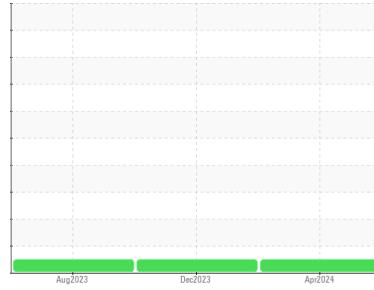




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
RONI
 Machine Id
861
 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

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0920823	WC0872908	LH0261499
Sample Date	Client Info			09 Apr 2024	01 Dec 2023	14 Aug 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	0.5
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	14	14	17
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	2
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	0	<1	0
Copper	ppm	ASTM D5185(m)	>330	5	6	6
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

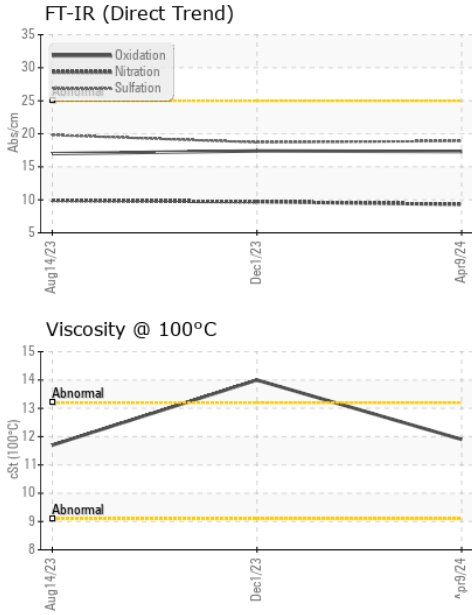
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1	1	2
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		61	60	62
Manganese	ppm	ASTM D5185(m)		<1	0	<1
Magnesium	ppm	ASTM D5185(m)		1037	1000	1051
Calcium	ppm	ASTM D5185(m)		1080	1089	1121
Phosphorus	ppm	ASTM D5185(m)		1047	1027	1113
Zinc	ppm	ASTM D5185(m)		1257	1249	1263
Sulfur	ppm	ASTM D5185(m)		2580	2518	2588
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	3	3	5
Sodium	ppm	ASTM D5185(m)		1	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	9.3	9.7	9.9
Sulfation	Abs./1mm	ASTM D7415*	>30	18.9	18.7	19.8



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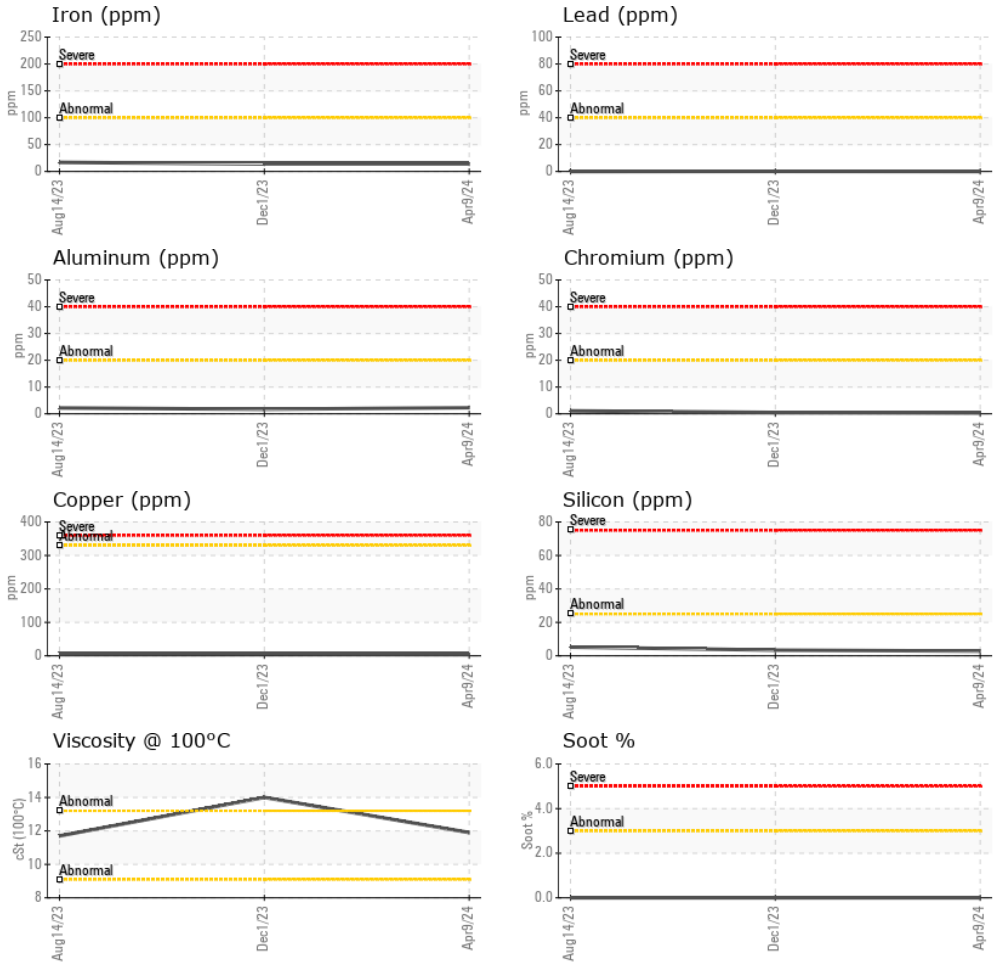


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	17.3	17.4	17.0

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	NONE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Precipitate	scalar	Visual*	NONE	NONE	NONE	
Silt	scalar	Visual*	NONE	NONE	NONE	
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	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	11.9	14.0	11.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **RONI/IRON SHORE EXCAVATING LTD.**
Sample No. : WC0920823 **Received** : 16 Apr 2024 100 MACINTOSH BLVD
Lab Number : **02629163** **Tested** : 16 Apr 2024 VAUGHAN, ON
Unique Number : 5762295 **Diagnosed** : 16 Apr 2024 - Wes Davis CA L4K 4P3
Test Package : MOBCE (Additional Tests: Visual) **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.