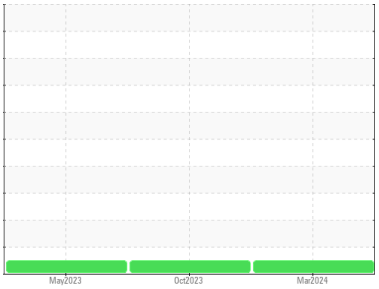
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
51967
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- LTR)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0915056**	WC0848064	WC0837234
Sample Date		Client Info		**25 Mar 2024**	16 Oct 2023	14 May 2023
Machine Age	mls	Client Info		**128992**	66187	33277
Oil Age	mls	Client Info		**29286**	32910	30780
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	**18**	27	52
Chromium	ppm	ASTM D5185(m)	>20	**<1**	2	2
Nickel	ppm	ASTM D5185(m)	>4	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	<1
Silver	ppm	ASTM D5185(m)	>3	**0**	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	**5**	21	34
Lead	ppm	ASTM D5185(m)	>40	**<1**	2	4
Copper	ppm	ASTM D5185(m)	>330	**<1**	5	16
Tin	ppm	ASTM D5185(m)	>15	**<1**	1	3
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	**4**	4	35
Barium	ppm	ASTM D5185(m)	0	**0**	<1	4
Molybdenum	ppm	ASTM D5185(m)	50	**60**	60	63
Manganese	ppm	ASTM D5185(m)	0	**0**	<1	5
Magnesium	ppm	ASTM D5185(m)	950	**986**	940	470
Calcium	ppm	ASTM D5185(m)	1050	**1049**	1130	1705
Phosphorus	ppm	ASTM D5185(m)	995	**988**	973	995
Zinc	ppm	ASTM D5185(m)	1180	**1195**	1216	1168
Sulfur	ppm	ASTM D5185(m)	2600	**2335**	2247	2281
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**3**	10	36
Sodium	ppm	ASTM D5185(m)		**1**	2	4
Potassium	ppm	ASTM D5185(m)	>20	**6**	54	96

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	**0.2**	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	**8.8**	9.4	9.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	**20.3**	21.3	23.3

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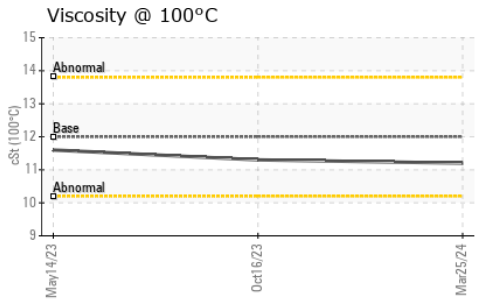
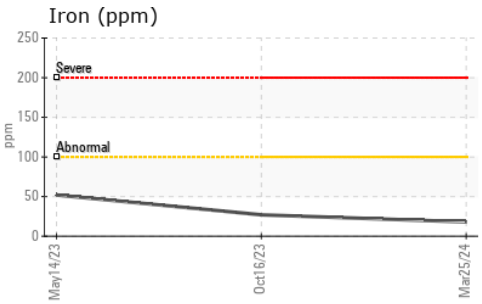


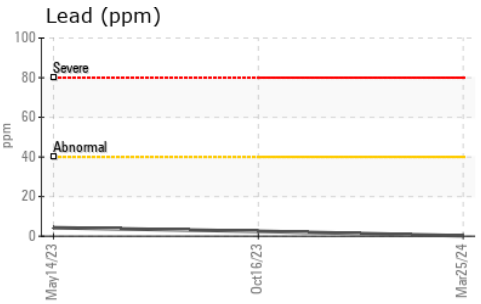
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**17.2**	18.1	19.5

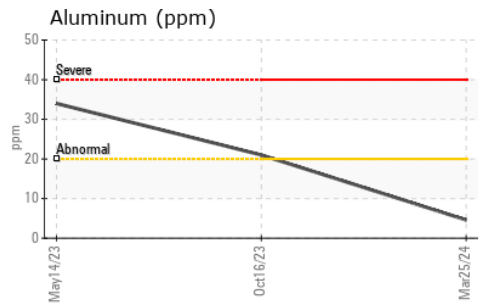
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

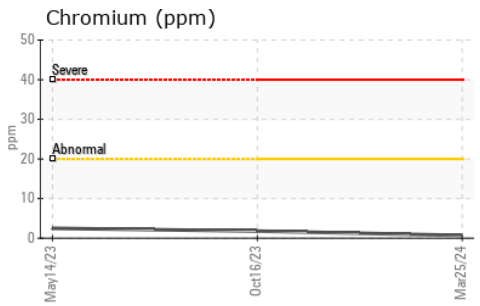
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	**11.2**	11.3	11.6

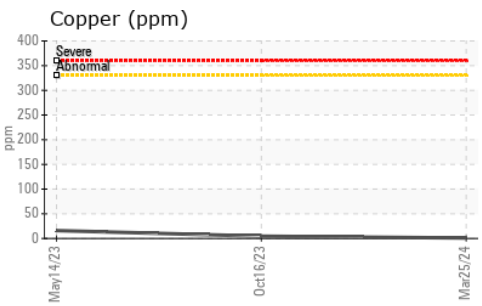
GRAPHS

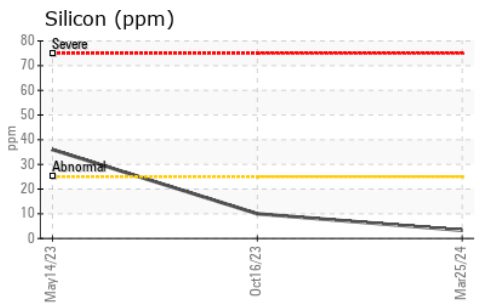


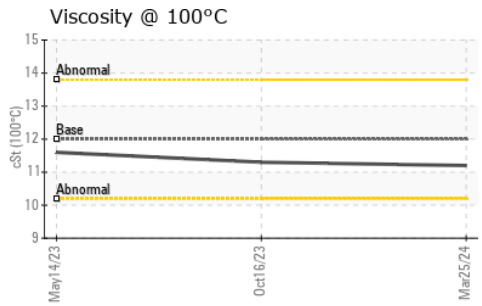


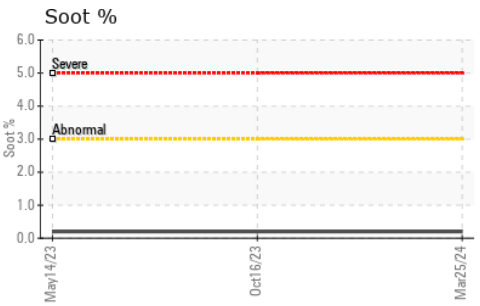












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915056
Lab Number : 02626387
Unique Number : 5759519
Test Package : MOB 1

Received : 03 Apr 2024
Tested : 03 Apr 2024
Diagnosed : 03 Apr 2024 - Wes Davis

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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