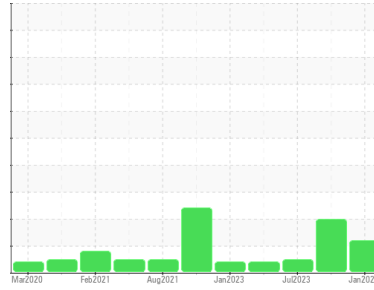


Area
STUFF ROOM D [98748499]
Machine Id
KR-GR-000017 - MARLEN (S/N STUFF D - 11513137)
Component
Hydraulic System
Fluid
R&O OIL ISO 100 (40 GAL)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. (Customer Sample Comment: 98748499)

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	PCA0115875	PCA0108228	PCA0102539
Sample Date	Client Info	22 Jan 2024	15 Oct 2023	20 Jul 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	ABNORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.05	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	1	9	<1
Chromium	ppm	ASTM D5185m >20	0	0	1
Nickel	ppm	ASTM D5185m >20	0	1	1
Titanium	ppm	ASTM D5185m	0	0	1
Silver	ppm	ASTM D5185m	0	0	3
Aluminum	ppm	ASTM D5185m >20	<1	3	0
Lead	ppm	ASTM D5185m >20	0	<1	8
Copper	ppm	ASTM D5185m >20	3	3	2
Tin	ppm	ASTM D5185m >20	0	<1	2
Vanadium	ppm	ASTM D5185m	0	0	2
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 5	0	0	<1
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 5	0	0	1
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 5	0	3	19
Calcium	ppm	ASTM D5185m 5	0	4	0
Phosphorus	ppm	ASTM D5185m 100	516	550	296
Zinc	ppm	ASTM D5185m 25	<1	0	0
Sulfur	ppm	ASTM D5185m 1500	1296	1556	1531

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<1	2	3
Sodium	ppm	ASTM D5185m	2	4	43
Potassium	ppm	ASTM D5185m >20	0	3	100

FLUID CLEANLINESS

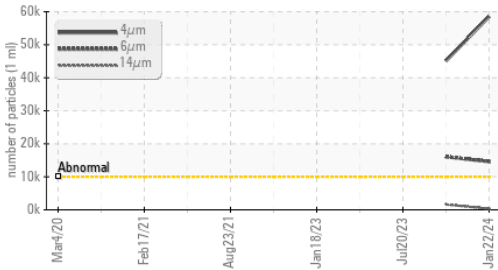
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 58548	▲ 45106	---
Particles >6µm	ASTM D7647 >2500	▲ 14623	▲ 16078	---
Particles >14µm	ASTM D7647 >640	304	▲ 1630	---
Particles >21µm	ASTM D7647 >160	41	▲ 453	---
Particles >38µm	ASTM D7647 >40	1	28	---
Particles >71µm	ASTM D7647 >10	0	3	---
Oil Cleanliness	ISO 4406 (c) >20/18/16	▲ 23/21/15	▲ 23/21/18	---

FLUID DEGRADATION

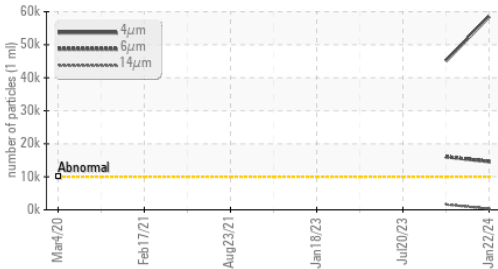
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.08	0.18	0.07	0.17

