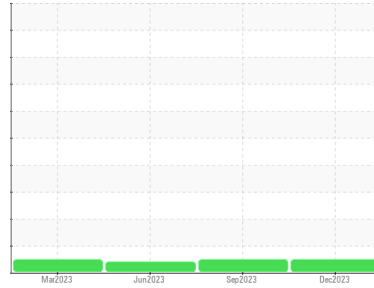




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
RONI
 Machine Id
456
 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			WC0888488	LH0275347	LH0247407
Sample Date	Client Info			22 Dec 2023	12 Sep 2023	01 Jun 2023
Machine Age	hrs	Client Info		0	2579	2071
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>2.1		<1.0	<1.0	0.8
Water	WC Method	>0.21		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>51	12	2	9
Chromium	ppm	ASTM D5185(m)	>11	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>31	3	<1	2
Lead	ppm	ASTM D5185(m)	>26	2	0	<1
Copper	ppm	ASTM D5185(m)	>26	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	<1	0	0
Antimony	ppm	ASTM D5185(m)		0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

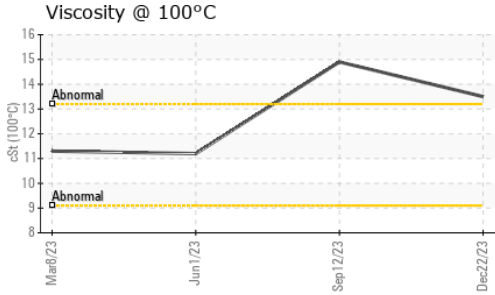
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1	1	2
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		59	57	62
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		977	965	1011
Calcium	ppm	ASTM D5185(m)		1071	1022	1111
Phosphorus	ppm	ASTM D5185(m)		1015	1047	1130
Zinc	ppm	ASTM D5185(m)		1225	1171	1240
Sulfur	ppm	ASTM D5185(m)		2725	2623	2691
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>22	3	4	3
Sodium	ppm	ASTM D5185(m)		1	1	<1
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	6.5	4.3	6.1
Sulfation	Abs./1mm	ASTM D7415*	>30	18.7	17.5	18.5



OIL ANALYSIS REPORT

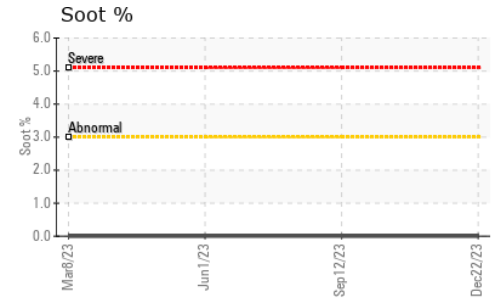
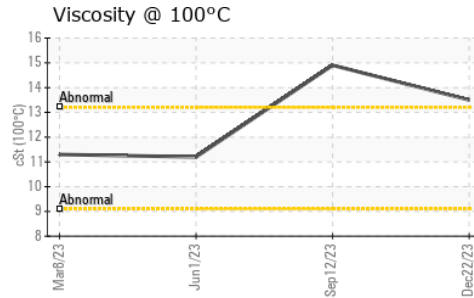
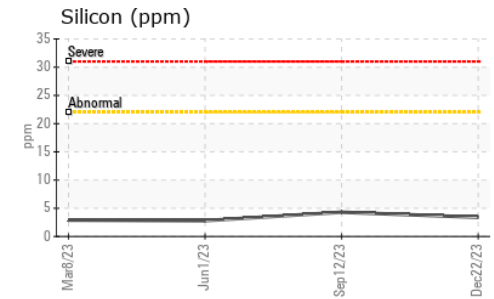
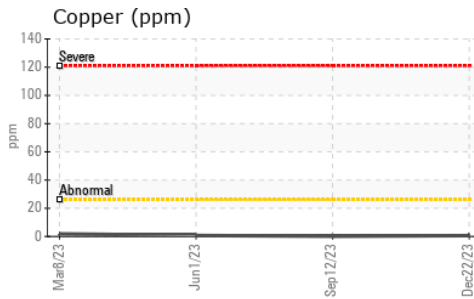
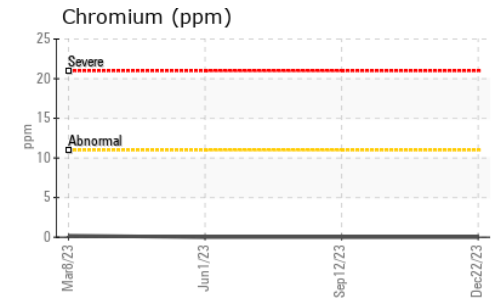
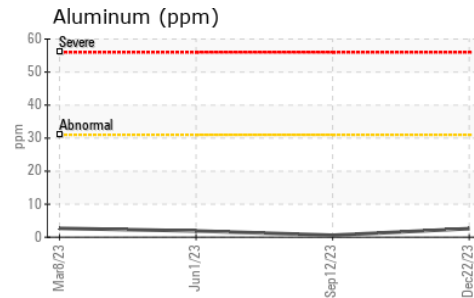
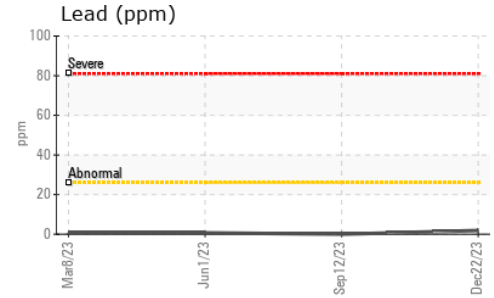
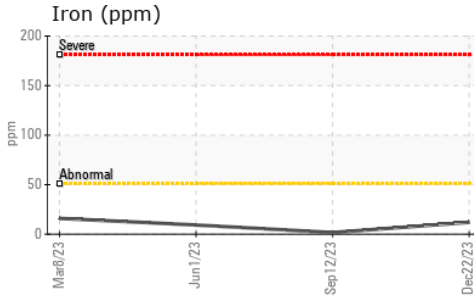


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	14.7	12.7	14.4

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.21	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)		13.5	14.9	▲ 11.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **RONI/IRON SHORE EXCAVATING LTD.**
Sample No. : WC0888488 **Received** : 08 Jan 2024 **100 MACINTOSH BLVD**
Lab Number : **02606906** **Diagnosed** : 08 Jan 2024 **VAUGHAN, ON**
Unique Number : 5707992 **Diagnostician** : Kevin Marson **CA L4K 4P3**
Test Package : MOBCE **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.