



# PROBLEM SUMMARY

Sample Rating Trend

ISO



Machine Id  
**BRIDGE DRIVE**

Component  
**Gearbox**

Fluid  
**GEAR OIL (PAG) ISO 220 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## 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 recommend you service the filters on this component. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL (PAG) ISO 220. Please confirm. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	---	---
Particles >4µm	ASTM D7647	>20000	▲ 27366	---	---
Particles >6µm	ASTM D7647	>5000	▲ 5671	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 22/20/15	---	---

Customer Id: ONTQUE  
 Sample No.: WC0565990  
 Lab Number: 02579809  
 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  
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To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Alert	---	---	?	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.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**BRIDGE DRIVE**

Component

**Gearbox**

Fluid

**GEAR OIL (PAG) ISO 220 (--- GAL)**

## DIAGNOSIS

### ▲ 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 recommend you service the filters on this component. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL (PAG) ISO 220. Please confirm. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a light 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	<b>WC0565990</b>	---	---
Sample Date	Client Info	<b>30 Aug 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---
Oil Age	hrs	Client Info	<b>0</b>	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ATTENTION</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	<b>0</b>	---	---
Iron	ppm	ASTM D5185(m) >200	<b>1</b>	---
Chromium	ppm	ASTM D5185(m) >15	<b>0</b>	---
Nickel	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	---
Aluminum	ppm	ASTM D5185(m) >25	<b>0</b>	---
Lead	ppm	ASTM D5185(m) >100	<b>17</b>	---
Copper	ppm	ASTM D5185(m) >200	<b>&lt;1</b>	---
Tin	ppm	ASTM D5185(m) >25	<b>0</b>	---
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	---
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	---
Barium	ppm	ASTM D5185(m) 5	<b>0</b>	---
Molybdenum	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	---
Manganese	ppm	ASTM D5185(m)	<b>0</b>	---
Magnesium	ppm	ASTM D5185(m) 5	<b>0</b>	---
Calcium	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	---
Phosphorus	ppm	ASTM D5185(m) 775	<b>428</b>	---
Zinc	ppm	ASTM D5185(m) 5	<b>3</b>	---
Sulfur	ppm	ASTM D5185(m) 2000	<b>2088</b>	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---

## CONTAMINANTS

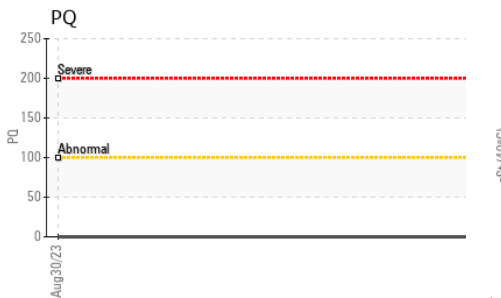
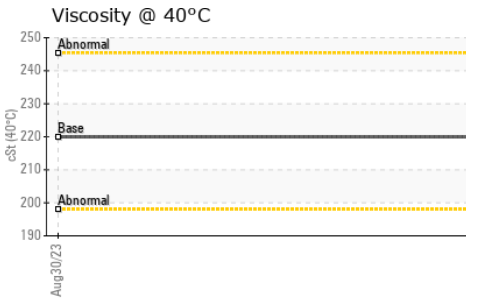
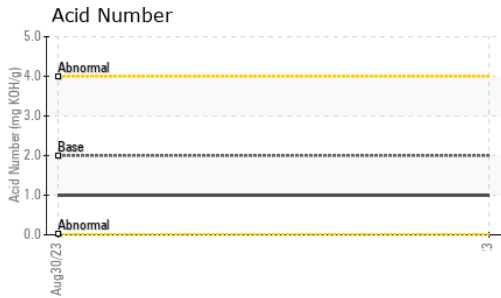
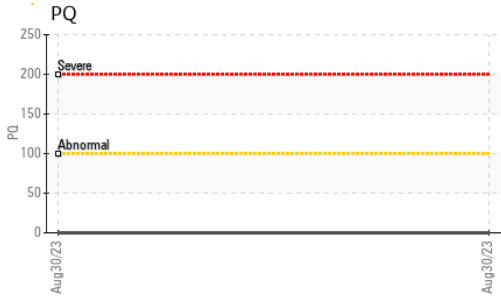
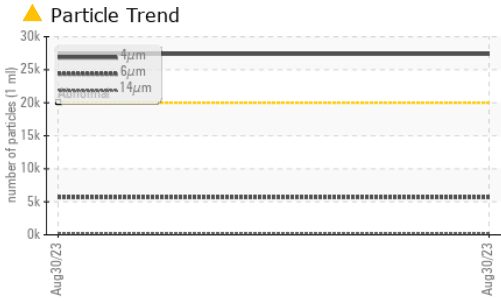
method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>17</b>	---
Sodium	ppm	ASTM D5185(m)	<b>2</b>	---
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	---

