FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
834093
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (29 QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

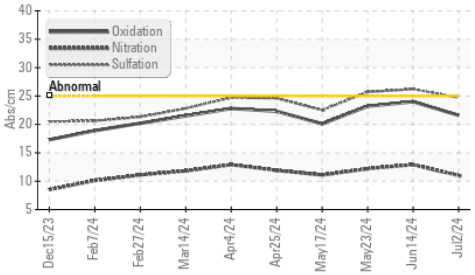
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

FLUID CONDITION

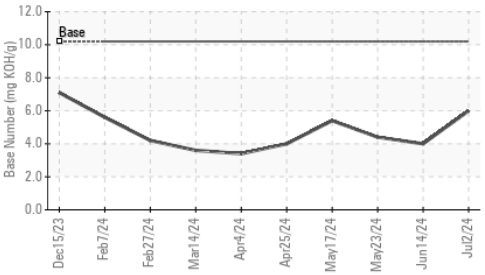
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122861	GFL0122823	GFL0122800
Sample Date		Client Info		02 Jul 2024	14 Jun 2024	23 May 2024
Machine Age	hrs	Client Info		1189	1083	9180
Oil Age	hrs	Client Info		1083	9180	9180
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>50	57	76	63
Chromium	ppm	ASTM D5185m	>4	3	4	3
Nickel	ppm	ASTM D5185m	>2	3	3	2
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>9	35	49	43
Lead	ppm	ASTM D5185m	>30	4	4	4
Copper	ppm	ASTM D5185m	>35	14	18	16
Tin	ppm	ASTM D5185m	>4	2	2	2
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>+100	18	26	23
Potassium	ppm	ASTM D5185m	>20	120	165	144
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.0	12.9	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.7	26.2	25.7
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
Sodium	ppm	ASTM D5185m		5	8	8
Boron	ppm	ASTM D5185m	50	26	10	13
Barium	ppm	ASTM D5185m	5	1	3	3
Molybdenum	ppm	ASTM D5185m	50	62	65	55
Manganese	ppm	ASTM D5185m	0	11	15	13
Magnesium	ppm	ASTM D5185m	560	735	903	746
Calcium	ppm	ASTM D5185m	1510	1513	1543	1288
Phosphorus	ppm	ASTM D5185m	780	735	845	772
Zinc	ppm	ASTM D5185m	870	1006	1092	929
Sulfur	ppm	ASTM D5185m	2040	2290	2805	2498
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.6	24.0	23.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	6.0	4.0	4.4
Visc @ 100°C	cSt	ASTM D445	15.1	14.94	14.5	14.6

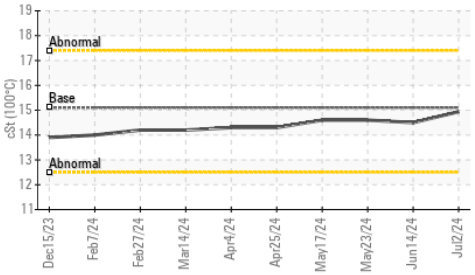
FT-IR (Direct Trend)



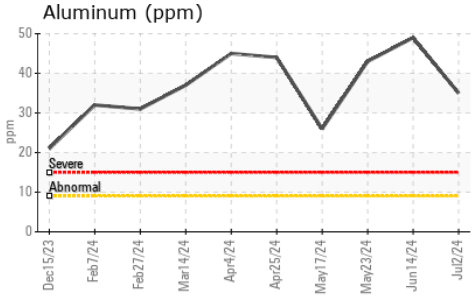
Base Number



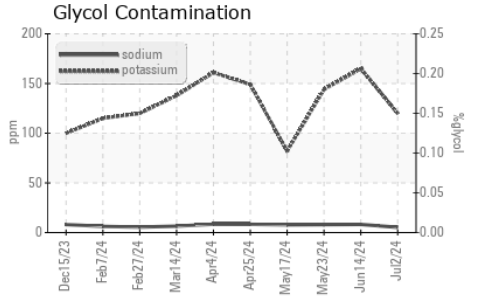
Viscosity @ 100°C



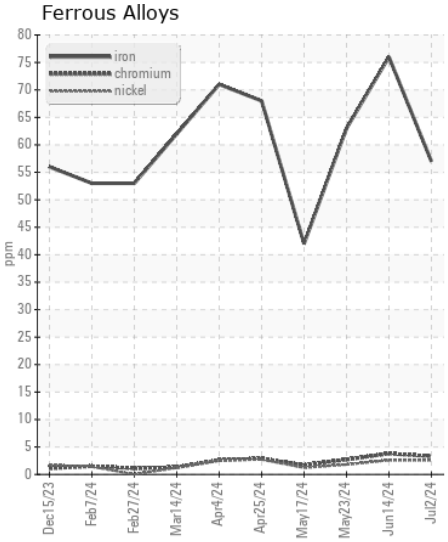
Aluminum (ppm)



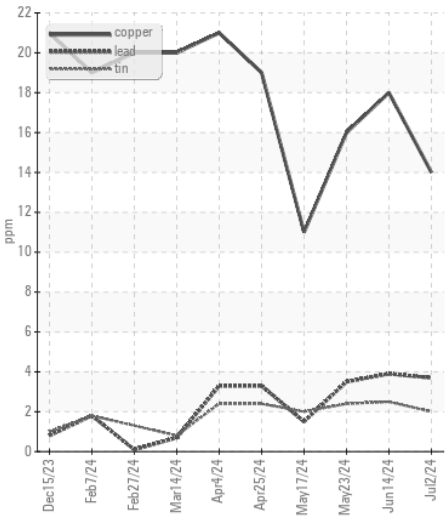
Glycol Contamination



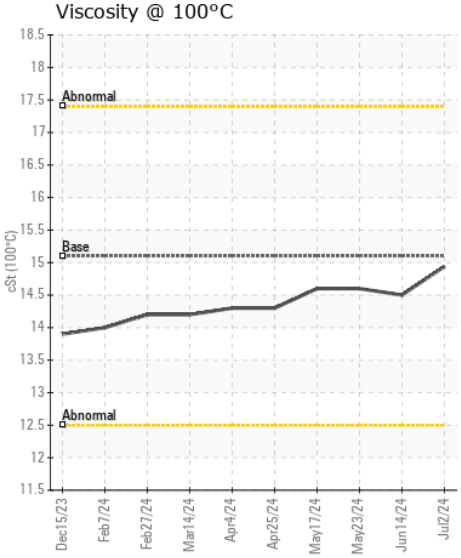
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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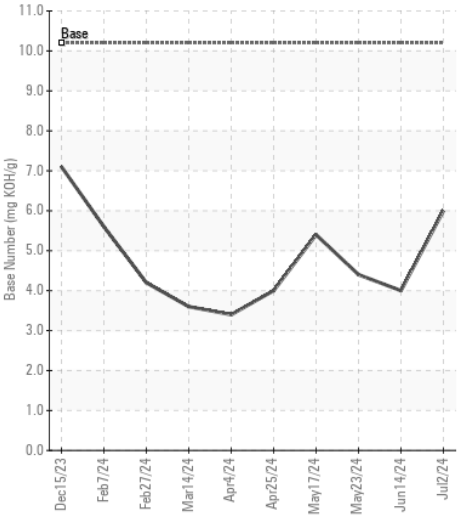

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0122861
Lab Number : 06230669
Unique Number : 11114162
Test Package : FLEET (Additional Tests: Glycol, KV40)

Received : 08 Jul 2024
Tested : 11 Jul 2024
Diagnosed : 12 Jul 2024 - Sean Felton

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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