



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
741010
 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		GFL0114770	GFL0102756	GFL0082286
Sample Date		Client Info		25 Jun 2024	22 Jan 2024	09 May 2023
Machine Age	hrs	Client Info		8172	7033	30655
Oil Age	hrs	Client Info		0	6112	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Bearing and/or bushing wear is indicated. Valve wear is indicated.

Iron	ppm	ASTM D5185m	>50	27	19	23
Chromium	ppm	ASTM D5185m	>4	2	1	3
Nickel	ppm	ASTM D5185m	>2	▲ 6	1	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>9	4	3	<1
Lead	ppm	ASTM D5185m	>30	5	11	2
Copper	ppm	ASTM D5185m	>35	▲ 58	0	3
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.

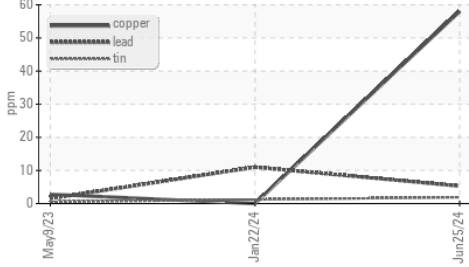
Silicon	ppm	ASTM D5185m	>+100	25	5	6
Potassium	ppm	ASTM D5185m	>20	4	2	1
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.2	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.4	12.7	11.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.2	27.1	24.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	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

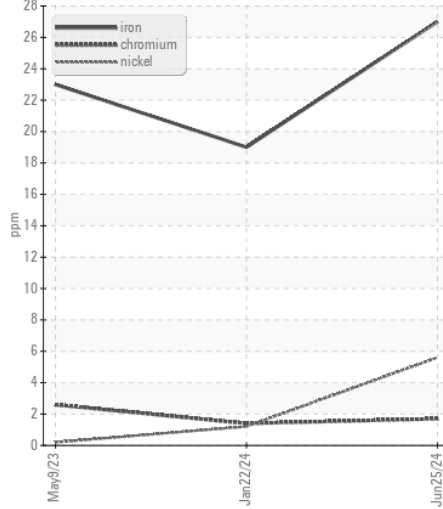
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		7	11	7
Boron	ppm	ASTM D5185m	50	49	7	7
Barium	ppm	ASTM D5185m	5	1	<1	0
Molybdenum	ppm	ASTM D5185m	50	75	64	100
Manganese	ppm	ASTM D5185m	0	2	1	<1
Magnesium	ppm	ASTM D5185m	560	619	590	655
Calcium	ppm	ASTM D5185m	1510	1508	1568	1611
Phosphorus	ppm	ASTM D5185m	780	663	711	737
Zinc	ppm	ASTM D5185m	870	910	934	942
Sulfur	ppm	ASTM D5185m	2040	2205	2292	3143
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.5	22.4	18.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.2	2.8	3.3
Visc @ 100°C	cSt	ASTM D445	15.1	13.0	14.4	13.8

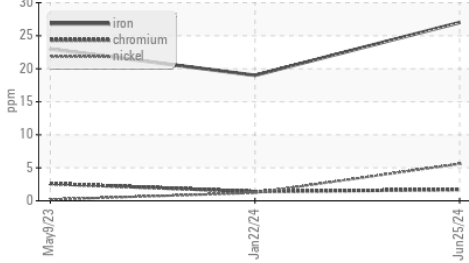
▲ Non-ferrous Metals



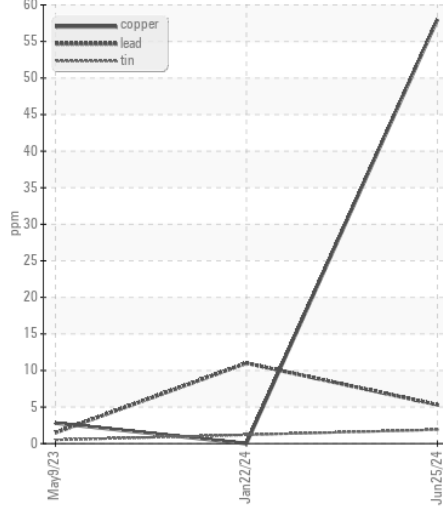
▲ Ferrous Alloys



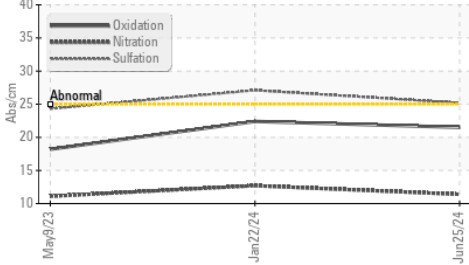
▲ Ferrous Alloys



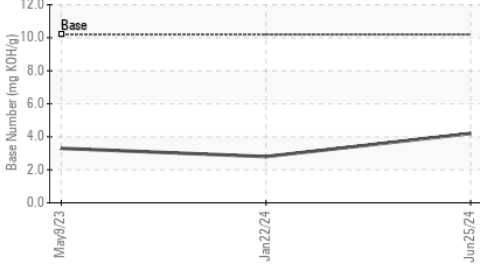
▲ Non-ferrous Metals



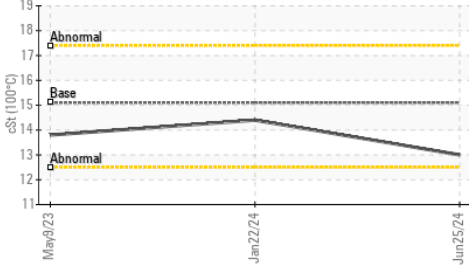
FT-IR (Direct Trend)



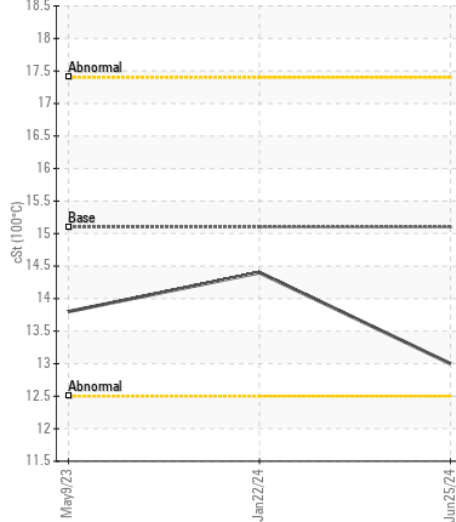
Base Number



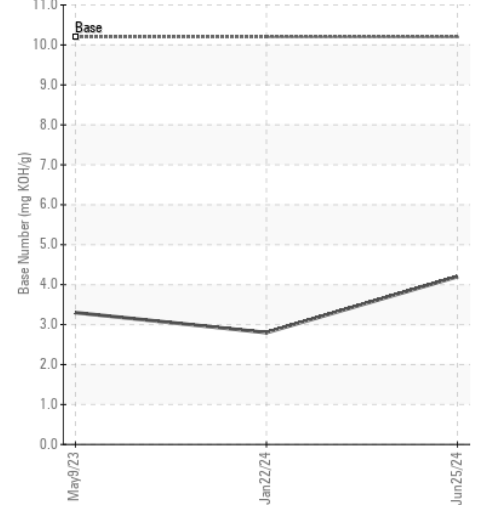
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0114770

Lab Number : 06223134

Unique Number : 11101331

Test Package : FLEET

Received : 28 Jun 2024

Tested : 28 Jun 2024

Diagnosed : 30 Jun 2024 - Don Baldrige

GFL Environmental - 963 - Peoria HC Disposal

1113 N. Swords Ave.

West Peoria, IL

US 61604

Contact: Corey Dozard

cdozard@gflenv.com

T:

F:

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)