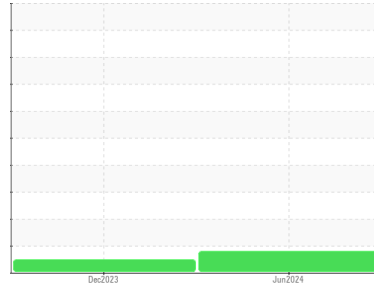


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
INTERNATIONAL 004342
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (18 QTS)

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

The aluminum level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0112486	PCA0091630	---
Sample Date	Client Info		11 Jun 2024	08 Dec 2023	---
Machine Age	mls	Client Info	80956	70937	---
Oil Age	mls	Client Info	10019	70937	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			ABNORMAL	NORMAL	---

CONTAMINATION	method	limit/base	current	history1	history2
Fuel	WC Method	>2.0	<1.0	0.8	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	48	7	---
Chromium	ppm	ASTM D5185m	>20	2	<1	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	▲ 26	3	---
Lead	ppm	ASTM D5185m	>40	<1	<1	---
Copper	ppm	ASTM D5185m	>330	3	<1	---
Tin	ppm	ASTM D5185m	>15	0	0	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

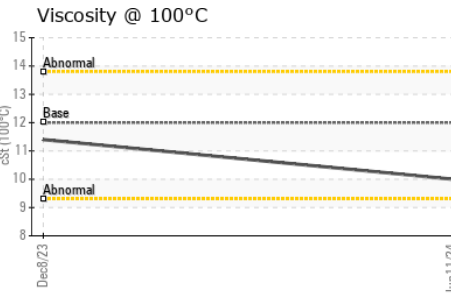
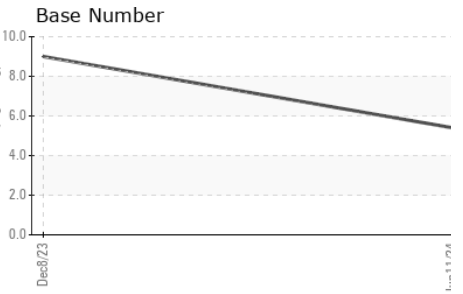
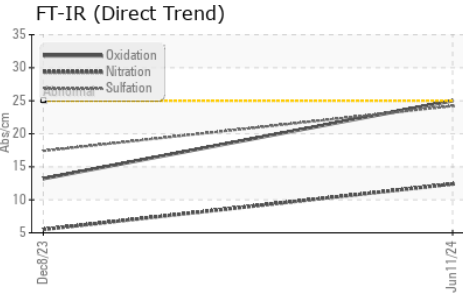
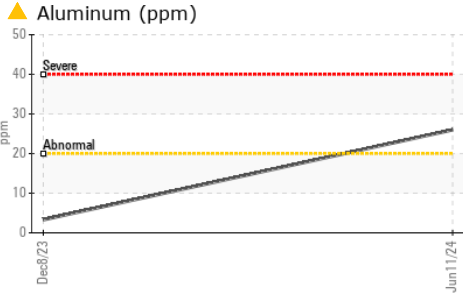
ADDITIVES	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	2	<1	1	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	50	56	58	---
Manganese	ppm	ASTM D5185m	0	<1	0	---
Magnesium	ppm	ASTM D5185m	950	891	929	---
Calcium	ppm	ASTM D5185m	1050	1074	988	---
Phosphorus	ppm	ASTM D5185m	995	945	1001	---
Zinc	ppm	ASTM D5185m	1180	1194	1196	---
Sulfur	ppm	ASTM D5185m	2600	3321	3093	---

CONTAMINANTS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	5	2	---
Sodium	ppm	ASTM D5185m		4	0	---
Potassium	ppm	ASTM D5185m	>20	21	2	---

INFRA-RED	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.7	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	12.4	5.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.2	17.4	---

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.0	13.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		5.4	9.0	---

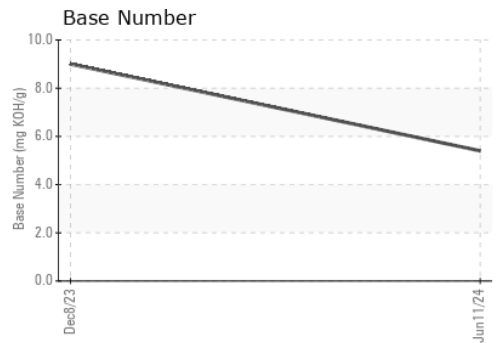
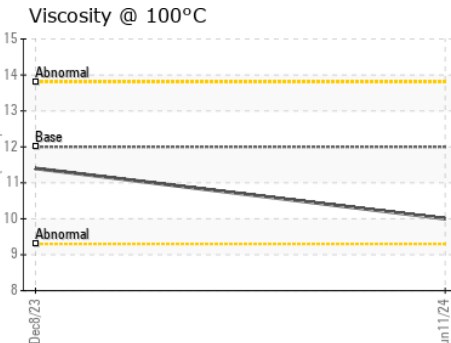
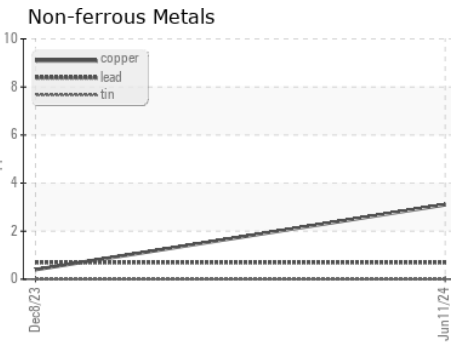
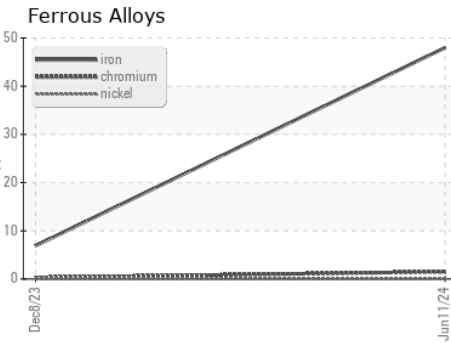
OIL ANALYSIS REPORT



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	10.0	11.4

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0112486 **Received** : 20 Jun 2024
Lab Number : 06215341 **Tested** : 21 Jun 2024
Unique Number : 11088205 **Diagnosed** : 21 Jun 2024 - Sean Felton
Test Package : FLEET

ICSB370 - Alton
 4525 North Alby Road
 Godfrey, IL
 US 62035
 Contact: Chad Ingold
 c.ingold@illinois-central.com
 T: (618)466-5400
 F:

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)