



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
424057-19
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (12 GAL)

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		GFL0125858	GFL0118693	GFL0118650
Sample Date		Client Info		18 Jun 2024	29 May 2024	14 May 2024
Machine Age	hrs	Client Info		22475	22328	22234
Oil Age	hrs	Client Info		150	600	400
Filter Age	hrs	Client Info		150	600	400
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	3	13	24
Chromium	ppm	ASTM D5185m	>20	0	<1	3
Nickel	ppm	ASTM D5185m	>5	<1	▲ 8	▲ 13
Titanium	ppm	ASTM D5185m	>2	0	0	3
Silver	ppm	ASTM D5185m	>2	0	0	3
Aluminum	ppm	ASTM D5185m	>20	1	4	9
Lead	ppm	ASTM D5185m	>40	0	0	3
Copper	ppm	ASTM D5185m	>330	<1	2	6
Tin	ppm	ASTM D5185m	>15	0	0	3
Vanadium	ppm	ASTM D5185m		<1	0	2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

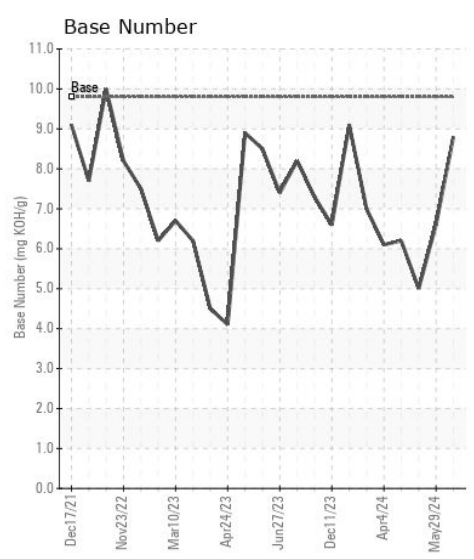
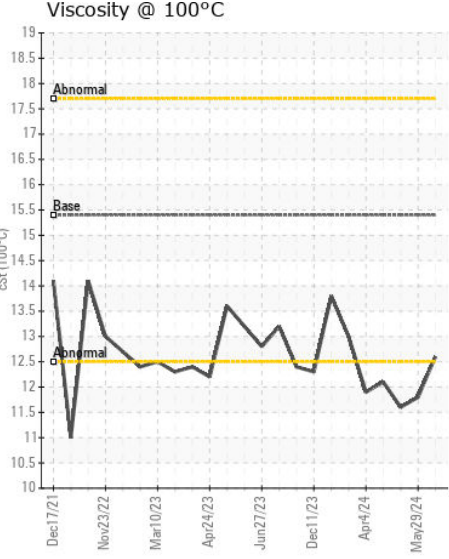
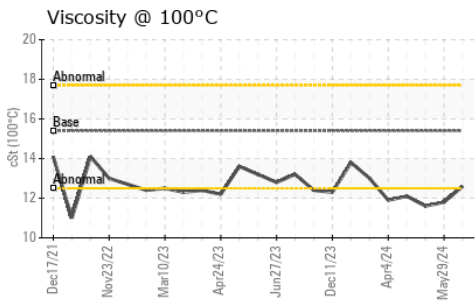
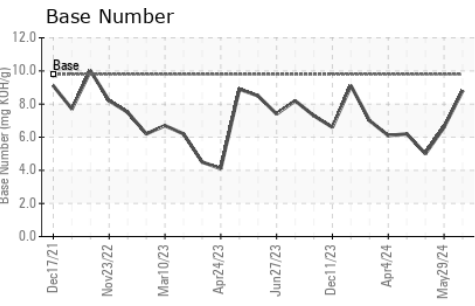
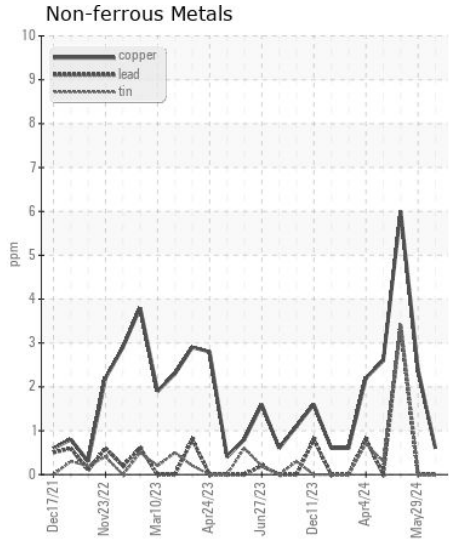
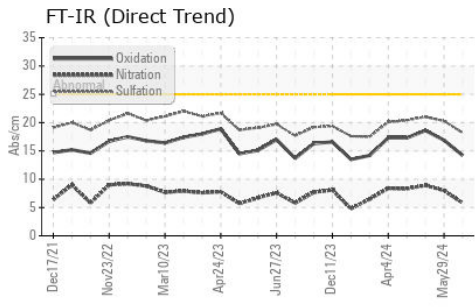
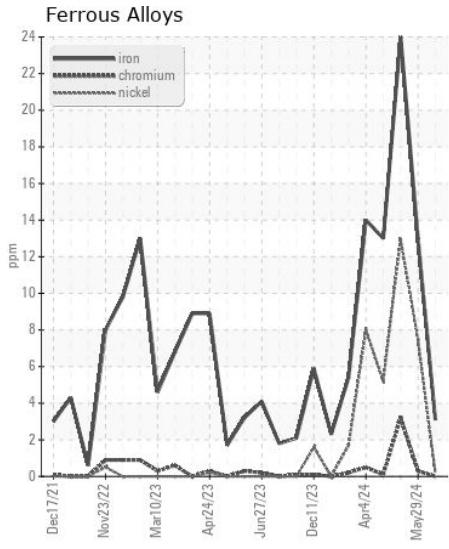
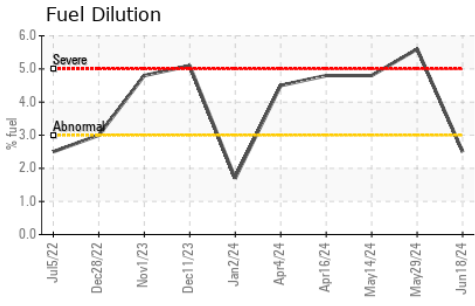
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	4	6	14
Potassium	ppm	ASTM D5185m	>20	0	<1	6
