



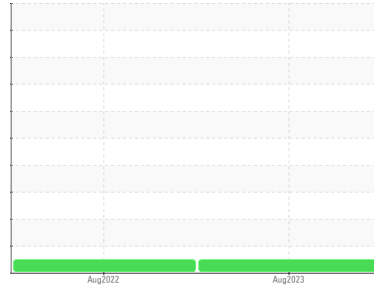
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**KOBELCO 9 - 21J121269**  
 Component  
**Compressor**  
 Fluid  
**KOBELCO (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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>WC0806245</b>	WC0705540	---
Sample Date	Client Info		<b>16 Aug 2023</b>	18 Aug 2022	---
Machine Age	hrs	Client Info	<b>4631</b>	1190	---
Oil Age	hrs	Client Info	<b>1423</b>	1190	---
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	<b>0</b>	0	---
Silver	ppm	ASTM D5185m	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	0	---
Lead	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>0</b>	<1	---
Tin	ppm	ASTM D5185m >15	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Calcium	ppm	ASTM D5185m	<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m	<b>2</b>	6	---
Zinc	ppm	ASTM D5185m	<b>0</b>	0	---
Sulfur	ppm	ASTM D5185m	<b>15</b>	30	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	4	---
Sodium	ppm	ASTM D5185m	<b>0</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	---

## FLUID DEGRADATION

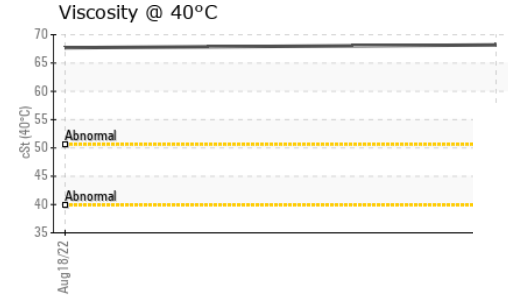
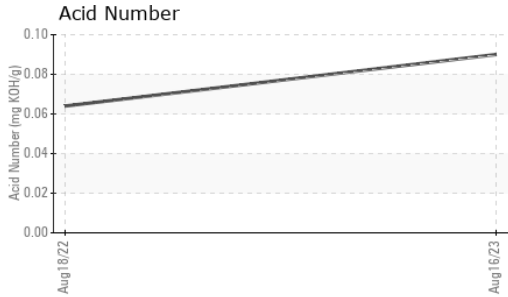
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.09</b>	0.064	---

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Silt	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual >0.1	<b>NEG</b>	NEG	---
Free Water	scalar	*Visual	<b>NEG</b>	NEG	---



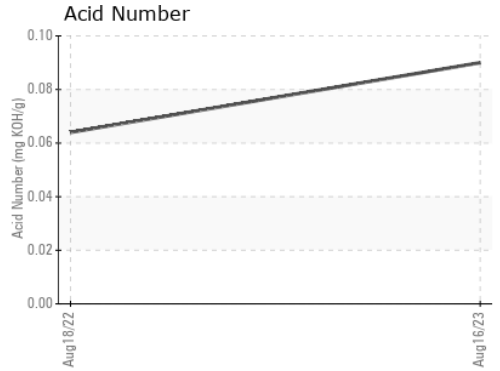
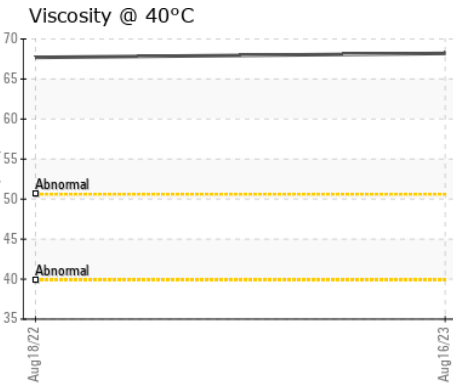
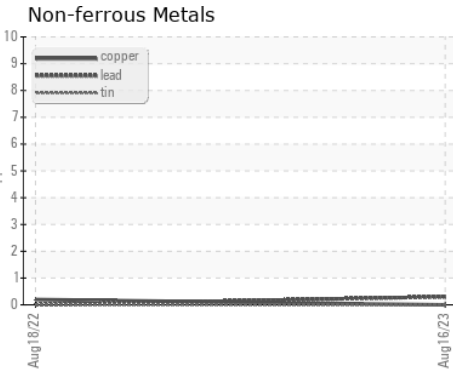
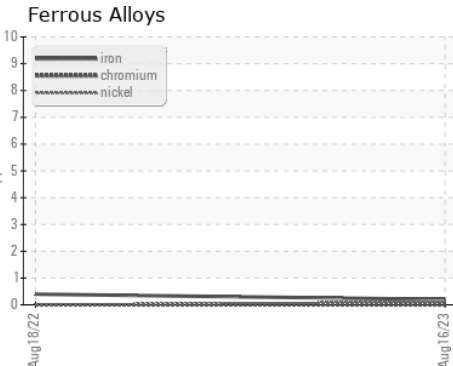
# OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68.2	67.7	---

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0806245 **Received** : 21 Aug 2023  
**Lab Number** : 05929769 **Diagnosed** : 23 Aug 2023  
**Unique Number** : 10615040 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF )

**XCEL ENERGY**  
 1400 EAST BLACK DOG RD  
 BURNSVILLE, MN  
 US 55337  
 Contact: JAYME BENSON

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T: (952)895-4125  
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