



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
{UNASSIGNED}
Machine Id
914035
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0119874	GFL0097849	GFL0097801
Sample Date		Client Info		24 Jun 2024	21 Mar 2024	12 Feb 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		500	500	583
Filter Age	hrs	Client Info		500	500	583
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	25	11	44
Chromium	ppm	ASTM D5185m	>20	<1	<1	2
Nickel	ppm	ASTM D5185m	>5	3	1	6
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	2
Aluminum	ppm	ASTM D5185m	>20	2	1	4
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	88	34	224
Tin	ppm	ASTM D5185m	>15	<1	0	3
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

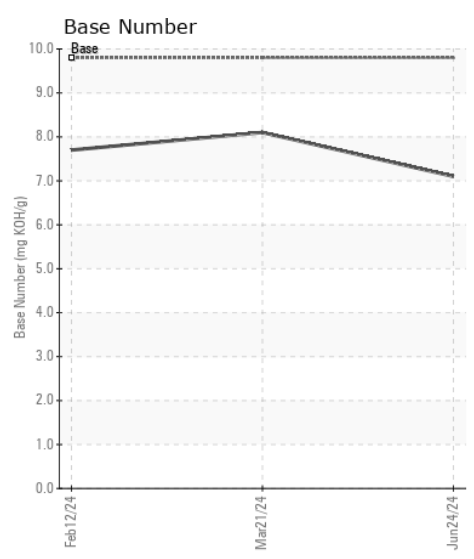
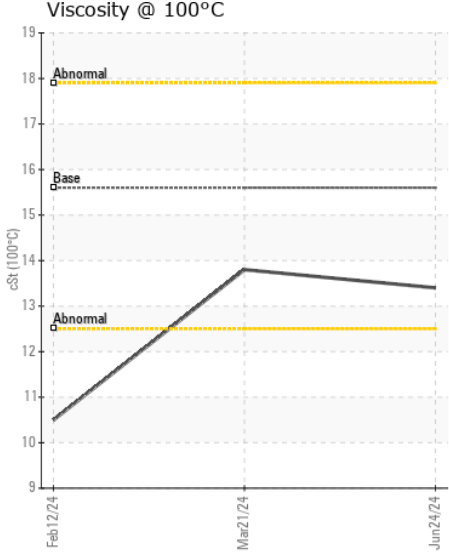
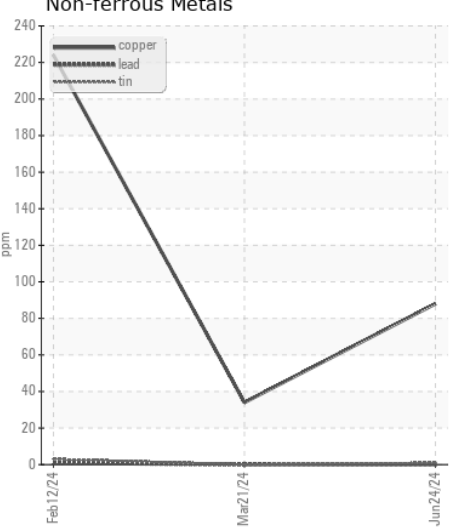
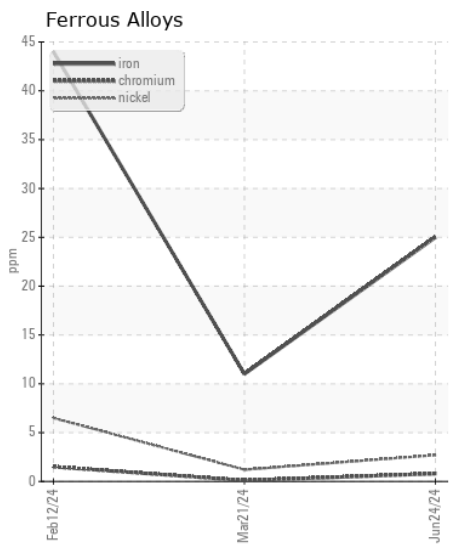
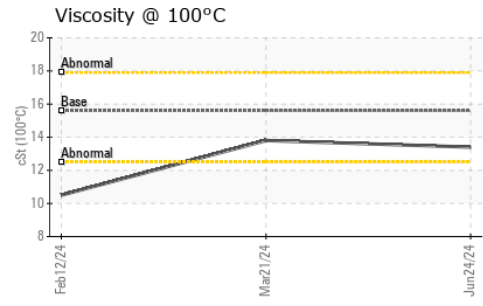
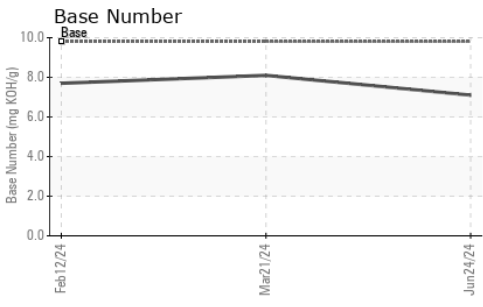
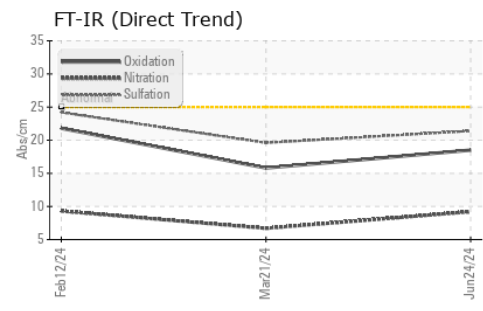
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	10	9	▲ 83
Potassium	ppm	ASTM D5185m	>20	5	0	8
Fuel		WC Method	>3.0	<1.0	<1.0	0.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.5	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.2	6.7	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	19.6	24.2
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 suitable for further service.

Sodium	ppm	ASTM D5185m		7	2	0
Boron	ppm	ASTM D5185m		10	11	223
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		65	58	112
Manganese	ppm	ASTM D5185m		2	<1	4
Magnesium	ppm	ASTM D5185m		1035	946	727
Calcium	ppm	ASTM D5185m		1166	1054	1338
Phosphorus	ppm	ASTM D5185m		1020	897	784
Zinc	ppm	ASTM D5185m		1345	1160	850
Sulfur	ppm	ASTM D5185m		2979	3228	2816
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.5	15.8	21.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.1	8.1	7.7
Visc @ 100°C	cSt	ASTM D445	15.6	13.4	13.8	● 10.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0119874
Lab Number : 06222999
Unique Number : 11101196
Test Package : FLEET
Received : 27 Jun 2024
Tested : 28 Jun 2024
Diagnosed : 28 Jun 2024 - Wes Davis

GFL Environmental - 958 - Tri County HC Morton
 1090 W. Jefferson St.
 Morton, IL
 US 61550
 Contact: Bryan Link
 blink@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)