IND II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Area
[02618664]
Machine Id
SCRAPPER HPU CP11
Component
Hydraulic System
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Confirm the source of the lubricant being utilized for top-up/fill. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

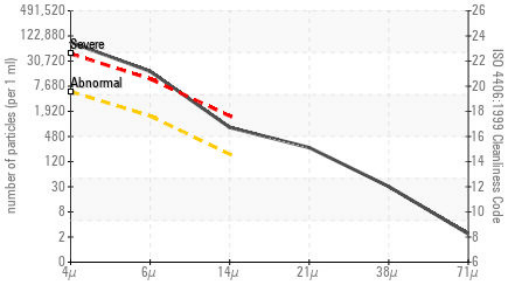
There is a high amount of particulates (2 to 100 microns in size) present in the oil.

FLUID CONDITION

indicate a difference in the oil formulation as compared to the reference oil. The high AN level of the oil indicates the presence of oxi-polymerized products. The AN level is much higher than the recommended limit. Viscosity of sample indicates oil is within ISO 15 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable.

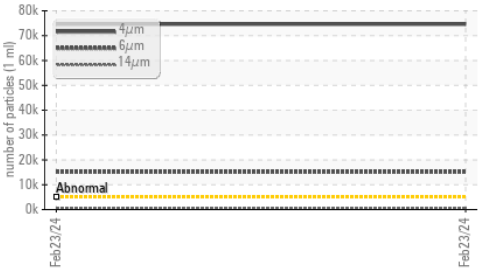
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PP	---	---
Sample Date		Client Info		23 Feb 2024	---	---
Machine Age	yrs	Client Info		1	---	---
Oil Age	yrs	Client Info		1	---	---
Filter Age	yrs	Client Info		1	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185(m)	>20	1	---	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---	---
Nickel	ppm	ASTM D5185(m)	>20	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<1	---	---
Lead	ppm	ASTM D5185(m)	>20	0	---	---
Copper	ppm	ASTM D5185(m)	>20	4	---	---
Tin	ppm	ASTM D5185(m)	>20	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>15	0	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water		WC Method	>0.05	NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 74611	---	---
Particles >6µm		ASTM D7647	>1300	▲ 15145	---	---
Particles >14µm		ASTM D7647	>160	▲ 695	---	---
Particles >21µm		ASTM D7647	>40	▲ 229	---	---
Particles >38µm		ASTM D7647	>10	▲ 27	---	---
Particles >71µm		ASTM D7647	>3	2	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/21/17	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.05	NEG	---	---
Sodium	ppm	ASTM D5185(m)		0	---	---
Boron	ppm	ASTM D5185(m)		0	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		0	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		0	---	---
Calcium	ppm	ASTM D5185(m)		<1	---	---
Phosphorus	ppm	ASTM D5185(m)		● <1	---	---
Zinc	ppm	ASTM D5185(m)		3	---	---
Sulfur	ppm	ASTM D5185(m)		● 52	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*		▲ 10.1	---	---
Visc @ 40°C	cSt	ASTM D7279(m)		▲ 16.9	---	---

