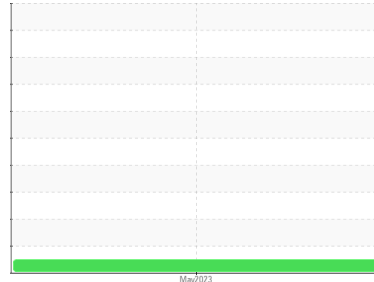




OIL ANALYSIS REPORT

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.

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			WC0814920	---	---
Sample Date	Client Info			25 May 2023	---	---
Machine Age	kms	Client Info		112952	---	---
Oil Age	kms	Client Info		59345	---	---
Oil Changed	Client Info			Changed	---	---
Sample Status				NORMAL	---	---

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

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

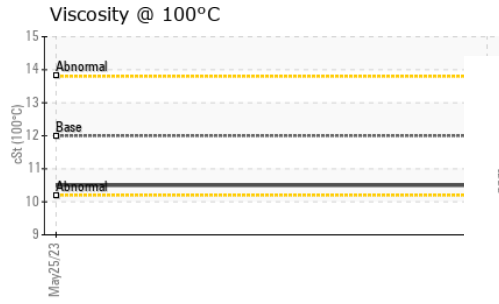
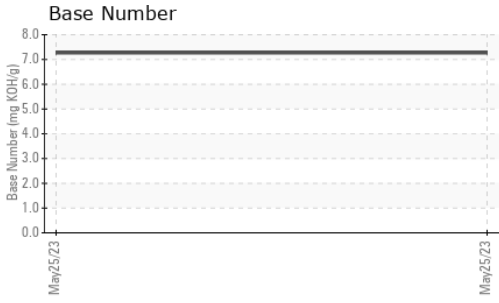
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m)	2	6	---	---
Barium	ppm	ASTM D5185(m)	0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	50	58	---	---
Manganese	ppm	ASTM D5185(m)	0	1	---	---
Magnesium	ppm	ASTM D5185(m)	950	921	---	---
Calcium	ppm	ASTM D5185(m)	1050	1267	---	---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

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

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



OIL ANALYSIS REPORT

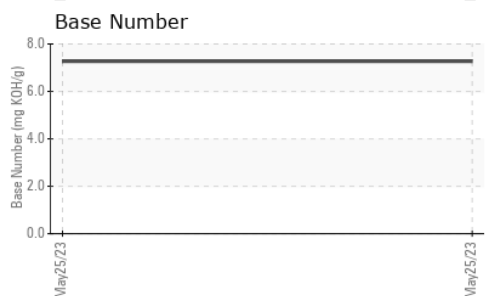
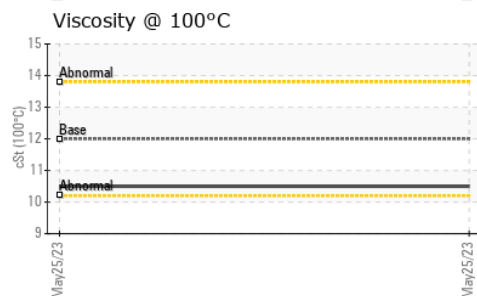
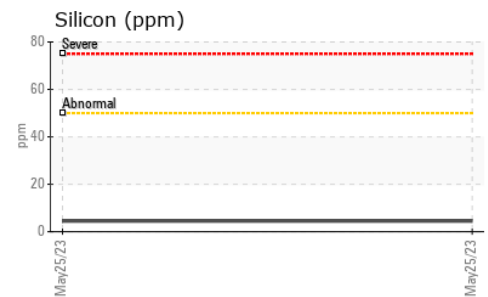
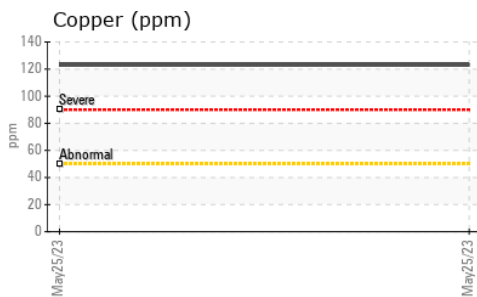
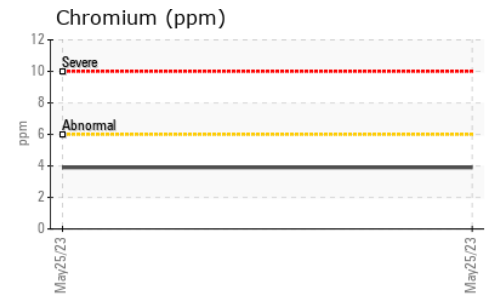
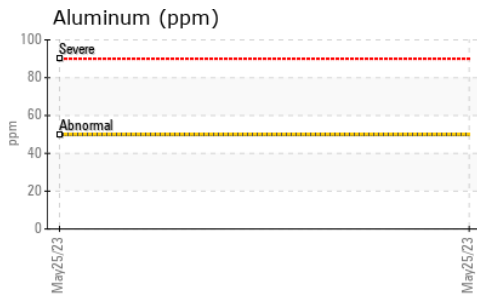
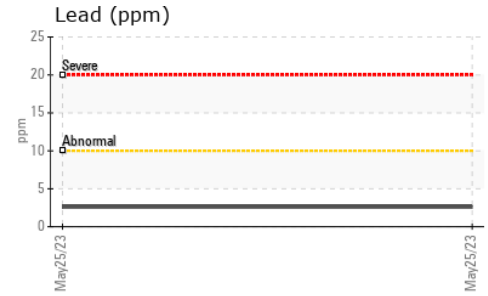
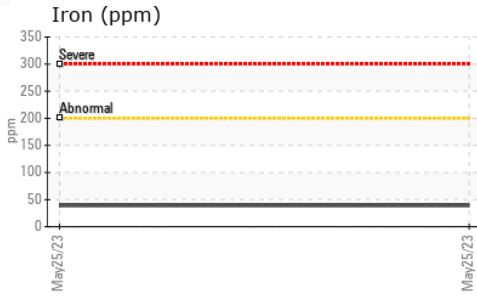


FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.5	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*		7.27	---	---

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

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0814920 **Received** : 25 May 2023
Lab Number : **02559358** **Diagnosed** : 26 May 2023
Unique Number : 5580398 **Diagnostician** : Wes Davis
Test Package : MOB 2

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

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.

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F: