



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Machine Id
834055
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

The oil is near the end of it's useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122897	GFL0122893	GFL0118791
Sample Date		Client Info		27 Jun 2024	18 Jun 2024	08 May 2024
Machine Age	hrs	Client Info		1456	1366	1170
Oil Age	hrs	Client Info		1366	1366	1170
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	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	83	76	61
Chromium	ppm	ASTM D5185m	>4	2	2	2
Nickel	ppm	ASTM D5185m	>2	3	2	1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>9	8	7	5
Lead	ppm	ASTM D5185m	>30	5	3	2
Copper	ppm	ASTM D5185m	>35	23	20	20
Tin	ppm	ASTM D5185m	>4	4	3	3
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

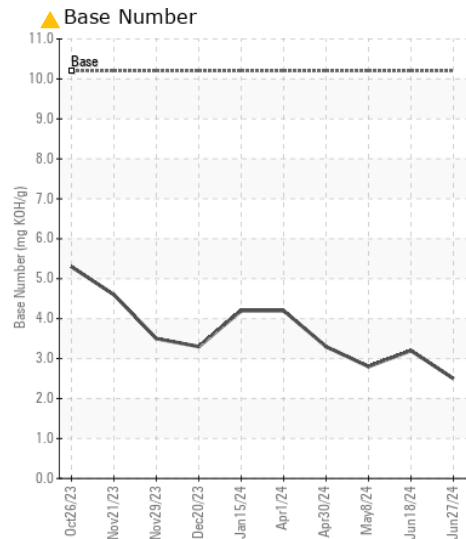
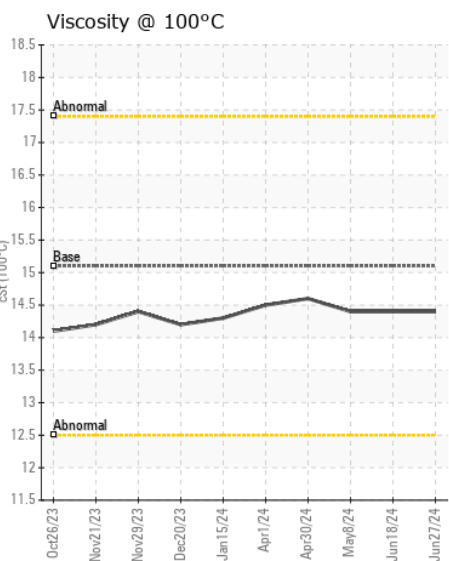
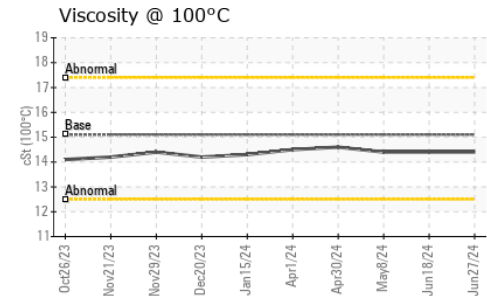
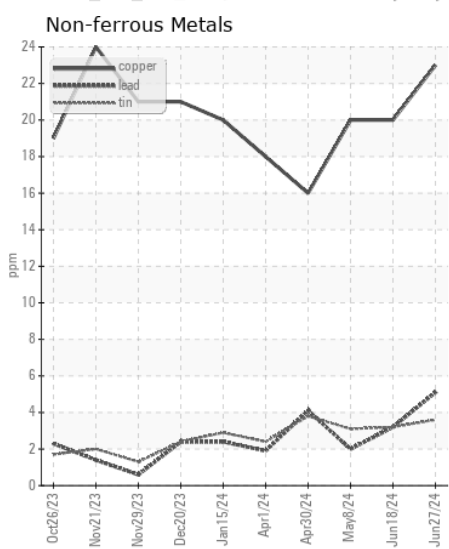
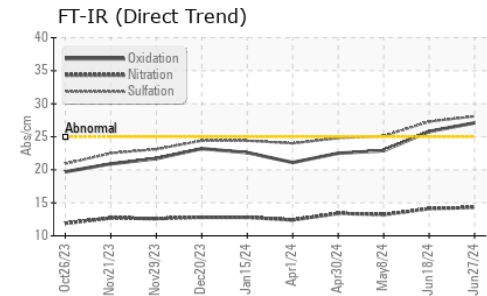
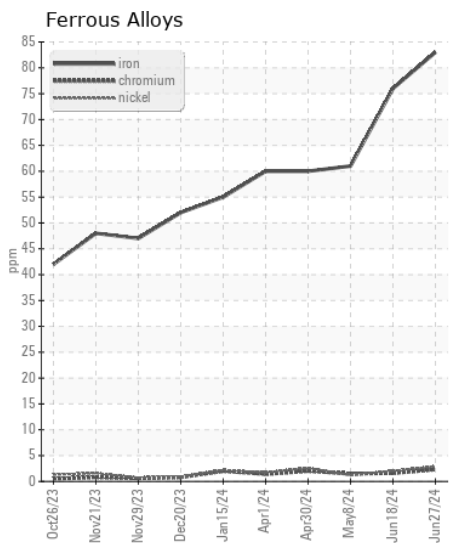
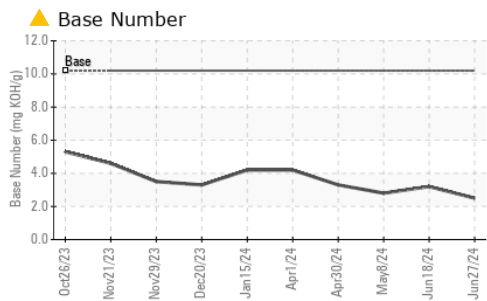
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	25	25	24
Potassium	ppm	ASTM D5185m	>20	10	7	2
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	14.3	14.1	13.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.1	27.3	25.1
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 level is low.

Sodium	ppm	ASTM D5185m		7	8	7
Boron	ppm	ASTM D5185m	50	5	8	8
Barium	ppm	ASTM D5185m	5	4	1	<1
Molybdenum	ppm	ASTM D5185m	50	68	63	57
Manganese	ppm	ASTM D5185m	0	16	15	13
Magnesium	ppm	ASTM D5185m	560	820	880	802
Calcium	ppm	ASTM D5185m	1510	1537	1547	1405
Phosphorus	ppm	ASTM D5185m	780	794	881	766
Zinc	ppm	ASTM D5185m	870	1037	1087	981
Sulfur	ppm	ASTM D5185m	2040	2150	2874	2596
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.1	25.8	22.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	2.5	3.2	2.8
Visc @ 100°C	cSt	ASTM D445	15.1	14.4	14.4	14.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0122897 **Received** : 01 Jul 2024
Lab Number : 06225649 **Tested** : 02 Jul 2024
Unique Number : 11103846 **Diagnosed** : 03 Jul 2024 - Don Baldrige
Test Package : FLEET

GFL Environmental - 837 - Harrison TS
 22820 S State Route 291
 Harrisonville, MO
 US 64701
 Contact: SARA PATRICK
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 T:
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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)