



LUBE PLUS+

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Charlestown
Machine Id
693
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (11 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0001938	PCA0083283	---
Sample Date		Client Info		02 Jul 2024	02 Mar 2023	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>65	11	19	---
Chromium	ppm	ASTM D5185m	>5	2	2	---
Nickel	ppm	ASTM D5185m	>3	0	<1	---
Titanium	ppm	ASTM D5185m	>5	<1	<1	---
Silver	ppm	ASTM D5185m	>2	0	<1	---
Aluminum	ppm	ASTM D5185m	>35	9	29	---
Lead	ppm	ASTM D5185m	>10	0	0	---
Copper	ppm	ASTM D5185m	>180	14	▲ 423	---
Tin	ppm	ASTM D5185m	>8	<1	3	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

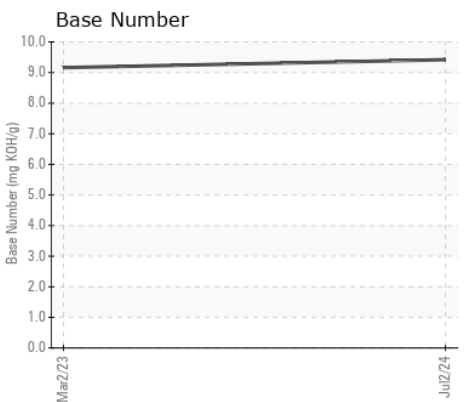
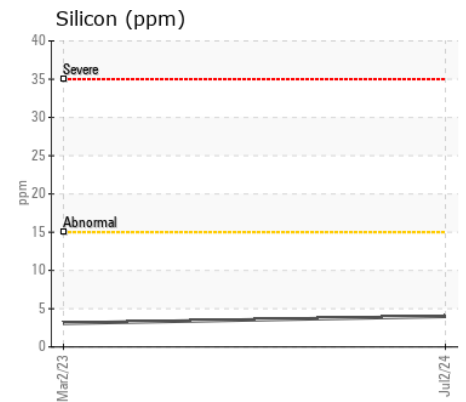
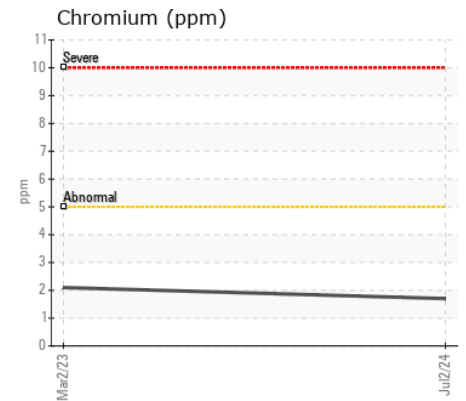
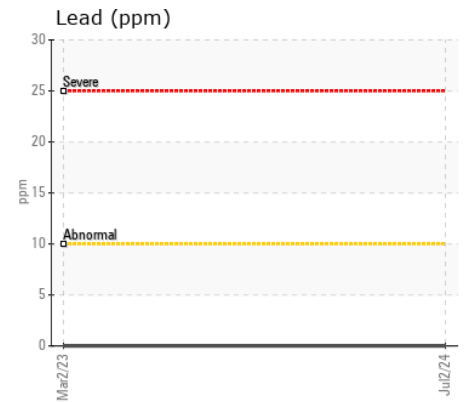
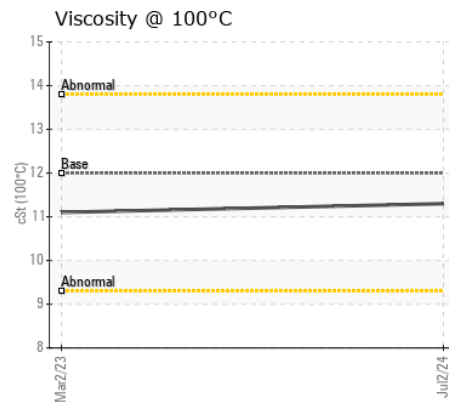
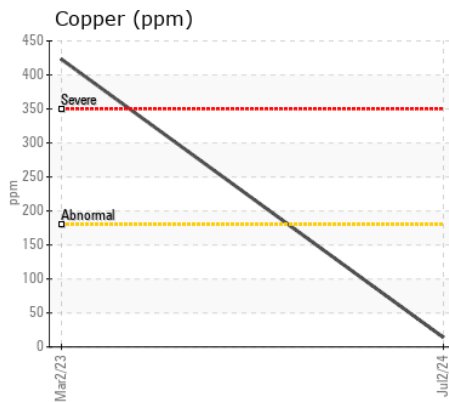
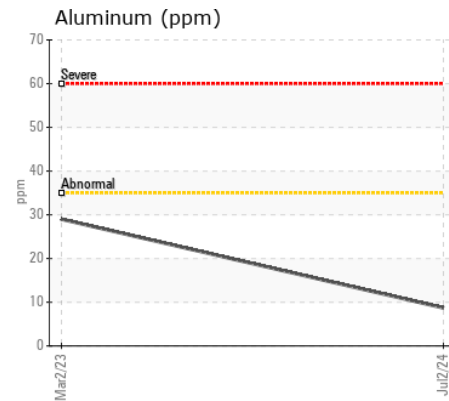
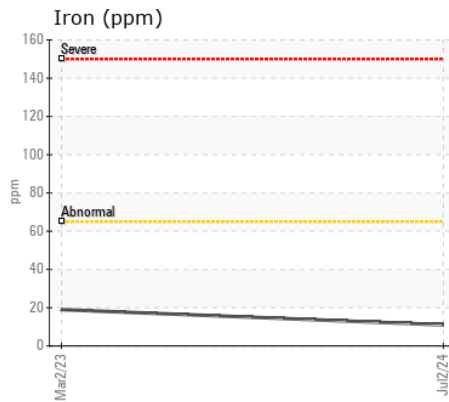
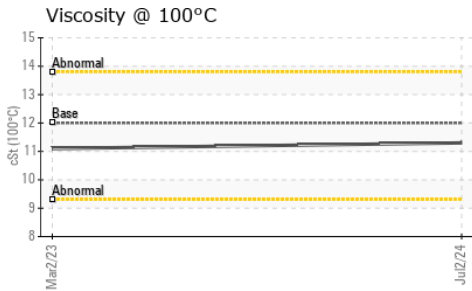
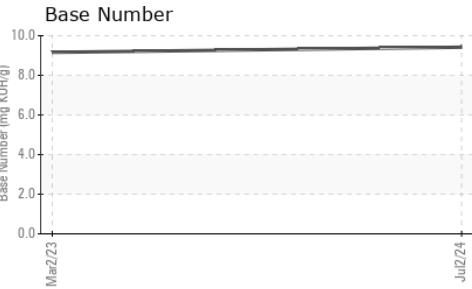
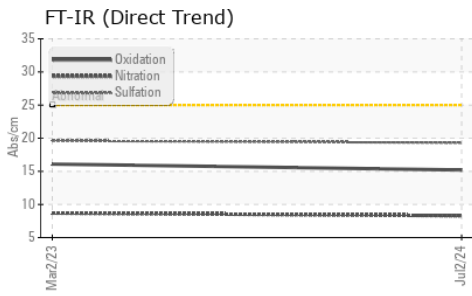
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	4	3	---
