



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(15496TB)
Machine Id
825038-154
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL012824	GFL0100130	GFL0090829
Sample Date		Client Info		10 Apr 2024	12 Jan 2024	26 Oct 2023
Machine Age	mls	Client Info		173198	173198	17639
Oil Age	mls	Client Info		173198	173198	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

The copper level has decreased, but is still abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	10	18	6
Chromium	ppm	ASTM D5185m	>5	0	<1	0
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	<1
Lead	ppm	ASTM D5185m	>150	0	3	0
Copper	ppm	ASTM D5185m	>90	▲ 100	▲ 230	39
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

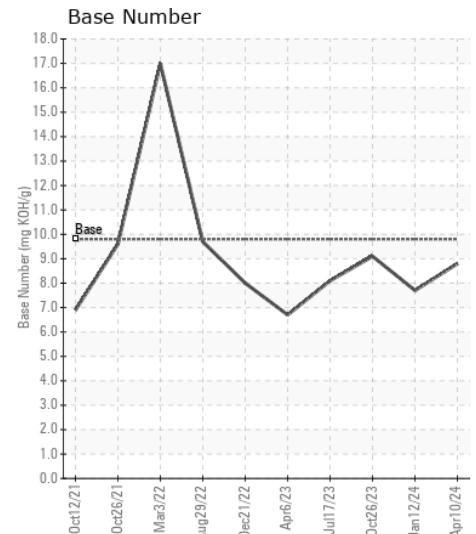
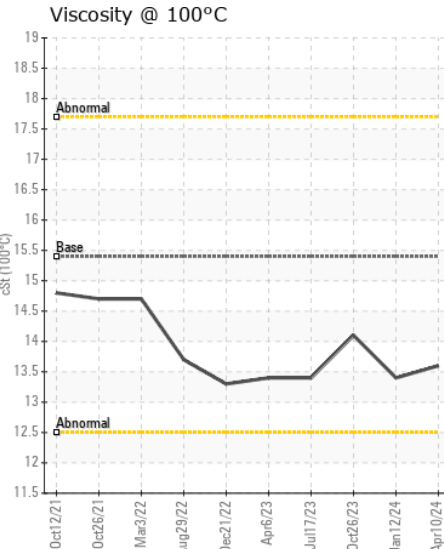
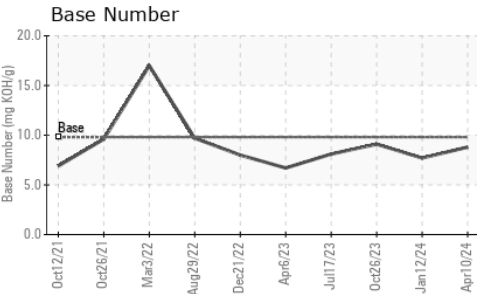
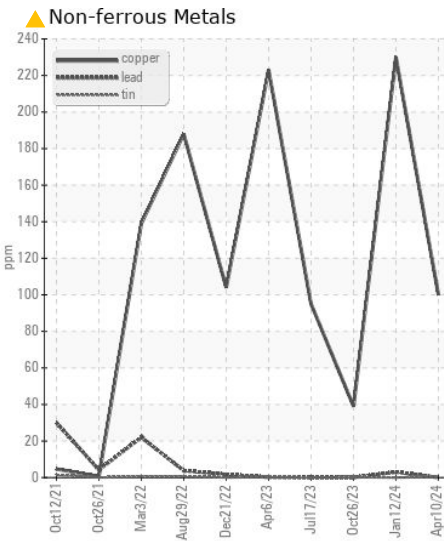
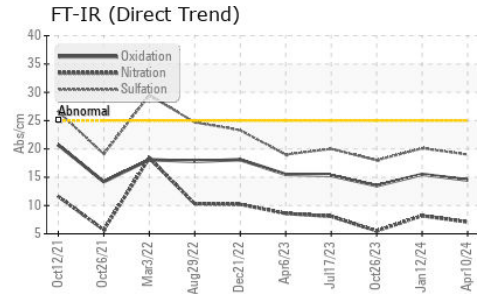
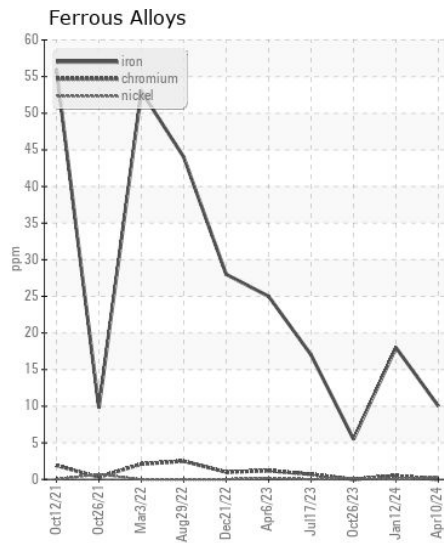
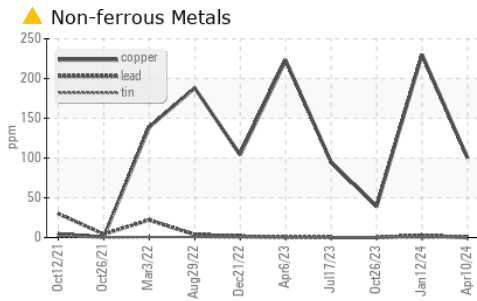
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	6	10	6
Potassium	ppm	ASTM D5185m	>20	13	31	15
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	0.2	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.1	8.2	5.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	20.1	18.0
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		4	8	2
Boron	ppm	ASTM D5185m	0	5	4	9
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	62	63	58
Manganese	ppm	ASTM D5185m	0	<1	0	0
Magnesium	ppm	ASTM D5185m	1010	996	991	892
Calcium	ppm	ASTM D5185m	1070	1110	1106	996
Phosphorus	ppm	ASTM D5185m	1150	1117	1121	1017
Zinc	ppm	ASTM D5185m	1270	1319	1266	1210
Sulfur	ppm	ASTM D5185m	2060	3825	3168	3018
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	15.5	13.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.8	7.7	9.1
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	13.4	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0112824
Lab Number : 06146339
Unique Number : 10976417
Test Package : FLEET

GFL Environmental - 659 - Mechanicsville
 8280 RICHFOOD RD
 Mechanicsville, VA
 US 23116
 Contact: Dwayne Oliver
 dwayneoliver@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)