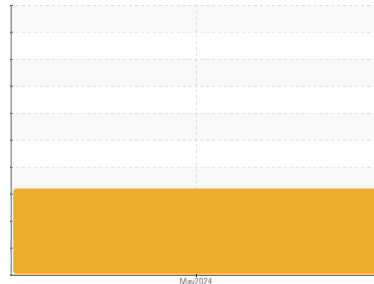


OIL ANALYSIS REPORT



Machine Id
DT867
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (36 QTS)

Sample Rating Trend



DIAGNOSIS

- Recommendation**
 We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.
- Wear**
 Valve wear is indicated.
- Contamination**
 Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.
- 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		PCA0120591	---	---
Sample Date	Client Info		10 May 2024	---	---
Machine Age	hrs	Client Info	36791	---	---
Oil Age	hrs	Client Info	36791	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	88	---	---
Chromium	ppm	ASTM D5185m >20	3	---	---
Nickel	ppm	ASTM D5185m >5	▲ 11	---	---
Titanium	ppm	ASTM D5185m >2	<1	---	---
Silver	ppm	ASTM D5185m >2	<1	---	---
Aluminum	ppm	ASTM D5185m >20	● 24	---	---
Lead	ppm	ASTM D5185m >40	0	---	---
Copper	ppm	ASTM D5185m >330	140	---	---
Tin	ppm	ASTM D5185m >15	5	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	28	---	---
Barium	ppm	ASTM D5185m 0	<1	---	---
Molybdenum	ppm	ASTM D5185m 50	114	---	---
Manganese	ppm	ASTM D5185m 0	6	---	---
Magnesium	ppm	ASTM D5185m 950	792	---	---
Calcium	ppm	ASTM D5185m 1050	1496	---	---
Phosphorus	ppm	ASTM D5185m 995	803	---	---
Zinc	ppm	ASTM D5185m 1180	946	---	---
Sulfur	ppm	ASTM D5185m 2600	2567	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	▲ 60	---	---
Sodium	ppm	ASTM D5185m	6	---	---
Potassium	ppm	ASTM D5185m >20	77	---	---

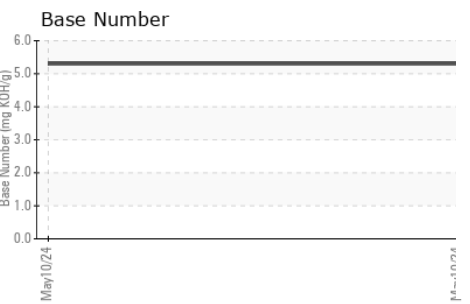
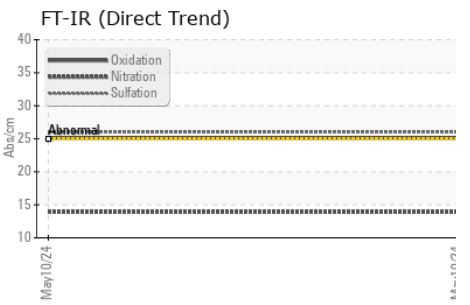
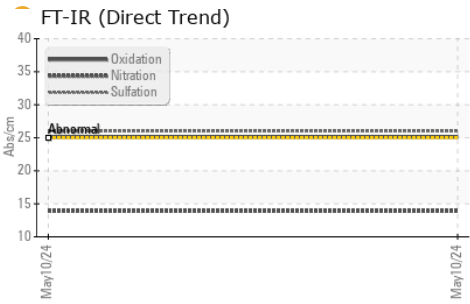
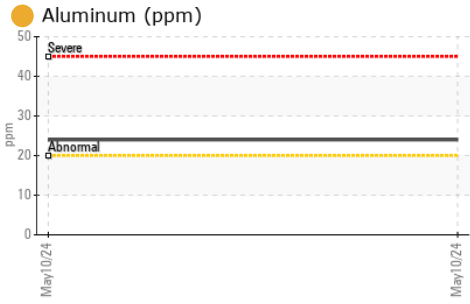
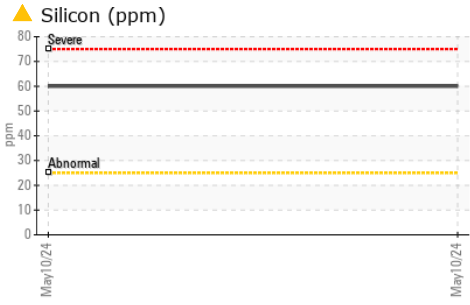
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	1.1	---	---
Nitration	Abs/cm	*ASTM D7624 >20	13.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	26.0	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	25.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	5.3	---	---

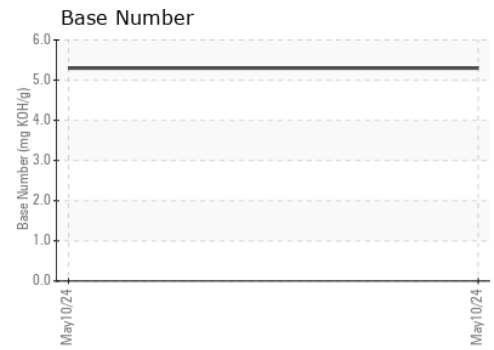
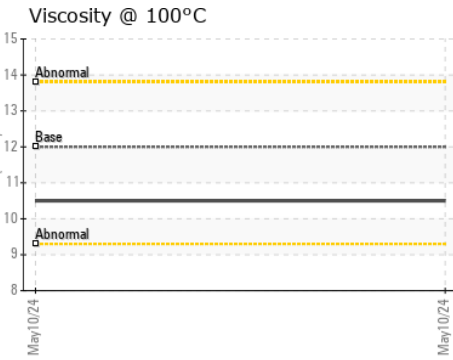
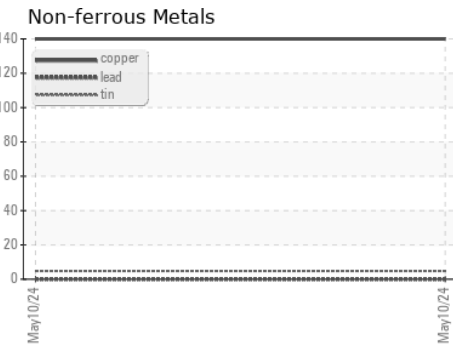
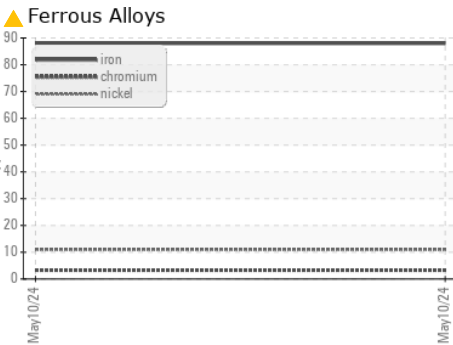
OIL ANALYSIS REPORT



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	10.5	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0120591
Lab Number : 06195280
Unique Number : 11057403
Test Package : FLEET

Received : 30 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Sean Felton

NW WHITE & CO - GREER DIVISION
 1060 ROGERS BRIDGE RD
 DUNCAN, SC
 US 29334
 Contact: Matt Quinlan
 mquinlan@nwwhite.com
 T: (864)905-8506
 F:

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)