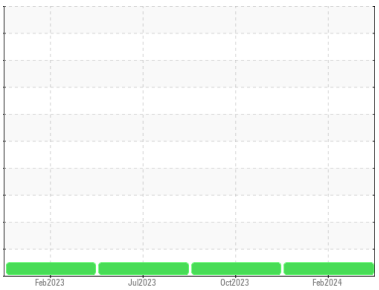
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
52943
Component
Diesel Engine
Fluid
PETRO CANADA DURON SAE 10W30 (--- GAL)

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		**WC0893696**	WC0857731	WC0805667
Sample Date		Client Info		**19 Feb 2024**	05 Oct 2023	06 Jul 2023
Machine Age	mls	Client Info		**120119**	89919	61883
Oil Age	mls	Client Info		**30634**	28037	28357
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	**<1.0**	<1.0	0.3
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)	>65	**33**	36	47
Chromium	ppm	ASTM D5185(m)	>5	**2**	2	4
Nickel	ppm	ASTM D5185(m)	>3	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)	>5	**0**	0	0
Silver	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Aluminum	ppm	ASTM D5185(m)	>35	**25**	74	116
Lead	ppm	ASTM D5185(m)	>10	**<1**	2	4
Copper	ppm	ASTM D5185(m)	>180	**61**	57	177
Tin	ppm	ASTM D5185(m)	>8	**0**	<1	1
Antimony	ppm	ASTM D5185(m)	>35	**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)	1	**2**	3	10
Barium	ppm	ASTM D5185(m)	1	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	1	**61**	59	60
Manganese	ppm	ASTM D5185(m)	1	**0**	<1	2
Magnesium	ppm	ASTM D5185(m)	10	**1009**	957	899
Calcium	ppm	ASTM D5185(m)	2942	**1097**	1134	1220
Phosphorus	ppm	ASTM D5185(m)	1102	**941**	926	952
Zinc	ppm	ASTM D5185(m)	1351	**1187**	1172	1114
Sulfur	ppm	ASTM D5185(m)	3903	**1953**	1876	1831
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**6**	8	6
Sodium	ppm	ASTM D5185(m)		**3**	4	4
Potassium	ppm	ASTM D5185(m)	>20	**39**	137	208

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	**0.7**	0.9	0.7
Nitration	Abs/cm	ASTM D7624*	>20	**8.7**	8.6	9.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	**21.0**	21.8	22.1

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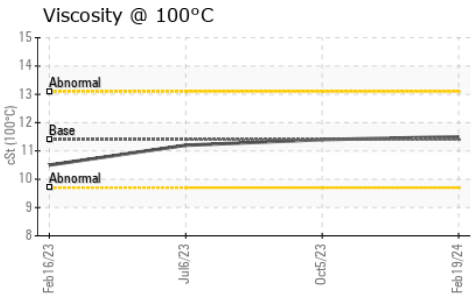
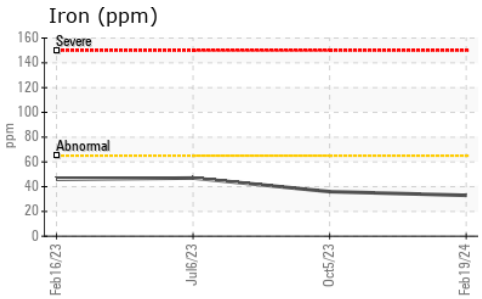


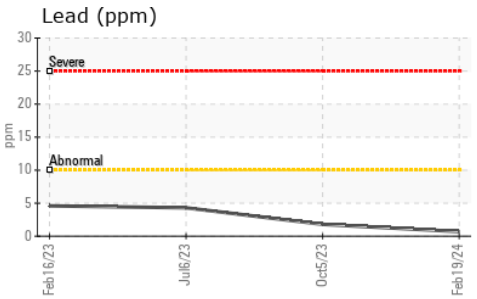
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**16.7**	16.9	17.9

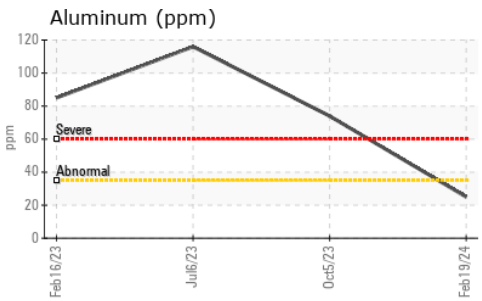
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

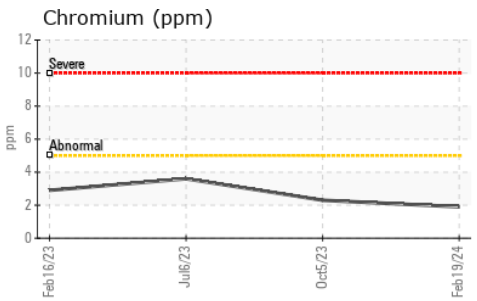
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	**11.5**	11.4	11.2

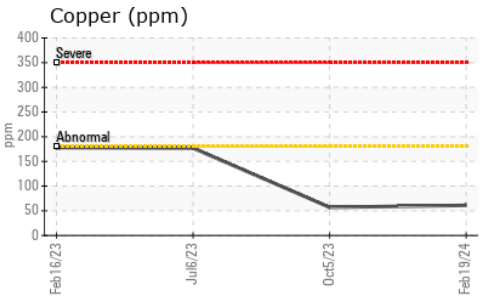
GRAPHS

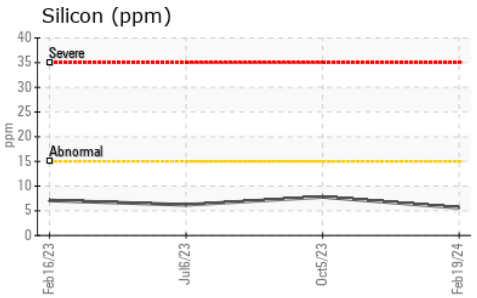


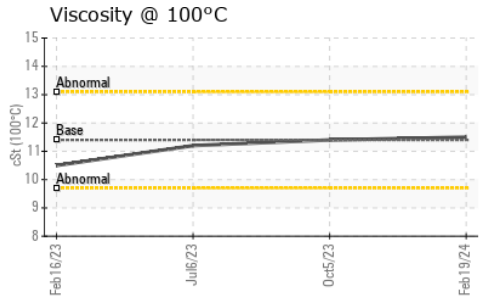


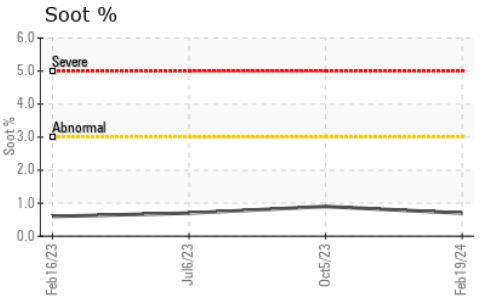












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0893696
Lab Number : 02625504
Unique Number : 5750623
Test Package : MOB 1

Received : 01 Apr 2024
Tested : 01 Apr 2024
Diagnosed : 01 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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