



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(YA146823) Whiteville NC
Machine Id
10912
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0083368	GFL0083358	GFL0083335
Sample Date		Client Info		12 Feb 2024	11 Sep 2023	31 May 2023
Machine Age	hrs	Client Info		12900	10676	0
Oil Age	hrs	Client Info		600	600	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	24	17	15
Chromium	ppm	ASTM D5185m	>5	<1	<1	0
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	3	2	4
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>100	2	1	1
Tin	ppm	ASTM D5185m	>4	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

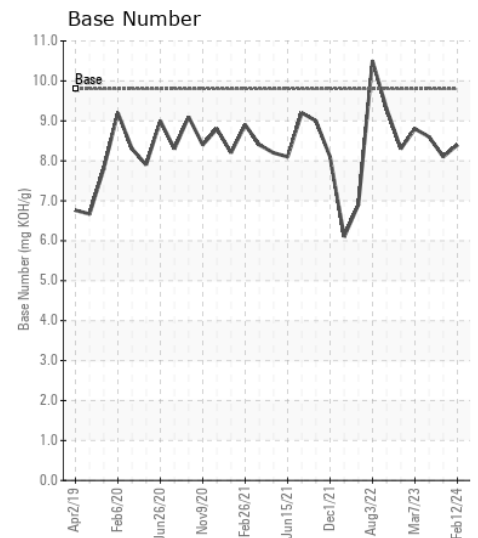
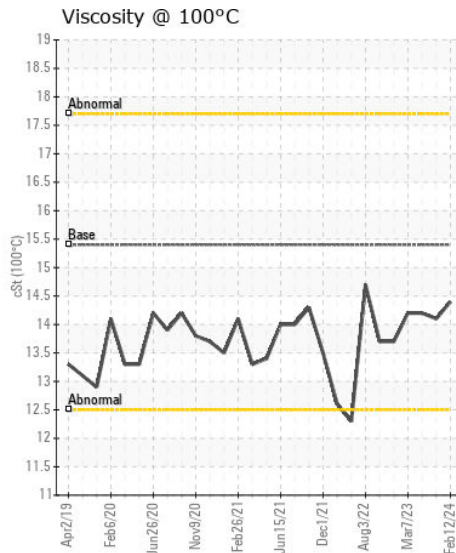
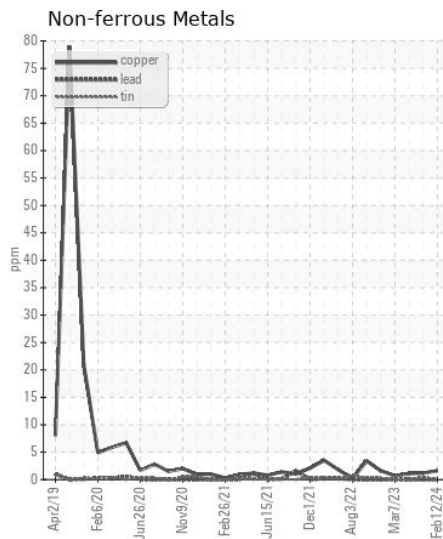
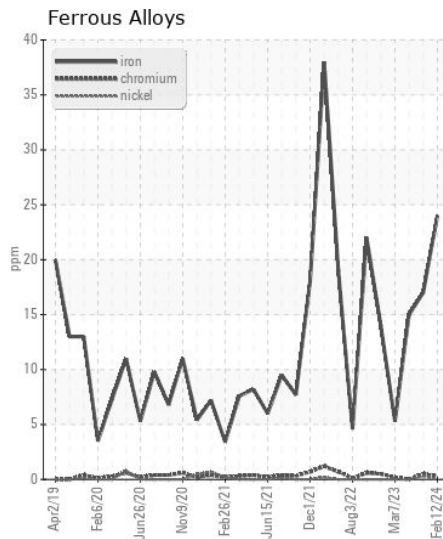
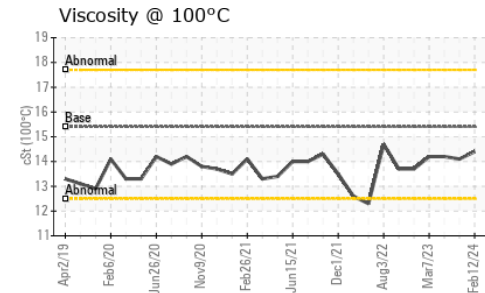
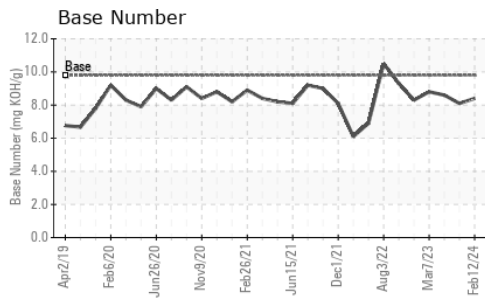
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	5	5
Potassium	ppm	ASTM D5185m	>20	2	2	0
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	0.7	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.1	7.7	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	19.9	19.8
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		3	6	5
Boron	ppm	ASTM D5185m	0	1	5	<1
Barium	ppm	ASTM D5185m	0	9	0	0
Molybdenum	ppm	ASTM D5185m	60	94	64	63
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	1010	1428	1023	1024
Calcium	ppm	ASTM D5185m	1070	1421	1145	1136
Phosphorus	ppm	ASTM D5185m	1150	1222	1110	1043
Zinc	ppm	ASTM D5185m	1270	1774	1396	1306
Sulfur	ppm	ASTM D5185m	2060	4003	3828	3622
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.7	14.9	15.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.4	8.1	8.6
Visc @ 100°C	cSt	ASTM D445	15.4	14.4	14.1	14.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0083368
 Lab Number : 06088558
 Unique Number : 10876003
 Test Package : FLEET

Received : 14 Feb 2024
 Tested : 15 Feb 2024
 Diagnosed : 15 Feb 2024 - Jonathan Hester

GFL Environmental - 108 - Whiteville
 5240 James B White Hwy South
 Whiteville, NC
 US 28472

Contact: Victor McGee
 victor.mcgee@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:
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