

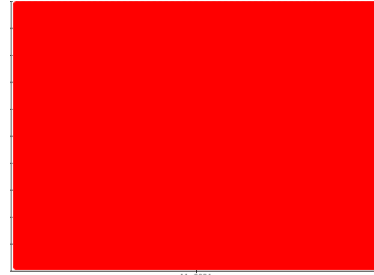


# OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area  
**[100013979]**  
 Machine Id  
**MINECAT UT99 FMC022**  
 Component  
**Front Differential**  
 Fluid  
**GEAR OIL LS 80W90 (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL LS 80W90. Please confirm.

### ▲ Wear

Iron and nickel ppm levels are severe. Chromium ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

### ▲ Contamination

There is a moderate concentration of water present in the oil.

### ● Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. 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		<b>WC0892417</b>	---	---
Sample Date	Client Info		<b>06 Mar 2024</b>	---	---
Machine Age	hrs	Client Info	<b>8448</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>97</b>	---	---
Iron	ppm	ASTM D5185(m) >500	<b>▲ 3135</b>	---	---
Chromium	ppm	ASTM D5185(m) >10	<b>▲ 14</b>	---	---
Nickel	ppm	ASTM D5185(m) >10	<b>▲ 82</b>	---	---
Titanium	ppm	ASTM D5185(m)	<b>2</b>	---	---
Silver	ppm	ASTM D5185(m)	<b>2</b>	---	---
Aluminum	ppm	ASTM D5185(m) >25	<b>45</b>	---	---
Lead	ppm	ASTM D5185(m) >25	<b>1</b>	---	---
Copper	ppm	ASTM D5185(m) >100	<b>14</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

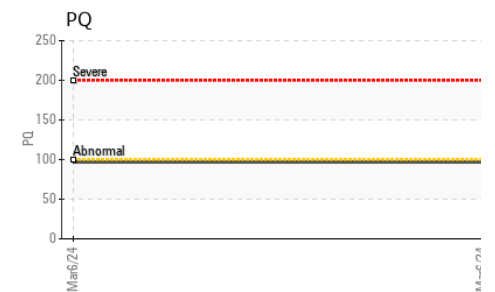
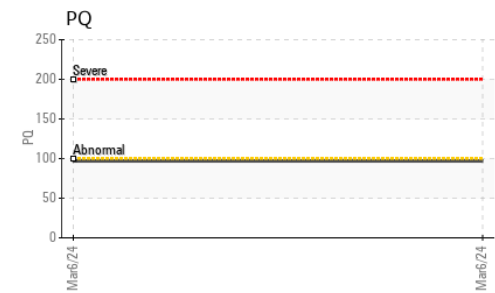
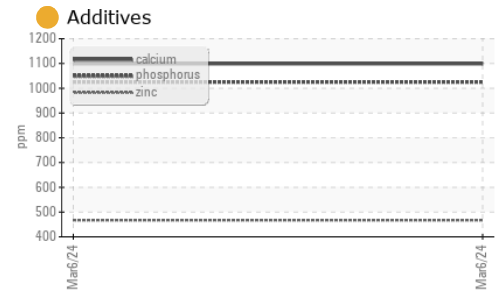
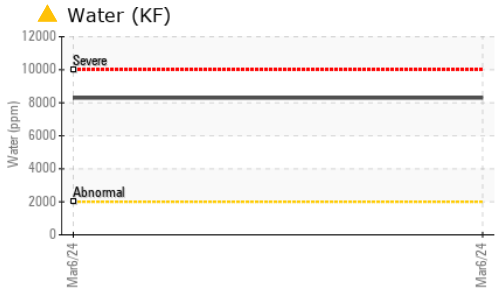
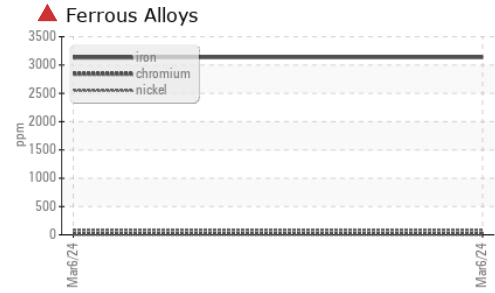
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 150	<b>85</b>	---	---
Barium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	<b>3</b>	---	---
Manganese	ppm	ASTM D5185(m)	<b>23</b>	---	---
Magnesium	ppm	ASTM D5185(m) 10	<b>61</b>	---	---
Calcium	ppm	ASTM D5185(m) 70	<b>● 1099</b>	---	---
Phosphorus	ppm	ASTM D5185(m) 2000	<b>1025</b>	---	---
Zinc	ppm	ASTM D5185(m) 50	<b>● 467</b>	---	---
Sulfur	ppm	ASTM D5185(m) 20000	<b>27855</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>1</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >75	<b>282</b>	---	---
Sodium	ppm	ASTM D5185(m)	<b>31</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>19</b>	---	---
Water	%	ASTM D6304* >.2	<b>▲ 0.829</b>	---	---
ppm Water	ppm	ASTM D6304* >2000	<b>▲ 8292</b>	---	---



# OIL ANALYSIS REPORT



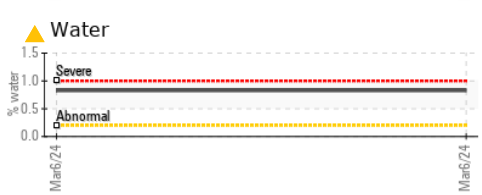
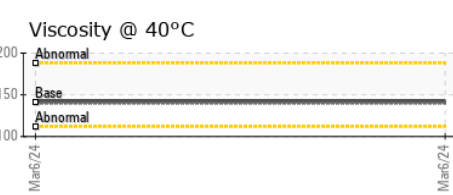
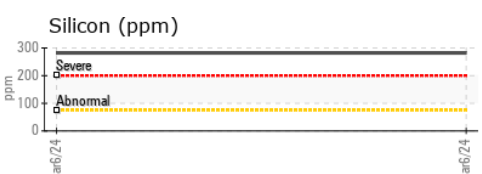
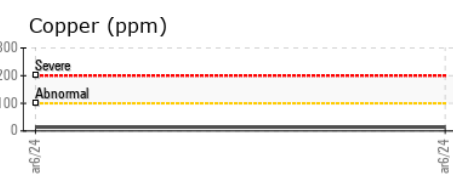
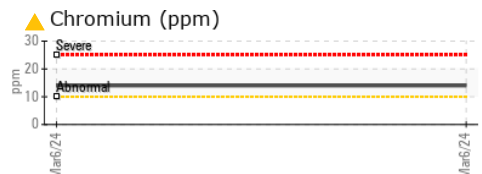
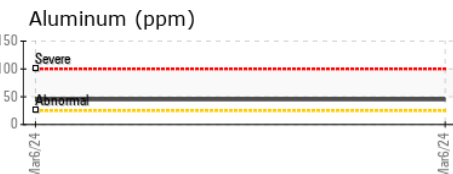
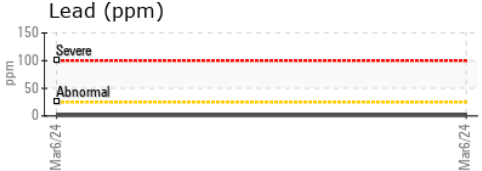
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>.2	▲.2%	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	140	142	---

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.** : WC0892417 **Received** : 12 Mar 2024  
**Lab Number** : 02621565 **Tested** : 13 Mar 2024  
**Unique Number** : 5746684 **Diagnosed** : 13 Mar 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: KF, PQ )

**Agnico Eagle Canada**  
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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.