



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(99295V)

Machine Id
223036

Component
Diesel Engine

Fluid
PETRO CANADA SUPREME™ SYNTHETIC BLEND 5W20 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0104994	GFL0104998	GFL0081478
Sample Date		Client Info		29 Jan 2024	28 Dec 2023	23 May 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	650
Filter Age	hrs	Client Info		0	0	650
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	25	52	46
Chromium	ppm	ASTM D5185m	>20	1	2	3
Nickel	ppm	ASTM D5185m	>2	0	<1	1
Titanium	ppm	ASTM D5185m	>2	<1	<1	2
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>25	12	28	11
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	2	2	3
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

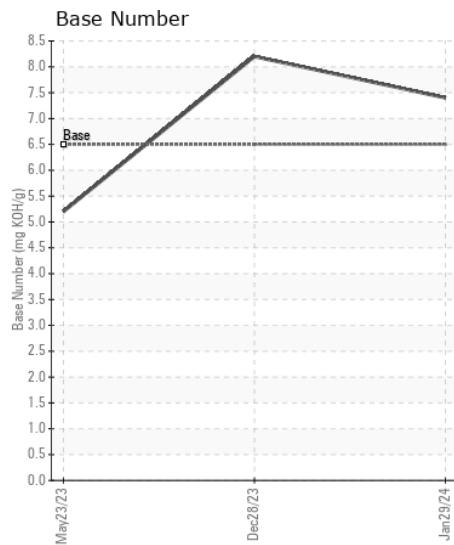
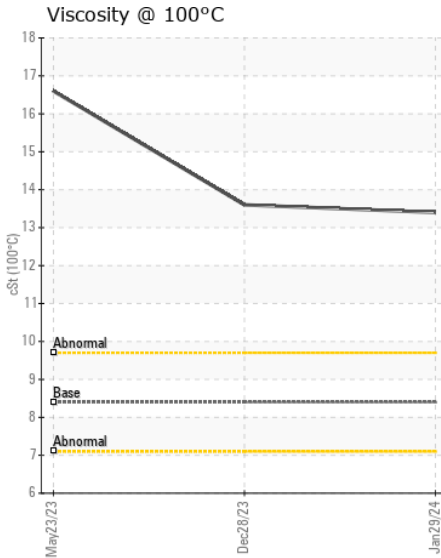
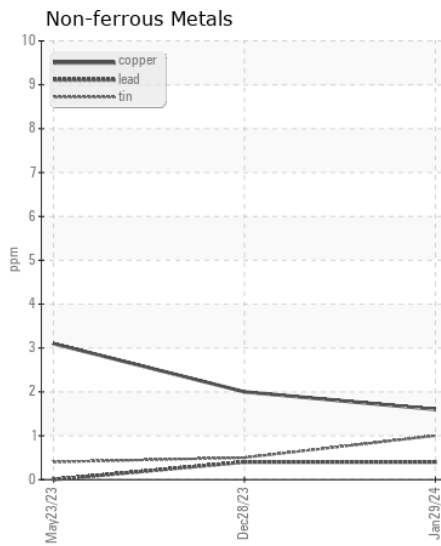
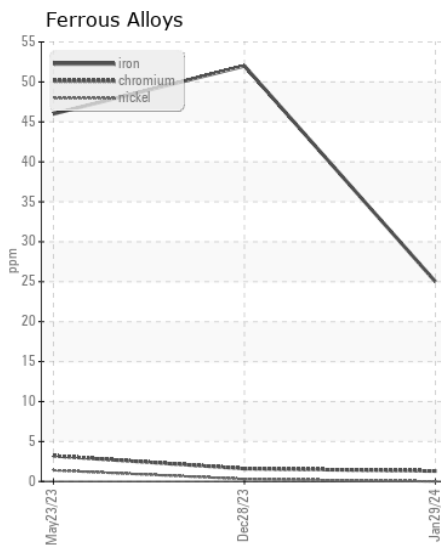
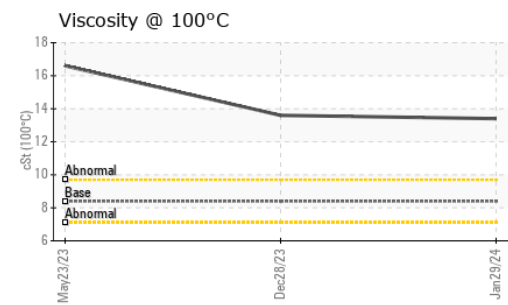
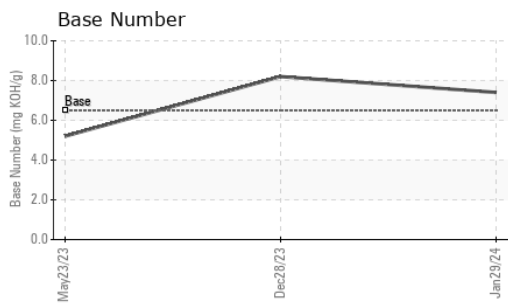
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	9	14
Potassium	ppm	ASTM D5185m	>20	17	46	5
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.8	1.4	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.3	9.7	17.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	21.3	34.5
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. Confirm oil type. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		10	5	18
Boron	ppm	ASTM D5185m		<1	3	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		58	60	69
Manganese	ppm	ASTM D5185m		<1	1	1
Magnesium	ppm	ASTM D5185m		1017	992	1056
Calcium	ppm	ASTM D5185m		1062	1063	1265
Phosphorus	ppm	ASTM D5185m	770	1012	1071	1021
Zinc	ppm	ASTM D5185m		1203	1323	1406
Sulfur	ppm	ASTM D5185m	2690	2728	3008	3361
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	15.3	34.5
Base Number (BN)	mg KOH/g	ASTM D2896	6.5	7.4	8.2	5.2
Visc @ 100°C	cSt	ASTM D445	8.4	13.4	13.6	16.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0104994 **Received** : 31 Jan 2024
Lab Number : 06075438 **Diagnosed** : 01 Feb 2024
Unique Number : 10857529 **Diagnostician** : Don Baldrige
Test Package : FLEET

GFL Environmental - 893 - OK East Hauling
 2100 Lilly Street
 Seminole, OK
 US 74868
 Contact: Roger Barlow
 rbarlow@gflenv.com
 T: (405)204-6183
 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)