



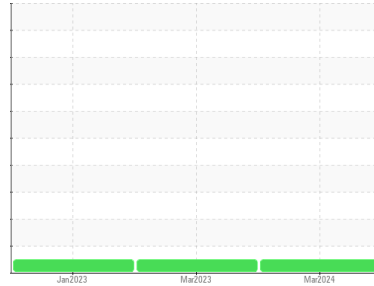
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
ORIN
 Machine Id
189
 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		WC0899413	LH0206532	LH0218870
Sample Date	Client Info		06 Mar 2024	24 Mar 2023	16 Jan 2023
Machine Age	hrs	Client Info	0	2000	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	Changed	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<1.0	<1.0	1.4
Water	WC Method	>0.1	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	0.0

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	6	8	52
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>10	1	1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>10	1	1	1
Lead	ppm	ASTM D5185(m)	>20	<1	<1	1
Copper	ppm	ASTM D5185(m)	>15	1	1	48
Tin	ppm	ASTM D5185(m)	>10	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	<1	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	8	16
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		60	55	3
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		964	879	16
Calcium	ppm	ASTM D5185(m)		1049	1262	2312
Phosphorus	ppm	ASTM D5185(m)		1003	1093	941
Zinc	ppm	ASTM D5185(m)		1171	1207	984
Sulfur	ppm	ASTM D5185(m)		2715	2763	3019
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

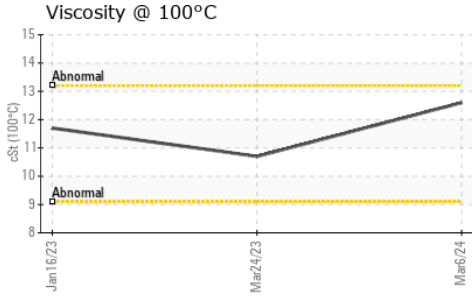
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	3	4	5
Sodium	ppm	ASTM D5185(m)		1	2	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	2

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.8	8.6	6.9
Sulfation	Abs./1mm	ASTM D7415*	>30	18.3	21.5	18.6



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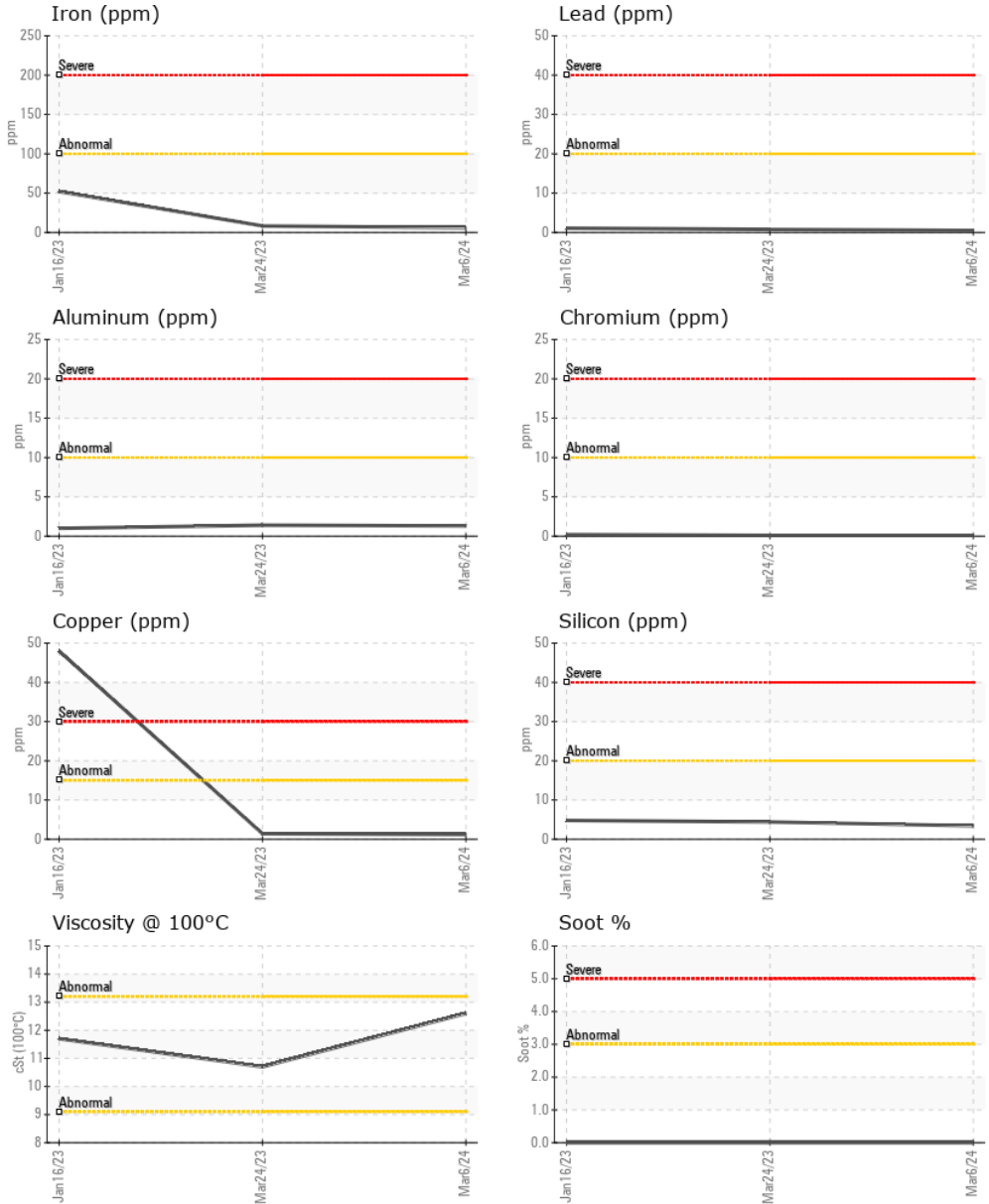


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	14.5	15.1	11.4

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	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)		12.6	10.7	11.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0899413
Lab Number : **02621060**
Unique Number : 5746179
Test Package : MOBCE
Received : 11 Mar 2024
Tested : 11 Mar 2024
Diagnosed : 11 Mar 2024 - Wes Davis

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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