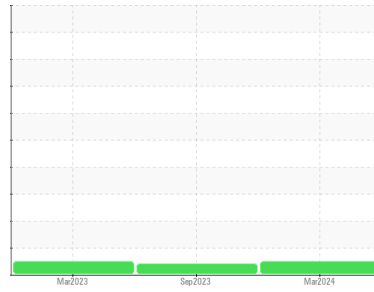




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**RONI**  
 Machine Id  
**176**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA 10W30 (--- 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

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. 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>WC0920846</b>	LH0275218	LH0218880
Sample Date	Client Info			<b>21 Mar 2024</b>	11 Sep 2023	06 Mar 2023
Machine Age	hrs	Client Info		<b>0</b>	6442	2000
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	0.8	<1.0
Water	WC Method	>0.2		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>6</b>	7	9
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	3	4
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

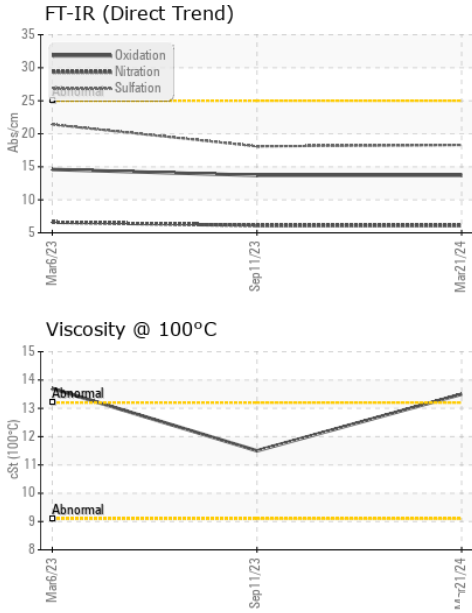
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>2</b>	4	10
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>59</b>	60	62
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>967</b>	981	944
Calcium	ppm	ASTM D5185(m)		<b>1049</b>	1062	1256
Phosphorus	ppm	ASTM D5185(m)		<b>986</b>	1066	1140
Zinc	ppm	ASTM D5185(m)		<b>1165</b>	1211	1253
Sulfur	ppm	ASTM D5185(m)		<b>2519</b>	2640	2796
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	3
Sodium	ppm	ASTM D5185(m)		<b>7</b>	5	6
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	2	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.2</b>	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.1</b>	6.1	6.6
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>18.3</b>	18.1	21.4



# OIL ANALYSIS REPORT

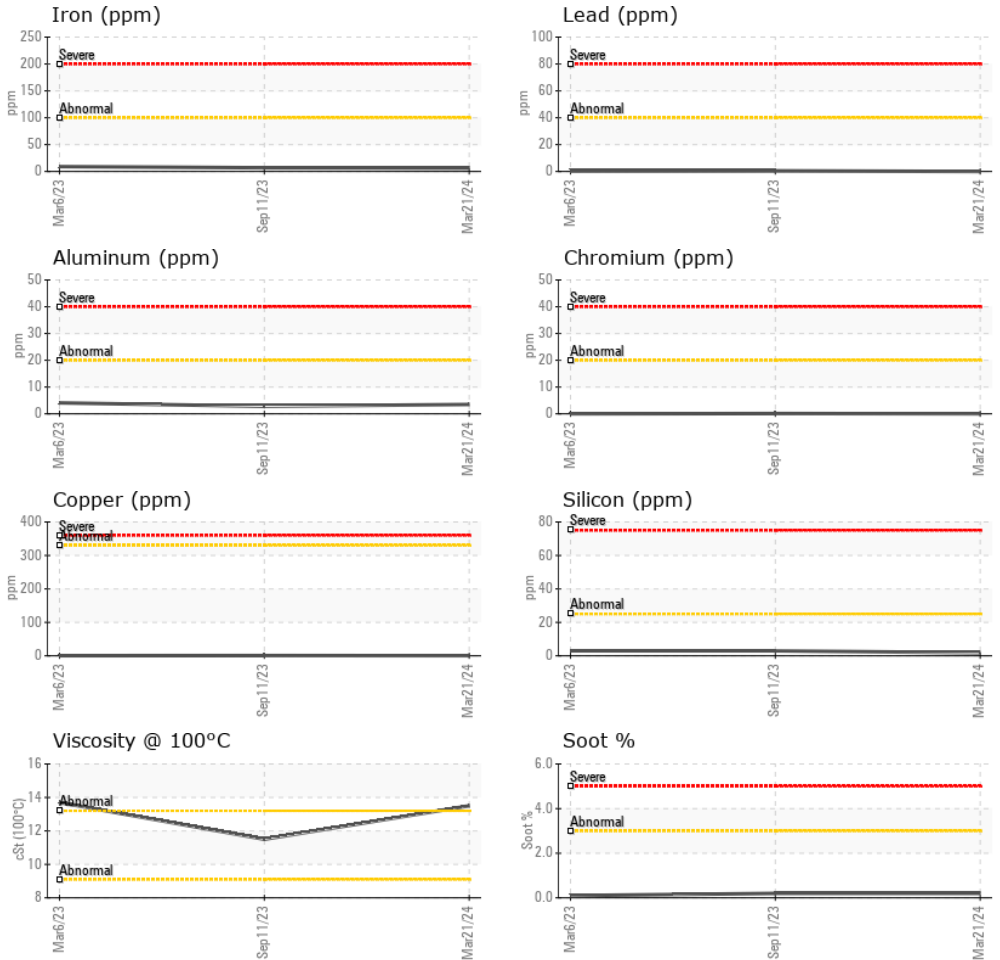


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>13.7</b>	13.7	14.6

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	<b>13.5</b>	▲ 11.5	13.7

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **RONI/IRON SHORE EXCAVATING LTD.**  
**Sample No.** : WC0920846 **Received** : 16 Apr 2024 100 MACINTOSH BLVD  
**Lab Number** : **02629144** **Tested** : 16 Apr 2024 VAUGHAN, ON  
**Unique Number** : 5762276 **Diagnosed** : 17 Apr 2024 - Kevin Marson CA L4K 4P3  
**Test Package** : MOBCE ( Additional Tests: Visual )  
 Contact: Nathan Fernandes  
 alfonse.sean@gmail.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.