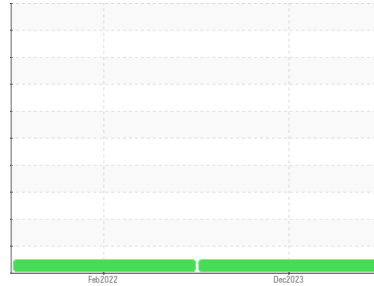


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
INTERNATIONAL 003349
 Component
Diesel Engine
 Fluid
PETRO CANADA 10W30 (31 QTS)

DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0091660	PCA0045438	---
Sample Date	Client Info			07 Dec 2023	11 Feb 2022	---
Machine Age	mls	Client Info		91314	81987	---
Oil Age	mls	Client Info		9327	81987	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>2.0		<1.0	<1.0	---
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	32	71	---
Chromium	ppm	ASTM D5185m	>20	<1	2	---
Nickel	ppm	ASTM D5185m	>4	0	3	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	8	15	---
Lead	ppm	ASTM D5185m	>40	0	2	---
Copper	ppm	ASTM D5185m	>330	1	4	---
Tin	ppm	ASTM D5185m	>15	0	2	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

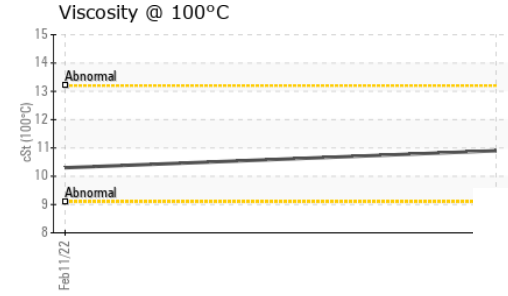
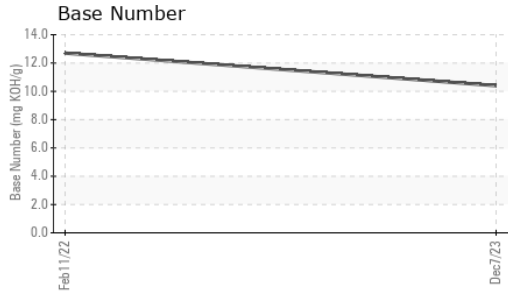
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	3	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		62	64	---
Manganese	ppm	ASTM D5185m		0	2	---
Magnesium	ppm	ASTM D5185m		902	969	---
Calcium	ppm	ASTM D5185m		1028	1173	---
Phosphorus	ppm	ASTM D5185m		857	1049	---
Zinc	ppm	ASTM D5185m		1168	1262	---
Sulfur	ppm	ASTM D5185m		2909	2829	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	16	---
Sodium	ppm	ASTM D5185m		0	4	---
Potassium	ppm	ASTM D5185m	>20	1	<1	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6	1	---
Nitration	Abs/cm	*ASTM D7624	>20	6.6	11.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	21.6	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	16.6	---
Base Number (BN)	mg KOH/g	ASTM D2896		10.4	12.7	---

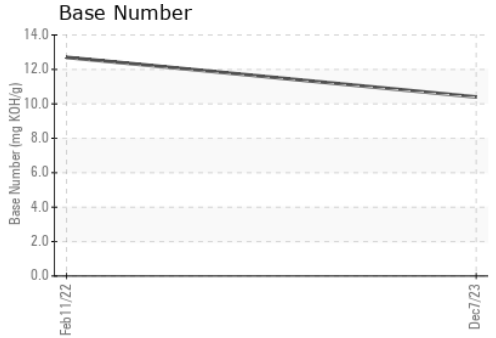
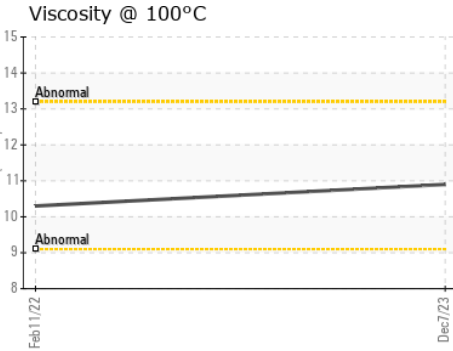
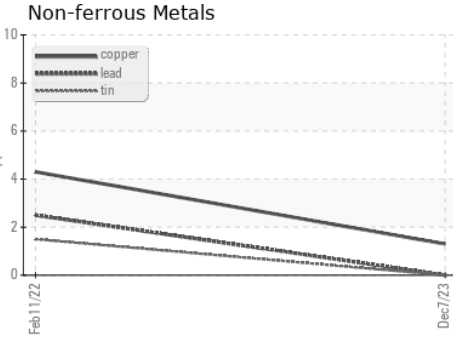
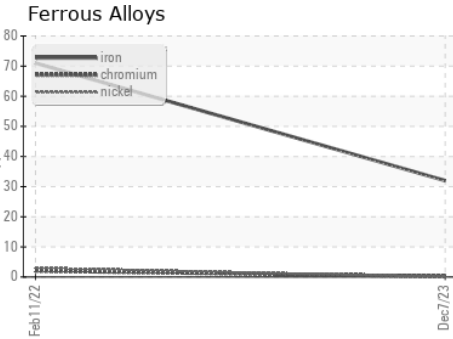
OIL ANALYSIS REPORT



PARAMETER	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	10.9	10.3	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0091660 **Received** : 20 Dec 2023
Lab Number : **06040256** **Diagnosed** : 21 Dec 2023
Unique Number : 10795485 **Diagnostician** : Sean Felton
Test Package : FLEET (Additional Tests: FT-IR(Diff))

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)