



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2611
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0123384	GFL0082442	GFL0082457
Sample Date		Client Info		20 Jun 2024	07 Sep 2023	02 Jun 2023
Machine Age	hrs	Client Info		230466	20189	19649
Oil Age	hrs	Client Info		230466	540	1188
Filter Age	hrs	Client Info		230466	540	1188
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	13	8	13
Chromium	ppm	ASTM D5185m	>4	<1	1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>9	1	1	2
Lead	ppm	ASTM D5185m	>30	2	2	7
Copper	ppm	ASTM D5185m	>35	<1	<1	1
Tin	ppm	ASTM D5185m	>4	0	2	<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.

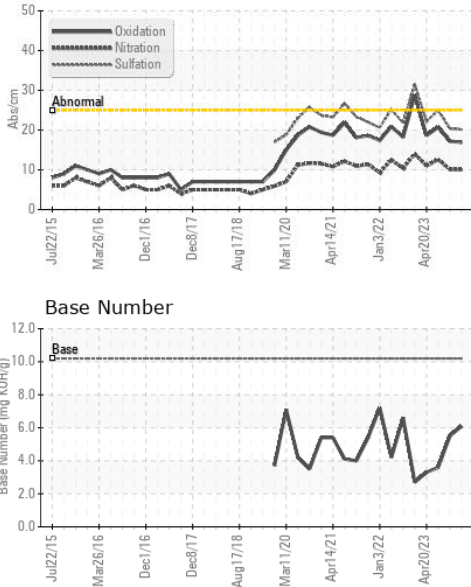
Silicon	ppm	ASTM D5185m	>+100	6	7	4
Potassium	ppm	ASTM D5185m	>20	2	3	3
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	10.0	10.1	12.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	20.4	24.9
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	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

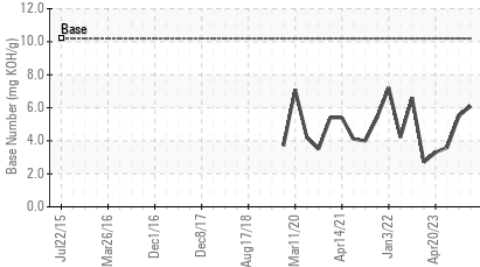
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		5	8	10
Boron	ppm	ASTM D5185m	50	14	10	8
Barium	ppm	ASTM D5185m	5	0	44	0
Molybdenum	ppm	ASTM D5185m	50	48	48	47
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	560	534	495	517
Calcium	ppm	ASTM D5185m	1510	1628	1420	1597
Phosphorus	ppm	ASTM D5185m	780	747	640	688
Zinc	ppm	ASTM D5185m	870	979	864	977
Sulfur	ppm	ASTM D5185m	2040	2845	2480	2383
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	17.2	20.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	6.1	5.5	3.6
Visc @ 100°C	cSt	ASTM D445	15.1	14.3	14.7	14.3

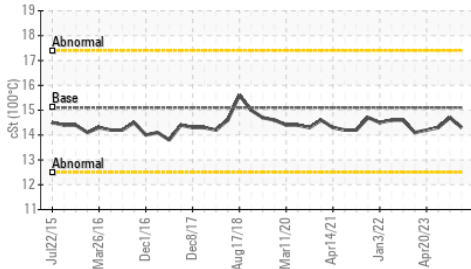
FT-IR (Direct Trend)



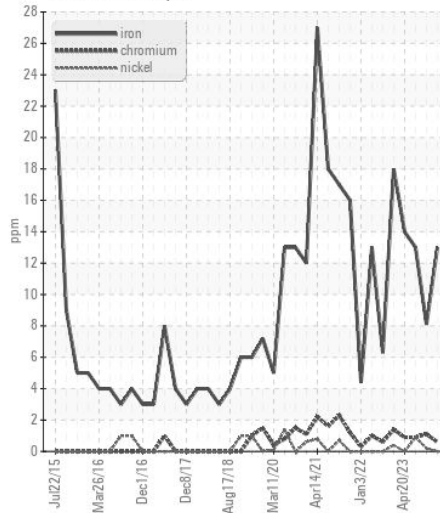
Base Number



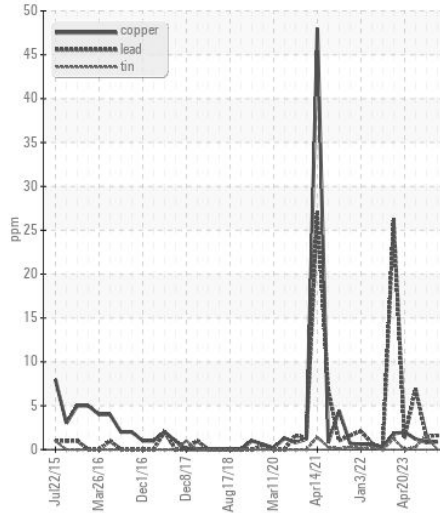
Viscosity @ 100°C



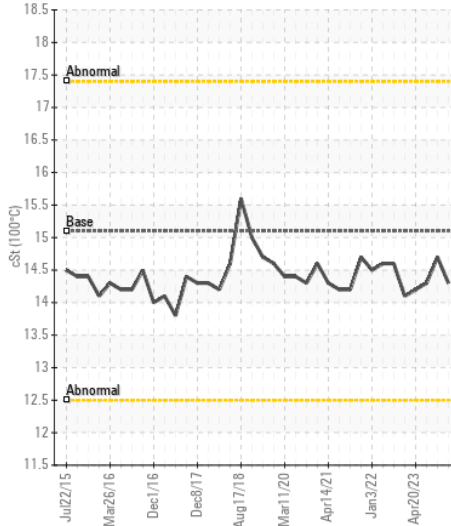
Ferrous Alloys



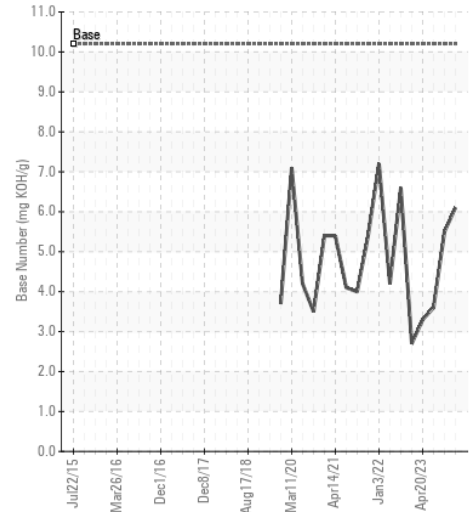
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0123384
Lab Number : 06223342
Unique Number : 11101539
Test Package : FLEET

Received : 28 Jun 2024
Tested : 01 Jul 2024
Diagnosed : 01 Jul 2024 - Wes Davis

GFL Environmental - 007 - Brunswick
 2809 Galloway Road
 Bolivia, NC
 US 28422
 Contact: DONALD CRAVEN
 dcraven@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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