



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
944007
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0115509	GFL0106982	GFL0094264
Sample Date		Client Info		10 Apr 2024	06 Jan 2024	22 Sep 2023
Machine Age	hrs	Client Info		30160	29395	28544
Oil Age	hrs	Client Info		30160	1605	0
Filter Age	hrs	Client Info		30160	1605	0
Oil Changed		Client Info		Changed	N/A	Not Changd
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	21	19	15
Chromium	ppm	ASTM D5185m	>4	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	<1	5
Lead	ppm	ASTM D5185m	>30	1	<1	1
Copper	ppm	ASTM D5185m	>35	<1	<1	0
Tin	ppm	ASTM D5185m	>4	<1	<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.

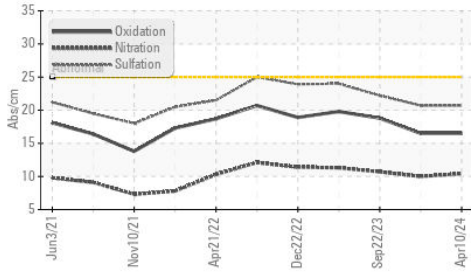
Silicon	ppm	ASTM D5185m	>+100	5	3	4
Potassium	ppm	ASTM D5185m	>20	10	8	2
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		1.5	1.5	0
Nitration	Abs/cm	*ASTM D7624	>20	10.4	10.0	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	20.7	22.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	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

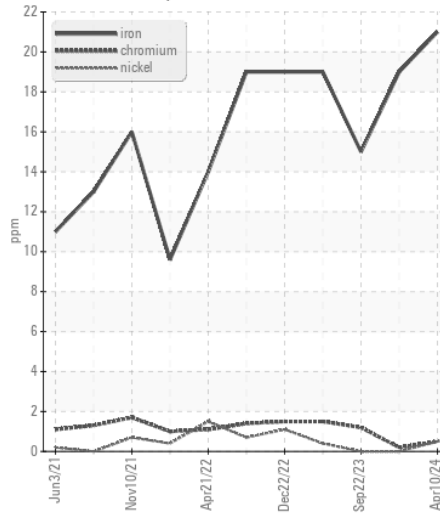
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		18	16	9
Boron	ppm	ASTM D5185m	50	2	3	6
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	65	58	53
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	560	939	876	600
Calcium	ppm	ASTM D5185m	1510	1175	1053	1592
Phosphorus	ppm	ASTM D5185m	780	1067	1071	708
Zinc	ppm	ASTM D5185m	870	1260	1257	987
Sulfur	ppm	ASTM D5185m	2040	3265	3021	2490
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	16.5	18.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	9.0	8.6	4.2
Visc @ 100°C	cSt	ASTM D445	15.1	12.6	12.6	14.7

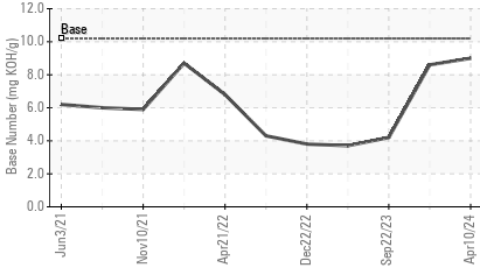
FT-IR (Direct Trend)



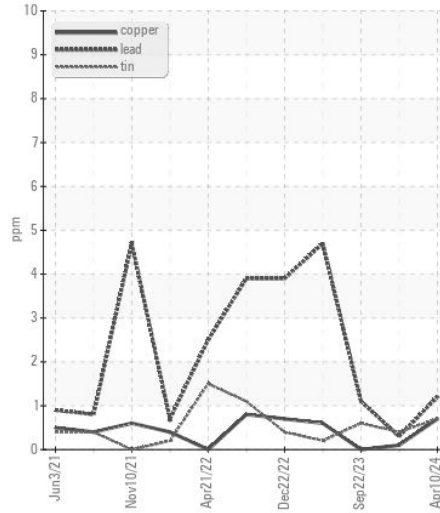
Ferrous Alloys



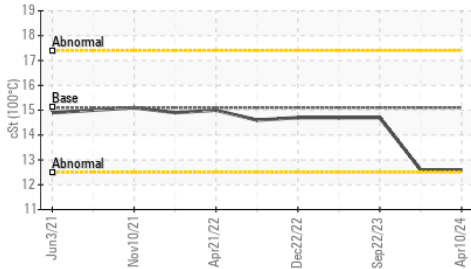
Base Number



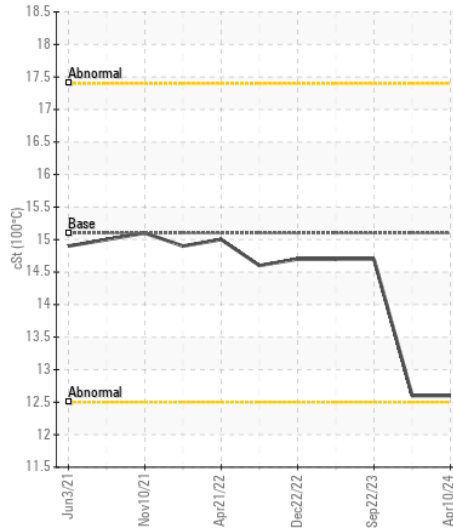
Non-ferrous Metals



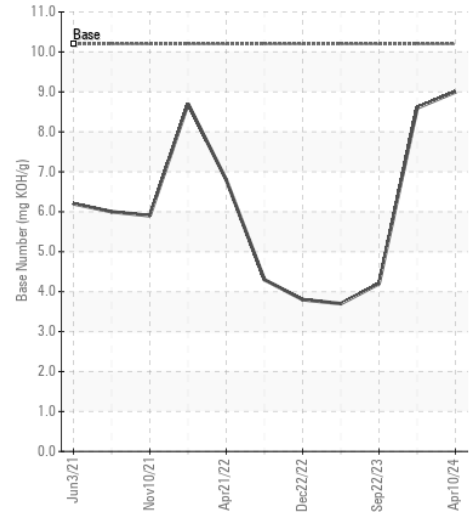
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : GFL0115509

Lab Number : 06148294

Unique Number : 10978372

Test Package : FLEET

Received : 15 Apr 2024

Tested : 16 Apr 2024

Diagnosed : 17 Apr 2024 - Sean Felton

GFL Environmental - 882 - Gainesville

5002 SW 41st Blvd

Gainesville, FL

US 32608

Contact: ROBERT CLARK

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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)