



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**401 CRANE BRIDGE NE**

Component  
**Gearbox**  
Fluid  
**NOT GIVEN (--- 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. Resample at the next service interval to monitor. 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 no indication of any contamination 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>WC0716518</b>	---	---
Sample Date	Client Info		<b>13 Oct 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>NORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>12</b>	---	---
Iron	ppm	ASTM D5185(m) >200	<b>57</b>	---	---
Chromium	ppm	ASTM D5185(m) >15	<b>&lt;1</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>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185(m) >100	<b>&lt;1</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)	<b>19</b>	---	---
Barium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185(m)	<b>6</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	<b>418</b>	---	---
Zinc	ppm	ASTM D5185(m)	<b>12</b>	---	---
Sulfur	ppm	ASTM D5185(m)	<b>5149</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

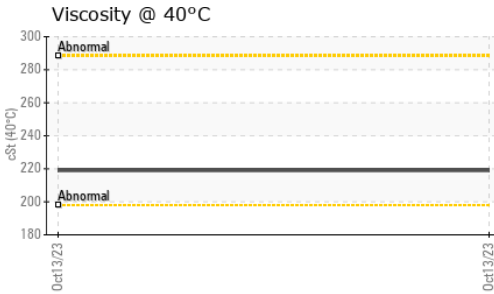
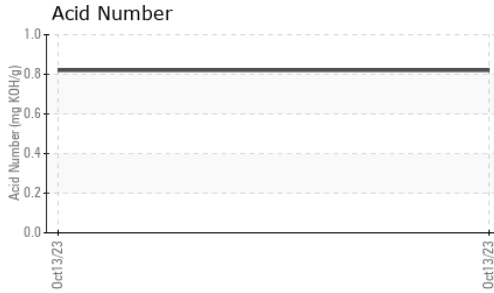
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>19</b>	---	---
Sodium	ppm	ASTM D5185(m)	<b>3</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>2</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>0.82</b>	---	---



# OIL ANALYSIS REPORT



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	VLITE	---
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	---

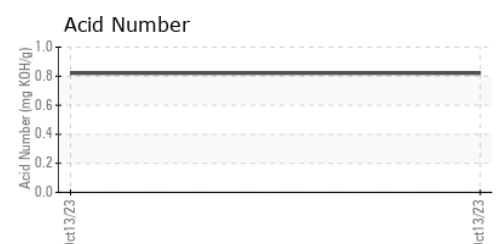
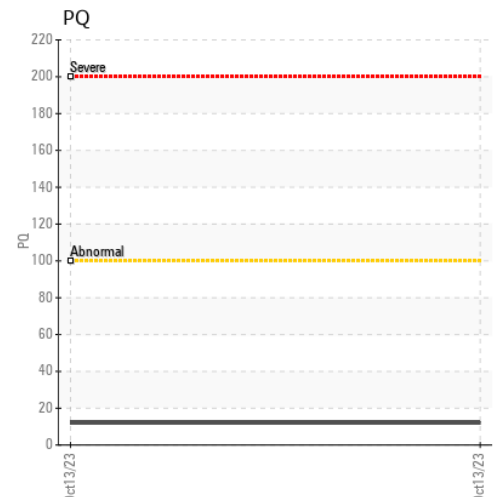
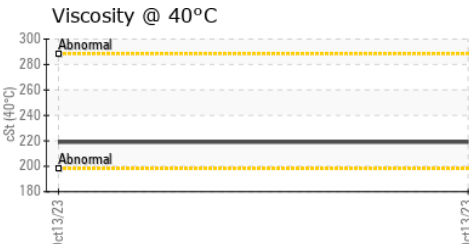
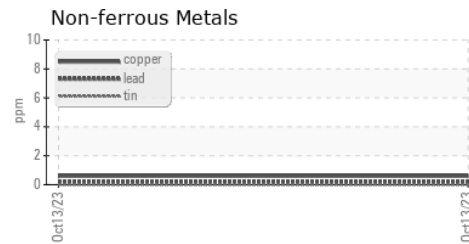
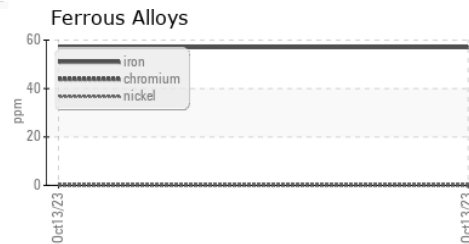
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	219	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

	no image	no image
Bottom		no image

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0716518 **Received** : 23 Oct 2023  
**Lab Number** : 02591187 **Diagnosed** : 25 Oct 2023  
**Unique Number** : 5668266 **Diagnostician** : Wes Davis  
**Test Package** : IND 2

**Vale - Copper Cliff Smelter**  
 COPPER CLIFF SMELTER WAREHOUSE, 155 BALSAM ST.  
 COPPER CLIFF, ON  
 CA P0M 1N0  
 Contact: Andy Kozachanko  
 andrew.kozachanko@vale.com  
 T: (705)682-6687  
 F: (705)682-6939

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.