OIL ANALYSIS REPORT

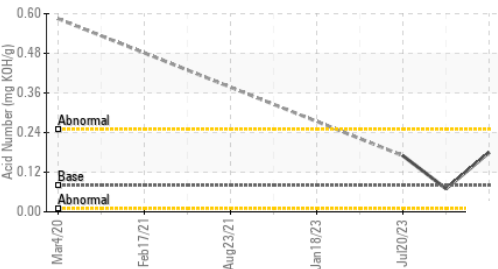
▲ Particle Trend



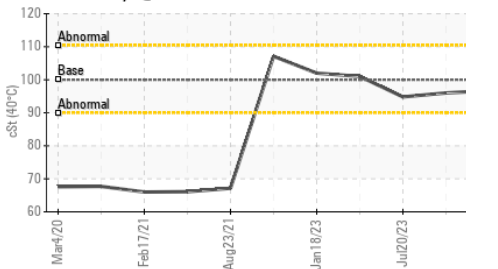
▲ Particle Trend



Acid Number



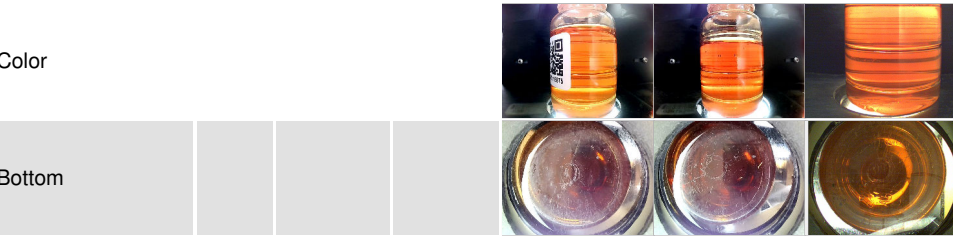
Viscosity @ 40°C



PARAMETER	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	LIGHT
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	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

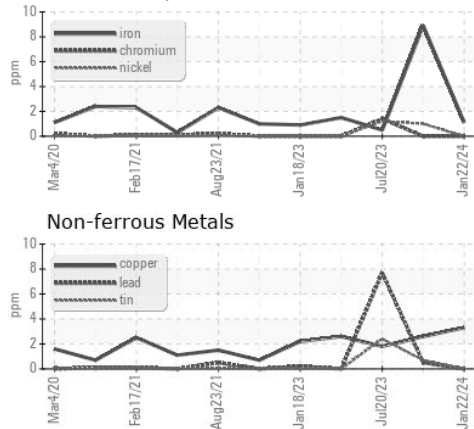
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	100	96.7	96.0

SAMPLE IMAGES

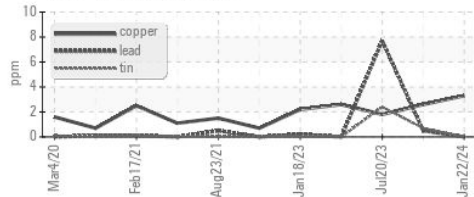


GRAPHS

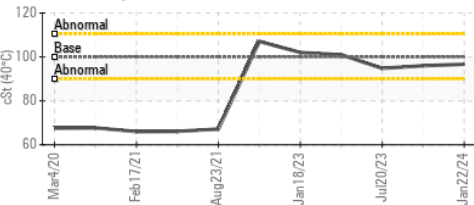
Ferrous Alloys



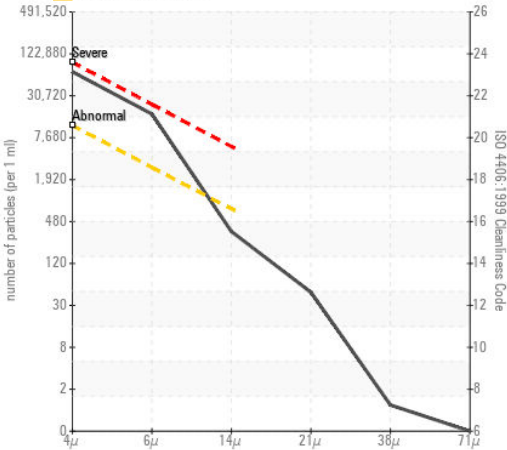
Non-ferrous Metals



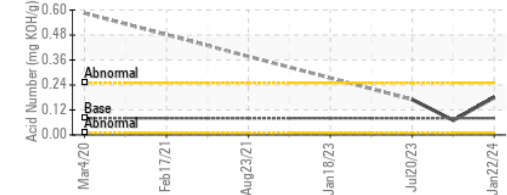
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0115875 **Received** : 25 Jan 2024
Lab Number : 06070421 **Diagnosed** : 28 Jan 2024
Unique Number : 10847098 **Diagnostician** : Don Baldrige
Test Package : IND 2

KraftHeinz - Kirksville - Plant 8333 PCA
 2504 INDUSTRIAL DR
 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)