Fuel	%	ASTM D3524	>3.0	2.5	▲ 5.6	▲ 4.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.1	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	5.8	8.0	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	20.3	21.0
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 suitable for further service.

Sodium	ppm	ASTM D5185m		2	8	10
Boron	ppm	ASTM D5185m	0	<1	0	2
Barium	ppm	ASTM D5185m	0	0	0	1
Molybdenum	ppm	ASTM D5185m	60	58	56	77
Manganese	ppm	ASTM D5185m	0	<1	<1	3
Magnesium	ppm	ASTM D5185m	1010	1010	902	1183
Calcium	ppm	ASTM D5185m	1070	1119	1067	1327
Phosphorus	ppm	ASTM D5185m	1150	1081	972	1206
Zinc	ppm	ASTM D5185m	1270	1311	1167	1501
Sulfur	ppm	ASTM D5185m	2060	3607	2710	3437
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	16.9	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.8	6.6	5.0
Visc @ 100°C	cSt	ASTM D445	15.4	12.6	▲ 11.8	▲ 11.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0125858 **Received** : 24 Jun 2024
Lab Number : 06217799 **Tested** : 26 Jun 2024
Unique Number : 11095996 **Diagnosed** : 26 Jun 2024 - Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

GFL Environmental - 166 - Phenix City
 18 Old Brickyard Rd
 Phenix City, AL
 US 36869
 Contact: DARRIN WRIGHT
 darrin.wright@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)

T:
F: