

Area
(TEMP) Preferred Service-Tractor
 Machine Id
[Preferred Service-Tractor] 192A32039B
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON UHP 5W30 (11 GAL)



DIAGNOSIS

Recommendation
 We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
 Metal levels are typical for a new component breaking in.

Contamination
 Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. 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		PCA0114373	---	---
Sample Date	Client Info		20 Dec 2023	---	---
Machine Age	mls	Client Info	28670	---	---
Oil Age	mls	Client Info	28670	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	39	---	---
Chromium	ppm	ASTM D5185m >20	<1	---	---
Nickel	ppm	ASTM D5185m >2	<1	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m >2	<1	---	---
Aluminum	ppm	ASTM D5185m >25	▲ 27	---	---
Lead	ppm	ASTM D5185m >40	0	---	---
Copper	ppm	ASTM D5185m >330	211	---	---
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 0	195	---	---
Barium	ppm	ASTM D5185m 0	10	---	---
Molybdenum	ppm	ASTM D5185m 64	127	---	---
Manganese	ppm	ASTM D5185m 0	4	---	---
Magnesium	ppm	ASTM D5185m 1160	646	---	---
Calcium	ppm	ASTM D5185m 820	1505	---	---
Phosphorus	ppm	ASTM D5185m 1160	758	---	---
Zinc	ppm	ASTM D5185m 1260	832	---	---
Sulfur	ppm	ASTM D5185m 3000	2490	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	▲ 77	---	---
Sodium	ppm	ASTM D5185m	<1	---	---
Potassium	ppm	ASTM D5185m >20	77	---	---

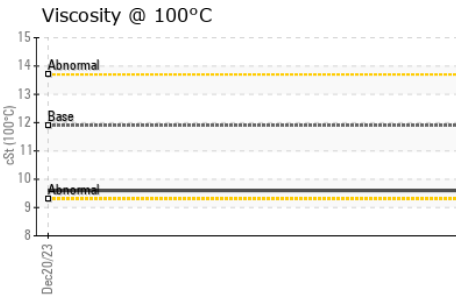
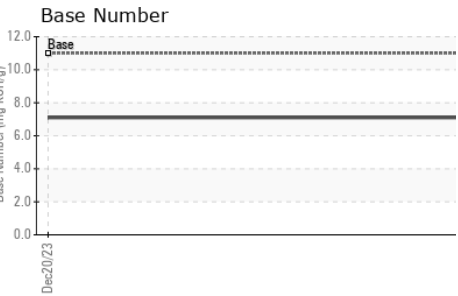
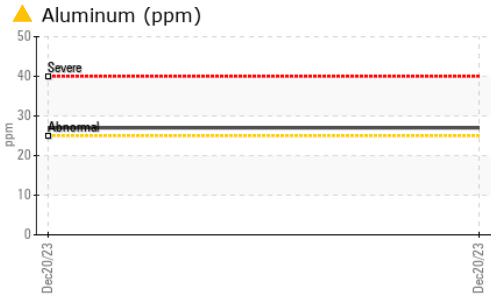
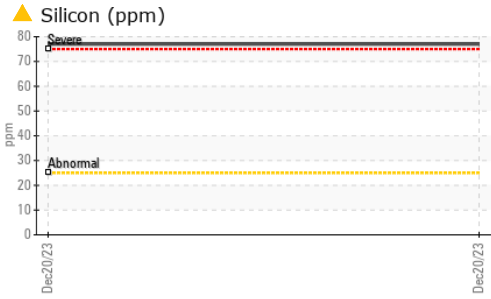
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.5	---	---
Nitration	Abs/cm	*ASTM D7624 >20	10.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.4	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	23.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 11.0	7.1	---	---

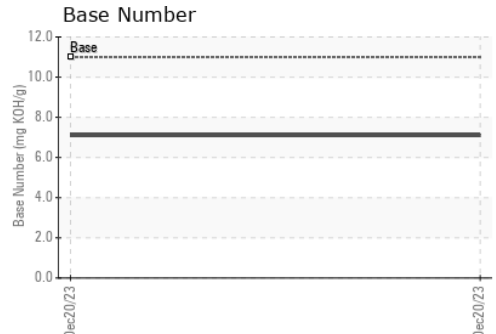
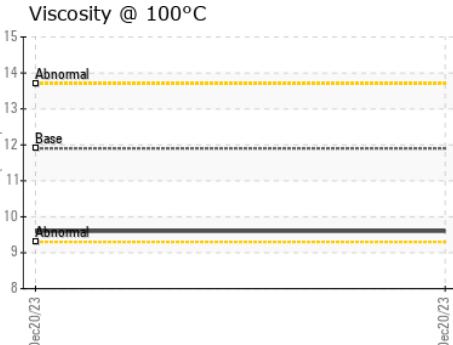
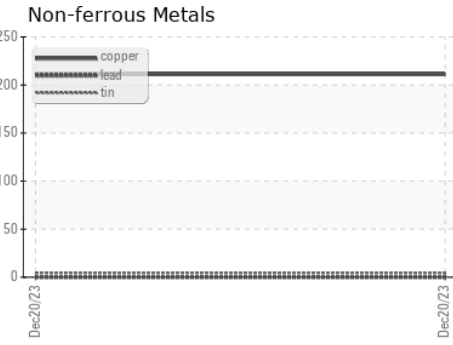
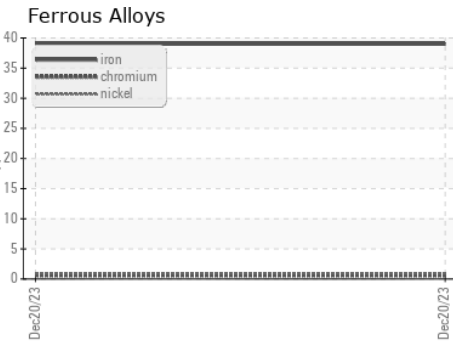
OIL ANALYSIS REPORT



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	11.9	9.6	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0114373 **Received** : 26 Dec 2023
Lab Number : 06045402 **Diagnosed** : 28 Dec 2023
Unique Number : 10806010 **Diagnostician** : Sean Felton
Test Package : FLEET

Transervice - Shop 1920 - Preferred Service
 1955 W. North Avenue, Bldg K
 Melrose Park, IL
 US 60160
 Contact: Tom Lindeman
 tlindemann@transervice.com
 T: (630)376-8946
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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)