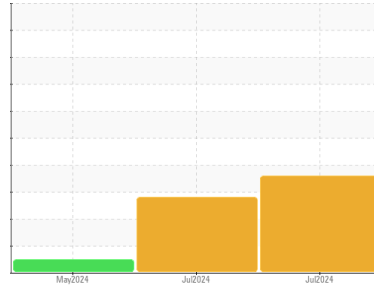




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
MISSION RANCHO
 Machine Id
MISSION RANCHO C2
 Component
Refrigeration Compressor
 Fluid
FRICK COMPRESSOR OIL #13 (--- GAL)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: one of two samples received with same ID.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates 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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USP0012287	USP0012283	USP0011525
Sample Date	Client Info		11 Jul 2024	11 Jul 2024	08 May 2024
Machine Age	hrs	Client Info	175402	0	174374
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	1	<1	---
Chromium	ppm	ASTM D5185m >2	0	0	---
Nickel	ppm	ASTM D5185m	0	0	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m >2	0	0	---
Aluminum	ppm	ASTM D5185m >3	<1	<1	---
Lead	ppm	ASTM D5185m >2	0	0	---
Copper	ppm	ASTM D5185m >8	0	0	---
Tin	ppm	ASTM D5185m >4	<1	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	1	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	---
Manganese	ppm	ASTM D5185m	0	0	---
Magnesium	ppm	ASTM D5185m	0	0	---
Calcium	ppm	ASTM D5185m	0	0	---
Phosphorus	ppm	ASTM D5185m	0	0	---
Zinc	ppm	ASTM D5185m	0	0	---
Sulfur	ppm	ASTM D5185m	0	0	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	14	---
Sodium	ppm	ASTM D5185m	0	0	---
Potassium	ppm	ASTM D5185m >20	<1	<1	---
Water	%	ASTM D6304 >0.01	▲ 0.045	▲ 0.039	---
ppm Water	ppm	ASTM D6304 >100	▲ 451	▲ 393	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 25797	▲ 9016	---
Particles >6µm	ASTM D7647	>320	▲ 7380	▲ 2058	---
Particles >14µm	ASTM D7647	>80	▲ 457	63	---
Particles >21µm	ASTM D7647	>20	▲ 83	7	---
Particles >38µm	ASTM D7647	>4	2	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>18/15/13	▲ 22/20/16	▲ 20/18/13	---

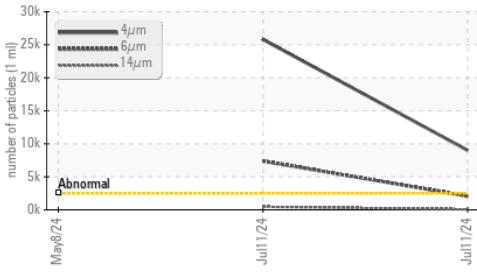
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.014	0.014	---

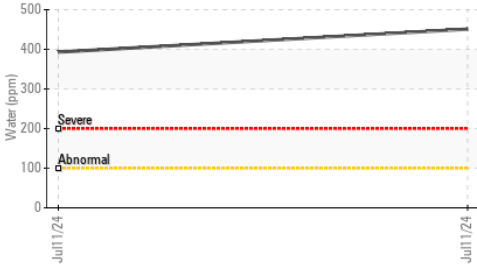


OIL ANALYSIS REPORT

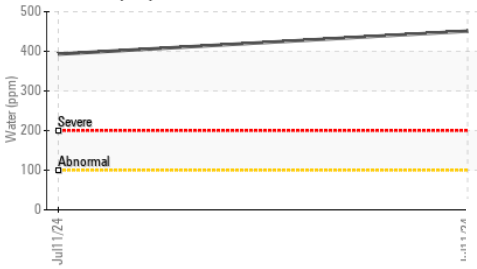
Particle Trend



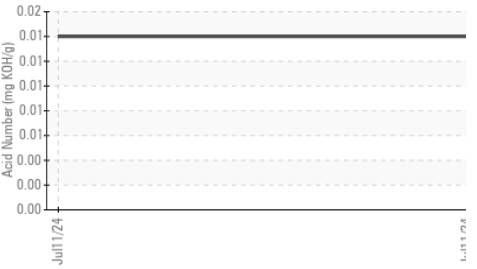
Water (KF)



