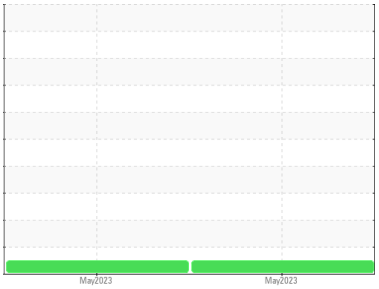
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
BD SHOP
Machine Id
200292
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry updates.

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. 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	history 1	history 2
Sample Number		Client Info		**WC0814921**	WC0814920	---
Sample Date		Client Info		**25 May 2023**	25 May 2023	---
Machine Age	kms	Client Info		**112953**	112952	---
Oil Age	kms	Client Info		**1**	59345	---
Oil Changed		Client Info		**N/A**	Changed	---
Sample Status				**NORMAL**	NORMAL	---

CONTAMINATION		method	limit/base	current	history 1	history 2
Fuel		WC Method	>3.0	**<1.0**	<1.0	---
Glycol		WC Method		**NEG**	NEG	---

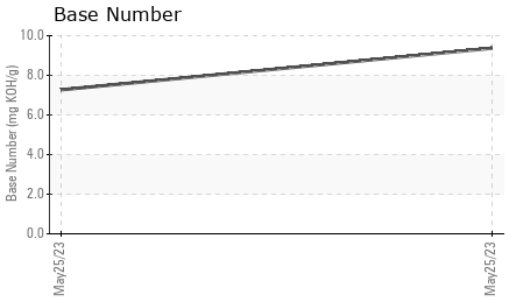
WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m)	>200	**7**	39	---
Chromium	ppm	ASTM D5185(m)	>6	**<1**	4	---
Nickel	ppm	ASTM D5185(m)	>3	**0**	<1	---
Titanium	ppm	ASTM D5185(m)	>2	**<1**	<1	---
Silver	ppm	ASTM D5185(m)	>2	**0**	0	---
Aluminum	ppm	ASTM D5185(m)	>50	**9**	50	---
Lead	ppm	ASTM D5185(m)	>10	**0**	3	---
Copper	ppm	ASTM D5185(m)	>50	**20**	123	---
Tin	ppm	ASTM D5185(m)	>6	**<1**	2	---
Antimony	ppm	ASTM D5185(m)		**0**	<1	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**0**	0	---

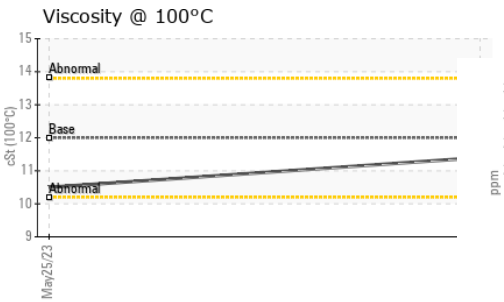
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m)	2	**7**	6	---
Barium	ppm	ASTM D5185(m)	0	**0**	0	---
Molybdenum	ppm	ASTM D5185(m)	50	**56**	58	---
Manganese	ppm	ASTM D5185(m)	0	**<1**	1	---
Magnesium	ppm	ASTM D5185(m)	950	**913**	921	---
Calcium	ppm	ASTM D5185(m)	1050	**1071**	1267	---
Phosphorus	ppm	ASTM D5185(m)	995	**1031**	1004	---
Zinc	ppm	ASTM D5185(m)	1180	**1107**	1128	---
Sulfur	ppm	ASTM D5185(m)	2600	**2482**	1935	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>50	**4**	4	---
Sodium	ppm	ASTM D5185(m)		**1**	3	---
Potassium	ppm	ASTM D5185(m)	>20	**17**	108	---

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	ASTM D7844*	>3	**0**	0.5	---
Nitration	Abs/cm	ASTM D7624*	>20	**4.9**	8.6	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	**18.1**	21.2	---

OIL ANALYSIS REPORT



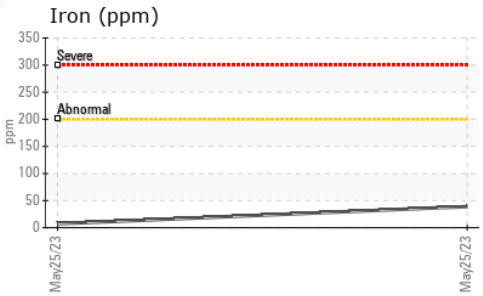


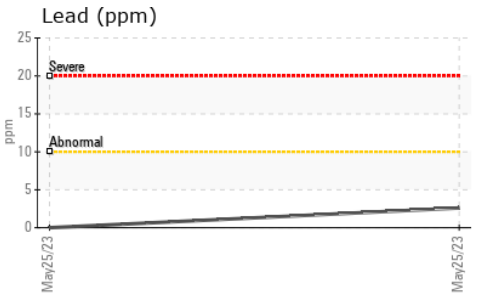
FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**13.7**	18.5	---
Base Number (BN)	mg KOH/g	ASTM D2896*		**9.37**	7.27	---

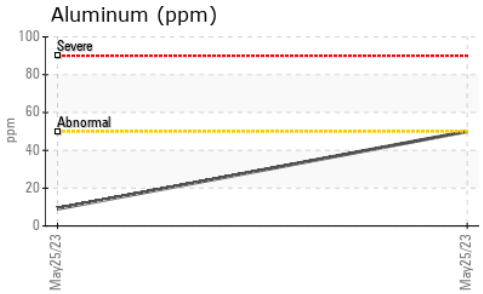
VISUAL		method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	---
Free Water	scalar	Visual*		**NEG**	NEG	---

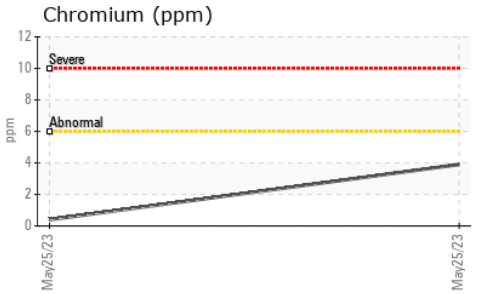
FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	**11.4**	10.5	---

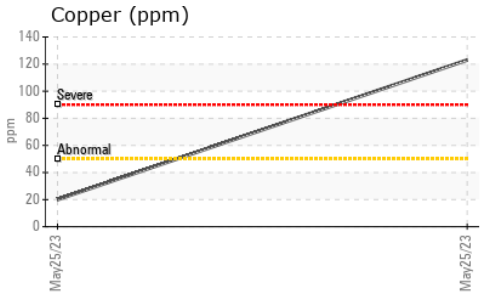
GRAPHS

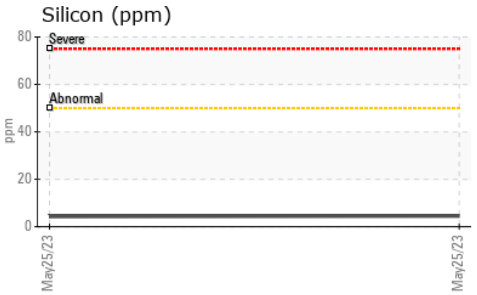


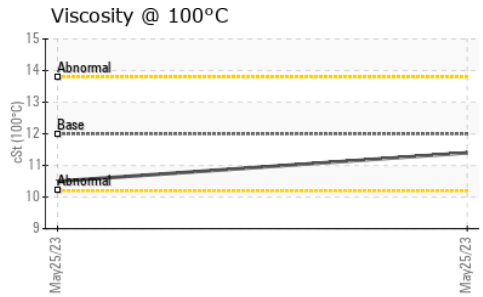


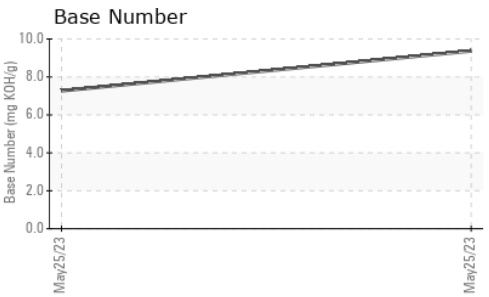












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0814921
Lab Number : 02559359
Unique Number : 5580399
Test Package : MOB 2

Received : 25 May 2023
Diagnosed : 13 Jun 2023
Diagnostician : Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

WFR Technical Services
5389 Riverside Drive
Burlington, ON
CA L7L 3Y1
Contact: William Ridley
wfr.technical.services@gmail.com
T:
F: