



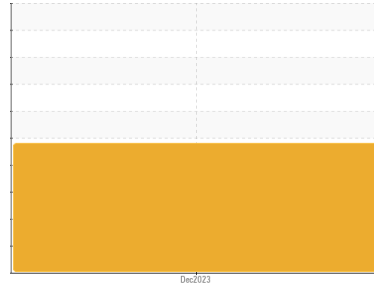
PROBLEM SUMMARY

Sample Rating Trend

ISO

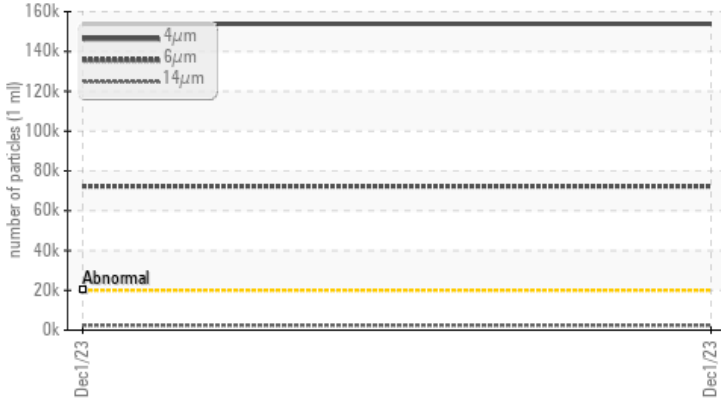


Area
BUILDING 51 - CEREAL PRODUCTS
 Machine Id
DRAG CHAIN CONVEYOR GEARBOX (S/N 51C9-GB)
 Component
Gearbox
 Fluid
LUBRICATION ENG DUOLEC 1605 GEAR OIL 220 (20 LTR)

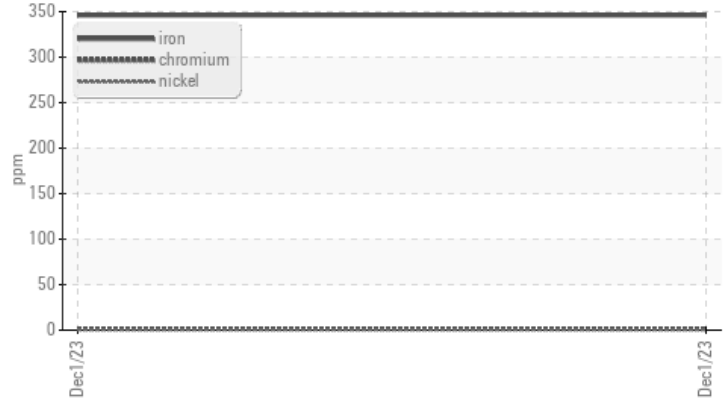


COMPONENT CONDITION SUMMARY

Particle Trend



Ferrous Alloys



RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We recommend that you drain the oil from the component if this has not already been done. 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. Resample in 30-45 days to monitor this situation.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185(m)	>200	▲ 346	---	---
Particles >4µm		ASTM D7647	>20000	▲ 153901	---	---
Particles >6µm		ASTM D7647	>5000	● 72280	---	---
Particles >14µm		ASTM D7647	>640	▲ 2425	---	---
Particles >21µm		ASTM D7647	>160	▲ 368	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 24/23/18	---	---

Customer Id: HIRWIN
 Sample No.: WC0865413
 Lab Number: 02601323
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
 Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Check Breathers	---	---	?	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.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.

HISTORICAL DIAGNOSIS



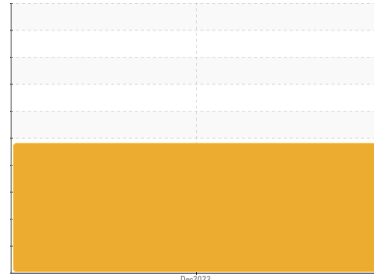
OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area
BUILDING 51 - CEREAL PRODUCTS
 Machine Id
DRAG CHAIN CONVEYOR GEARBOX (S/N 51C9-GB)
 Component
Gearbox
 Fluid
LUBRICATION ENG DUOLEC 1605 GEAR OIL 220 (20 LTR)



DIAGNOSIS

Recommendation

We advise that you check all areas where contaminants can enter the system. We recommend that you drain the oil from the component if this has not already been done. 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. Resample in 30-45 days to monitor this situation.

Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

Contamination

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

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0865413	---	---
Sample Date	Client Info		01 Dec 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		8	---	---
Iron	ppm	ASTM D5185(m) >200	▲ 346	---	---
Chromium	ppm	ASTM D5185(m) >15	2	---	---
Nickel	ppm	ASTM D5185(m) >15	<1	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	<1	---	---
Aluminum	ppm	ASTM D5185(m) >25	2	---	---
Lead	ppm	ASTM D5185(m) >100	0	---	---
Copper	ppm	ASTM D5185(m) >200	2	---	---
Tin	ppm	ASTM D5185(m) >25	0	---	---
Antimony	ppm	ASTM D5185(m) >5	<1	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

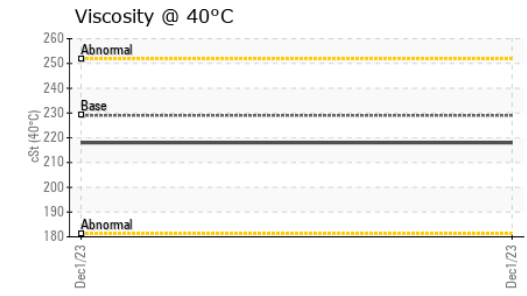
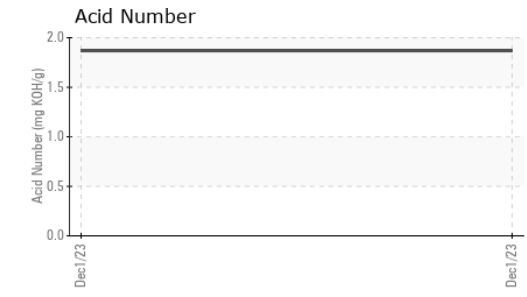
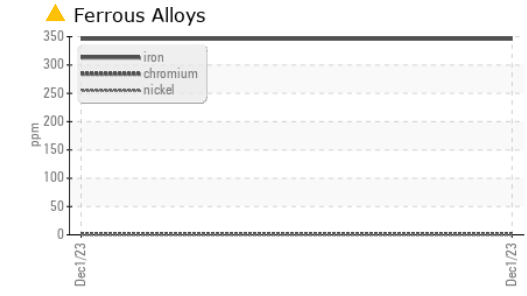
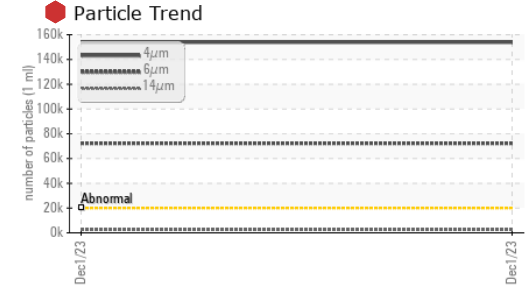
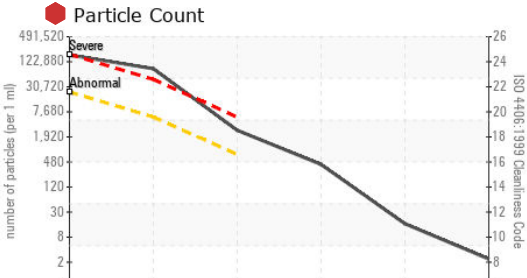
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	37	---	---
Barium	ppm	ASTM D5185(m)	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0	---	---
Manganese	ppm	ASTM D5185(m)	7	---	---
Magnesium	ppm	ASTM D5185(m)	<1	---	---
Calcium	ppm	ASTM D5185(m)	3	---	---
Phosphorus	ppm	ASTM D5185(m)	976	---	---
Zinc	ppm	ASTM D5185(m)	27	---	---
Sulfur	ppm	ASTM D5185(m)	13835	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	4	---	---
Sodium	ppm	ASTM D5185(m)	3	---	---
Potassium	ppm	ASTM D5185(m) >20	<1	---	---



OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 153901	---	---
Particles >6µm	ASTM D7647	>5000	● 72280	---	---
Particles >14µm	ASTM D7647	>640	▲ 2425	---	---
Particles >21µm	ASTM D7647	>160	▲ 368	---	---
Particles >38µm	ASTM D7647	>40	14	---	---
Particles >71µm	ASTM D7647	>10	2	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	● 24/23/18	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	1.87	---	---

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	229.0	218	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color					
Bottom					



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0865413
Lab Number : 02601323
Unique Number : 5694408
Test Package : IND 2 (Additional Tests: PQ, TAN Man)

HIRAM WALKER & SONS LTD.
 2072 RIVERSIDE DRIVE EAST, BOX 2518
 WINDSOR, ON
 CA N8Y 4S5
 Contact: Matt Morand
 matt.morand@pernod-ricard.com
 T: (519)561-5359
 F: (519)971-5719

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.