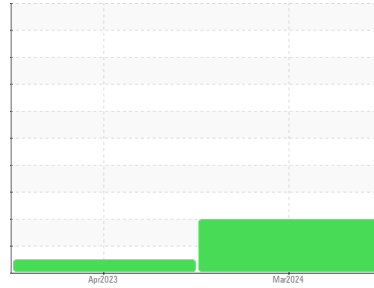


Area
(89817X) Walgreens - Tractor
 Machine Id
[Walgreens - Tractor] 136A68029
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (11 GAL)



DIAGNOSIS

Recommendation
 Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear
 The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core).

Contamination
 Sodium and/or potassium levels are high. Test for glycol is negative.

Fluid Condition
 The BN result indicates that there is suitable alkalinity remaining in the 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	PCA0110603	PCA0096565	---
Sample Date	Client Info	07 Mar 2024	10 Apr 2023	---
Machine Age	mls	Client Info	163510	163510
Oil Age	mls	Client Info	163510	163510
Oil Changed	Client Info	Changed	Changed	---
Sample Status		ABNORMAL	NORMAL	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	---
Water	WC Method >0.2	NEG	NEG	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >80	48	22	---
Chromium	ppm ASTM D5185m >5	2	<1	---
Nickel	ppm ASTM D5185m >2	1	0	---
Titanium	ppm ASTM D5185m	<1	6	---
Silver	ppm ASTM D5185m >3	0	0	---
Aluminum	ppm ASTM D5185m >30	6	0	---
Lead	ppm ASTM D5185m >30	<1	0	---
Copper	ppm ASTM D5185m >150	▲ 230	1	---
Tin	ppm ASTM D5185m >5	<1	0	---
Vanadium	ppm ASTM D5185m	0	0	---
Cadmium	ppm ASTM D5185m	0	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	4	5	---
Barium	ppm ASTM D5185m 0	0	0	---
Molybdenum	ppm ASTM D5185m 50	33	47	---
Manganese	ppm ASTM D5185m 0	2	<1	---
Magnesium	ppm ASTM D5185m 950	123	694	---
Calcium	ppm ASTM D5185m 1050	2015	1216	---
Phosphorus	ppm ASTM D5185m 995	820	918	---
Zinc	ppm ASTM D5185m 1180	1046	1111	---
Sulfur	ppm ASTM D5185m 2600	3269	3015	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	8	5	---
Sodium	ppm ASTM D5185m	▲ 116	15	---
Potassium	ppm ASTM D5185m >20	19	20	---
Glycol	% *ASTM D2982	NEG	NEG	---

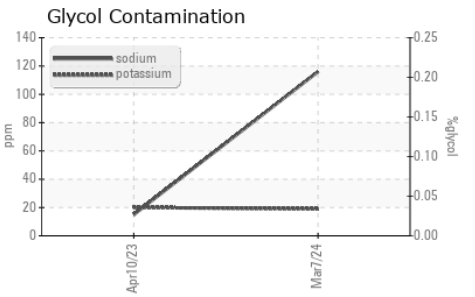
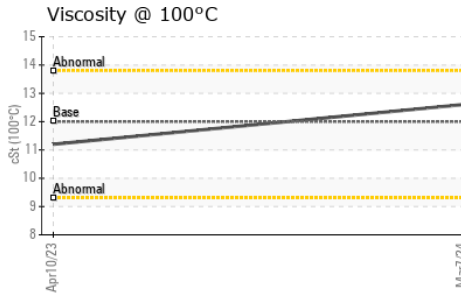
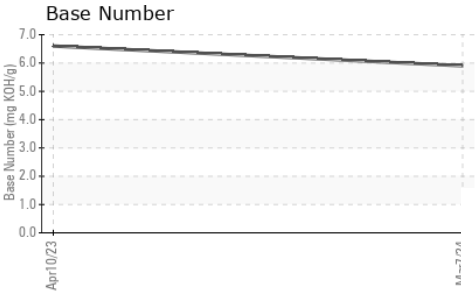
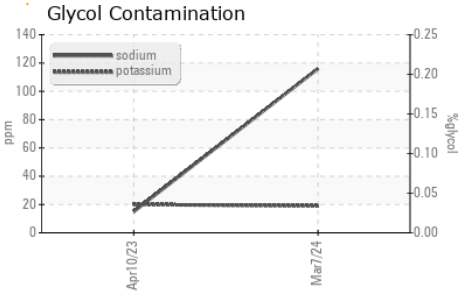
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.7	0.5	---
Nitration	Abs/cm *ASTM D7624 >20	10.1	9.6	---
Sulfation	Abs/.1mm *ASTM D7415 >30	22.0	21.0	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	15.5	17.1	---
Base Number (BN)	mg KOH/g ASTM D2896	5.9	6.6	---

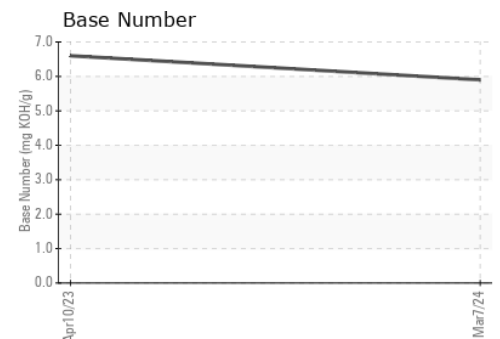
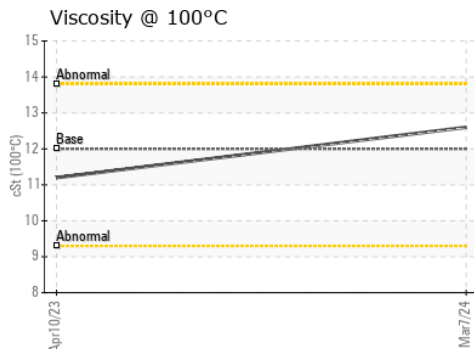
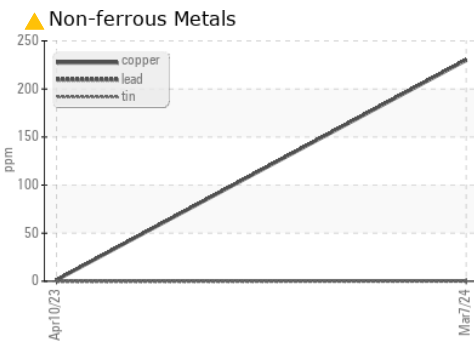
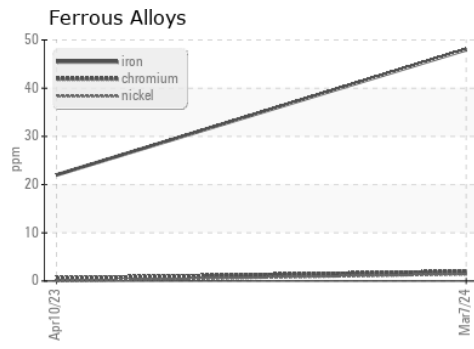
OIL ANALYSIS REPORT



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	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	12.6	11.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0110603
Lab Number : 06121373
Unique Number : 10930206
Test Package : FLEET (Additional Tests: Glycol)

Transervice - Shop 1376 - Berkeley-Linden
 3425 Tremley Point Road
 Linden, NJ
 US 07036

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact: Shop 1376 Oil Analysis
 shop1376@transervice.com
 T:
 F: