

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
630785
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.

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		PCA0100796	---	---
Sample Date	Client Info		18 Aug 2023	---	---
Machine Age	mls	Client Info	40345	---	---
Oil Age	mls	Client Info	40345	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	116	---
Chromium	ppm	ASTM D5185m	>20	1	---
Nickel	ppm	ASTM D5185m	>4	0	---
Titanium	ppm	ASTM D5185m		<1	---
Silver	ppm	ASTM D5185m	>3	<1	---
Aluminum	ppm	ASTM D5185m	>20	64	---
Lead	ppm	ASTM D5185m	>40	<1	---
Copper	ppm	ASTM D5185m	>330	28	---
Tin	ppm	ASTM D5185m	>15	4	---
Vanadium	ppm	ASTM D5185m		0	---
Cadmium	ppm	ASTM D5185m		0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	19	---
Barium	ppm	ASTM D5185m	0	2	---
Molybdenum	ppm	ASTM D5185m	50	11	---
Manganese	ppm	ASTM D5185m	0	4	---
Magnesium	ppm	ASTM D5185m	950	906	---
Calcium	ppm	ASTM D5185m	1050	1604	---
Phosphorus	ppm	ASTM D5185m	995	837	---
Zinc	ppm	ASTM D5185m	1180	1023	---
Sulfur	ppm	ASTM D5185m	2600	3844	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	17	---
Sodium	ppm	ASTM D5185m		42	---
Potassium	ppm	ASTM D5185m	>20	144	---
Glycol	%	*ASTM D2982		NEG	---

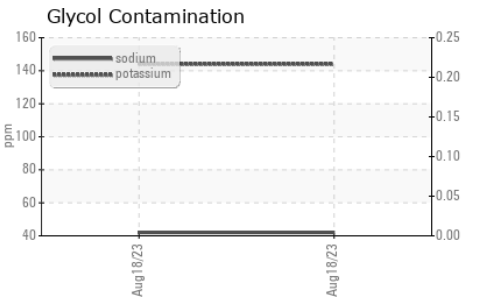
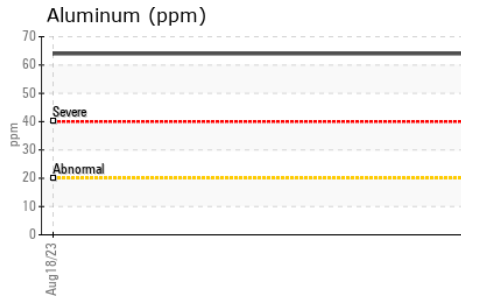
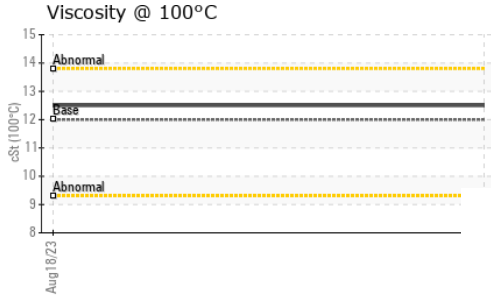
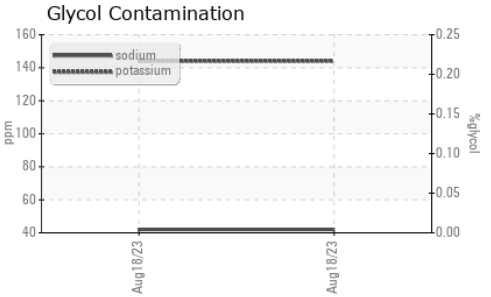
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.8	---
Nitration	Abs/cm	*ASTM D7624	>20	14.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.6	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.4	---
Base Number (BN)	mg KOH/g	ASTM D2896		4.8	---

