles >6µm	ASTM D7647	>2500	● 3113	▲ 56206	● 4605
Particles >14µm	ASTM D7647	>640	129	▲ 1421	71
Particles >21µm	ASTM D7647	>160	17	▲ 212	11
Particles >38µm	ASTM D7647	>40	0	1	0
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/16	● 21/19/14	▲ 25/23/18	▲ 22/19/13

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.045	0.031	0.013



OIL ANALYSIS REPORT

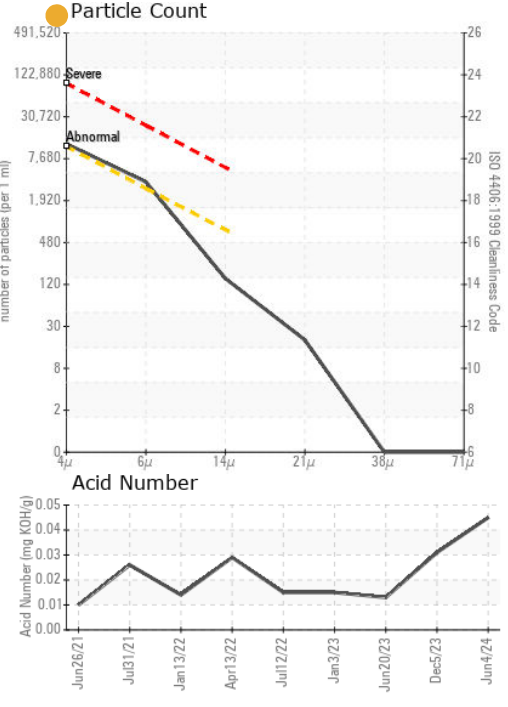
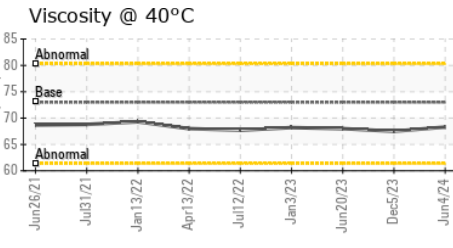
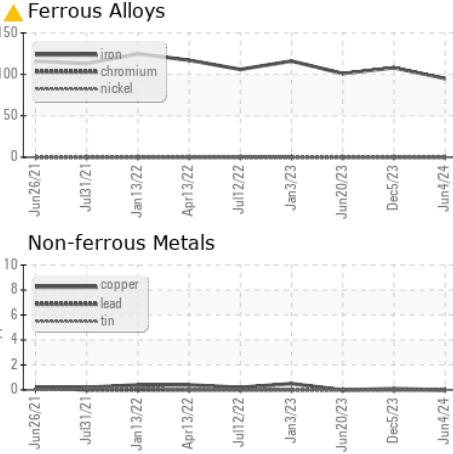


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 73	68.3	67.5	68.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : USP244449

Lab Number : 06213544

Unique Number : 11086408

Test Package : IND 2 (Additional Tests: PQ)

Received : 18 Jun 2024

Tested : 12 Jul 2024

Diagnosed : 12 Jul 2024 - Doug Bogart

KraftHeinz - San Diego - Plant 8383

7878 AIRWAY RD

SAN DIEGO, CA

US 92154

Contact: Lorena Castro

Lorena.Castro@kraftheinz.com

T:

F:

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)