MOBIL LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
514018
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

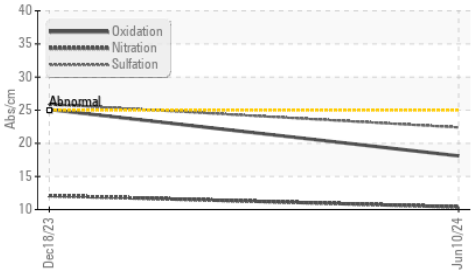
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

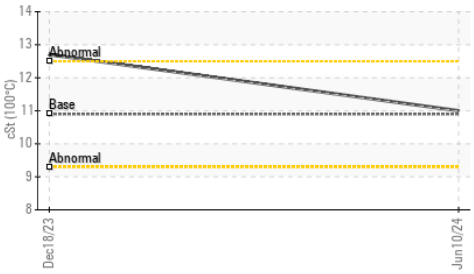
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**GFL0120094**	GFL0098560	---
Sample Date		Client Info		**10 Jun 2024**	18 Dec 2023	---
Machine Age	kms	Client Info		**106495**	56342	---
Oil Age	kms	Client Info		**50153**	0	---
Filter Age	kms	Client Info		**0**	0	---
Oil Changed		Client Info		**Changed**	Changed	---
Filter Changed		Client Info		**Changed**	Changed	---
Sample Status				**NORMAL**	NORMAL	---
Iron	ppm	ASTM D5185(m)	>120	**34**	45	---
Chromium	ppm	ASTM D5185(m)	>20	**<1**	<1	---
Nickel	ppm	ASTM D5185(m)	>5	**4**	1	---
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	---
Silver	ppm	ASTM D5185(m)	>2	**0**	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	**6**	16	---
Lead	ppm	ASTM D5185(m)	>40	**3**	3	---
Copper	ppm	ASTM D5185(m)	>330	**147**	103	---
Tin	ppm	ASTM D5185(m)	>15	**2**	5	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Silicon	ppm	ASTM D5185(m)	>25	**17**	67	---
Potassium	ppm	ASTM D5185(m)	>20	**16**	35	---
Fuel		WC Method	>3.0	**<1.0**	<1.0	---
Water		WC Method	>0.2	**NEG**	NEG	---
Glycol		WC Method		**NEG**	NEG	---
Soot %	%	ASTM D7844*	>4	**0.8**	0.7	---
Nitration	Abs/cm	ASTM D7624*	>20	**10.4**	12.1	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	**22.4**	25.9	---
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	---
Sodium	ppm	ASTM D5185(m)		**2**	4	---
Boron	ppm	ASTM D5185(m)	250	**4**	37	---
Barium	ppm	ASTM D5185(m)	10	**0**	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	**66**	119	---
Manganese	ppm	ASTM D5185(m)		**1**	3	---
Magnesium	ppm	ASTM D5185(m)	450	**918**	745	---
Calcium	ppm	ASTM D5185(m)	3000	**1242**	1440	---
Phosphorus	ppm	ASTM D5185(m)	1150	**861**	660	---
Zinc	ppm	ASTM D5185(m)	1350	**1090**	779	---
Sulfur	ppm	ASTM D5185(m)	4250	**1930**	1863	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	**18.1**	25.1	---
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	**11.0**	12.7	---

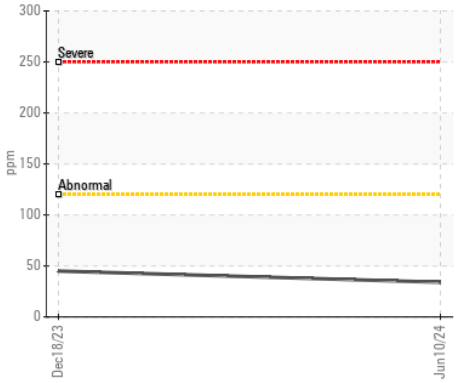
FT-IR (Direct Trend)



