



PROBLEM SUMMARY

Sample Rating Trend



ISO



Machine Id

101

Component

Diesel Engine

Fluid

PETRO CANADA 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



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.

PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	---	---
Particles >6µm	ASTM D7647	>5000	▲ 6929	---	---
Particles >14µm	ASTM D7647	>640	▲ 1179	---	---
Particles >21µm	ASTM D7647	>160	▲ 397	---	---
Particles >38µm	ASTM D7647	>40	▲ 61	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 21/20/17	---	---

Customer Id: CLBMYR
 Sample No.: WC0517505
 Lab Number: 05939120
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldrige +1

don.b505@comcast.net

To change component or sample information:

Customer Service +1 1-800-237-1369

customerservice@wearcheck.com

RECOMMENDED ACTIONS

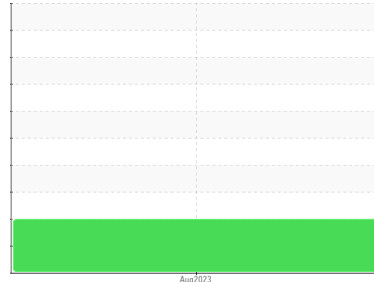
Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

101

Component

Diesel Engine

Fluid

PETRO CANADA 15W40 (--- 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

All component wear rates are normal.

▲ Contamination

There is a moderate amount of particulates present 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		WC0517505	---	---
Sample Date	Client Info		11 Aug 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	250	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ATTENTION	---	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	11	---	---
Chromium	ppm	ASTM D5185m >20	<1	---	---
Nickel	ppm	ASTM D5185m >4	<1	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m >3	0	---	---
Aluminum	ppm	ASTM D5185m >20	2	---	---
Lead	ppm	ASTM D5185m >40	0	---	---
Copper	ppm	ASTM D5185m >330	<1	---	---
Tin	ppm	ASTM D5185m >15	<1	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	14	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	79	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m	1143	---	---
Calcium	ppm	ASTM D5185m	1346	---	---
Phosphorus	ppm	ASTM D5185m	1282	---	---
Zinc	ppm	ASTM D5185m	1525	---	---
Sulfur	ppm	ASTM D5185m	4257	---	---

CONTAMINANTS

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

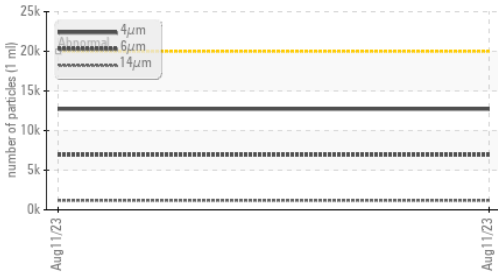
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.4	---	---
Nitration	Abs/cm	*ASTM D7624 >20	6.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.1	---	---

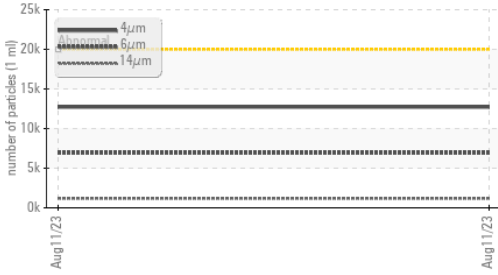


OIL ANALYSIS REPORT

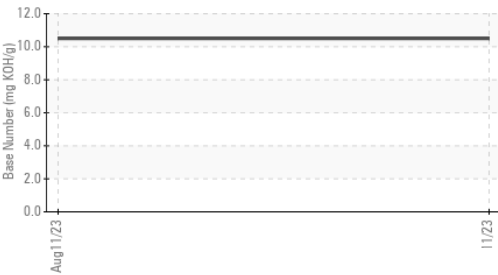
Particle Trend



Particle Trend



Base Number



Viscosity @ 100°C



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	12719	---	---
Particles >6µm	ASTM D7647	>5000	▲ 6929	---	---
Particles >14µm	ASTM D7647	>640	▲ 1179	---	---
Particles >21µm	ASTM D7647	>160	▲ 397	---	---
Particles >38µm	ASTM D7647	>40	▲ 61	---	---
Particles >71µm	ASTM D7647	>10	6	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 21/20/17	---	---

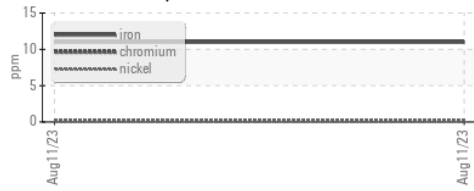
FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	14.1	---	---
Base Number (BN)	mg KOH/g ASTM D2896		10.50	---	---

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		13.9	---	---

GRAPHS

Ferrous Alloys



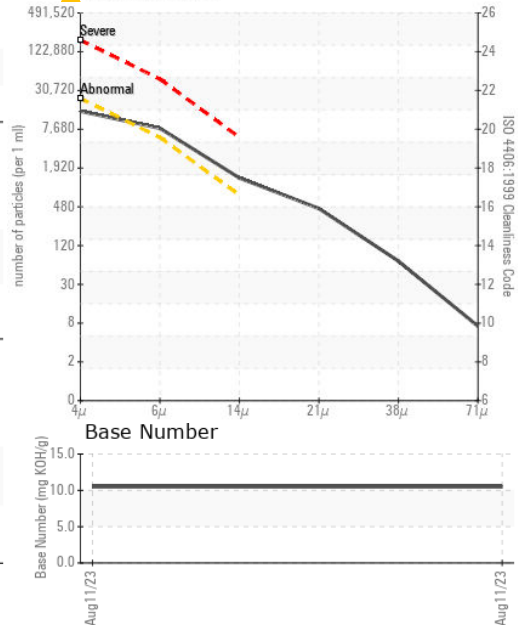
Non-ferrous Metals



Viscosity @ 100°C



Particle Count



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0517505 **Received** : 30 Aug 2023
Lab Number : 05939120 **Diagnosed** : 01 Sep 2023
Unique Number : 10629732 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: PrtCount)

C.L. BENTON & SONS INC
 706 38TH AVE N
 MYRTLE BEACH, SC
 US 29577
 Contact: NEIL
 neil@clbenton.com

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)

T:
F: