MOBIL LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
MACK 124-0807
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

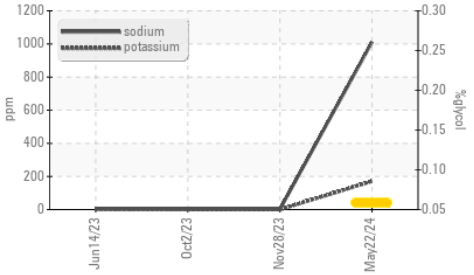
Test for glycol is positive. There is a moderate concentration of glycol present in the oil.

FLUID CONDITION

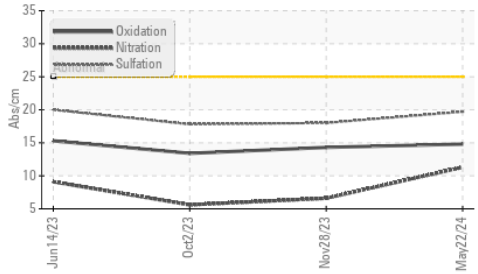
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0088763	PC0072582	PC0072675
Sample Date		Client Info		22 May 2024	28 Nov 2023	02 Oct 2023
Machine Age	kms	Client Info		393979	378153	370642
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>120	11	3	2
Chromium	ppm	ASTM D5185(m)	>20	<1	0	0
Nickel	ppm	ASTM D5185(m)	>5	2	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	3	1	1
Lead	ppm	ASTM D5185(m)	>40	2	<1	<1
Copper	ppm	ASTM D5185(m)	>330	2	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	9	4	9
Potassium	ppm	ASTM D5185(m)	>20	▲ 171	0	0
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		▲ 0.064	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.2	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.3	6.6	5.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.7	18.0	17.8
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>158	● 1011	3	2
Boron	ppm	ASTM D5185(m)	250	16	2	2
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	110	56	57
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)	450	920	927	929
Calcium	ppm	ASTM D5185(m)	3000	987	1019	1043
Phosphorus	ppm	ASTM D5185(m)	1150	983	994	993
Zinc	ppm	ASTM D5185(m)	1350	1109	1151	1155
Sulfur	ppm	ASTM D5185(m)	4250	2507	2505	2562
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.8	14.3	13.4
Visc @ 40°C	cSt	ASTM D7279(m)	115	92.3	94.3	102
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.8	13.3	13.8
Viscosity Index (VI)	Scale	ASTM D2270*	126	135	140	136

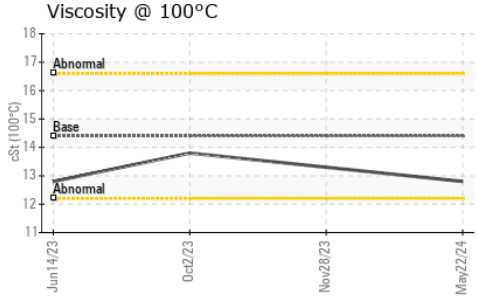
Glycol Contamination



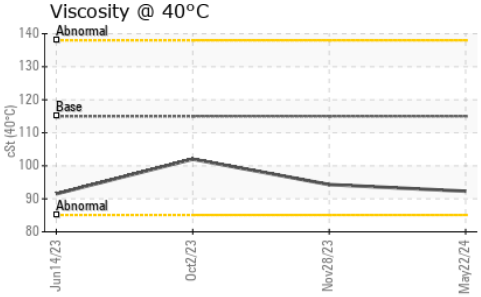
FT-IR (Direct Trend)