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 27366</b>	---
Particles >6µm	ASTM D7647	>5000	<b>▲ 5671</b>	---
Particles >14µm	ASTM D7647	>640	<b>228</b>	---
Particles >21µm	ASTM D7647	>160	<b>50</b>	---
Particles >38µm	ASTM D7647	>40	<b>1</b>	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 22/20/15</b>	---



# OIL ANALYSIS REPORT



FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	2.00	<b>1.00</b>	---

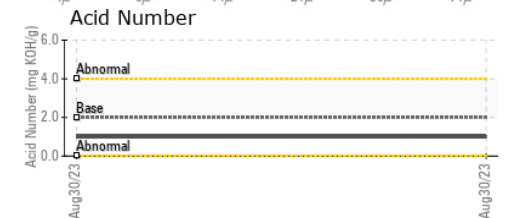
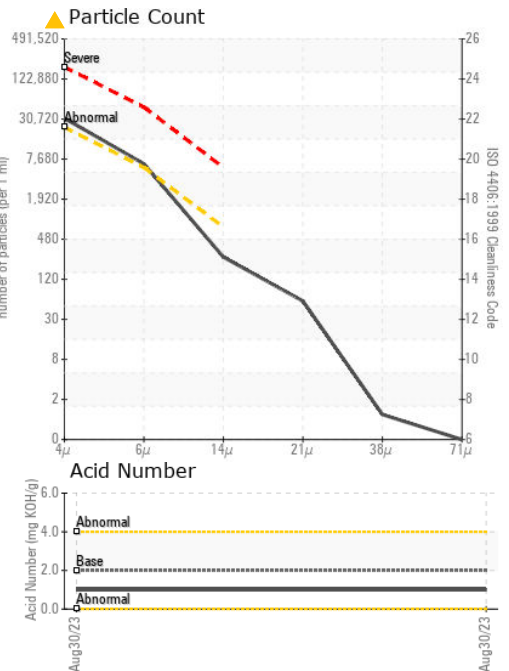
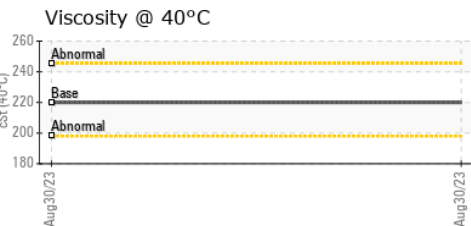
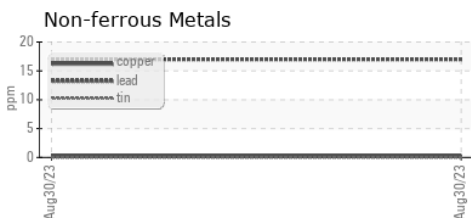
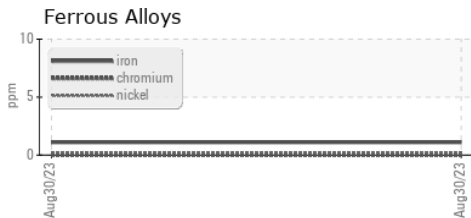
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---
Sand/Dirt	scalar	Visual*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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	<b>220</b>	---

## SAMPLE IMAGES

Color	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0565990 **Received** : 31 Aug 2023  
**Lab Number** : 02579809 **Diagnosed** : 01 Sep 2023  
**Unique Number** : 5632869 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: PQ, PrtCount )

**Ontario Power Generation**  
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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.