



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(YA154619) WHITEVILLE NC
Machine Id
10983
Component
Diesel Engine
Fluid
PETRO CANADA 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry updates.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0083381	GFL0083366	GFL0083345
Sample Date		Client Info		28 Feb 2024	08 Nov 2023	03 Aug 2023
Machine Age	hrs	Client Info		10299	10299	9643
Oil Age	hrs	Client Info		600	600	600
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	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	7	11	35
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>15	2	2	4
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>100	<1	<1	2
Tin	ppm	ASTM D5185m	>4	<1	<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

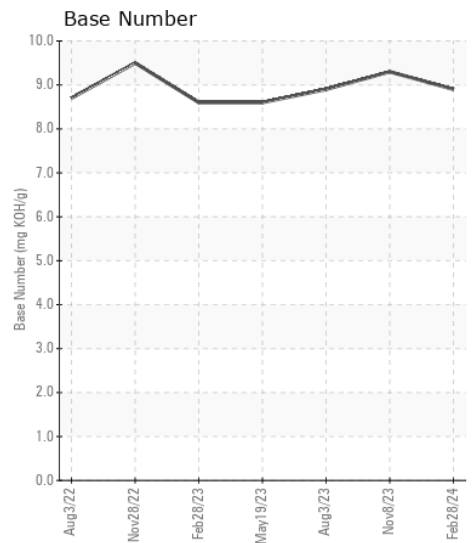
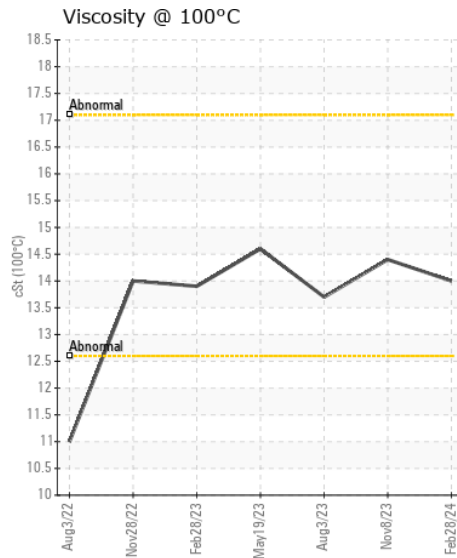
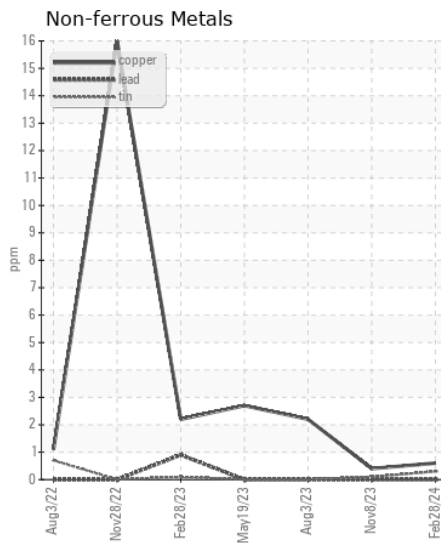
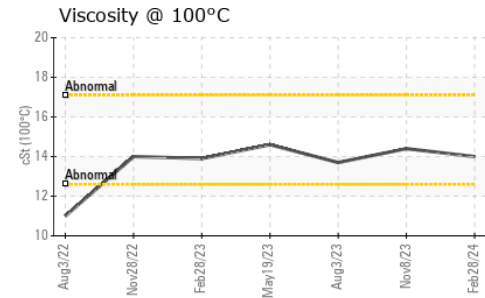
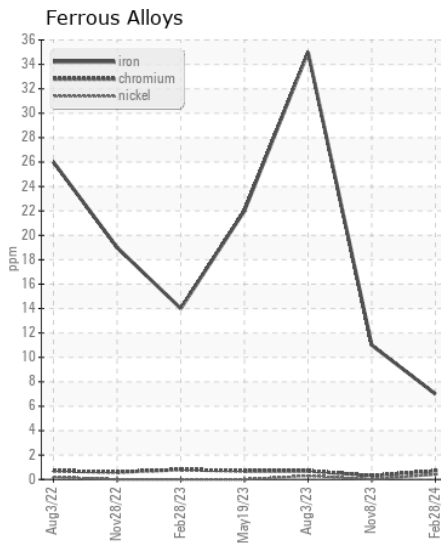
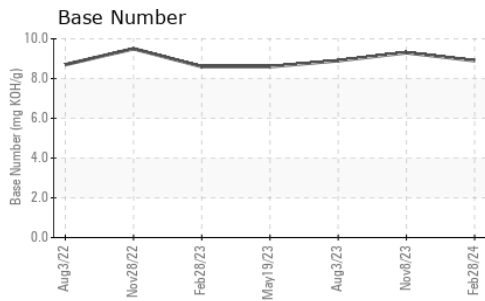
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	8	11
Potassium	ppm	ASTM D5185m	>20	8	27	▲ 594
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	▲ 0.10
Soot %	%	*ASTM D7844	>6	0.3	0.2	1.3
Nitration	Abs/cm	*ASTM D7624	>20	6.5	6.1	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.1	18.3	21.1
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		12	60	● 269
Boron	ppm	ASTM D5185m		2	1	8
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		59	64	69
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		982	1021	876
Calcium	ppm	ASTM D5185m		986	1136	1051
Phosphorus	ppm	ASTM D5185m		1032	1135	1009
Zinc	ppm	ASTM D5185m		1282	1363	1187
Sulfur	ppm	ASTM D5185m		3427	3188	2958
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	14.0	15.1
Base Number (BN)	mg KOH/g	ASTM D2896		8.9	9.3	8.9
Visc @ 100°C	cSt	ASTM D445		14.0	14.4	13.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0083381
Lab Number : 06104037
Unique Number : 10902267
Test Package : FLEET
Received : 29 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 05 Mar 2024 - Doug Bogart

GFL Environmental - 108 - Whiteville
 5240 James B White Hwy South
 Whiteville, NC
 US 28472
 Contact: Victor McGee
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 T:
 F:

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)