



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
AUTOCAR 933046
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0109617	GFL0109612	GFL0109649
Sample Date		Client Info		17 Jul 2024	12 Jul 2024	17 May 2024
Machine Age	hrs	Client Info		1185	1154	776
Oil Age	hrs	Client Info		1185	1154	776
Filter Age	hrs	Client Info		1185	1154	776
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>50	34	33	32
Chromium	ppm	ASTM D5185m	>4	2	2	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>9	4	4	3
Lead	ppm	ASTM D5185m	>30	10	9	3
Copper	ppm	ASTM D5185m	>35	14	14	11
Tin	ppm	ASTM D5185m	>4	2	2	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

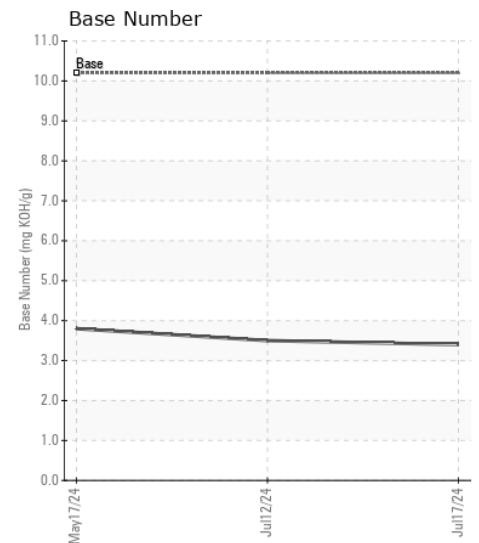
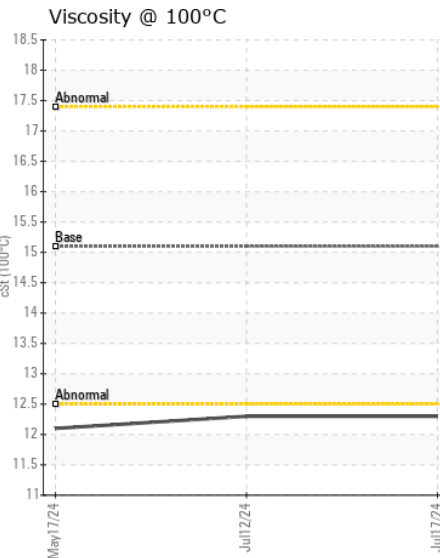
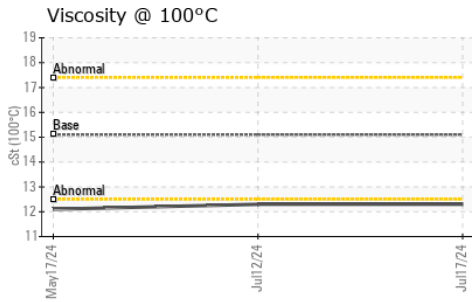
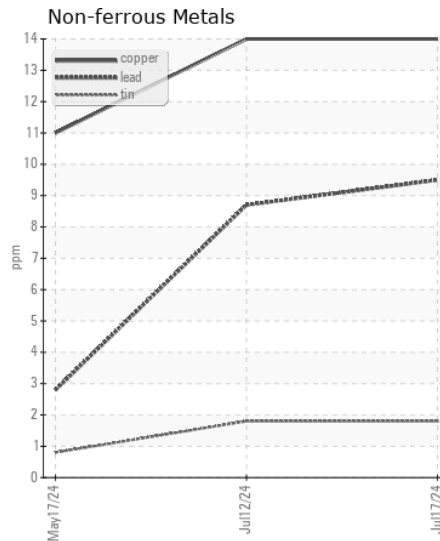
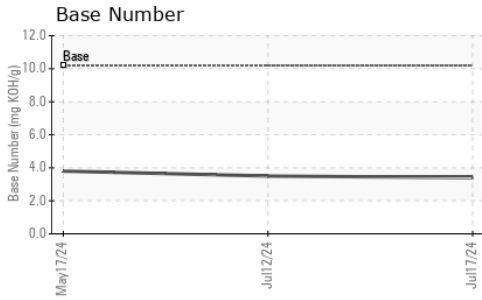
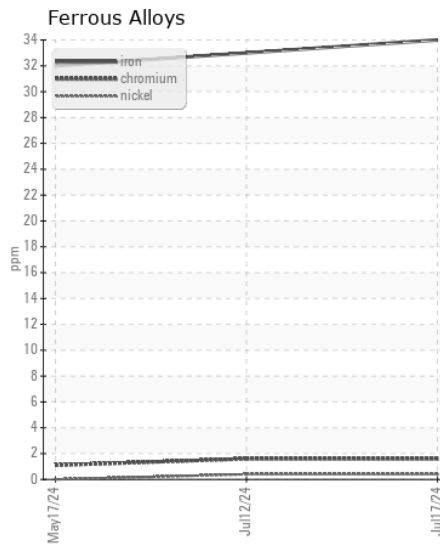
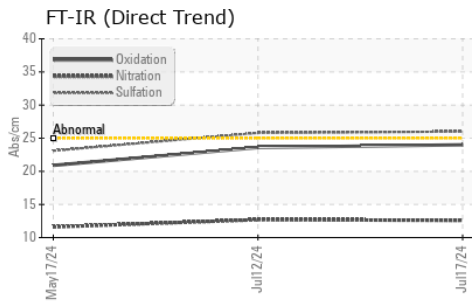
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	69	66	78
Potassium	ppm	ASTM D5185m	>20	6	7	4
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	12.6	12.7	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.0	25.8	23.1
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	>0.1	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		2	2	5
Boron	ppm	ASTM D5185m	50	6	8	10
Barium	ppm	ASTM D5185m	5	5	5	6
Molybdenum	ppm	ASTM D5185m	50	58	57	54
Manganese	ppm	ASTM D5185m	0	4	4	4
Magnesium	ppm	ASTM D5185m	560	754	742	780
Calcium	ppm	ASTM D5185m	1510	1396	1381	1351
Phosphorus	ppm	ASTM D5185m	780	766	748	700
Zinc	ppm	ASTM D5185m	870	966	950	941
Sulfur	ppm	ASTM D5185m	2040	2354	2318	2773
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.0	23.6	20.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	3.4	3.5	3.8
Visc @ 100°C	cSt	ASTM D445	15.1	12.3	12.3	12.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0109617
Lab Number : 06239862
Unique Number : 11128696
Test Package : FLEET

Received : 18 Jul 2024
Tested : 18 Jul 2024
Diagnosed : 19 Jul 2024 - Don Baldrige

GFL Environmental - 331 - Columbus
 180 Ada Moore Rd
 Columbus, NC
 US 28722

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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