Potassium	ppm	ASTM D5185m	>20	16	61	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	8.3	8.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	19.6	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
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	>0.2	NEG	NEG	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	0	---
Boron	ppm	ASTM D5185m	2	5	5	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	50	58	57	---
Manganese	ppm	ASTM D5185m	0	0	1	---
Magnesium	ppm	ASTM D5185m	950	939	814	---
Calcium	ppm	ASTM D5185m	1050	1080	1151	---
Phosphorus	ppm	ASTM D5185m	995	964	910	---
Zinc	ppm	ASTM D5185m	1180	1228	1091	---
Sulfur	ppm	ASTM D5185m	2600	2621	2206	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	16.1	---
Base Number (BN)	mg KOH/g	ASTM D2896		9.42	9.16	---
Visc @ 100°C	cSt	ASTM D445	12.00	11.3	11.1	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0001938
Lab Number : 06230902
Unique Number : 11114395
Test Package : MOB 2

Received : 08 Jul 2024
Tested : 10 Jul 2024
Diagnosed : 10 Jul 2024 - Wes Davis

PORTSIDE TRUCK AND AUTO - DIVERSIFIED AUTO
 100 TERMINAL ST
 CHARLESTOWN, MA
 US 02129

Contact: BRYAN WINTER
 BWINTERS@DIVERSIFIEDAUTO.COM

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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)

F: