MOB 1 WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
KENWORTH 226524
Component
Diesel Engine
Fluid
SHELL ROTELLA T 15W40 (11 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. (Customer Sample Comment: I put 2 ltrs of top up oil in)

WEAR

All component wear rates are normal.

CONTAMINATION

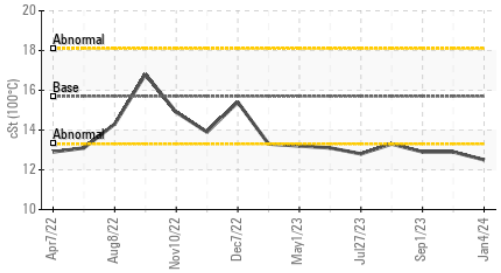
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

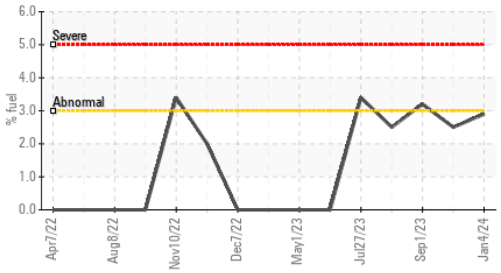
Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0849105**	WC0849104	WC0764579
Sample Date		Client Info		**04 Jan 2024**	09 Oct 2023	01 Sep 2023
Machine Age	kms	Client Info		**4000000**	4000000	4000000
Oil Age	kms	Client Info		**41000**	11000	15000
Filter Age	kms	Client Info		**41000**	11000	15000
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	MARGINAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>200	**18**	7	14
Chromium	ppm	ASTM D5185(m)	>10	**<1**	0	<1
Nickel	ppm	ASTM D5185(m)	>4	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	0
Silver	ppm	ASTM D5185(m)	>2	**0**	<1	0
Aluminum	ppm	ASTM D5185(m)	>30	**2**	3	1
Lead	ppm	ASTM D5185(m)	>30	**<1**	<1	<1
Copper	ppm	ASTM D5185(m)	>30	**1**	<1	<1
Tin	ppm	ASTM D5185(m)	>4	**<1**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Silicon	ppm	ASTM D5185(m)	>30	**3**	3	3
Potassium	ppm	ASTM D5185(m)	>20	**6**	13	9
Fuel	%	ASTM D7593*	>3.0	▲ **2.9**	▲ 2.5	▲ 3.2
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	0.0	0.0
Soot %	%	ASTM D7844*	>3	**0.6**	0.4	0.9
Nitration	Abs/cm	ASTM D7624*	>20	**8.0**	6.4	6.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	**21.9**	20.5	21.8
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)		**2**	2	2
Boron	ppm	ASTM D5185(m)	35	**108**	157	138
Barium	ppm	ASTM D5185(m)	0	**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	**10**	2	2
Manganese	ppm	ASTM D5185(m)	0	**0**	0	<1
Magnesium	ppm	ASTM D5185(m)	10	**28**	19	19
Calcium	ppm	ASTM D5185(m)	2340	**2161**	2155	2137
Phosphorus	ppm	ASTM D5185(m)	1110	**931**	959	1007
Zinc	ppm	ASTM D5185(m)	1210	**1126**	1132	1105
Sulfur	ppm	ASTM D5185(m)	3890	**3056**	2947	2889
Oxidation	Abs/.1mm	ASTM D7414*	>25	**16.8**	15.1	14.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.7	▲ **12.5**	12.9	▲ 12.9

