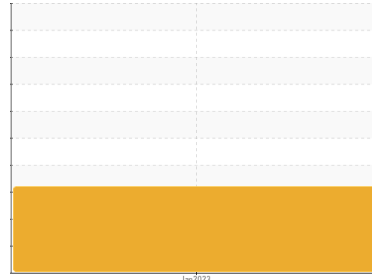


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
50043912 PORT GEARBOX

Component
Port Gearbox

Fluid
PETRO CANADA DURON HP 15W40 (--- LTR)

DIAGNOSIS

▲ Recommendation

We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

▲ Wear

Copper ppm levels are abnormal.

Contamination

There is no indication of any contamination in the oil.

▲ Fluid Condition

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WA0018402	---	---
Sample Date	Client Info	07 Jan 2023	---	---
Machine Age	hrs	Client Info	683	---
Oil Age	hrs	Client Info	268	---
Oil Changed	Client Info	Not Chngd	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >150	11	---
Chromium	ppm	ASTM D5185(m) >10	0	---
Nickel	ppm	ASTM D5185(m) >10	<1	---
Titanium	ppm	ASTM D5185(m)	4	---
Silver	ppm	ASTM D5185(m)	0	---
Aluminum	ppm	ASTM D5185(m) >5	5	---
Lead	ppm	ASTM D5185(m) >65	11	---
Copper	ppm	ASTM D5185(m) >80	▲ 146	---
Tin	ppm	ASTM D5185(m) >8	5	---
Antimony	ppm	ASTM D5185(m) >5	<1	---
Vanadium	ppm	ASTM D5185(m)	0	---
Beryllium	ppm	ASTM D5185(m)	0	---
Cadmium	ppm	ASTM D5185(m)	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	▲ 167	---
Barium	ppm	ASTM D5185(m) 0	0	---
Molybdenum	ppm	ASTM D5185(m) 60	▲ 7	---
Manganese	ppm	ASTM D5185(m) 0	<1	---
Magnesium	ppm	ASTM D5185(m) 1010	▲ 187	---
Calcium	ppm	ASTM D5185(m) 1070	▲ 2126	---
Phosphorus	ppm	ASTM D5185(m) 1150	1017	---
Zinc	ppm	ASTM D5185(m) 1270	1068	---
Sulfur	ppm	ASTM D5185(m) 2060	▲ 3338	---
Lithium	ppm	ASTM D5185(m)	<1	---

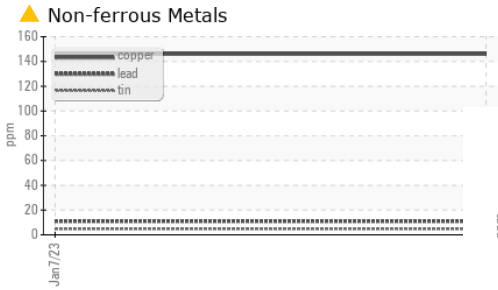
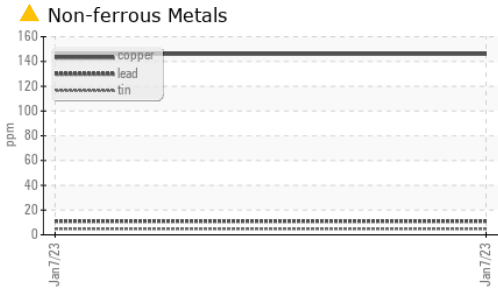
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	2	---
Sodium	ppm	ASTM D5185(m)	3	---
Potassium	ppm	ASTM D5185(m) >20	6	---

VISUAL

method	limit/base	current	history1	history2
White Metal	scalar	Visual* NONE	NONE	---
Yellow Metal	scalar	Visual* NONE	NONE	---
Precipitate	scalar	Visual* NONE	NONE	---
Silt	scalar	Visual* NONE	NONE	---
Debris	scalar	Visual* NONE	NONE	---
Sand/Dirt	scalar	Visual* NONE	NONE	---
Appearance	scalar	Visual* NORML	NORML	---
Odor	scalar	Visual* NORML	NORML	---
Emulsified Water	scalar	Visual* >0.2	NEG	---
Free Water	scalar	Visual*	NEG	---

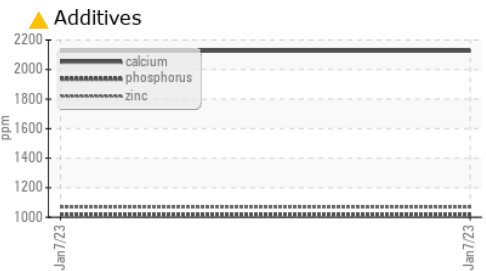
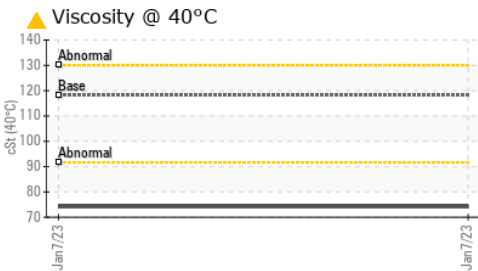
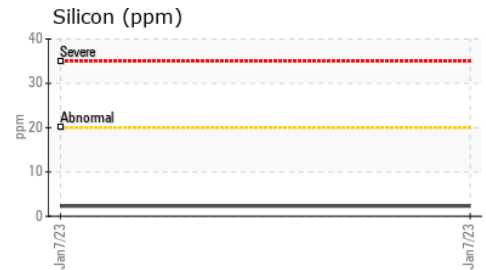
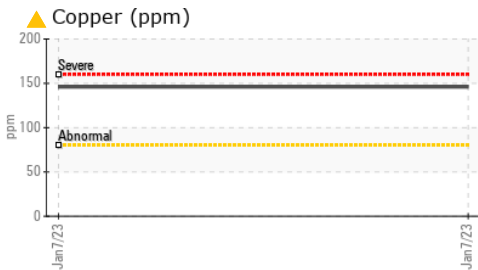
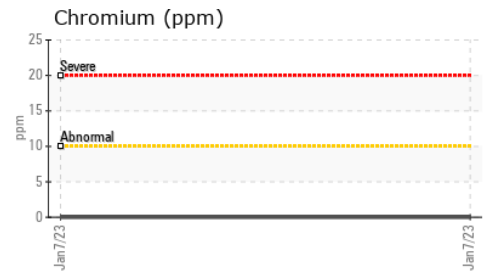
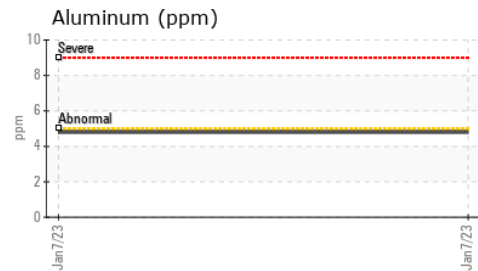
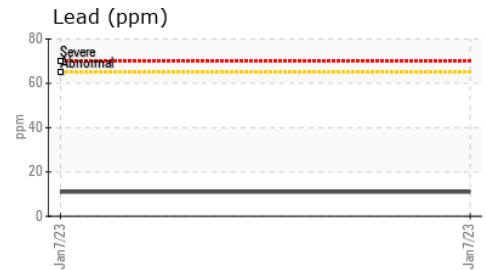
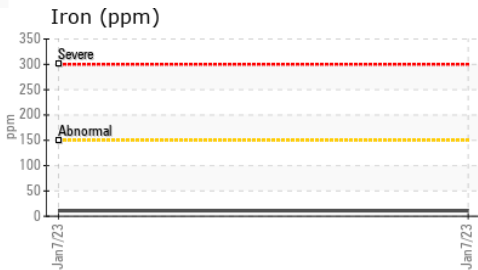
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	118.2 ▲ 74.2	---	---

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WA0018402 **Received** : 16 Jan 2023
Lab Number : 02533558 **Diagnosed** : 17 Jan 2023
Unique Number : 5514557 **Diagnostician** : Bill Quesnel
Test Package : MOB 1

CANADIAN COAST GUARD
 CCGS HARE BAY, 10 SAMBRO WHARF ROAD
 SAMBRO, NS
 CA B3V 1M7
 Contact: Engineer
 andrew.prince@dfo-mpo.gc.ca
 T: (902)868-2444
 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.