MOBIL LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
514005
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

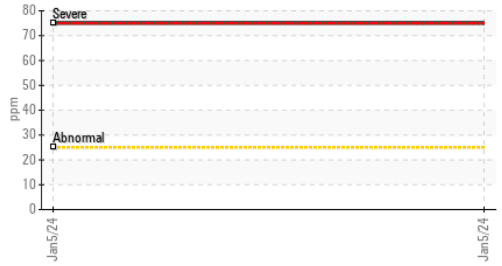
Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

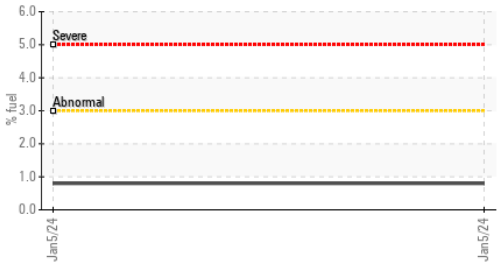
Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0098558	---	---
Sample Date		Client Info		05 Jan 2024	---	---
Machine Age	kms	Client Info		67323	---	---
Oil Age	kms	Client Info		0	---	---
Filter Age	kms	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185(m)	>120	68	---	---
Chromium	ppm	ASTM D5185(m)	>20	1	---	---
Nickel	ppm	ASTM D5185(m)	>5	5	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>20	26	---	---
Lead	ppm	ASTM D5185(m)	>40	6	---	---
Copper	ppm	ASTM D5185(m)	>330	214	---	---
Tin	ppm	ASTM D5185(m)	>15	5	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Silicon	ppm	ASTM D5185(m)	>25	▲ 75	---	---
Potassium	ppm	ASTM D5185(m)	>20	64	---	---
Fuel	%	ASTM D7593*	>3.0	0.8	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>4	0.7	---	---
Nitration	Abs/cm	ASTM D7624*	>20	13.1	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.2	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185(m)		5	---	---
Boron	ppm	ASTM D5185(m)		23	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		115	---	---
Manganese	ppm	ASTM D5185(m)		4	---	---
Magnesium	ppm	ASTM D5185(m)		725	---	---
Calcium	ppm	ASTM D5185(m)		1437	---	---
Phosphorus	ppm	ASTM D5185(m)		679	---	---
Zinc	ppm	ASTM D5185(m)		777	---	---
Sulfur	ppm	ASTM D5185(m)		1791	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	26.4	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		10.1	---	---

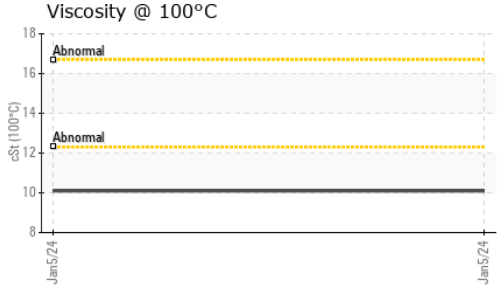
Silicon (ppm)



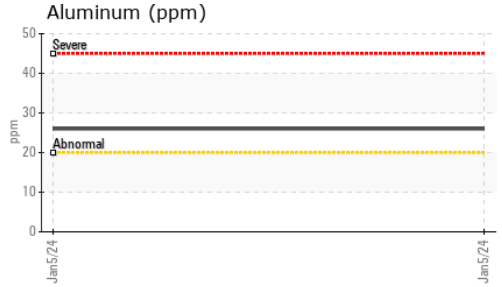
Fuel Dilution



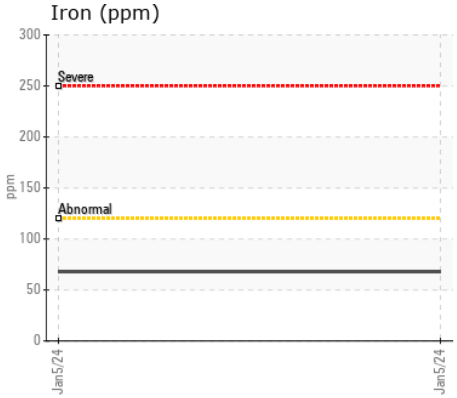
Viscosity @ 100°C



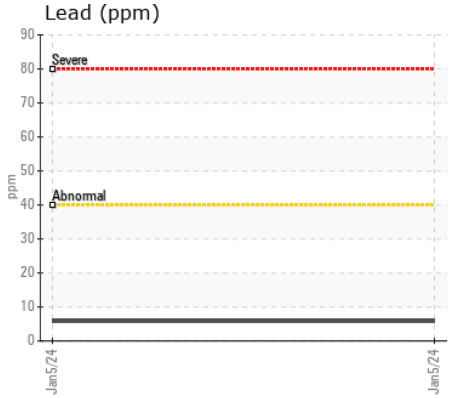
Aluminum (ppm)



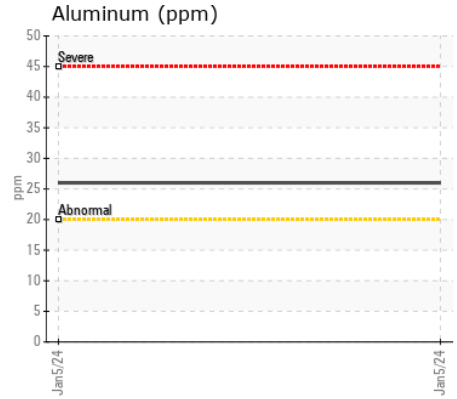
Iron (ppm)



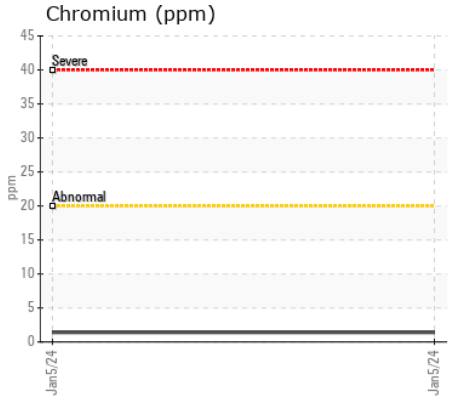
Lead (ppm)



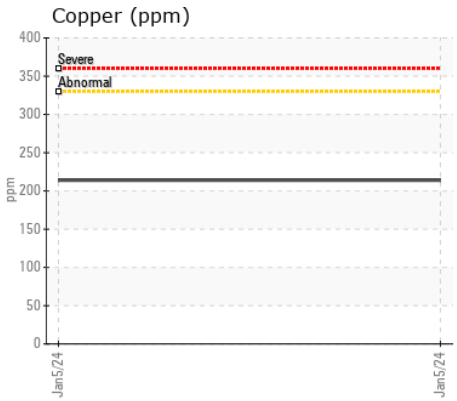
Aluminum (ppm)



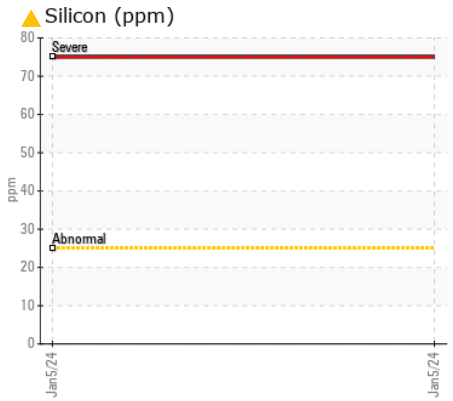
Chromium (ppm)



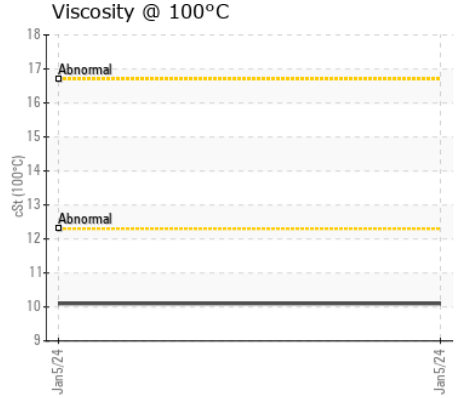
Copper (ppm)



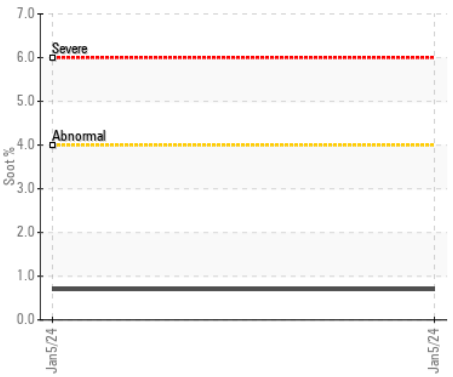
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: GFL0098558	**Recieved**	: 11 Jan 2024
Lab Number	: 02608106	**Diagnosed**	: 12 Jan 2024
Unique Number	: 5709192	**Diagnostician**	: Kevin Marson
Test Package	: MOB 1 (Additional Tests: FuelDilution, PercentFuel)		

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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