



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
731116
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0114064	GFL0114077	GFL0114010
Sample Date		Client Info		17 Apr 2024	26 Mar 2024	07 Mar 2024
Machine Age	hrs	Client Info		6851	6722	6611
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>50	▲ 61	43	9
Chromium	ppm	ASTM D5185m	>4	3	3	0
Nickel	ppm	ASTM D5185m	>2	<1	2	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>9	5	5	<1
Lead	ppm	ASTM D5185m	>30	2	3	<1
Copper	ppm	ASTM D5185m	>35	1	2	0
Tin	ppm	ASTM D5185m	>4	2	1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

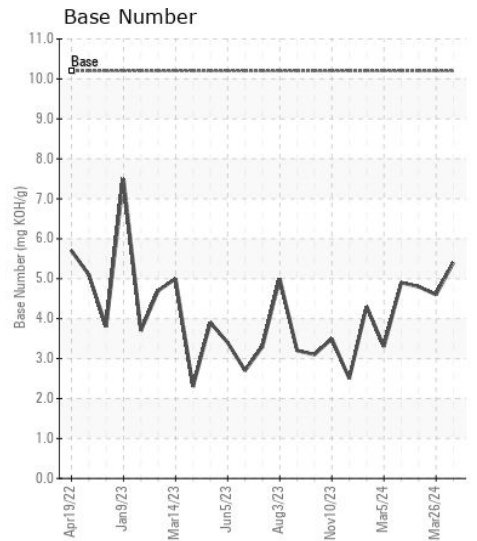
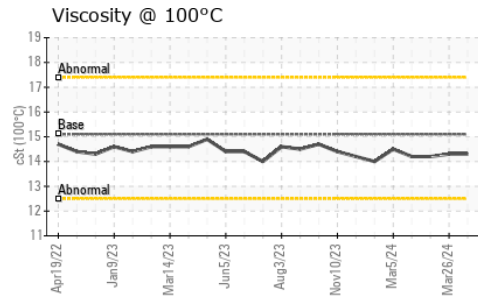
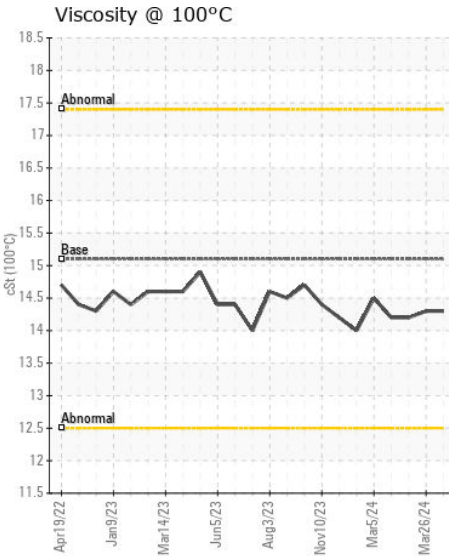
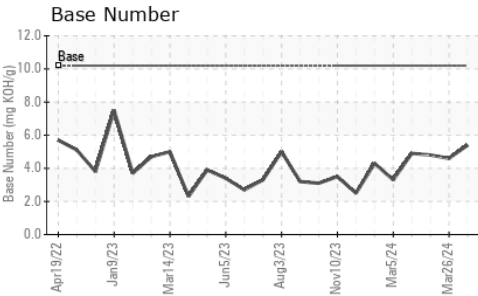
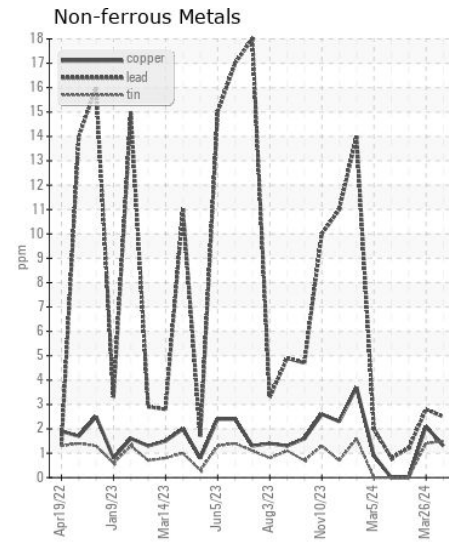
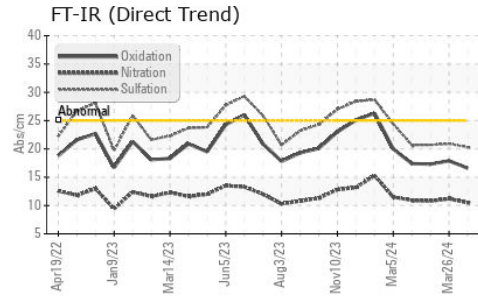
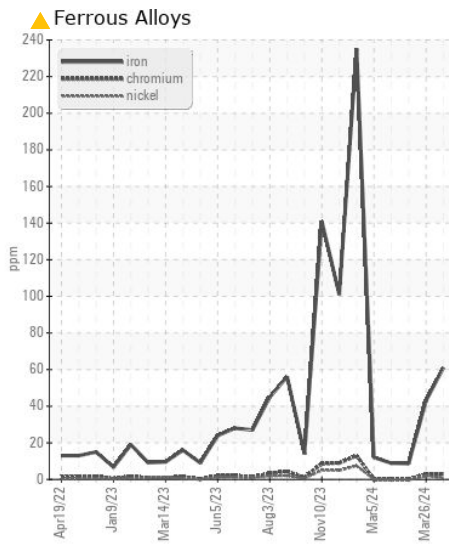
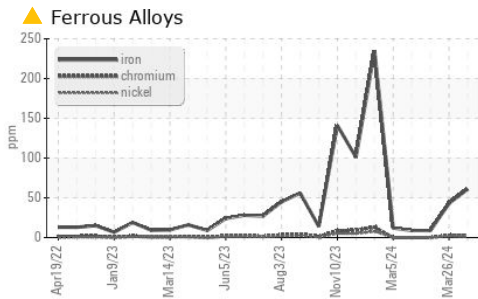
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	17	16	3
Potassium	ppm	ASTM D5185m	>20	<1	3	0
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	10.5	11.2	10.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.3	20.9	20.7
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		9	9	6
Boron	ppm	ASTM D5185m	50	4	14	11
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	59	58	50
Manganese	ppm	ASTM D5185m	0	1	2	0
Magnesium	ppm	ASTM D5185m	560	542	508	481
Calcium	ppm	ASTM D5185m	1510	1784	1637	1579
Phosphorus	ppm	ASTM D5185m	780	740	755	626
Zinc	ppm	ASTM D5185m	870	963	980	863
Sulfur	ppm	ASTM D5185m	2040	2917	2608	2243
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	17.9	17.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	5.4	4.6	4.8
Visc @ 100°C	cSt	ASTM D445	15.1	14.3	14.3	14.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0114064
Lab Number : 06154113
Unique Number : 10989536
Test Package : FLEET

Received : 19 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Sean Felton

GFL Environmental - 836 - Kansas City Hauling
 7801 East Truman Road
 Kansas City, MO
 US 64126
 Contact: Loyce Stewart
 loyce.stewart@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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F: