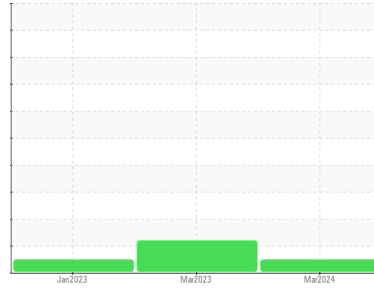




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
ORIN
Machine Id
189
Component
Hydraulic System
Fluid
PETRO CANADA 10W (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0899415	LH0206533	LH0218873
Sample Date	Client Info		06 Mar 2024	29 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 Changed	Changed	N/A
Sample Status			NORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>25	6	8	8
Chromium	ppm	ASTM D5185(m)	>10	4	5	1
Nickel	ppm	ASTM D5185(m)	>10	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	3	1
Lead	ppm	ASTM D5185(m)	>20	<1	<1	4
Copper	ppm	ASTM D5185(m)	>150	9	14	40
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	4	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		<1	2	0
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		10	28	2
Calcium	ppm	ASTM D5185(m)		109	209	80
Phosphorus	ppm	ASTM D5185(m)		351	399	397
Zinc	ppm	ASTM D5185(m)		413	434	329
Sulfur	ppm	ASTM D5185(m)		934	1179	916
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

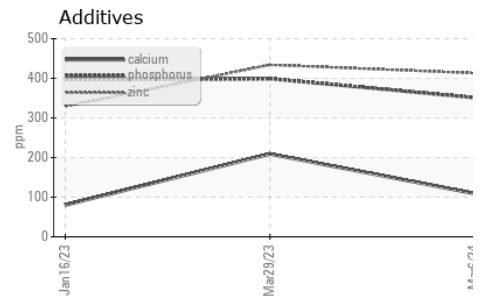
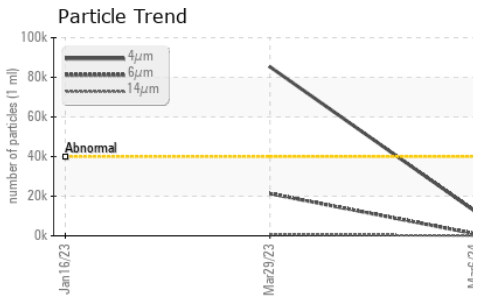
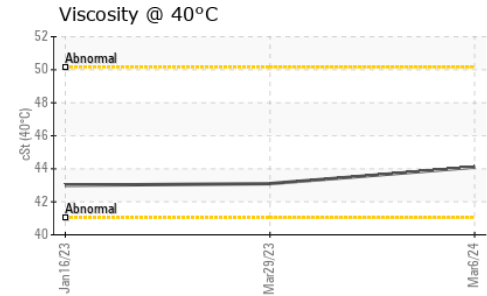
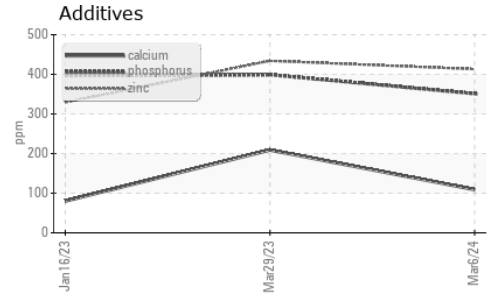
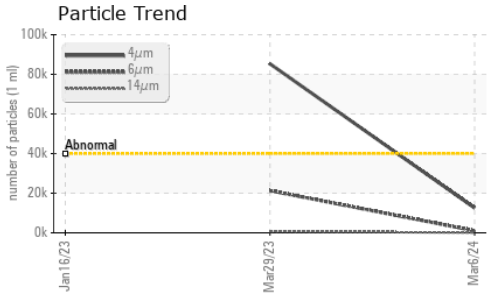
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>50	1	3	4
Sodium	ppm	ASTM D5185(m)		1	5	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>40000	12543	▲ 85308	---
Particles >6µm	ASTM D7647	>10000	1034	▲ 21280	---
Particles >14µm	ASTM D7647	>2500	48	695	---
Particles >21µm	ASTM D7647	>640	14	125	---
Particles >38µm	ASTM D7647	>160	1	2	---
Particles >71µm	ASTM D7647	>40	0	1	---
Oil Cleanliness	ISO 4406 (c)	>22/20/18	21/17/13	▲ 24/22/17	---



OIL ANALYSIS REPORT

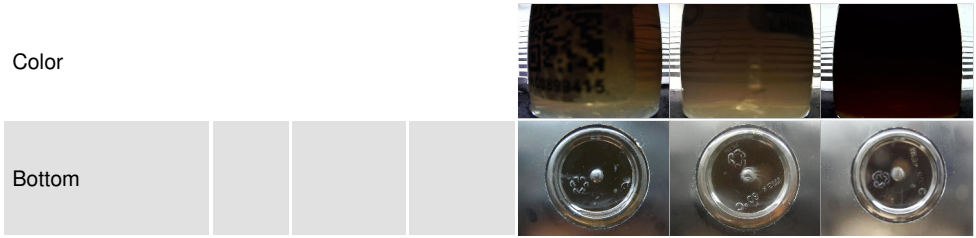


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.53	---	---

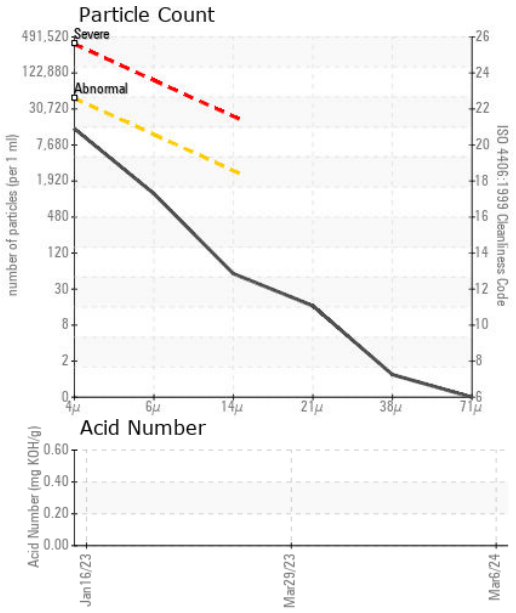
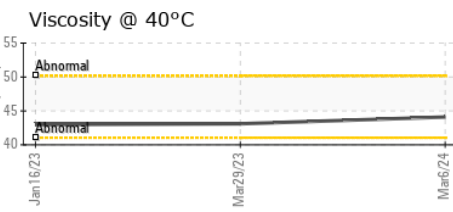
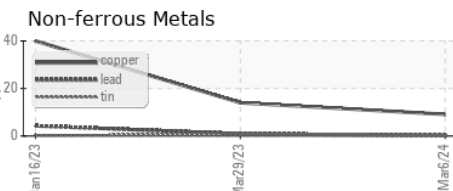
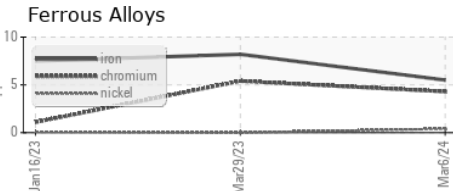
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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 @ 40°C	cSt	ASTM D7279(m)		44.1	43.1	43.0

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0899415 **Received** : 11 Mar 2024
Lab Number : **02621128** **Tested** : 12 Mar 2024
Unique Number : 5746247 **Diagnosed** : 12 Mar 2024 - Wes Davis
Test Package : MOBCE

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.

T:
F: