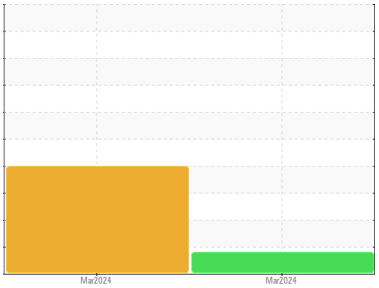
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
100-052
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 46 (--- GAL)

DIAGNOSIS

Recommendation
The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear
All component wear rates are normal.

Contamination
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition
Additive levels indicate the addition of a different brand, or type of oil. 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		**WC0920784**	WC0899431	---
Sample Date		Client Info		**16 Mar 2024**	16 Mar 2024	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**Changed**	Changed	---
Sample Status				**ATTENTION**	SEVERE	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**7**	8	---
Chromium	ppm	ASTM D5185(m)	>10	**<1**	0	---
Nickel	ppm	ASTM D5185(m)	>10	**0**	0	---
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)		**0**	0	---
Aluminum	ppm	ASTM D5185(m)	>10	**<1**	2	---
Lead	ppm	ASTM D5185(m)	>10	**0**	<1	---
Copper	ppm	ASTM D5185(m)	>75	**5**	2	---
Tin	ppm	ASTM D5185(m)	>10	**0**	0	---
Antimony	ppm	ASTM D5185(m)		**0**	0	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**0**	0	---

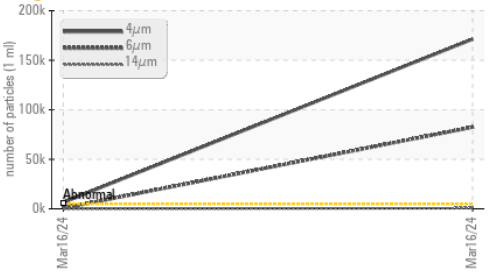
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**<1**	2	---
Barium	ppm	ASTM D5185(m)	0	**0**	0	---
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	---
Manganese	ppm	ASTM D5185(m)	0	**0**	0	---
Magnesium	ppm	ASTM D5185(m)	0	**6**	1	---
Calcium	ppm	ASTM D5185(m)	50	**1413**	9	---
Phosphorus	ppm	ASTM D5185(m)	330	**598**	150	---
Zinc	ppm	ASTM D5185(m)	430	**683**	9	---
Sulfur	ppm	ASTM D5185(m)	760	**2566**	2538	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

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

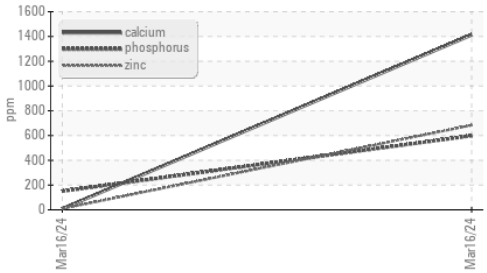
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**6465**	▲ 171334	---
Particles >6µm		ASTM D7647	>1300	**599**	▲ 82493	---
Particles >14µm		ASTM D7647	>160	**15**	▲ 614	---
Particles >21µm		ASTM D7647	>40	**5**	22	---
Particles >38µm		ASTM D7647	>10	**3**	1	---
Particles >71µm		ASTM D7647	>3	**2**	1	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**20/16/11**	▲ 25/24/16	---

OIL ANALYSIS REPORT

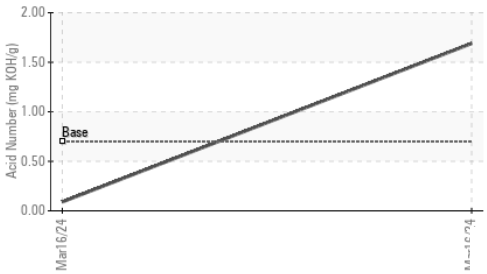
Particle Trend



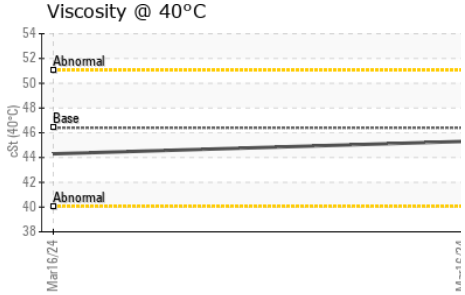
Additives



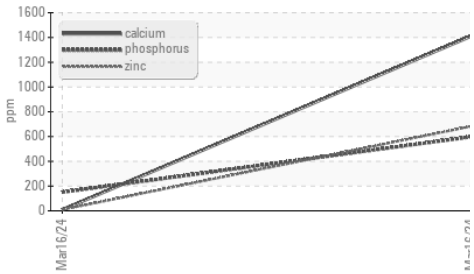
Acid Number



Viscosity @ 40°C



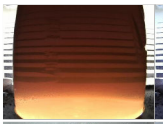
Additives



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	**1.69**	0.09	---

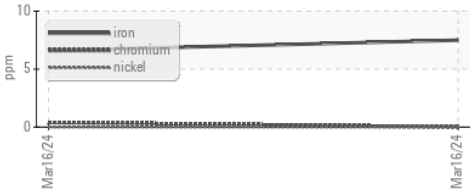
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	---
Silt	scalar	Visual*	NONE	**NONE**	VLITE	---
Debris	scalar	Visual*	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	---
Appearance	scalar	Visual*	NORML	**NORML**	NORML	---
Odor	scalar	Visual*	NORML	**NORML**	NORML	---
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	---
Free Water	scalar	Visual*		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	**45.3**	44.3	---

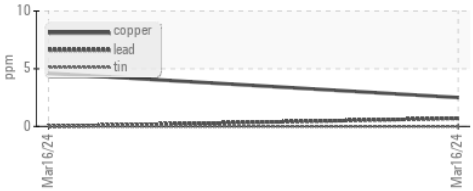
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

Ferrous Alloys

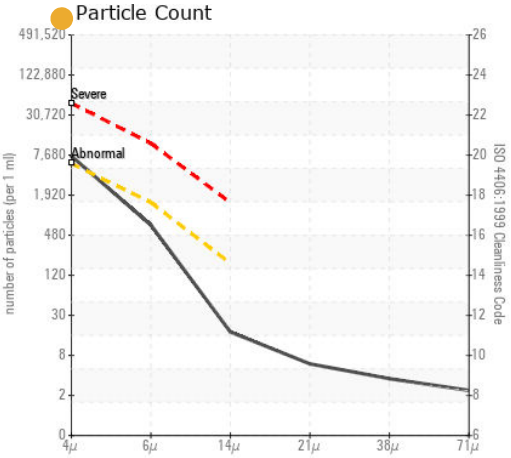


Non-ferrous Metals

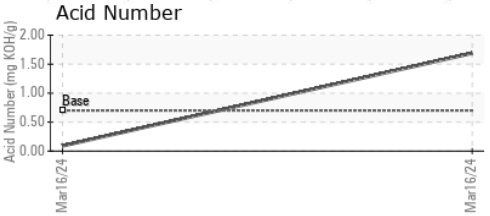


Viscosity @ 40°C

Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0920784
Lab Number : 02624340
Unique Number : 5749459
Test Package : MOBCE (Additional Tests: TAN Man)

Received : 25 Mar 2024
Tested : 26 Mar 2024
Diagnosed : 26 Mar 2024 - Kevin Marson

RONI/IRON SHORE EXCAVATING LTD.
100 MACINTOSH BLVD
VAUGHAN, ON
CA L4K 4P3
Contact: Service Team
service.team@roni.ca
T:
F:

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.