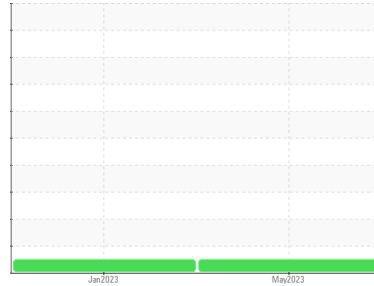


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
PME 512100765

Component
Port Main Engine

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

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WA0018403	WA0017759	---
Sample Date	Client Info			01 May 2023	07 Jan 2023	---
Machine Age	hrs	Client Info		831	683	---
Oil Age	hrs	Client Info		416	268	---
Oil Changed	Client Info			Not Chngd	Not Chngd	---
Sample Status				NORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>4.0	<1.0	<1.0	---
Glycol	WC Method			NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	13	10	---
Chromium	ppm	ASTM D5185(m)	>8	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	---
Titanium	ppm	ASTM D5185(m)	>3	1	1	---
Silver	ppm	ASTM D5185(m)	>2	0	0	---
Aluminum	ppm	ASTM D5185(m)	>15	1	1	---
Lead	ppm	ASTM D5185(m)	>18	3	2	---
Copper	ppm	ASTM D5185(m)	>80	16	13	---
Tin	ppm	ASTM D5185(m)	>14	2	2	---
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	---

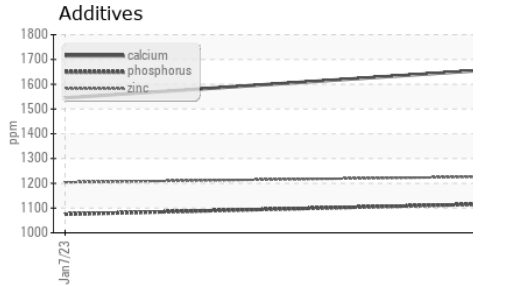
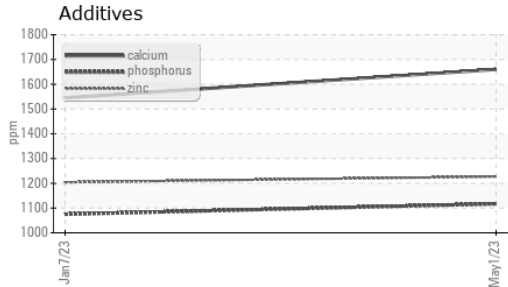
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	36	37	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	60	42	43	---
Manganese	ppm	ASTM D5185(m)	0	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	1010	691	731	---
Calcium	ppm	ASTM D5185(m)	1070	1660	1545	---
Phosphorus	ppm	ASTM D5185(m)	1150	1117	1075	---
Zinc	ppm	ASTM D5185(m)	1270	1227	1204	---
Sulfur	ppm	ASTM D5185(m)	2060	2768	2752	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	2	2	---
Sodium	ppm	ASTM D5185(m)	>75	2	2	---
Potassium	ppm	ASTM D5185(m)	>20	2	2	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0.3	0.1	---
Nitration	Abs/cm	ASTM D7624*	>20	9.6	8.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.7	21.5	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.3	17.2	---

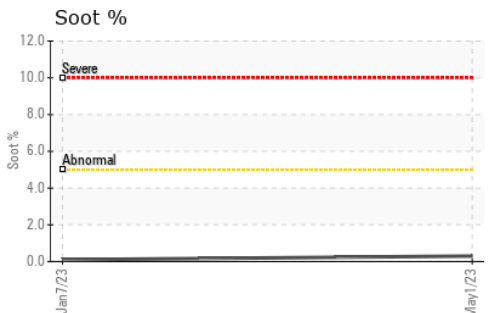
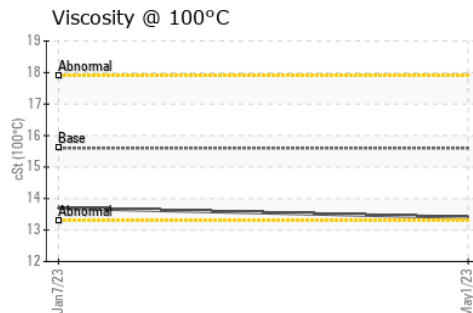
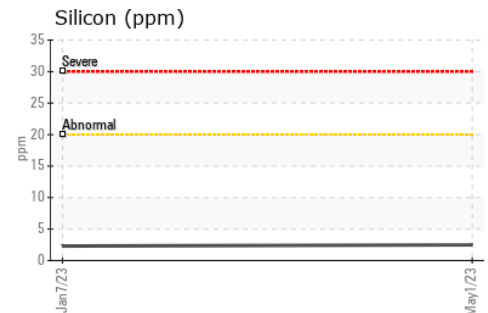
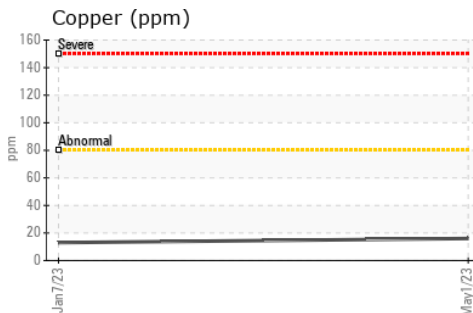
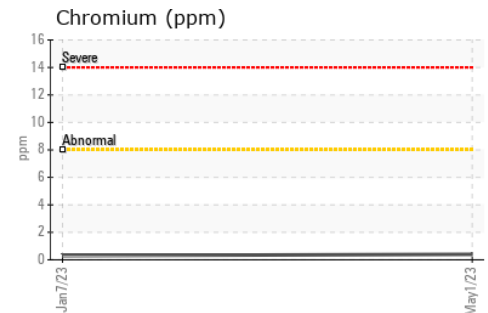
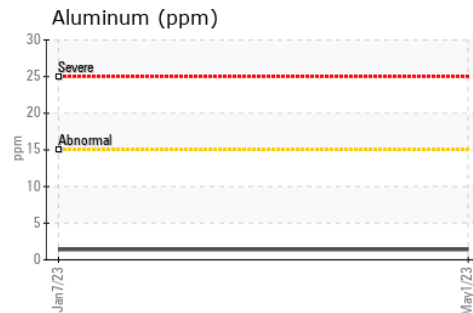
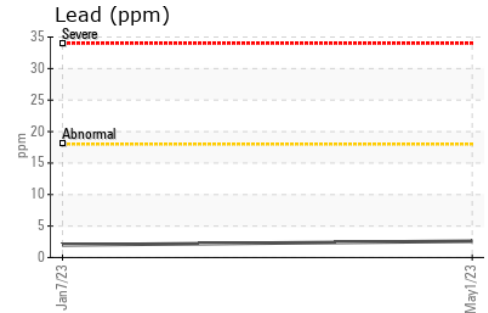
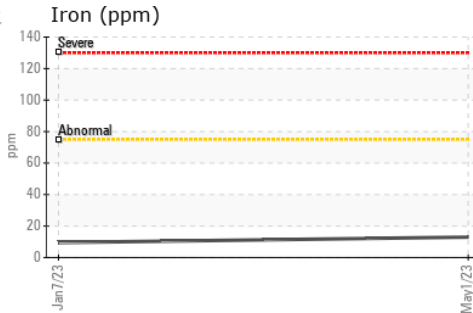
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.4	13.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WA0018403
Lab Number : 02556093
Unique Number : 5577133
Test Package : MOB 1

CANADIAN COAST GUARD
 CCGS HARE BAY, 10 SAMBRO WHARF ROAD
 SAMBRO, NS
 CA B3V 1M7
 Contact: Enginner Manager
 sambro.engineer@dfo-mpo.qc.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.