



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**CATERPILLAR 320B EXC01**  
 Component  
**Swing Drive**  
 Fluid  
**GEAR OIL SAE 80W90 (--- 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 condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0920169</b>	---	---
Sample Date	Client Info		<b>07 Apr 2024</b>	---	---
Machine Age	hrs	Client Info	<b>19178</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>Not Chngd</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >400	<b>50</b>	---	---
Chromium	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m) >10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m) >25	<b>2</b>	---	---
Lead	ppm	ASTM D5185(m) >50	<b>0</b>	---	---
Copper	ppm	ASTM D5185(m) >200	<b>3</b>	---	---
Tin	ppm	ASTM D5185(m) >10	<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

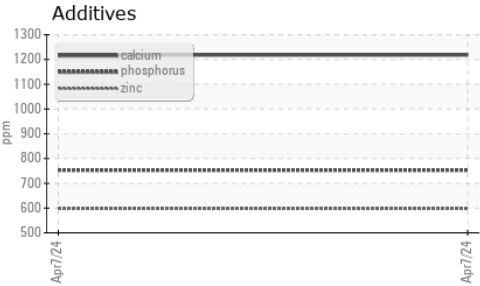
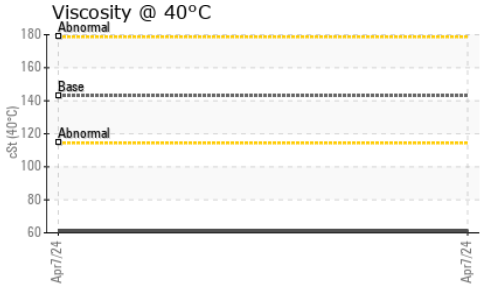
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 400	<b>142</b>	---	---
Barium	ppm	ASTM D5185(m) 200	<b>2</b>	---	---
Molybdenum	ppm	ASTM D5185(m) 12	<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m) 12	<b>122</b>	---	---
Calcium	ppm	ASTM D5185(m) 150	<b>1218</b>	---	---
Phosphorus	ppm	ASTM D5185(m) 1650	<b>753</b>	---	---
Zinc	ppm	ASTM D5185(m) 125	<b>597</b>	---	---
Sulfur	ppm	ASTM D5185(m) 22500	<b>10811</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>2</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>11</b>	---	---
Sodium	ppm	ASTM D5185(m) >170	<b>2</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>2</b>	---	---



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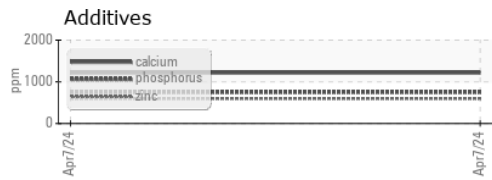
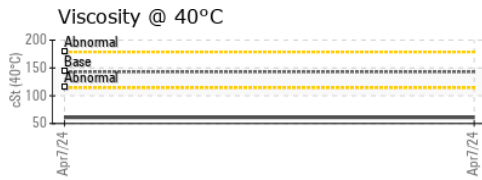
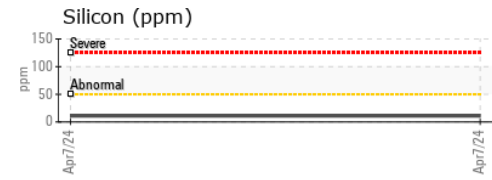
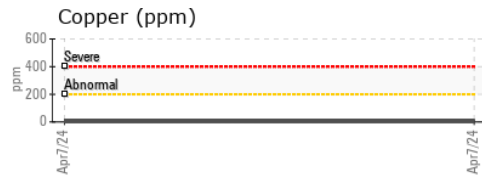
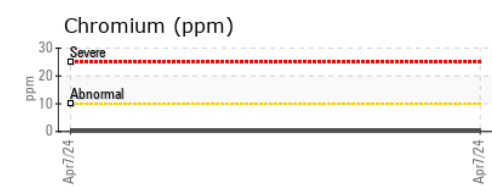
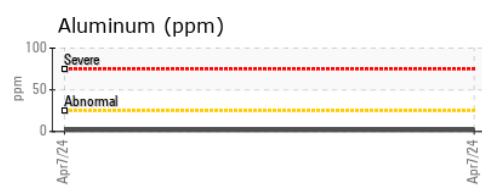
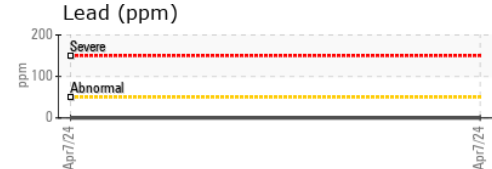
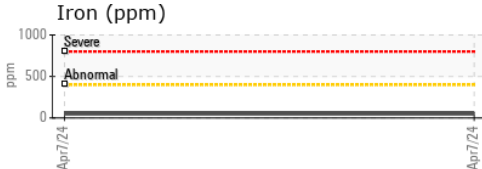
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
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)	143	61.1	---	---

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

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0920169  
**Lab Number** : 02628560  
**Unique Number** : 5761692  
**Test Package** : MOB 1

**Agnico Eagle Canada**  
 1350 Government Rd. W, MACASSA COMPLEX  
 Kirkland Lake, ON  
 CA P2N 3J1  
 Contact: Mitch Lamontagne  
 AEM\_KL\_macassaoilsampleresults@agnicoeagle.com

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.

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