



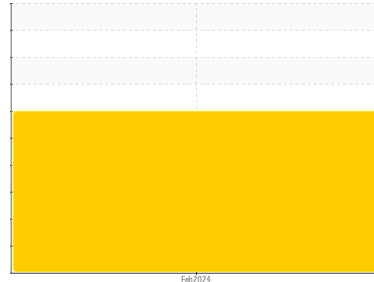
PROBLEM SUMMARY

Sample Rating Trend

WEAR

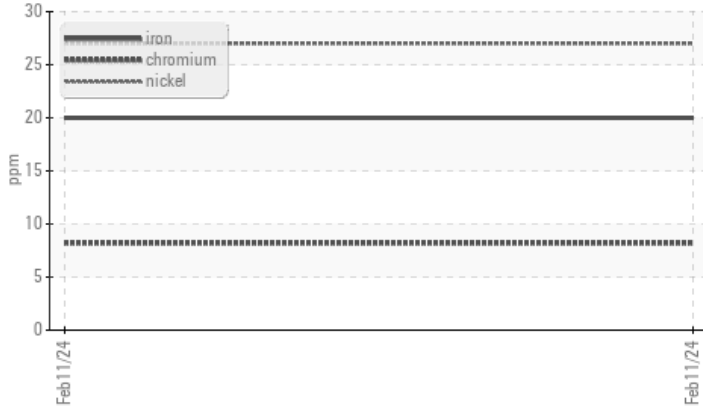


Area
Pumping
 Machine Id
WESTERN STAR 4900 H03
 Component
Gearbox
 Fluid
SAE 75W90 (--- LTR)



COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status	SEVERE	---	---
Nickel ppm ASTM D5185(m) >10	▲ 27	---	---

Customer Id: GOLEDM
 Sample No.: WC0803699
 Lab Number: 02623119
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Kevin Marson +1 (289)291-4644 x4644
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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	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.

HISTORICAL DIAGNOSIS

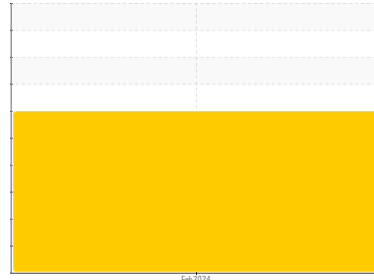


OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area
Pumping
 Machine Id
WESTERN STAR 4900 H03
 Component
Gearbox
 Fluid
SAE 75W90 (--- LTR)



DIAGNOSIS

▲ Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

▲ Wear

Nickel ppm levels are severe.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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		WC0803699	---	---
Sample Date	Client Info		11 Feb 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Not Changd	---	---
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*		0	---	---
Iron	ppm	ASTM D5185(m) >200	20	---	---
Chromium	ppm	ASTM D5185(m) >10	8	---	---
Nickel	ppm	ASTM D5185(m) >10	▲ 27	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m) >25	2	---	---
Lead	ppm	ASTM D5185(m) >50	3	---	---
Copper	ppm	ASTM D5185(m) >200	3	---	---
Tin	ppm	ASTM D5185(m) >10	<1	---	---
Antimony	ppm	ASTM D5185(m) >5	10	---	---
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) 150	57	---	---
Barium	ppm	ASTM D5185(m) 5	<1	---	---
Molybdenum	ppm	ASTM D5185(m) 0	124	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m) 0	6	---	---
Calcium	ppm	ASTM D5185(m) 20	48	---	---
Phosphorus	ppm	ASTM D5185(m) 1200	1360	---	---
Zinc	ppm	ASTM D5185(m) 25	66	---	---
Sulfur	ppm	ASTM D5185(m) 22000	22269	---	---
Lithium	ppm	ASTM D5185(m)	8	---	---

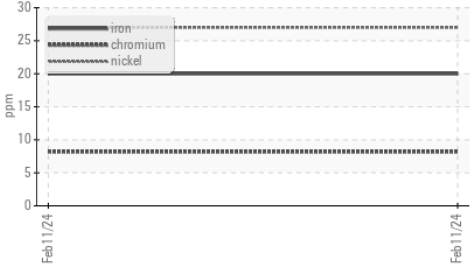
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	10	---	---
Sodium	ppm	ASTM D5185(m)	83	---	---
Potassium	ppm	ASTM D5185(m) >20	8	---	---

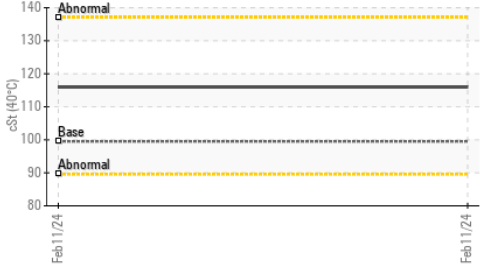


OIL ANALYSIS REPORT

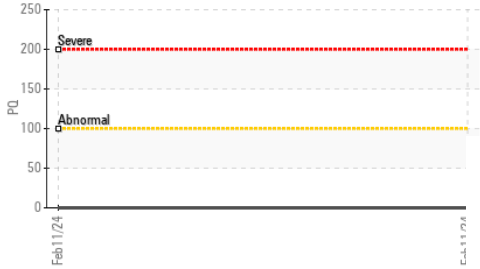
▲ Ferrous Alloys



Viscosity @ 40°C



PQ



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	---

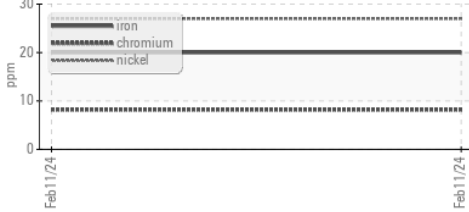
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	99.5	116	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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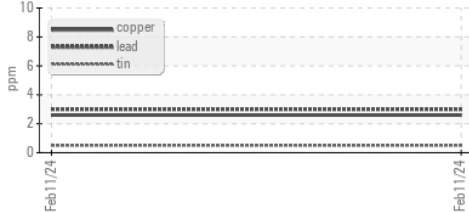
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GRAPHS

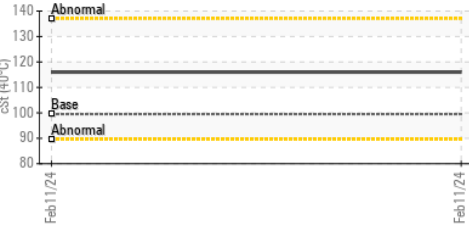
▲ Ferrous Alloys



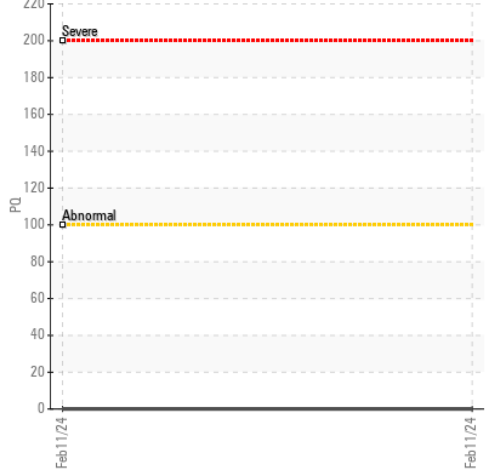
Non-ferrous Metals



Viscosity @ 40°C



PQ



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0803699 **Received** : 19 Mar 2024
Lab Number : 02623119 **Tested** : 20 Mar 2024
Unique Number : 5748238 **Diagnosed** : 20 Mar 2024 - Kevin Marson
Test Package : FLEET (Additional Tests: PQ)

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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.