



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[66994]

Machine Id
5458

Component
Diesel Engine

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

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample
Comment: Changed fluid and filters)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0108727	PCA0062060	---
Sample Date		Client Info		21 May 2024	01 Dec 2022	---
Machine Age	hrs	Client Info		19885	19604	---
Oil Age	hrs	Client Info		19885	19604	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	85	88	---
Chromium	ppm	ASTM D5185m	>20	8	8	---
Nickel	ppm	ASTM D5185m	>4	2	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	5	4	---
Lead	ppm	ASTM D5185m	>40	9	9	---
Copper	ppm	ASTM D5185m	>330	2	2	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

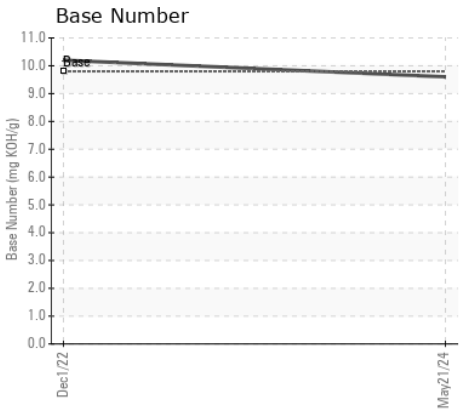
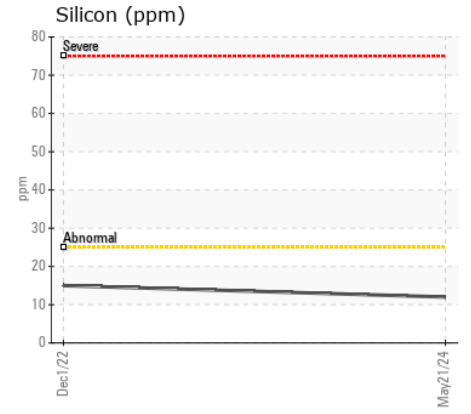
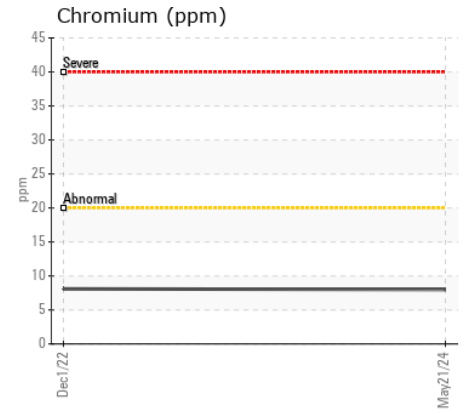
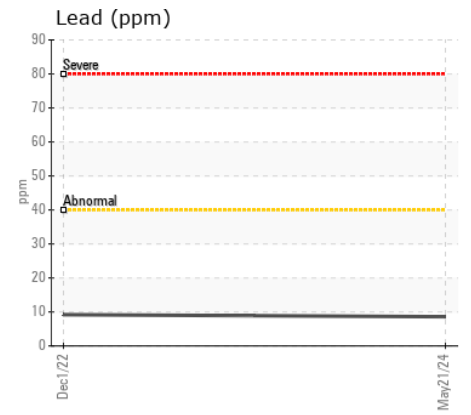
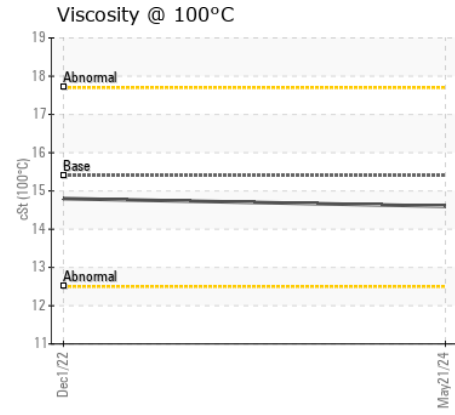
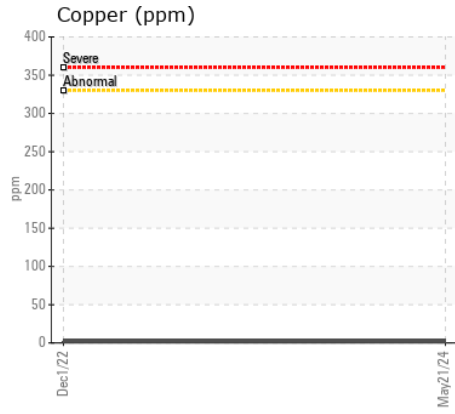
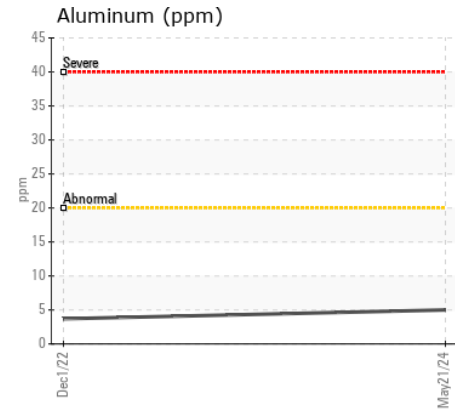
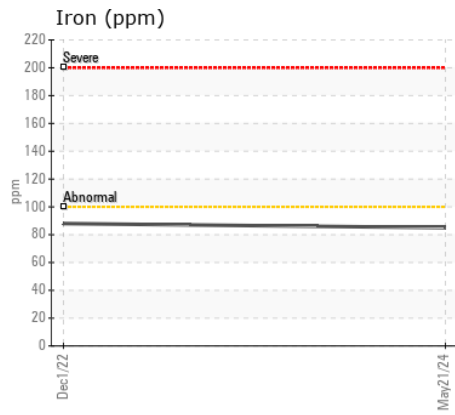
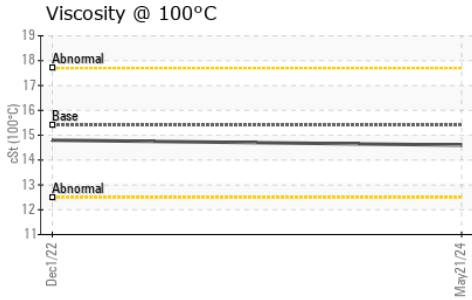
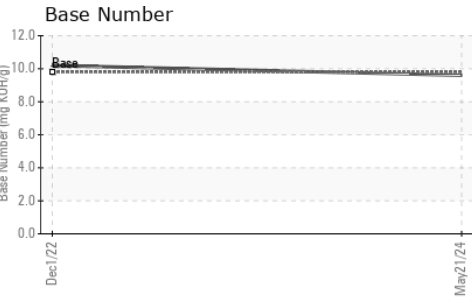
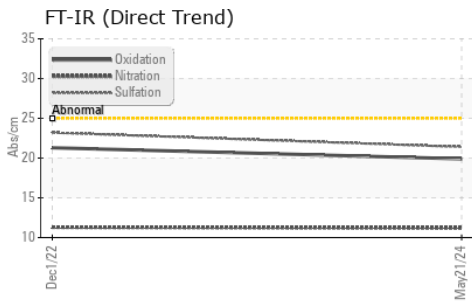
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	12	15	---
Potassium	ppm	ASTM D5185m	>20	1	1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	11.2	11.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	23.2	---
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		2	2	---
Boron	ppm	ASTM D5185m	0	5	7	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	72	65	---
Manganese	ppm	ASTM D5185m	0	1	1	---
Magnesium	ppm	ASTM D5185m	1010	1244	1008	---
Calcium	ppm	ASTM D5185m	1070	1458	1210	---
Phosphorus	ppm	ASTM D5185m	1150	1355	1121	---
Zinc	ppm	ASTM D5185m	1270	1682	1342	---
Sulfur	ppm	ASTM D5185m	2060	4412	3879	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	21.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.6	10.2	---
Visc @ 100°C	cSt	ASTM D445	15.4	14.6	14.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : PCA0108727
 Lab Number : 06193214
 Unique Number : 11049966
 Test Package : MOB 1 (Additional Tests: TBN)

Received : 28 May 2024
 Tested : 30 May 2024
 Diagnosed : 30 May 2024 - Sean Felton

Kemp Quarries - Kemp Stone - Neosho
 19148 Ingersol Lane
 Neosho, MO
 US 64850
 Contact:
 neosho@kempstone.com

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)

T:
F: