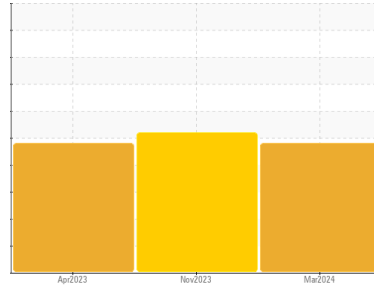




# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Machine Id  
**100-005**  
 Component  
**Right Final Drive**  
 Fluid  
**PETRO CANADA 30W (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

Chromium and iron ppm levels are abnormal. Aluminum ppm levels are noted. Titanium ppm levels are marginal. Gear wear is indicated.

### Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component.

### Fluid Condition

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>WC0920777</b>	WC0872753	LH0232538
Sample Date	Client Info		<b>16 Mar 2024</b>	13 Nov 2023	06 Apr 2023
Machine Age	hrs	Client Info	<b>0</b>	0	1000
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>365</b>	135	469
Iron	ppm	ASTM D5185(m) >500	<b>▲ 1618</b>	▲ 1263	▲ 1327
Chromium	ppm	ASTM D5185(m) >10	<b>▲ 24</b>	▲ 21	▲ 21
Nickel	ppm	ASTM D5185(m) >10	<b>9</b>	8	10
Titanium	ppm	ASTM D5185(m)	<b>▲ 28</b>	▲ 23	▲ 24
Silver	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >25	<b>● 513</b>	● 417	● 393
Lead	ppm	ASTM D5185(m) >25	<b>0</b>	1	1
Copper	ppm	ASTM D5185(m) >50	<b>5</b>	4	4
Tin	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

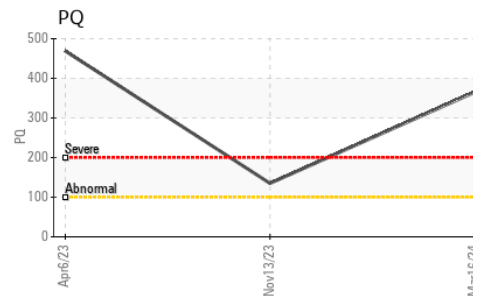
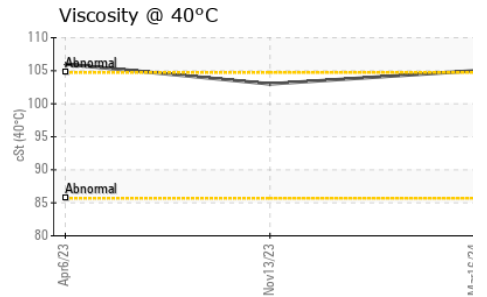
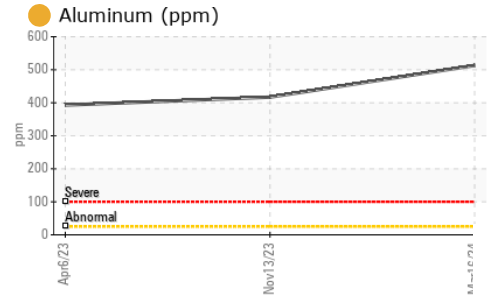
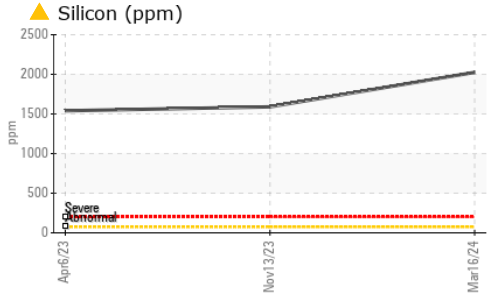
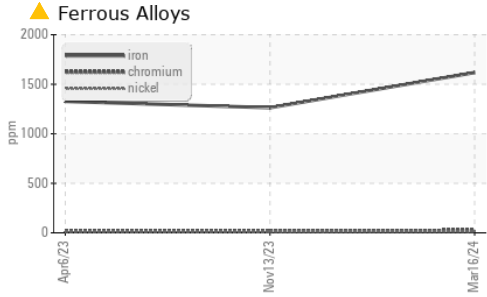
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>56</b>	51	52
Barium	ppm	ASTM D5185(m)	<b>6</b>	6	4
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)	<b>24</b>	21	19
Magnesium	ppm	ASTM D5185(m)	<b>232</b>	198	180
Calcium	ppm	ASTM D5185(m)	<b>5716</b>	5231	5500
Phosphorus	ppm	ASTM D5185(m)	<b>836</b>	872	948
Zinc	ppm	ASTM D5185(m)	<b>830</b>	826	825
Sulfur	ppm	ASTM D5185(m)	<b>6867</b>	6837	7215
Lithium	ppm	ASTM D5185(m)	<b>1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >75	<b>▲ 2025</b>	▲ 1590	▲ 1540
Sodium	ppm	ASTM D5185(m)	<b>130</b>	100	100
Potassium	ppm	ASTM D5185(m) >20	<b>213</b>	177	157



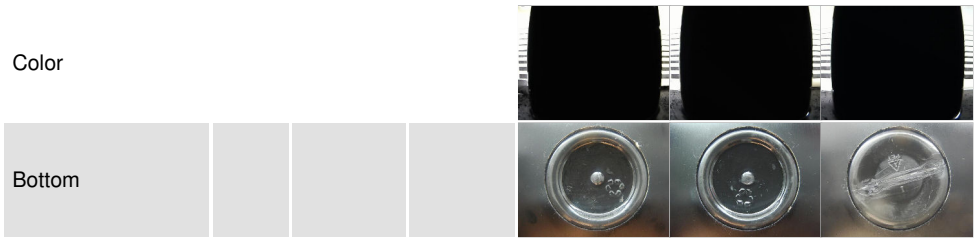
# OIL ANALYSIS REPORT



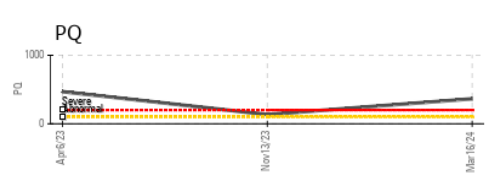
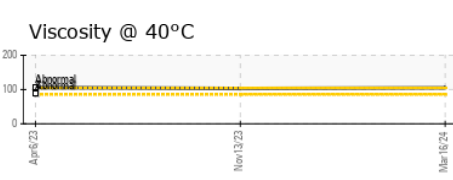
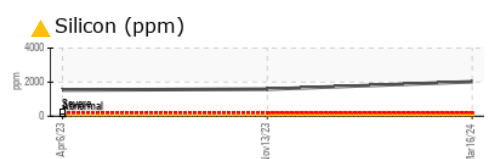
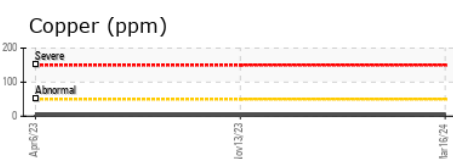
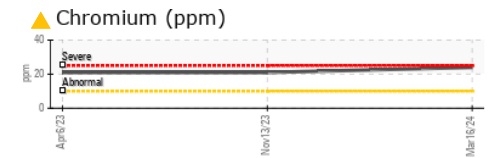
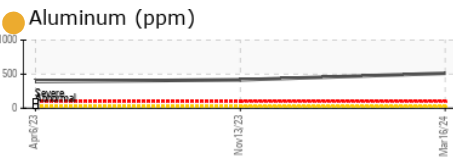
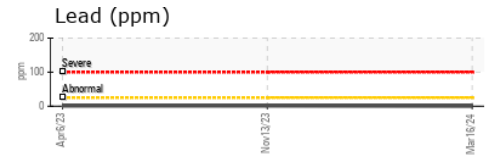
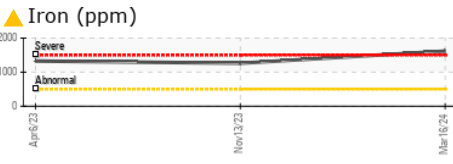
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	VLITE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	105	▲ 103	106

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0920777  
**Lab Number** : 02624390  
**Unique Number** : 5749509  
**Test Package** : MOBCE ( Additional Tests: PQ, Visual )

**RONI/IRON SHORE EXCAVATING LTD.**  
 100 MACINTOSH BLVD  
 VAUGHAN, ON  
 CA L4K 4P3  
 Contact: Service Team  
 service.team@roni.ca

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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