



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
946015-260296
 Component
Natural Gas Engine
 Fluid
PETRO CANADA 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0121755	GFL0092129	GFL0084734
Sample Date		Client Info		17 Jun 2024	29 Dec 2023	20 Jun 2023
Machine Age	hrs	Client Info		47607	179371	152196
Oil Age	hrs	Client Info		600	25645	0
Filter Age	hrs	Client Info		600	0	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	33	4	9
Chromium	ppm	ASTM D5185m	>4	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	3	1	2
Lead	ppm	ASTM D5185m	>30	<1	0	0
Copper	ppm	ASTM D5185m	>35	3	2	1
Tin	ppm	ASTM D5185m	>4	2	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

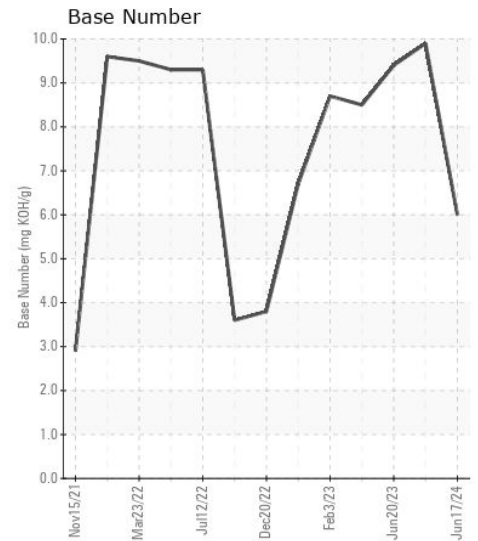
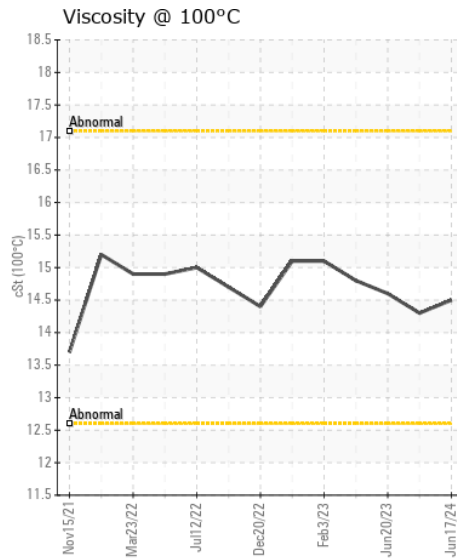
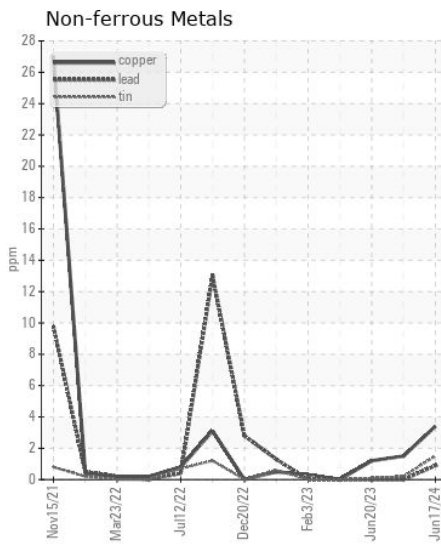
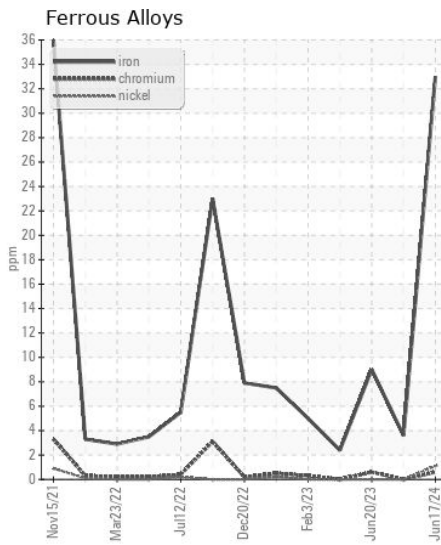
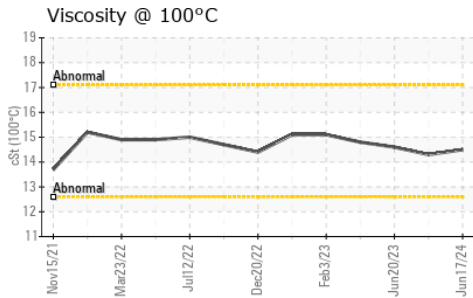
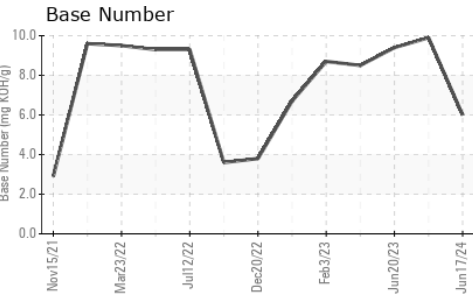
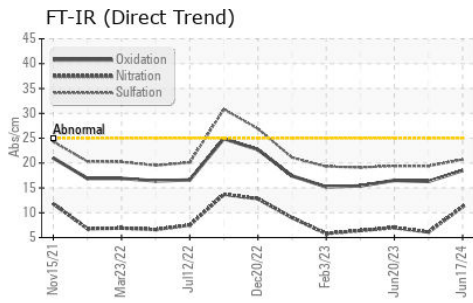
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	26	9	19
Potassium	ppm	ASTM D5185m	>20	5	2	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.2	6.1	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	19.4	19.4
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	>0.1	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		4	3	3
Boron	ppm	ASTM D5185m		17	44	45
Barium	ppm	ASTM D5185m		4	3	0
Molybdenum	ppm	ASTM D5185m		50	43	48
Manganese	ppm	ASTM D5185m		6	2	<1
Magnesium	ppm	ASTM D5185m		840	770	604
Calcium	ppm	ASTM D5185m		1395	1168	1470
Phosphorus	ppm	ASTM D5185m		802	758	766
Zinc	ppm	ASTM D5185m		999	899	931
Sulfur	ppm	ASTM D5185m		2849	2301	2957
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.5	16.3	16.5
Base Number (BN)	mg KOH/g	ASTM D2896		6.0	9.9	9.4
Visc @ 100°C	cSt	ASTM D445		14.5	14.3	14.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0121755
Lab Number : 06216735
Unique Number : 11089599
Test Package : FLEET

Received : 21 Jun 2024
Tested : 24 Jun 2024
Diagnosed : 24 Jun 2024 - Sean Felton

GFL Environmental - 856 - Houston South
 8515 Highway 6 South
 Houston, TX
 US 77083
 Contact: Apolinar Zacarias
 pzacariascano@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)

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