



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(EAQ340)
Machine Id
10976
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (8 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0077445	GFL0089604	GFL0083037
Sample Date		Client Info		21 May 2024	27 Feb 2024	11 Aug 2023
Machine Age	days	Client Info		90	0	0
Oil Age	days	Client Info		0	0	0
Filter Age	days	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				NORMAL	ABNORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>75	50	124	3
Chromium	ppm	ASTM D5185m	>5	3	2	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>15	29	8	2
Lead	ppm	ASTM D5185m	>25	<1	1	0
Copper	ppm	ASTM D5185m	>100	8	16	1
Tin	ppm	ASTM D5185m	>4	1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

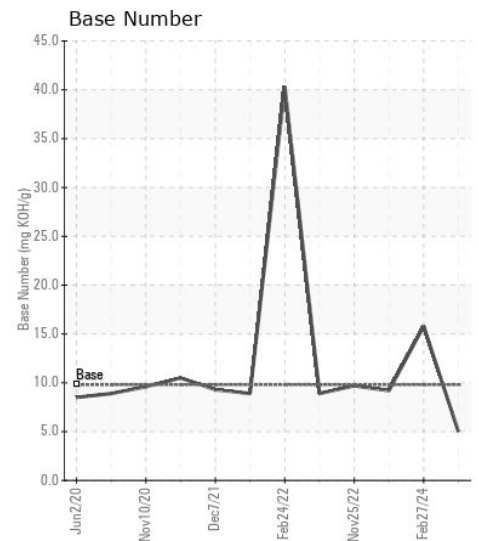
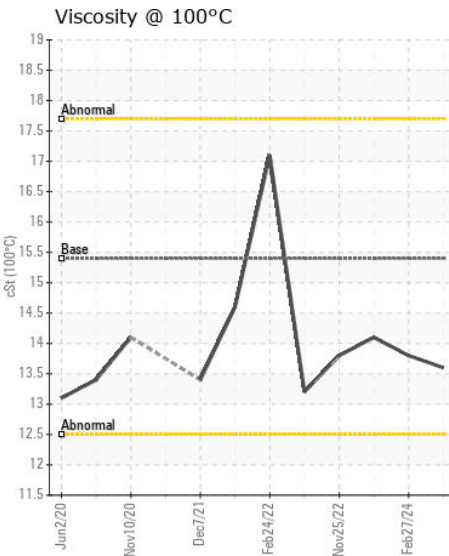
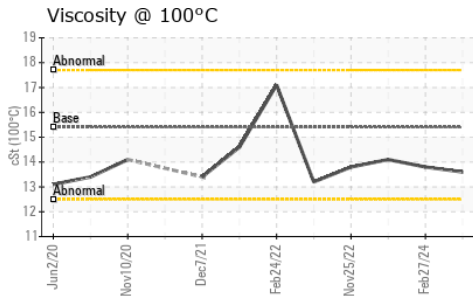
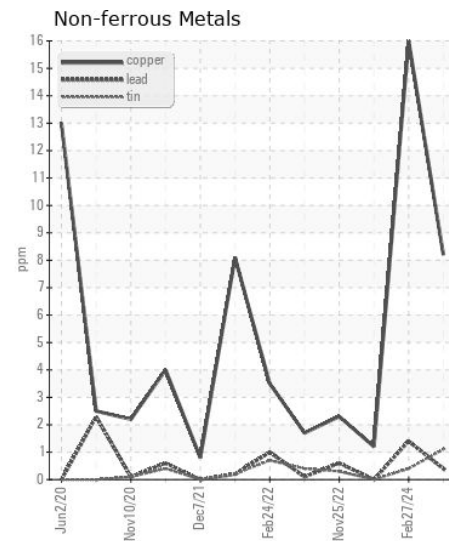
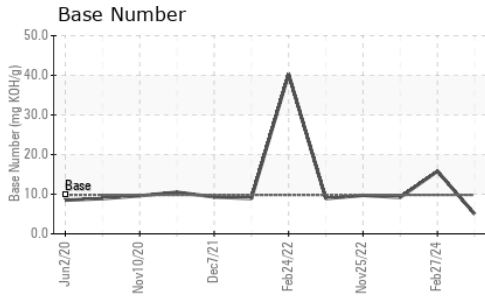
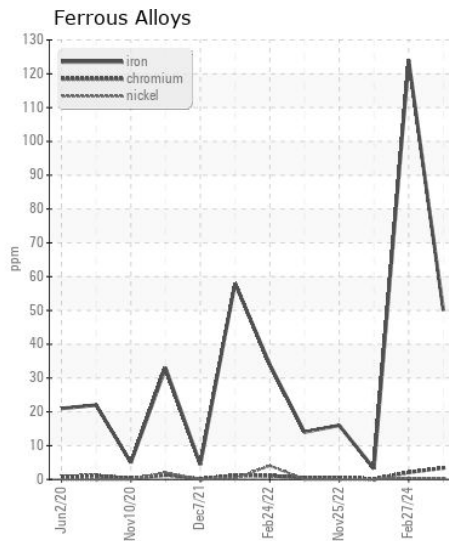
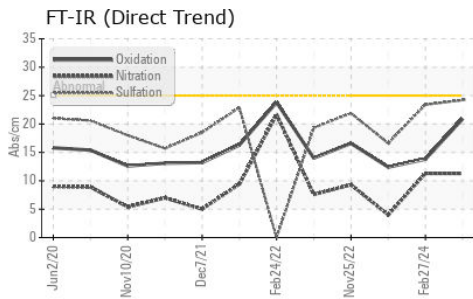
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	▲ 77	16
Potassium	ppm	ASTM D5185m	>20	38	10	1
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	0.9	2.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.3	11.3	4.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.2	23.4	16.6
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		25	▲ 2082	<1
Boron	ppm	ASTM D5185m	0	3	124	5
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	65	124	58
Manganese	ppm	ASTM D5185m	0	1	2	<1
Magnesium	ppm	ASTM D5185m	1010	902	866	611
Calcium	ppm	ASTM D5185m	1070	1071	967	1293
Phosphorus	ppm	ASTM D5185m	1150	995	970	959
Zinc	ppm	ASTM D5185m	1270	1212	1088	1122
Sulfur	ppm	ASTM D5185m	2060	2718	3040	3103
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.9	13.8	12.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.0	▲ 15.8	9.2
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	13.8	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0077445
Lab Number : 06193752
Unique Number : 11050504
Test Package : FLEET

Received : 29 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Wes Davis

GFL Environmental - 072 - Americus - Transwaste
 361 McMath Mill Road
 Americus, GA
 US 31719
 Contact: RICHARD HEINZERLING
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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)