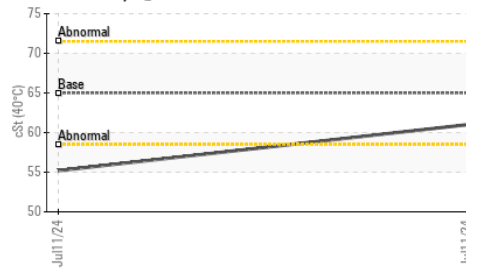
Water (KF)



Acid Number



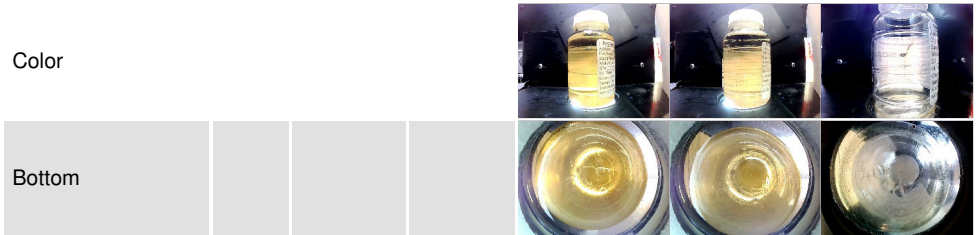
Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	LIGHT	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
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

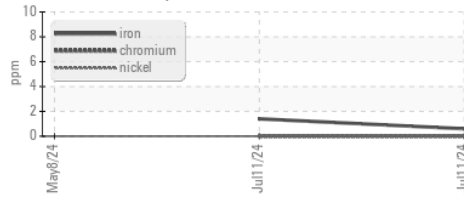
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.0	61.0	55.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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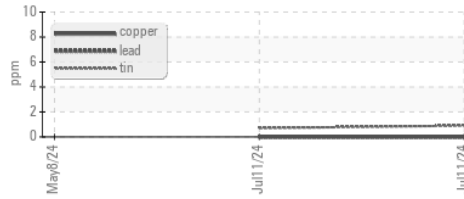


GRAPHS

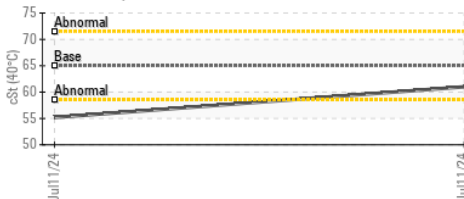
Ferrous Alloys



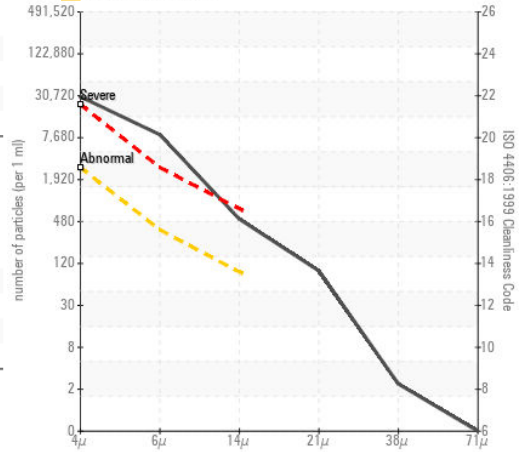
Non-ferrous Metals



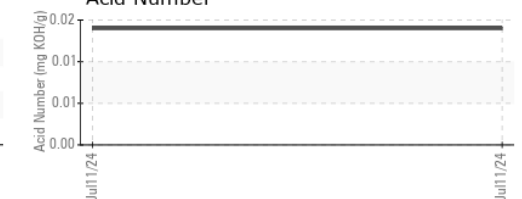
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

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

Sample No. : USP0012287

Lab Number : 06235003

Unique Number : 11123837

Test Package : IND 2

Received : 12 Jul 2024

Tested : 17 Jul 2024

Diagnosed : 17 Jul 2024 - Doug Bogart

RACE ENGINEERING CORP

12871 WESTERN AVE, SUITE E

GARDEN GROVE, CA

US 92841

Contact: TODD CARTER

trac@verizon.net

T: (714)895-3488

F: (714)895-5125

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)