



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL



Machine Id
8133
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0119026	GFL0101713	GFL0090614
Sample Date		Client Info		13 Jun 2024	24 Nov 2023	18 Aug 2023
Machine Age	hrs	Client Info		16665	16333	15813
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	ATTENTION	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	35	7	11
Chromium	ppm	ASTM D5185(m)	>5	2	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>30	4	1	2
Lead	ppm	ASTM D5185(m)	>30	<1	2	7
Copper	ppm	ASTM D5185(m)	>150	8	14	177
Tin	ppm	ASTM D5185(m)	>5	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

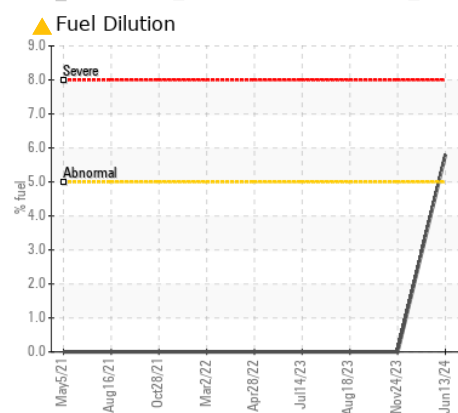
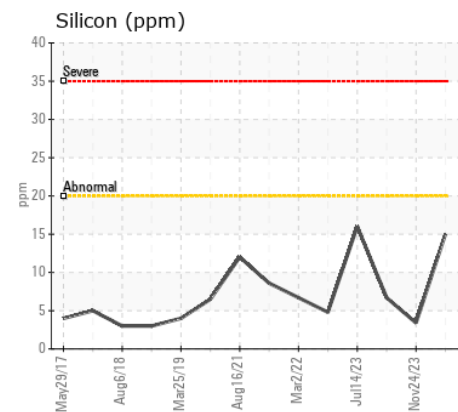
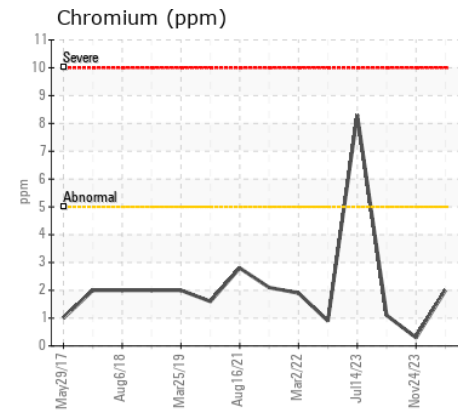
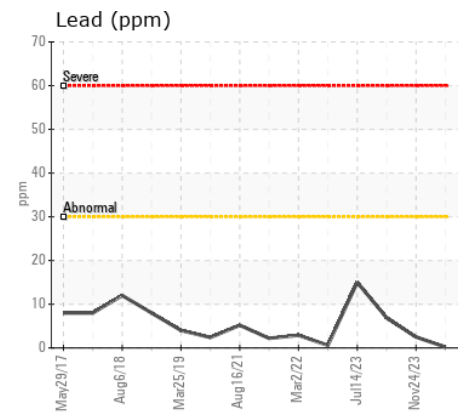
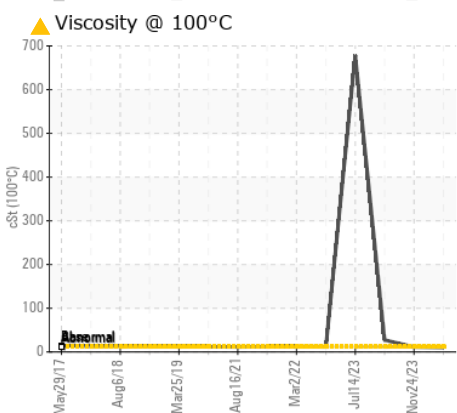
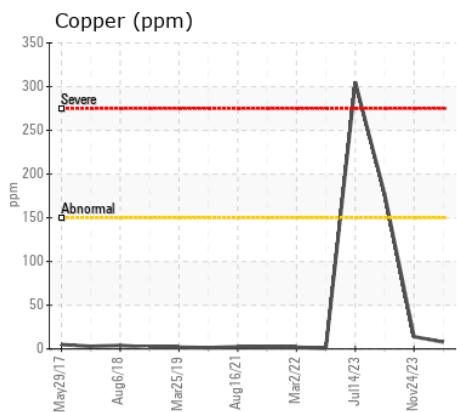
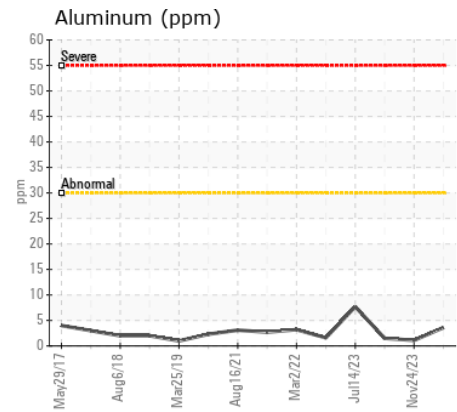
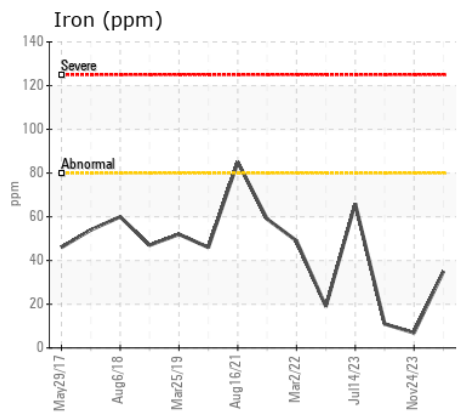
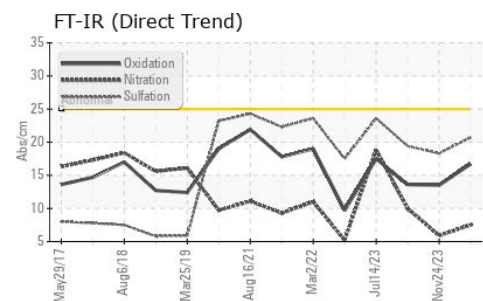
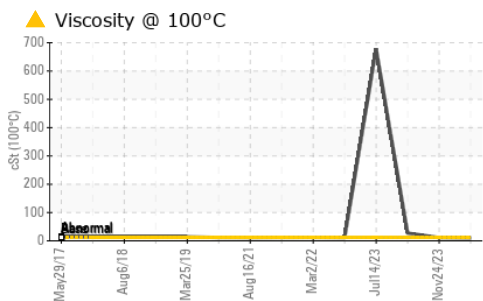
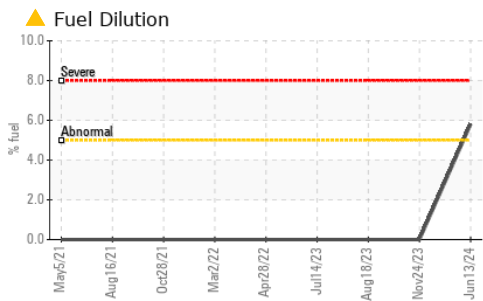
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>20	15	3	7
Potassium	ppm	ASTM D5185(m)	>20	1	1	10
Fuel	%	ASTM D7593*	>5	5.8	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	0.0	0.464
Soot %	%	ASTM D7844*	>3	0.6	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	7.5	5.9	10.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.7	18.3	19.4
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		25	264	1780
Boron	ppm	ASTM D5185(m)	2	9	2	9
Barium	ppm	ASTM D5185(m)	0	<1	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	53	64	118
Manganese	ppm	ASTM D5185(m)	0	2	0	<1
Magnesium	ppm	ASTM D5185(m)	950	804	905	760
Calcium	ppm	ASTM D5185(m)	1050	937	968	873
Phosphorus	ppm	ASTM D5185(m)	995	841	957	946
Zinc	ppm	ASTM D5185(m)	1180	998	1112	996
Sulfur	ppm	ASTM D5185(m)	2600	2233	2484	2341
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.7	13.5	13.6
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	10.1	11.3	27.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119026
Lab Number : 02644004
Unique Number : 5801543
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)
Received : 25 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 26 Jun 2024 - Wes Davis

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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.