



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2227115
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0123165	PCA0101162	---
Sample Date		Client Info		08 Apr 2024	03 Sep 2023	---
Machine Age	mls	Client Info		20000	19100	---
Oil Age	mls	Client Info		20000	15000	---
Filter Age	mls	Client Info		20000	15000	---
Oil Changed		Client Info		Not Chngd	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	23	29	---
Chromium	ppm	ASTM D5185m	>20	0	<1	---
Nickel	ppm	ASTM D5185m	>4	3	<1	---
Titanium	ppm	ASTM D5185m		14	<1	---
Silver	ppm	ASTM D5185m	>3	0	17	---
Aluminum	ppm	ASTM D5185m	>20	5	29	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	136	176	---
Tin	ppm	ASTM D5185m	>15	<1	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.

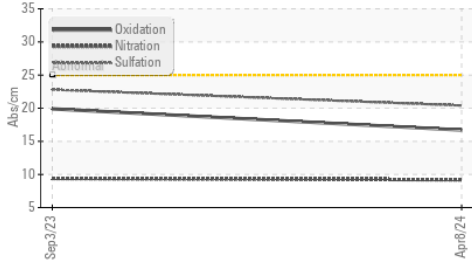
Silicon	ppm	ASTM D5185m	>25	7	▲ 64	---
Potassium	ppm	ASTM D5185m	>20	15	82	---
Fuel		WC Method	>5	<1.0	0.6	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	22.8	---
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

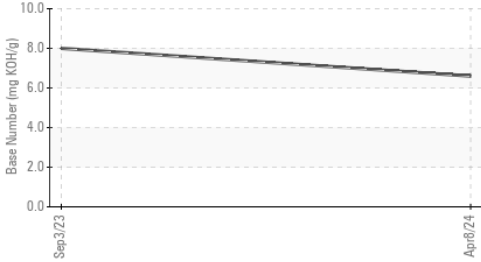
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	4	---
Boron	ppm	ASTM D5185m	2	5	228	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	50	53	117	---
Manganese	ppm	ASTM D5185m	0	0	4	---
Magnesium	ppm	ASTM D5185m	950	868	703	---
Calcium	ppm	ASTM D5185m	1050	1407	1546	---
Phosphorus	ppm	ASTM D5185m	995	1026	684	---
Zinc	ppm	ASTM D5185m	1180	1299	835	---
Sulfur	ppm	ASTM D5185m	2600	3170	2861	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	19.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		6.6	8.0	---
Visc @ 100°C	cSt	ASTM D445	12.00	10.6	9.2	---

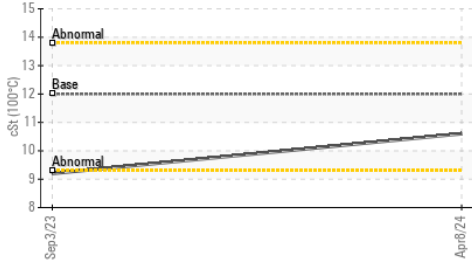
FT-IR (Direct Trend)



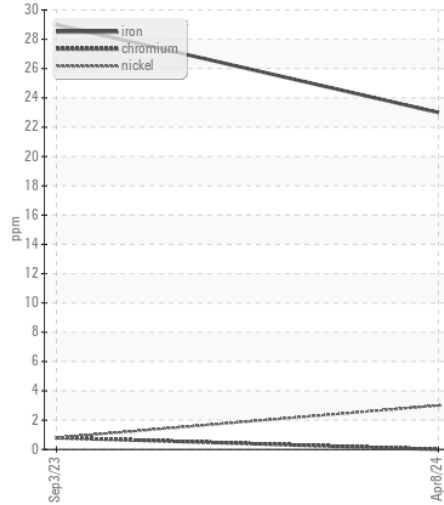
Base Number



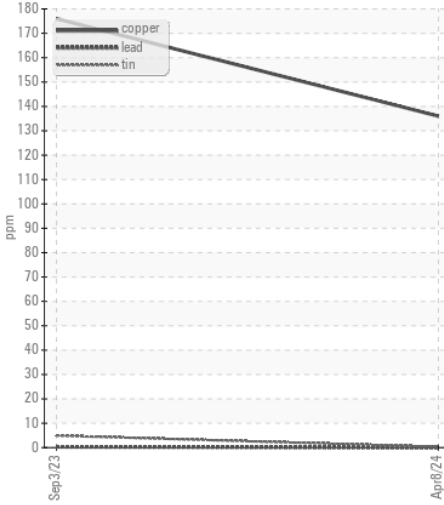
Viscosity @ 100°C



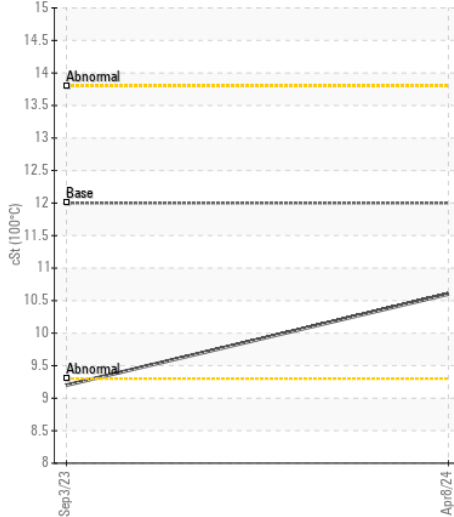
Ferrous Alloys



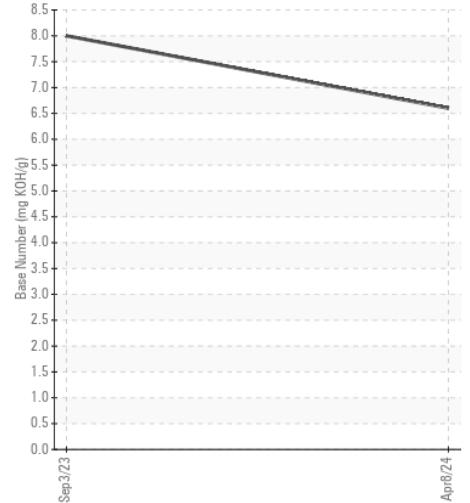
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0123165 **Received** : 24 Apr 2024
Lab Number : 06158756 **Tested** : 25 Apr 2024
Unique Number : 10994179 **Diagnosed** : 25 Apr 2024 - Wes Davis
Test Package : FLEET

PERDUE FARMS - SALISBURY
 7036 ZION CHURCH ROAD
 SALISBURY, MD
 US 21802
 Contact: RICHARD O'NEAL
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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)