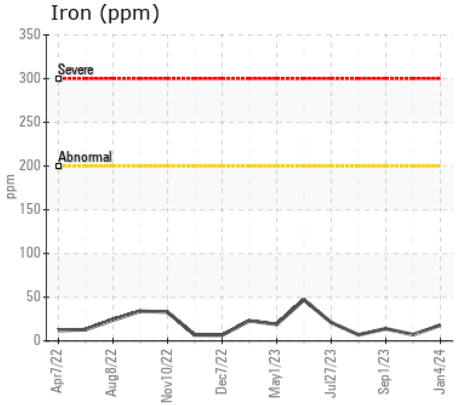
Viscosity @ 100°C



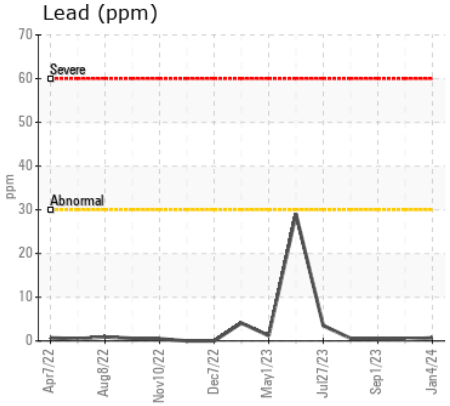
Fuel Dilution



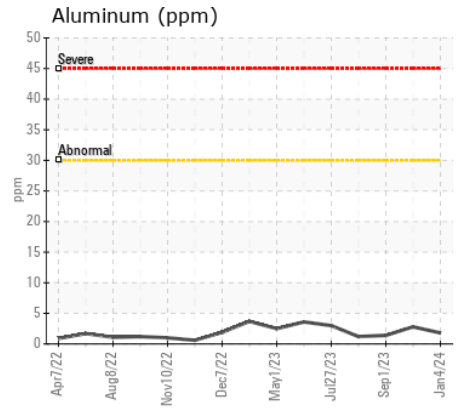
Iron (ppm)



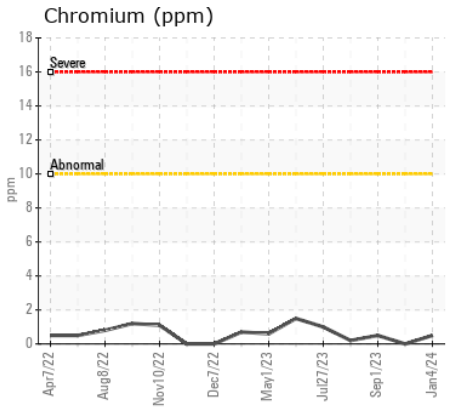
Lead (ppm)



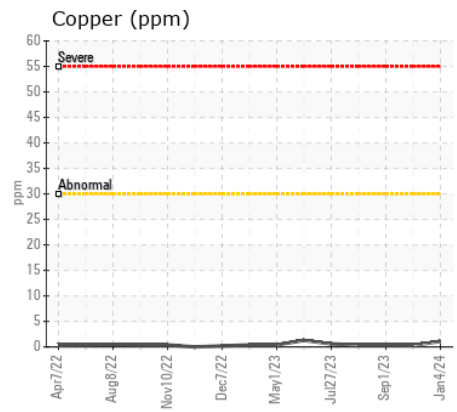
Aluminum (ppm)



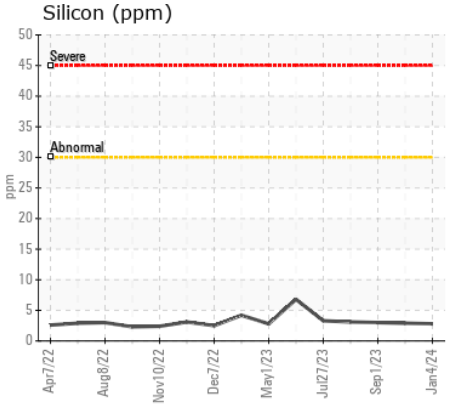
Chromium (ppm)



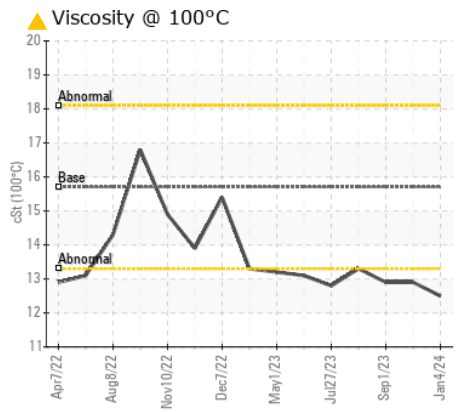
Copper (ppm)



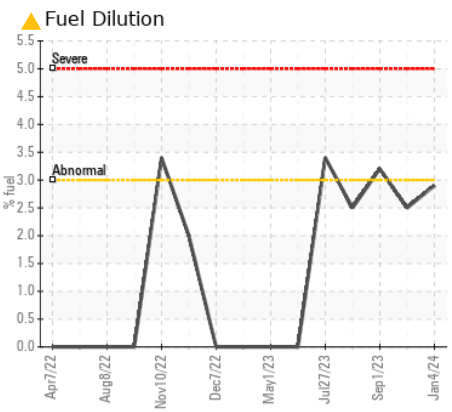
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **2636021 ONT INC - GRANT HOWARD**
Sample No. : WC0849105 **Recieved** : 08 Jan 2024 159 QUEEN ST, P.O BOX 63
Lab Number : 02606923 **Diagnosed** : 09 Jan 2024 AILSA CRAIG, ON
Unique Number : 5708009 **Diagnostician** : Kevin Marson CA N0M 1A0
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel) Contact: Grant Howard

To discuss this sample report, contact Customer Service at 1-800-268-2131. lohowie0161@gmail.com
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (519)857-6903
Validity of results and interpretation are based on the sample and information as supplied. F: