



Area
(34706UA)
Machine Id
712015
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (7 GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter 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		GFL0119093	GFL0112138	GFL0060127
Sample Date		Client Info		22 May 2024	08 Feb 2024	22 Dec 2022
Machine Age	hrs	Client Info		724	724	724
Oil Age	hrs	Client Info		724	724	2350
Filter Age	hrs	Client Info		724	724	771
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	52	28	31
Chromium	ppm	ASTM D5185m	>20	2	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	24	15	42
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	6	<1	1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

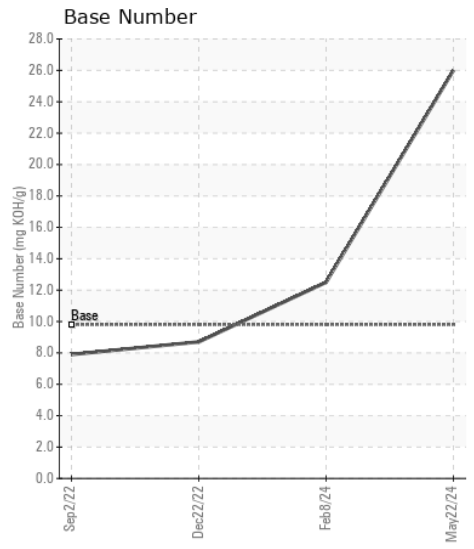
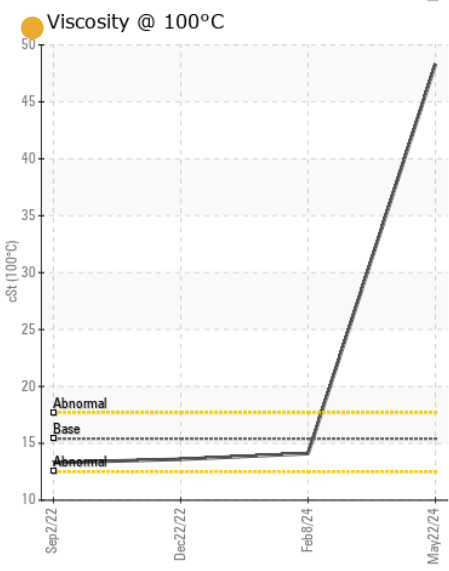
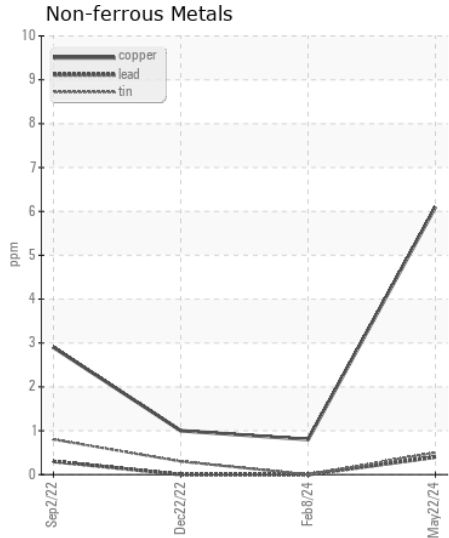
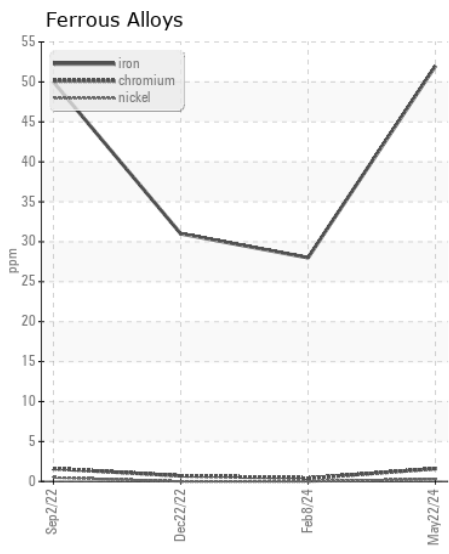
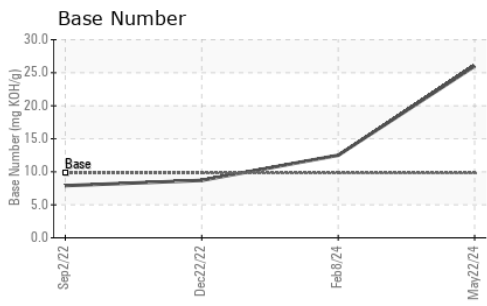
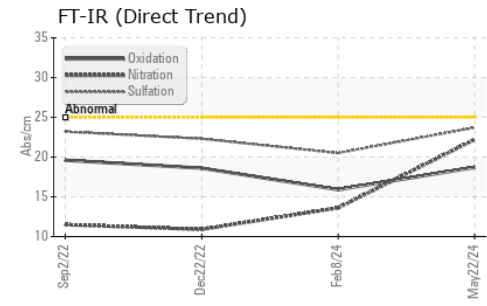
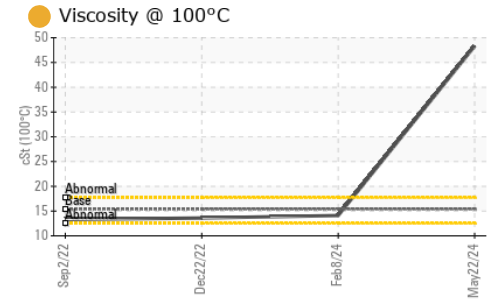
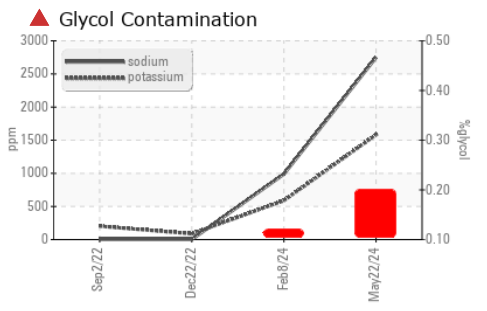
Sodium and/or potassium levels are high. There is a high concentration of glycol present in the oil.

Silicon	ppm	ASTM D5185m	>25	20	7	4
Potassium	ppm	ASTM D5185m	>20	▲ 1581	▲ 589	88
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		▲ 0.20	▲ 0.12	NEG
Soot %	%	*ASTM D7844	>6	0.6	0.4	0.9
Nitration	Abs/cm	*ASTM D7624	>20	22.2	13.6	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	20.5	22.3
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 oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		▲ 2749	▲ 989	2
Boron	ppm	ASTM D5185m	0	65	26	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	208	112	63
Manganese	ppm	ASTM D5185m	0	2	<1	<1
Magnesium	ppm	ASTM D5185m	1010	801	864	918
Calcium	ppm	ASTM D5185m	1070	1050	1078	1161
Phosphorus	ppm	ASTM D5185m	1150	941	1015	1055
Zinc	ppm	ASTM D5185m	1270	1114	1201	1253
Sulfur	ppm	ASTM D5185m	2060	3084	2749	3952
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7	15.9	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	26.0	12.5	8.7
Visc @ 100°C	cSt	ASTM D445	15.4	● 48.3	14.1	13.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0119093
Lab Number : 06191459
Unique Number : 11048211
Test Package : FLEET
Received : 24 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Don Baldrige

GFL Environmental - 045 - Tidewater
 3821 Cook Blvd.
 Chesapeake, VA
 US 23323
 Contact: ELVIN RODRIGUEZ
 elvinrodriguez@gflenv.com
 T:
 F:

Certificate L2367
 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)