Particle Count

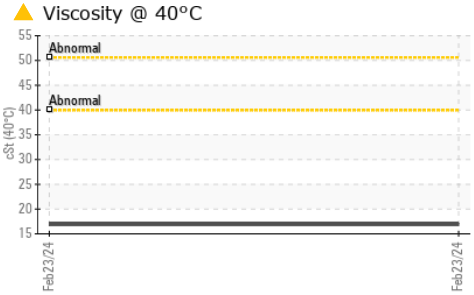


Acid Number

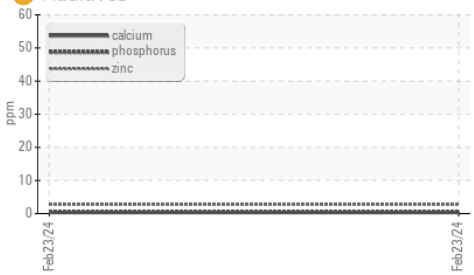
Particle Trend



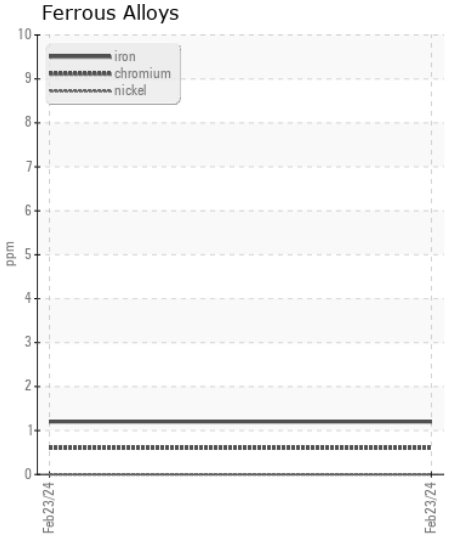
Viscosity @ 40°C



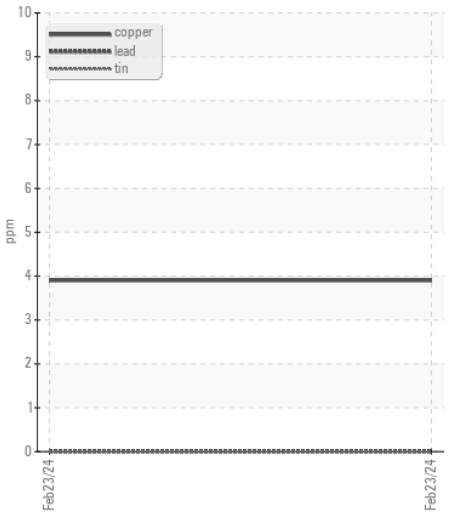
Additives



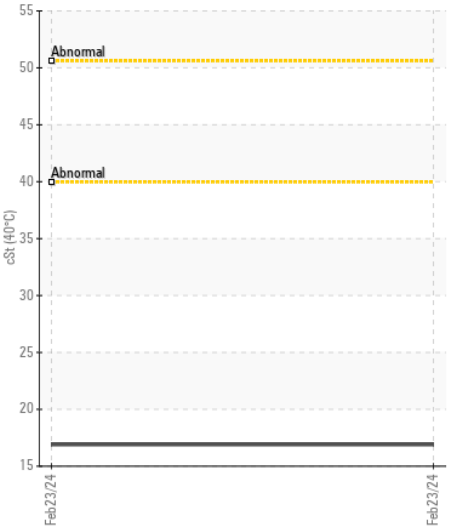
Ferrous Alloys



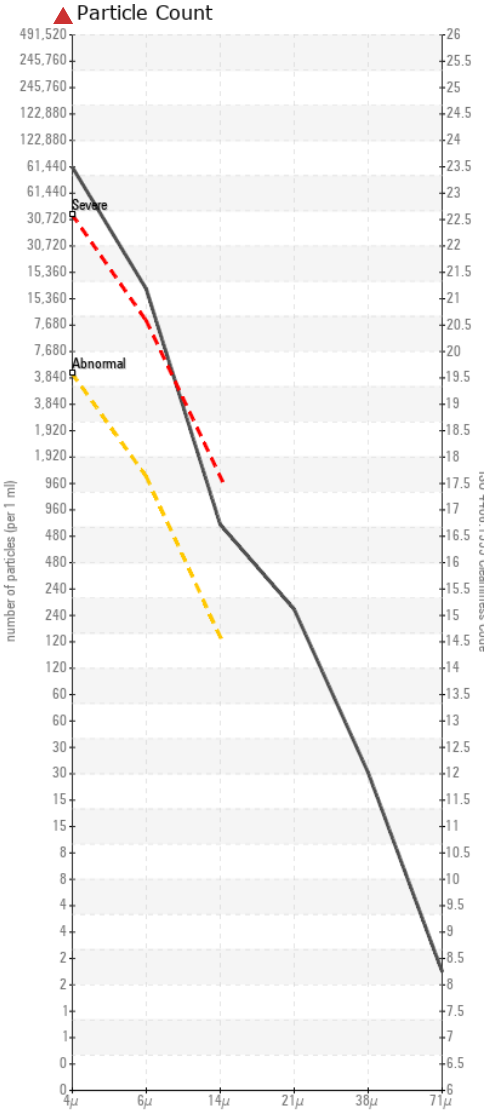
Non-ferrous Metals



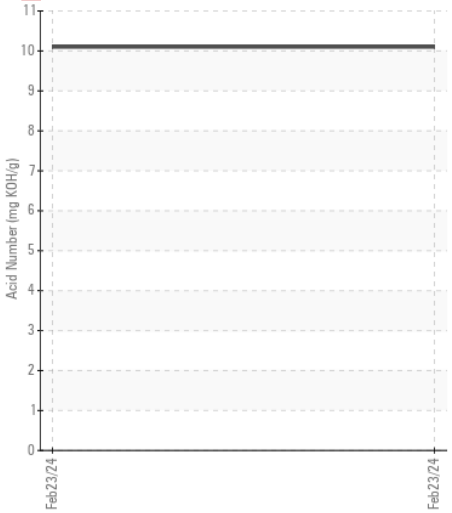
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP
Lab Number : 02618669
Unique Number : 5735779
Test Package : IND 2 (Additional Tests: TAN Man)

Received : 28 Feb 2024
Tested : 01 Mar 2024
Diagnosed : 01 Mar 2024 - Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

CPI AUTOMATION
5155, TIMBERLEA BLVD
MISSISSAUGA, ON
CA L4W 2S3
Contact: Lou Botelhu
loub@cpiautomation.com
T: (905)625-4805
F: (905)629-8409