



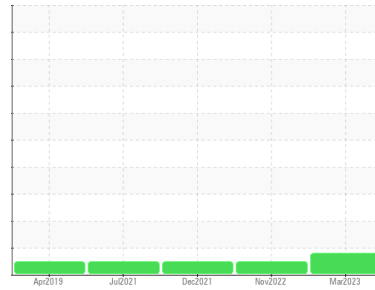
OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Machine Id
501142
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected 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	GFL0074238	GFL0061082	GFL0041348	
Sample Date	Client Info	20 Mar 2023	14 Nov 2022	23 Dec 2021	
Machine Age	hrs	Client Info	0	4099	3135
Oil Age	hrs	Client Info	0	399	0
Oil Changed	Client Info	N/A	Changed	Changed	
Sample Status		MARGINAL	NORMAL	NORMAL	

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >120	22	14	27
Chromium	ppm	ASTM D5185(m) >20	<1	<1	<1
Nickel	ppm	ASTM D5185(m) >5	<1	1	3
Titanium	ppm	ASTM D5185(m) >2	<1	0	0
Silver	ppm	ASTM D5185(m) >2	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	3	3	5
Lead	ppm	ASTM D5185(m) >40	<1	<1	<1
Copper	ppm	ASTM D5185(m) >330	2	1	5
Tin	ppm	ASTM D5185(m) >15	<1	<1	<1
Antimony	ppm	ASTM D5185(m)	<1	0	<1
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) 0	4	3	6
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 60	58	57	60
Manganese	ppm	ASTM D5185(m) 0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	924	921	929
Calcium	ppm	ASTM D5185(m) 1070	1028	1041	1085
Phosphorus	ppm	ASTM D5185(m) 1150	1040	1024	971
Zinc	ppm	ASTM D5185(m) 1270	1131	1140	1121
Sulfur	ppm	ASTM D5185(m) 2060	2563	2507	2529
Lithium	ppm	ASTM D5185(m)	<1	<1	0

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >25	3	3	4
Sodium	ppm	ASTM D5185(m)	3	3	3
Potassium	ppm	ASTM D5185(m) >20	0	<1	2
Fuel	%	ASTM D7593* >5	▲ 3.5	<1.0	<1.0

INFRA-RED

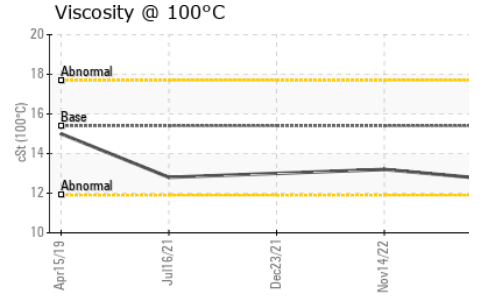
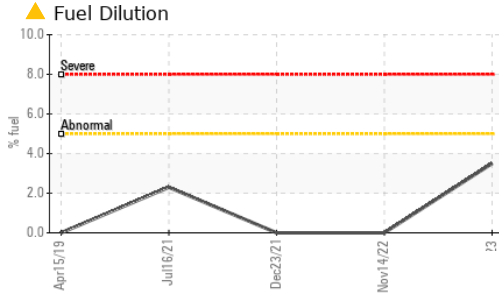
method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844* >4	0.4	0.3	0.7
Nitration	Abs/cm	ASTM D7624* >20	11.9	9.6	11.5
Sulfation	Abs/.1mm	ASTM D7415* >30	21.9	20.3	21.4

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414* >25	16.8	17.0	18.4



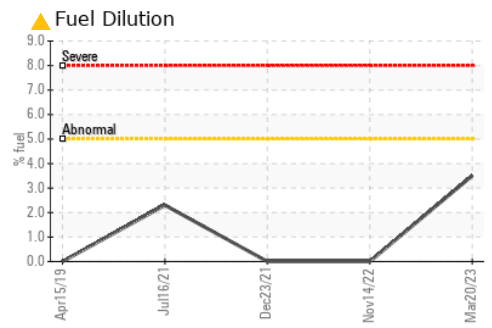
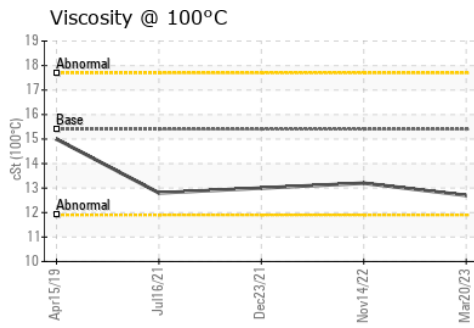
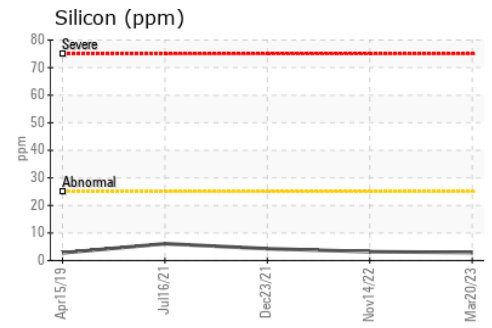
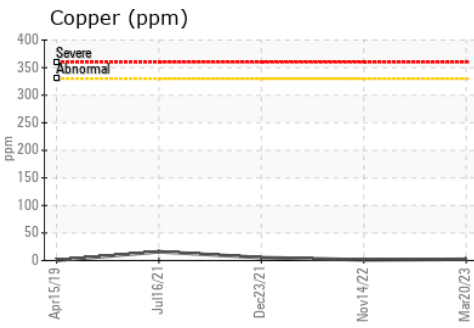
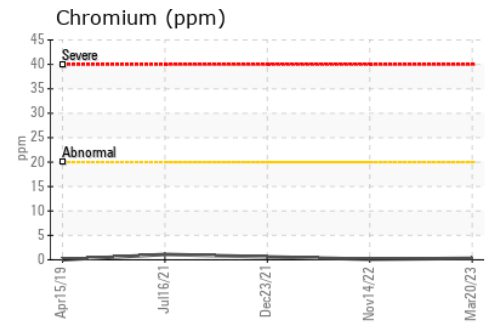
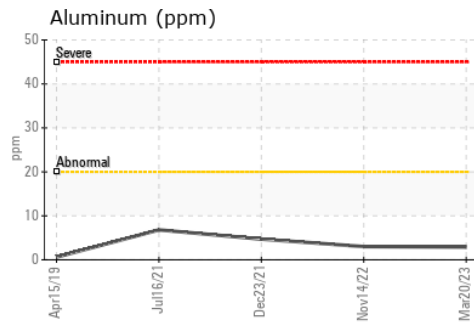
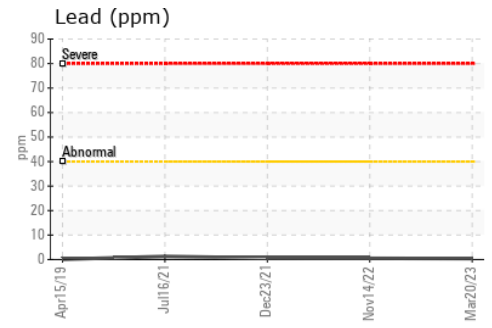
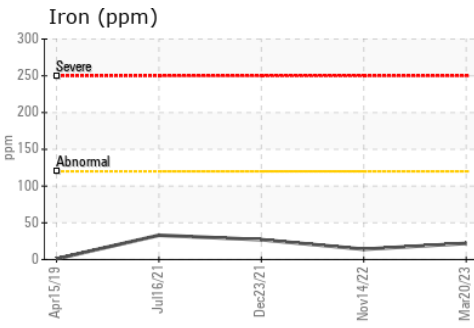
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	12.7	13.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0074238 **Received** : 21 Mar 2023
Lab Number : 02546582 **Diagnosed** : 22 Mar 2023
Unique Number : 5551592 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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 Toronto, ON
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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.