



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(YA171053) 2

Machine Id

832012

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (36 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0124218	PCA0101774	PCA0101738
Sample Date		Client Info		13 Jun 2024	09 Jan 2024	07 Aug 2023
Machine Age	hrs	Client Info		3363	2238	1203
Oil Age	hrs	Client Info		1125	1035	1203
Filter Age	hrs	Client Info		1125	1035	1203
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	14	14	31
Chromium	ppm	ASTM D5185m	>4	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	<1	1	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>9	4	4	2
Lead	ppm	ASTM D5185m	>30	2	2	0
Copper	ppm	ASTM D5185m	>35	2	2	12
Tin	ppm	ASTM D5185m	>4	<1	2	2
Vanadium	ppm	ASTM D5185m		0	<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.

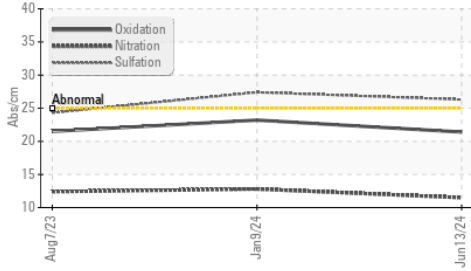
Silicon	ppm	ASTM D5185m	>+100	6	6	20
Potassium	ppm	ASTM D5185m	>20	<1	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.5	12.8	12.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.3	27.4	24.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	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

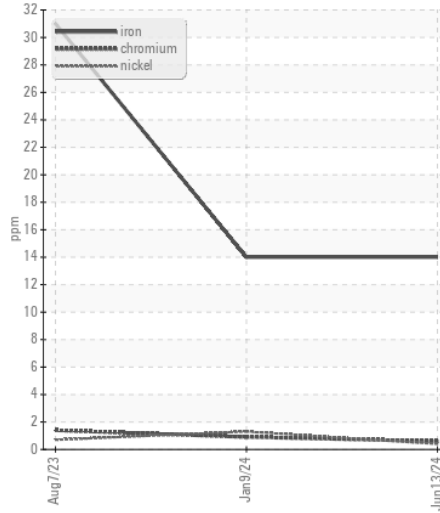
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		8	7	5
Boron	ppm	ASTM D5185m	50	14	1	7
Barium	ppm	ASTM D5185m	5	0	0	2
Molybdenum	ppm	ASTM D5185m	50	55	54	63
Manganese	ppm	ASTM D5185m	0	<1	2	9
Magnesium	ppm	ASTM D5185m	560	659	625	823
Calcium	ppm	ASTM D5185m	1510	1888	1703	1537
Phosphorus	ppm	ASTM D5185m	780	906	783	769
Zinc	ppm	ASTM D5185m	870	1106	1066	1029
Sulfur	ppm	ASTM D5185m	2040	3053	2482	2914
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.4	23.2	21.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.7	2.6	4.1
Visc @ 100°C	cSt	ASTM D445	15.1	14.6	14.6	14.3

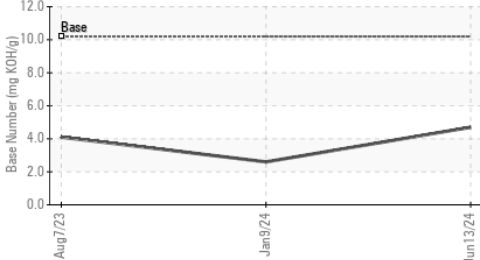
FT-IR (Direct Trend)



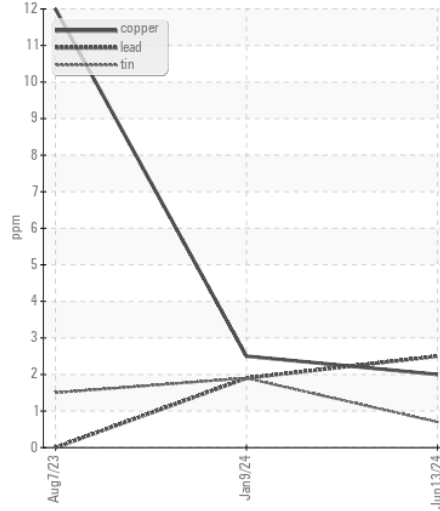
Ferrous Alloys



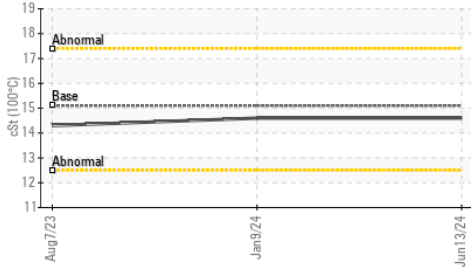
Base Number



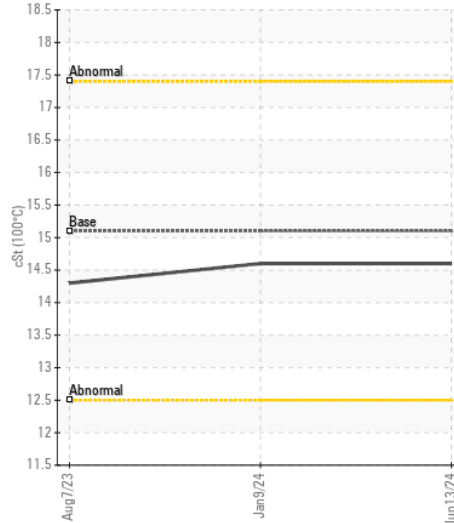
Non-ferrous Metals



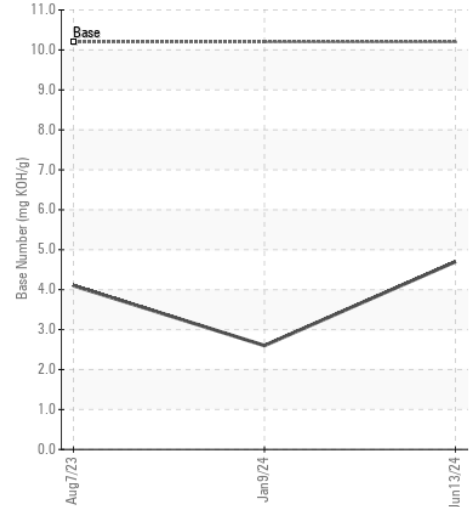
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : PCA0124218
 Lab Number : 06211239
 Unique Number : 11084103
 Test Package : FLEET

Received : 17 Jun 2024
 Tested : 18 Jun 2024
 Diagnosed : 18 Jun 2024 - Wes Davis

GFL Environmental - 002 - Vance-Granville
 241 Vanco Mill Rd
 Henderson, NC
 US 27537

Contact: Cameron King
 cameron.king@gflenv.com

T: (252)438-5333
 F: (252)431-1635

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)