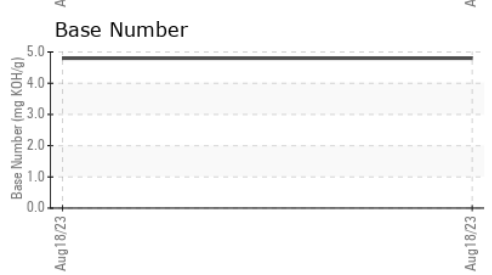
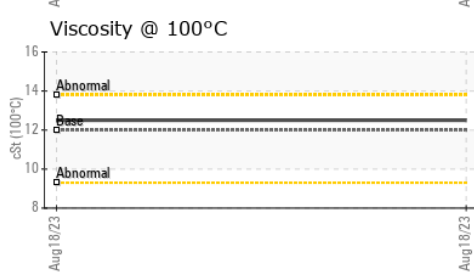
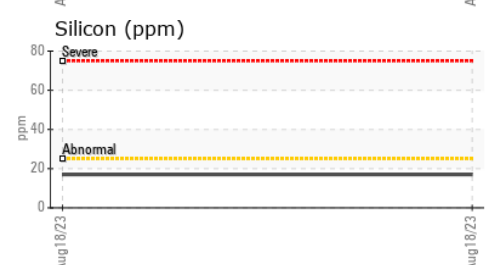
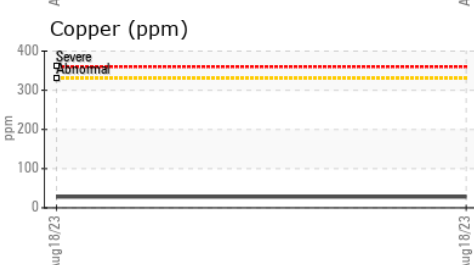
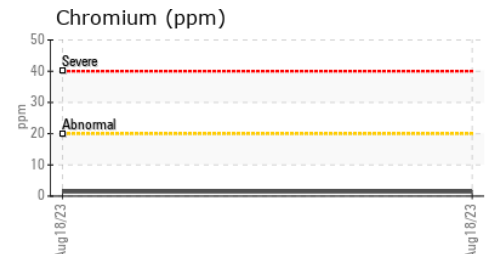
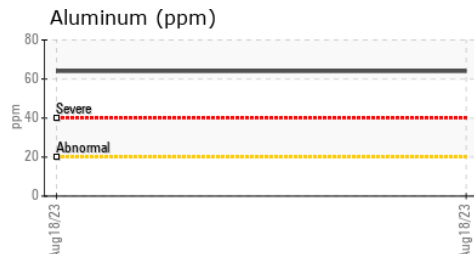
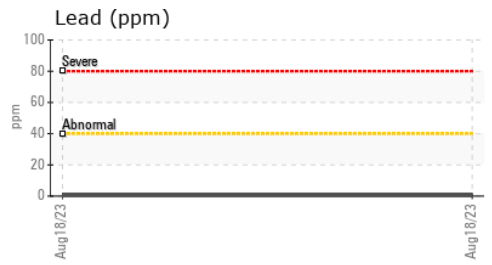
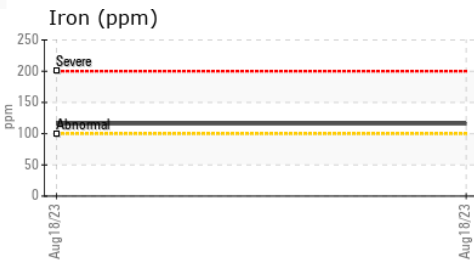
OIL ANALYSIS REPORT



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	12.5	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0100796 **Received** : 06 Sep 2023
Lab Number : 05943317 **Diagnosed** : 08 Sep 2023
Unique Number : 10633929 **Diagnostician** : Don Baldrige
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

MILLER TRUCK LEASING #118
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 PHILADELPHIA, PA
 US 19116
 Contact: ROSTY VITER
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Certificate L2367
 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)