



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
FUEL
Machine Id
332
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (38 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0109983	PCA0090726	PCA71227658
Sample Date		Client Info		16 Apr 2024	02 May 2023	20 Nov 2017
Machine Age	mls	Client Info		292673	261214	121430
Oil Age	mls	Client Info		16000	12000	401584
Filter Age	mls	Client Info		16000	12000	401584
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>65	18	10	19
Chromium	ppm	ASTM D5185m	>5	1	0	2
Nickel	ppm	ASTM D5185m	>3	<1	0	0
Titanium	ppm	ASTM D5185m	>5	1	0	---
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>35	8	6	17
Lead	ppm	ASTM D5185m	>10	<1	0	0
Copper	ppm	ASTM D5185m	>180	2	<1	89
Tin	ppm	ASTM D5185m	>8	<1	0	5
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

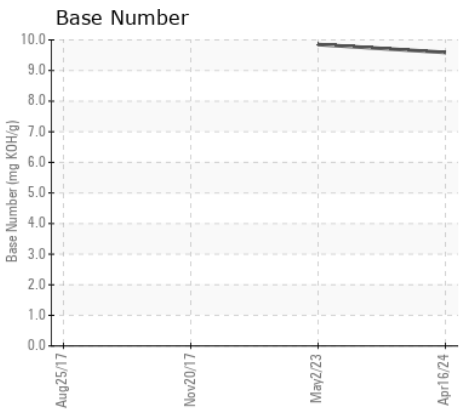
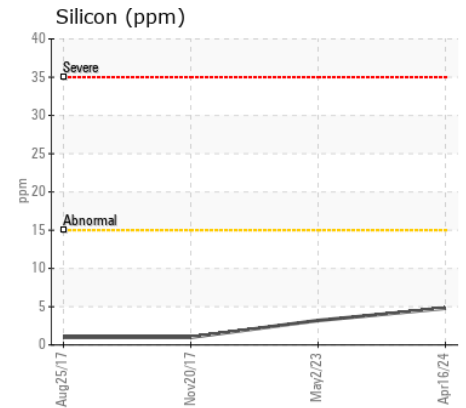
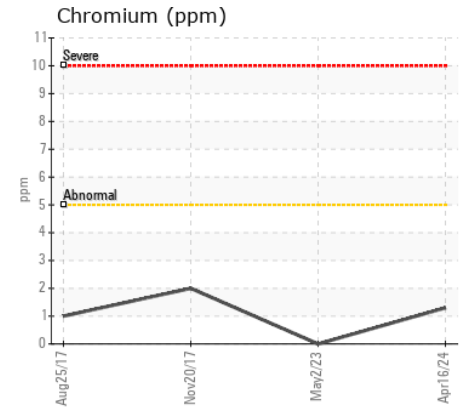
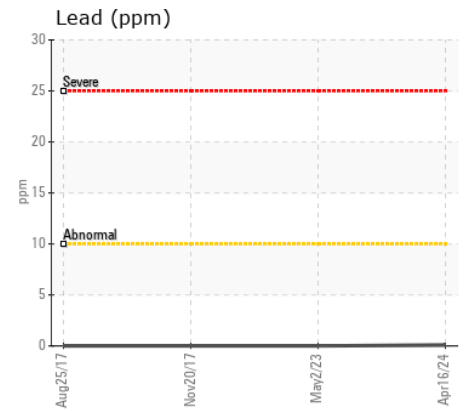
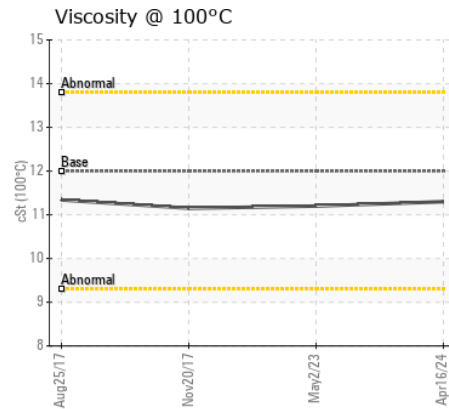
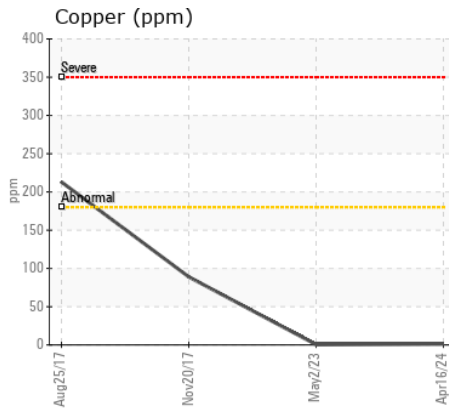
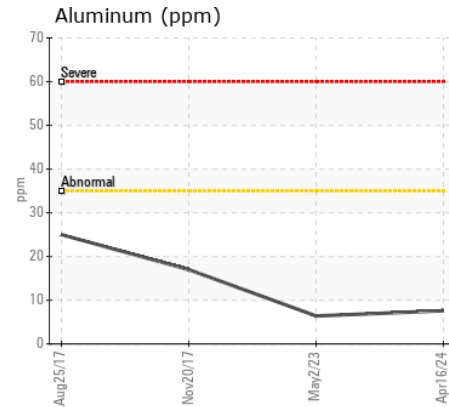
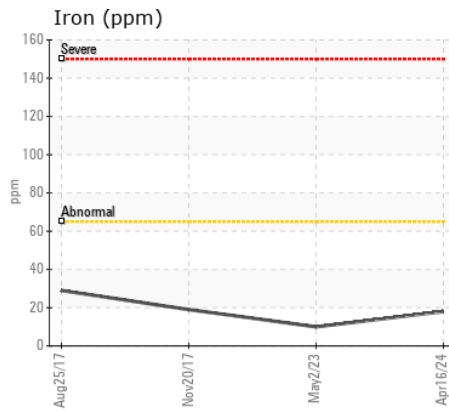
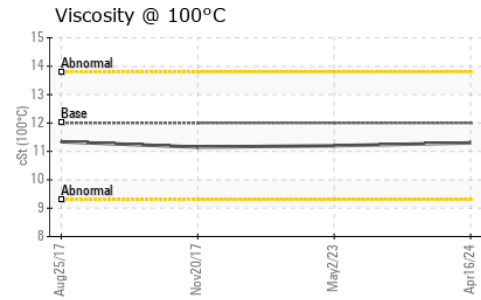
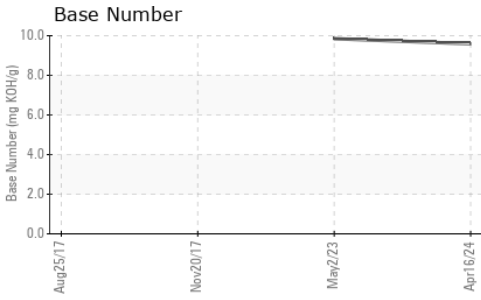
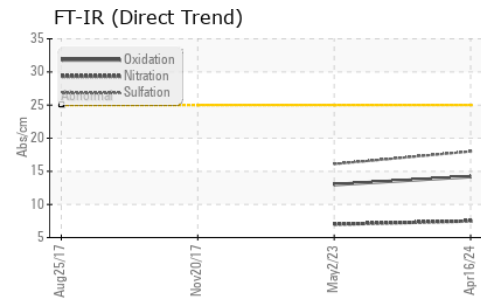
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	5	3	1
Potassium	ppm	ASTM D5185m	>20	7	6	▲ 40
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.5	7.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	16.1	---
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		0	4	2
Boron	ppm	ASTM D5185m	2	10	8	6
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	65	60	62
Manganese	ppm	ASTM D5185m	0	<1	0	---
Magnesium	ppm	ASTM D5185m	950	908	927	935
Calcium	ppm	ASTM D5185m	1050	1070	1187	1180
Phosphorus	ppm	ASTM D5185m	995	996	1004	955
Zinc	ppm	ASTM D5185m	1180	1160	1191	1143
Sulfur	ppm	ASTM D5185m	2600	3072	3602	2652
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	13.0	---
Base Number (BN)	mg KOH/g	ASTM D2896		9.59	9.85	---
Visc @ 100°C	cSt	ASTM D445	12.00	11.3	11.2	11.15



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109983
Lab Number : 06155257
Unique Number : 10990680
Test Package : MOB 2

DENNIS K BURKE INC - INTERNAL SAMPLES
 555 CONSTITUTION DR
 TAUNTON, MA
 US 02780
 Contact: GREG DUNKER

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)

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