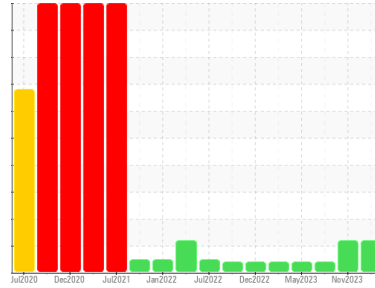


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
STUFF ROOM B [98724419]
Machine Id
KR-GR-000869 - MARLEN (S/N STUFF B - 11513113)
Component
Vacuum Pump
Fluid
R&O OIL ISO 100 (5 LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. (Customer Sample Comment: 98724419)

Wear

All component wear rates are normal.

Contamination

There is a high 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	PCA0115876	PCA0108451	PCA0102559
Sample Date	Client Info	22 Jan 2024	06 Nov 2023	05 Sep 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ATTENTION	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	2	0	2
Chromium	ppm ASTM D5185m >20	0	0	0
Nickel	ppm ASTM D5185m >20	0	<1	0
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >20	7	5	7
Lead	ppm ASTM D5185m >20	0	<1	0
Copper	ppm ASTM D5185m >20	<1	<1	<1
Tin	ppm ASTM D5185m >20	0	0	0
Vanadium	ppm ASTM D5185m	0	0	<1
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 5	0	0	0
Barium	ppm ASTM D5185m 5	0	0	0
Molybdenum	ppm ASTM D5185m 5	<1	0	<1
Manganese	ppm ASTM D5185m	0	<1	0
Magnesium	ppm ASTM D5185m 5	0	0	0
Calcium	ppm ASTM D5185m 5	0	2	0
Phosphorus	ppm ASTM D5185m 100	549	558	389
Zinc	ppm ASTM D5185m 25	4	0	0
Sulfur	ppm ASTM D5185m 1500	1335	1561	1164

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >15	6	8	8
Sodium	ppm ASTM D5185m	9	8	8
Potassium	ppm ASTM D5185m >20	2	3	2

FLUID CLEANLINESS

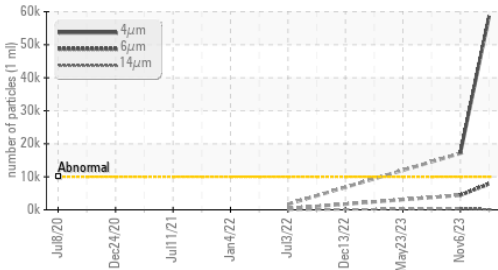
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 58627	▲ 17114	---
Particles >6µm	ASTM D7647 >2500	▲ 7884	▲ 4430	---
Particles >14µm	ASTM D7647 >640	121	337	---
Particles >21µm	ASTM D7647 >160	20	78	---
Particles >38µm	ASTM D7647 >40	1	3	---
Particles >71µm	ASTM D7647 >10	1	1	---
Oil Cleanliness	ISO 4406 (c) >20/18/16	▲ 23/20/14	▲ 21/19/16	---

FLUID DEGRADATION

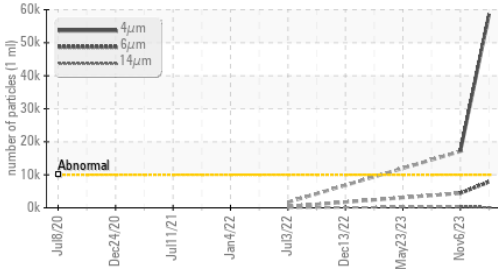
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.08	0.14	0.14	0.18

OIL ANALYSIS REPORT

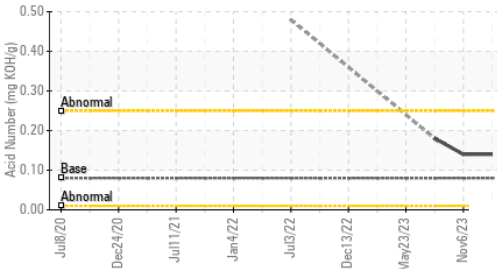
▲ Particle Trend



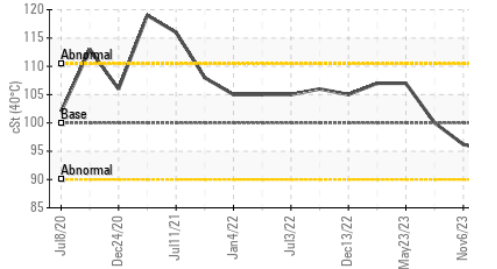
▲ Particle Trend



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	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

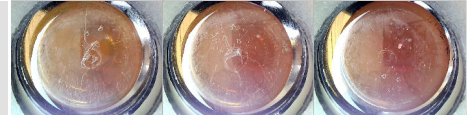
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	100	95.0	96.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

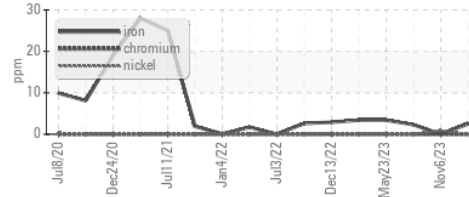


Bottom

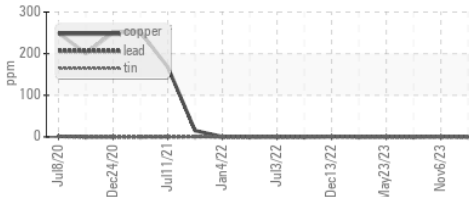


GRAPHS

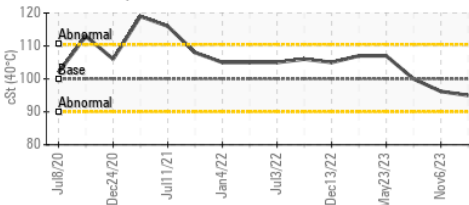
Ferrous Alloys



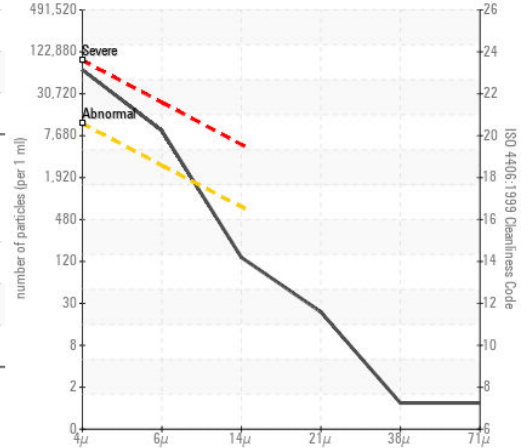
Non-ferrous Metals



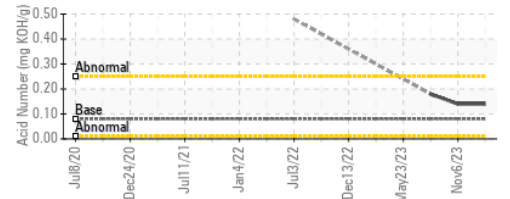
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0115876 **Received** : 25 Jan 2024
Lab Number : 06070419 **Diagnosed** : 28 Jan 2024
Unique Number : 10847096 **Diagnostician** : Don Baldrige

KraftHeinz - Kirksville - Plant 8333 PCA
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 KIRKSVILLE, MO
 US 63501
 Contact: WALLACE WARD
 wallace.ward@kraftheinzcompany.com
 T: (660)627-1031
 F: (660)627-5887

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)