



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(EPQ787)
Machine Id
911055
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (7 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		GFL0111487	GFL0111459	GFL0068891
Sample Date		Client Info		17 Apr 2024	29 Mar 2024	06 Mar 2024
Machine Age	hrs	Client Info		8836	8736	8646
Oil Age	hrs	Client Info		315	215	125
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>90	▲ 158	▲ 149	▲ 141
Chromium	ppm	ASTM D5185m	>20	10	9	9
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	15	13	12
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	2	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

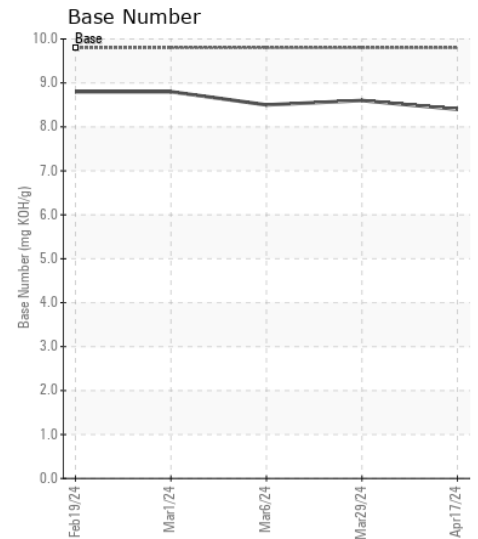
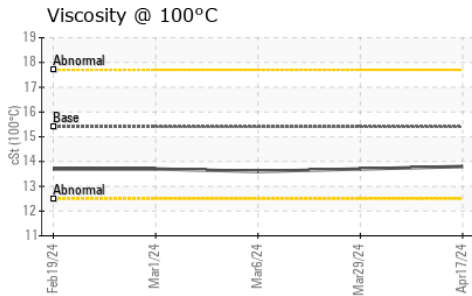
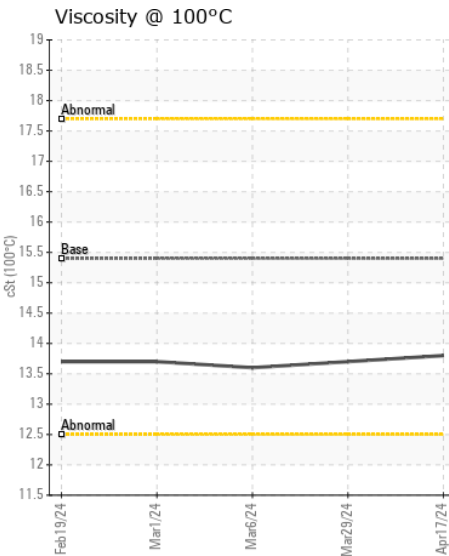
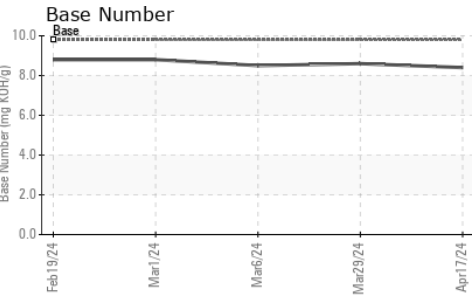
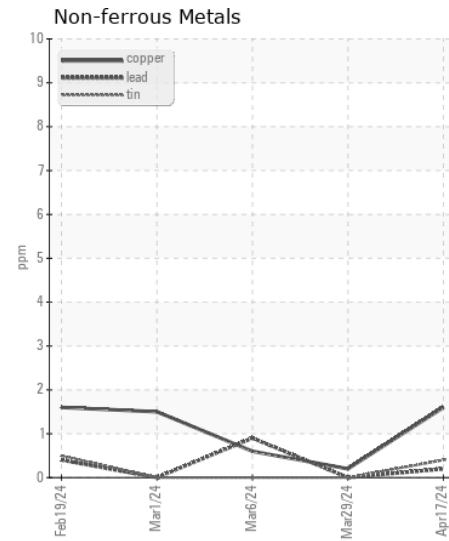
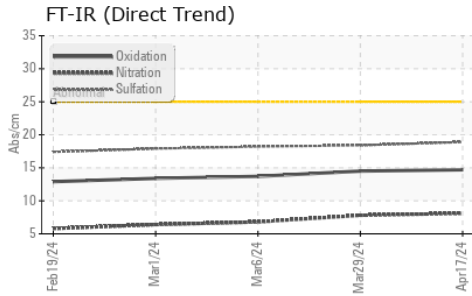
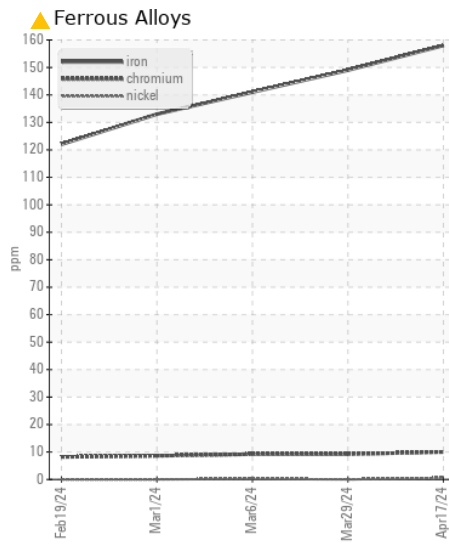
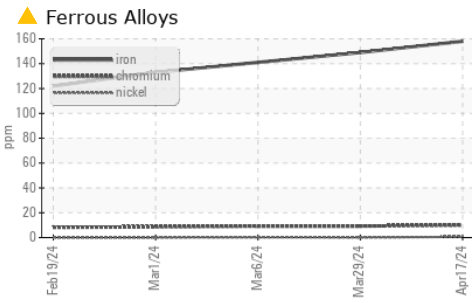
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	5	5
Potassium	ppm	ASTM D5185m	>20	26	23	20
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	>6	0.6	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.8	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	18.4	18.2
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	4	7
Boron	ppm	ASTM D5185m	0	5	6	5
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	60	58	57
Manganese	ppm	ASTM D5185m	0	2	2	1
Magnesium	ppm	ASTM D5185m	1010	912	913	976
Calcium	ppm	ASTM D5185m	1070	1049	1016	1057
Phosphorus	ppm	ASTM D5185m	1150	1015	1014	1019
Zinc	ppm	ASTM D5185m	1270	1180	1188	1239
Sulfur	ppm	ASTM D5185m	2060	3134	3332	3047
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.7	14.5	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.4	8.6	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.7	13.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111487
Lab Number : 06155050
Unique Number : 10990473
Test Package : FLEET
Received : 19 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Jonathan Hester

GFL Environmental - 073 - Warner Robins - Transwaste
 155 Story Road
 Warner Robins, GA
 US 31093
 Contact: JOSH MALONEY
 jmaloney@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)