



Machine Id
828007
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (22 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0107146	GFL0086759	GFL0063946
Sample Date		Client Info		16 Jan 2024	15 Jun 2023	24 Feb 2023
Machine Age	hrs	Client Info		11067	10203	9536
Oil Age	hrs	Client Info		0	10203	9536
Filter Age	hrs	Client Info		0	10203	9536
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	20	17	17
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>30	5	3	4
Lead	ppm	ASTM D5185(m)	>30	0	0	0
Copper	ppm	ASTM D5185(m)	>150	1	1	1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

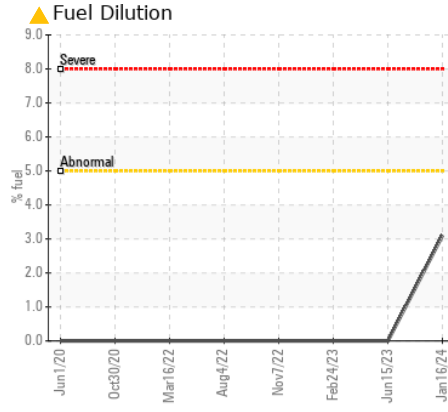
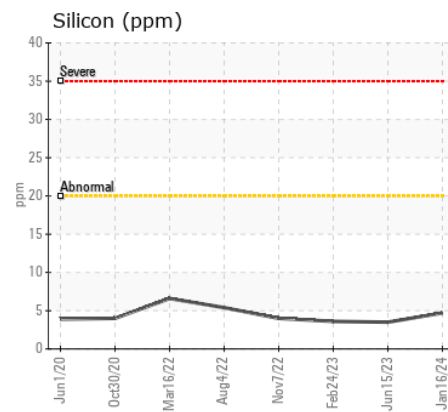
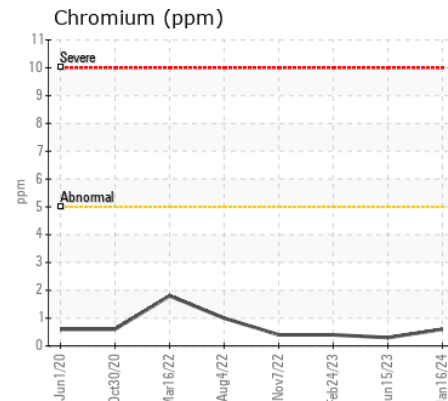
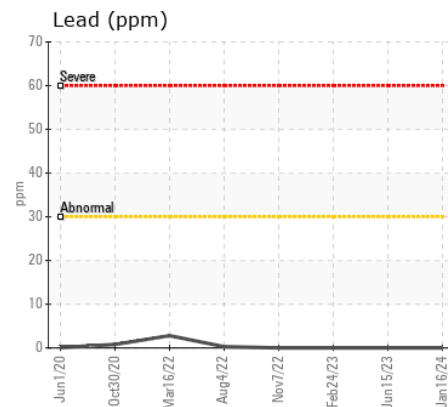
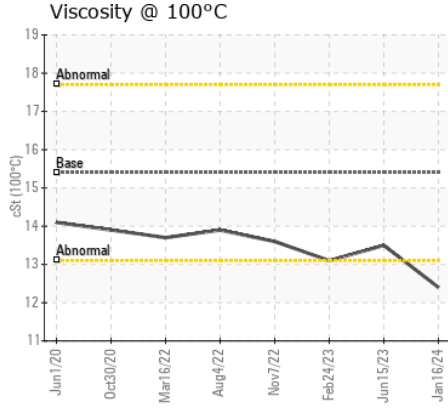
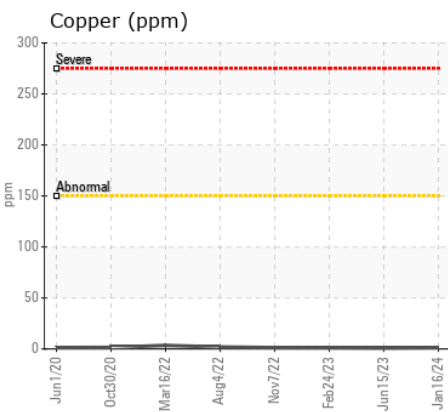
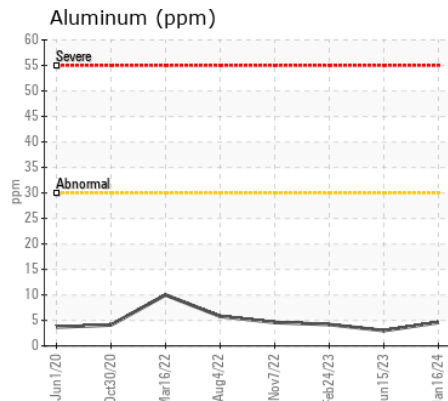
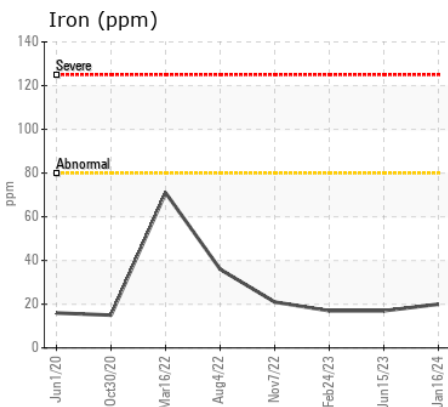
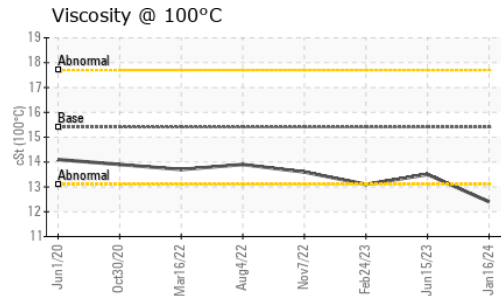
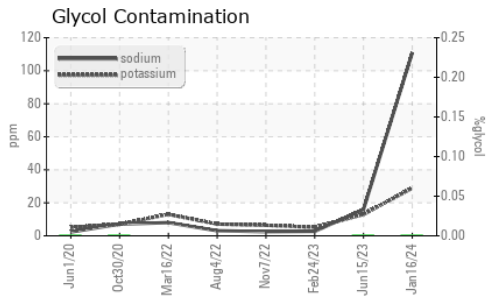
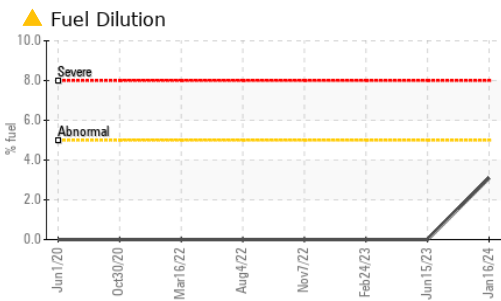
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>20	5	4	4
Potassium	ppm	ASTM D5185(m)	>20	29	13	5
Fuel	%	ASTM D7593*	>5	▲ 3.1	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	NEG
Soot %	%	ASTM D7844*	>3	0.5	0.4	0.2
Nitration	Abs/cm	ASTM D7624*	>20	11.4	9.6	10.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.4	21.3	22.8
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		111	16	3
Boron	ppm	ASTM D5185(m)	0	22	3	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	64	61	60
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	967	976	958
Calcium	ppm	ASTM D5185(m)	1070	1026	1120	1113
Phosphorus	ppm	ASTM D5185(m)	1150	943	1072	1070
Zinc	ppm	ASTM D5185(m)	1270	1145	1214	1205
Sulfur	ppm	ASTM D5185(m)	2060	2657	2501	2509
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.9	18.3	18.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	12.4	13.5	13.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107146 **Received** : 18 Jan 2024
Lab Number : 02609606 **Diagnosed** : 19 Jan 2024
Unique Number : 5710692 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, PercentFuel)

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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.