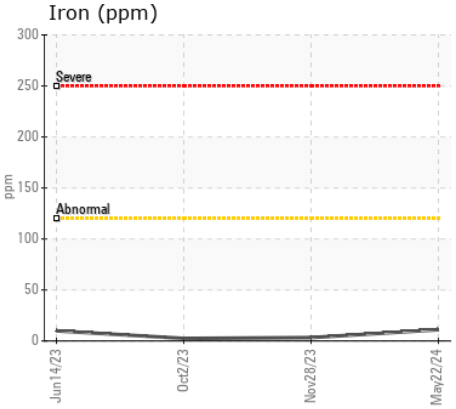
Viscosity @ 100°C



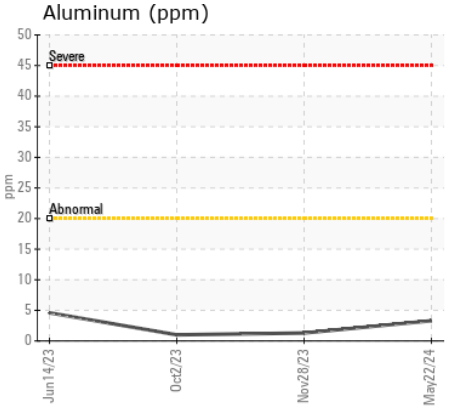
Viscosity @ 40°C



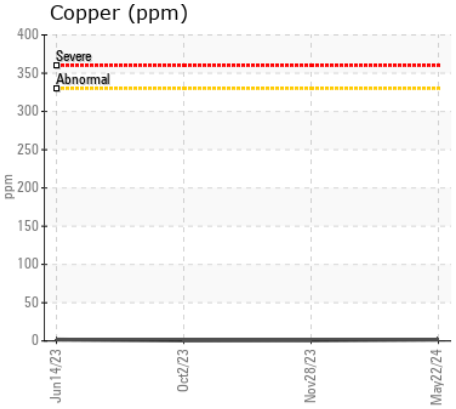
Iron (ppm)



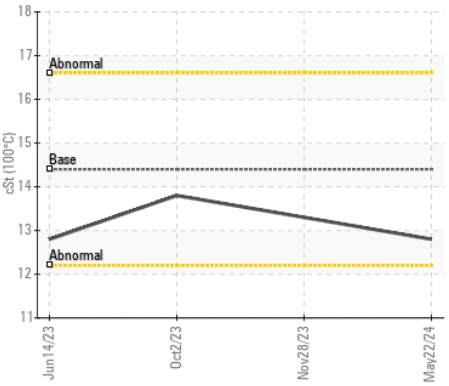
Aluminum (ppm)



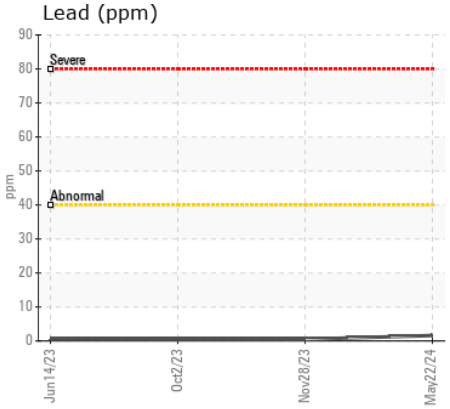
Copper (ppm)



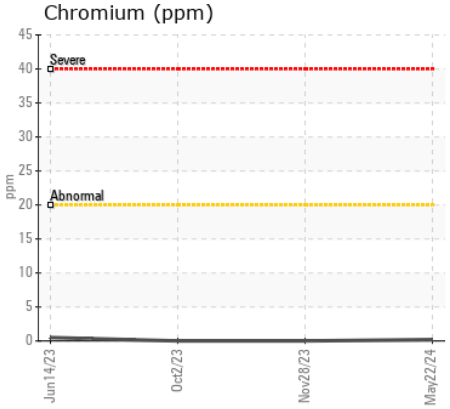
Viscosity @ 100°C



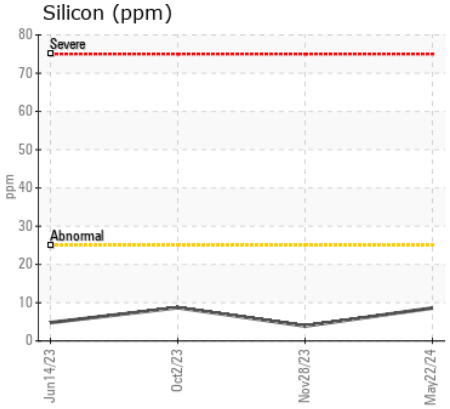
Lead (ppm)



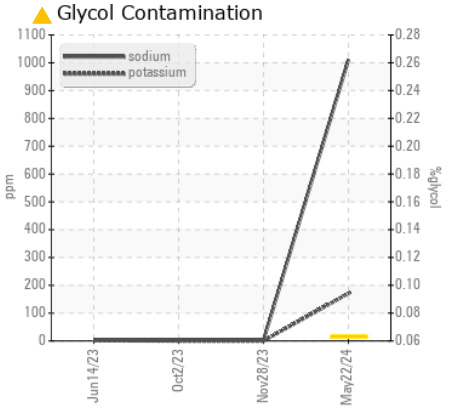
Chromium (ppm)



Silicon (ppm)



Glycol Contamination



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0088763 **Received** : 29 May 2024
Lab Number : 02638350 **Tested** : 29 May 2024
Unique Number : 5787512 **Diagnosed** : 29 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol, KV40, VI)

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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