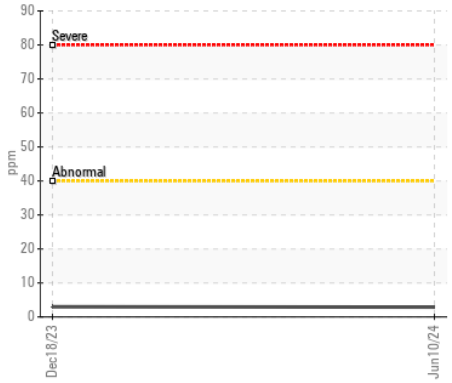
Viscosity @ 100°C



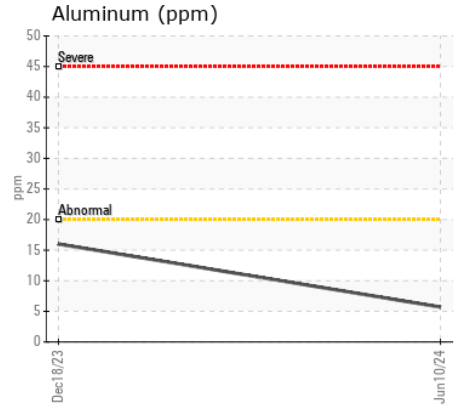
Iron (ppm)



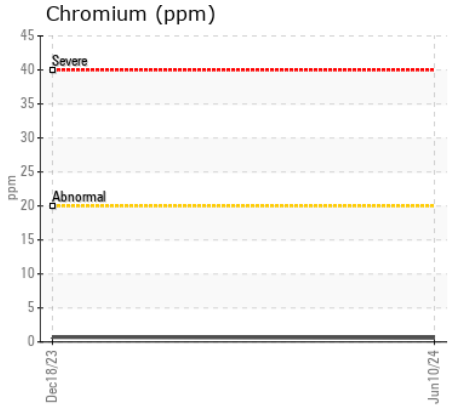
Lead (ppm)



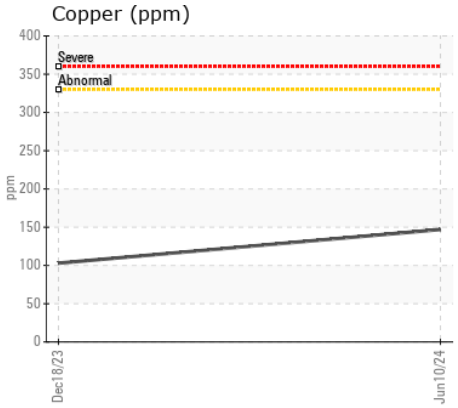
Aluminum (ppm)



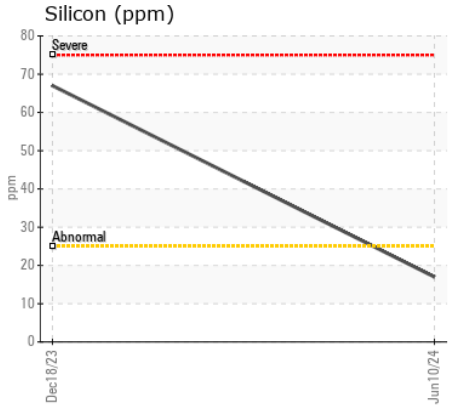
Chromium (ppm)



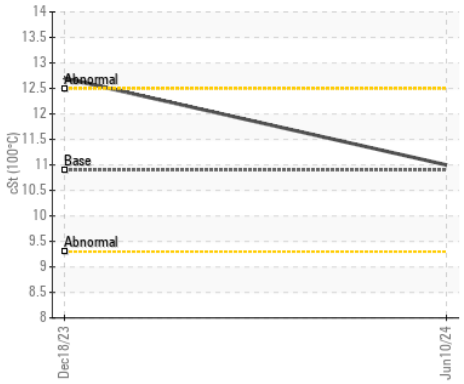
Copper (ppm)



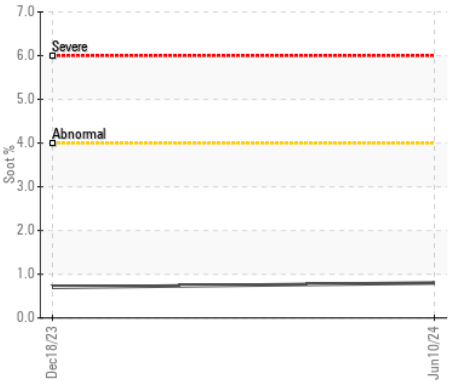
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0120094
Lab Number : 02641339
Unique Number : 5798878
Test Package : MOB 1

Received : 12 Jun 2024
Tested : 12 Jun 2024
Diagnosed : 12 Jun 2024 - Wes Davis

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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