



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
922016
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0116182	GFL0092549	GFL0077928
Sample Date		Client Info		11 Jun 2024	27 Feb 2024	14 Dec 2023
Machine Age	hrs	Client Info		27777	27261	26852
Oil Age	hrs	Client Info		516	427	602
Filter Age	hrs	Client Info		516	427	602
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	7	6	12
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	2
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	2	2	3
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

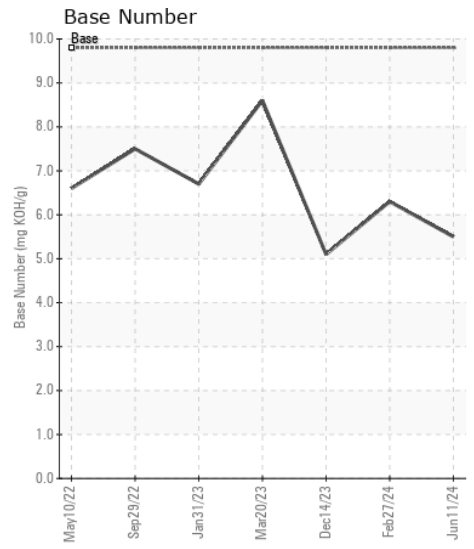
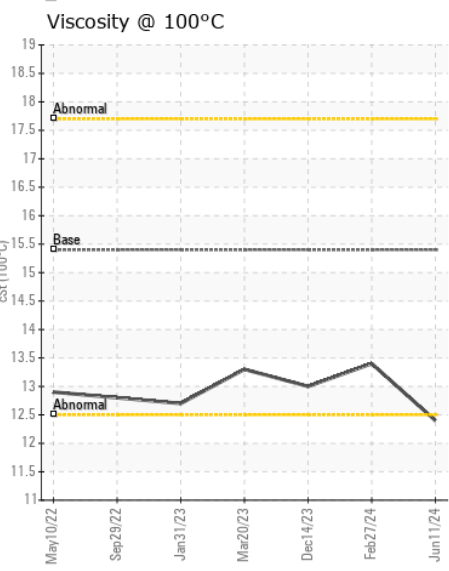
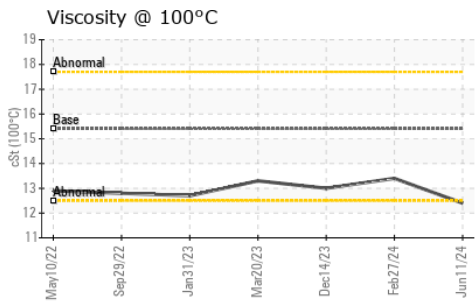
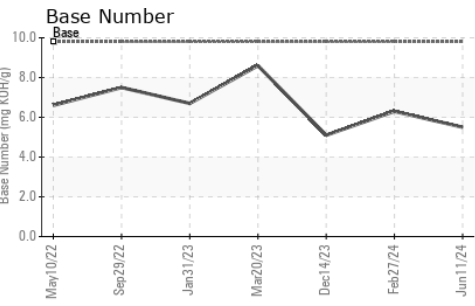
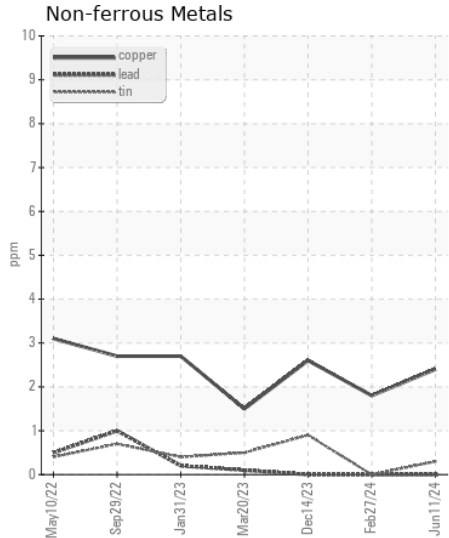
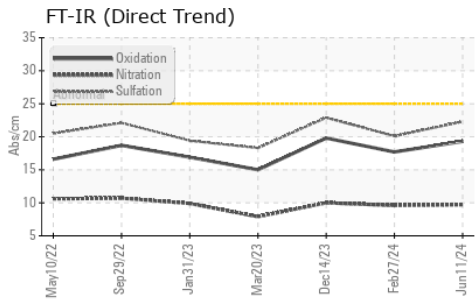
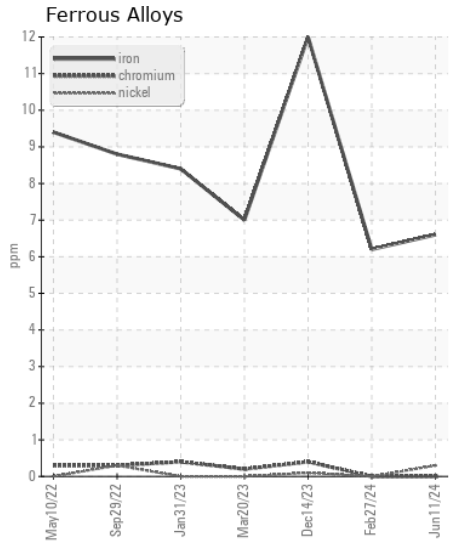
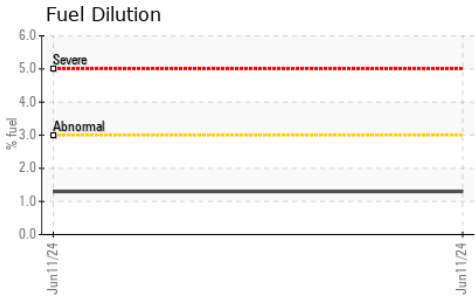
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	3	4
Potassium	ppm	ASTM D5185m	>20	2	0	1
Fuel	%	ASTM D3524	>3.0	1.3	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.3	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.7	9.6	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	20.1	22.9
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	3	4
Boron	ppm	ASTM D5185m	0	9	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	60	58	62
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	932	1115	1016
Calcium	ppm	ASTM D5185m	1070	1113	1173	1063
Phosphorus	ppm	ASTM D5185m	1150	1082	1180	1115
Zinc	ppm	ASTM D5185m	1270	1245	1347	1300
Sulfur	ppm	ASTM D5185m	2060	3306	3318	2839
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.3	17.7	19.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.5	6.3	5.1
Visc @ 100°C	cSt	ASTM D445	15.4	12.4	13.4	13.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0116182 **Received** : 17 Jun 2024
Lab Number : 06212771 **Tested** : 20 Jun 2024
Unique Number : 11085635 **Diagnosed** : 20 Jun 2024 - Sean Felton
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 935 - Omro HC
 250 Alder Avenue
 Omro, WI
 US 54963
 Contact: Tim Kieffer
 tim.kieffer@gflenv.com
 T: (608)219-0288
 F:

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)