MOB

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
CUMMINS 236
Component
Rear Diesel Engine
Fluid
ESSO XD-3 EXTRA 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

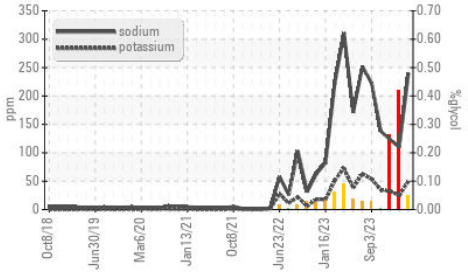
Test for glycol is positive. There is a moderate concentration of glycol present in the oil.

FLUID CONDITION

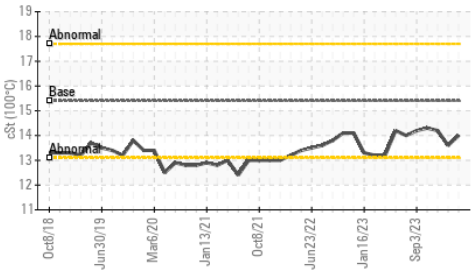
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0889131**	WC0889099	WC0889181
Sample Date		Client Info		**15 Feb 2024**	16 Jan 2024	28 Dec 2023
Machine Age	kms	Client Info		**0**	0	0
Oil Age	kms	Client Info		**8786**	1915	9294
Filter Age	kms	Client Info		**8786**	1915	9294
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	SEVERE	SEVERE
Iron	ppm	ASTM D5185(m)	>90	**5**	4	10
Chromium	ppm	ASTM D5185(m)	>20	**0**	0	<1
Nickel	ppm	ASTM D5185(m)	>2	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	0
Silver	ppm	ASTM D5185(m)	>2	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**3**	2	5
Lead	ppm	ASTM D5185(m)	>40	**2**	4	2
Copper	ppm	ASTM D5185(m)	>330	**76**	148	87
Tin	ppm	ASTM D5185(m)	>15	**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Silicon	ppm	ASTM D5185(m)	>25	**4**	3	6
Potassium	ppm	ASTM D5185(m)	>20	▲ **50**	▲ 25	▲ 32
Fuel		WC Method	>3.0	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol	%	ASTM D7922*		▲ **0.047**	▲ 0.419	▲ 0.261
Soot %	%	ASTM D7844*	>6	**0.1**	0	0.2
Nitration	Abs/cm	ASTM D7624*	>20	**8.9**	6.7	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	**21.6**	20.1	23.3
Emulsified Water	scalar	Visual*	>0.2	**NEG**	▲ .2%	▲ .2%
Sodium	ppm	ASTM D5185(m)	>192	● **240**	● 110	● 123
Boron	ppm	ASTM D5185(m)		**21**	58	28
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**<1**	1	<1
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)		**15**	22	17
Calcium	ppm	ASTM D5185(m)	3780	**2100**	1953	2020
Phosphorus	ppm	ASTM D5185(m)	1370	**922**	958	945
Zinc	ppm	ASTM D5185(m)	1500	**1108**	1092	1111
Sulfur	ppm	ASTM D5185(m)	3800	**2897**	3026	2909
Oxidation	Abs/.1mm	ASTM D7414*	>25	**17.9**	16.1	18.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	**14.0**	13.6	14.2

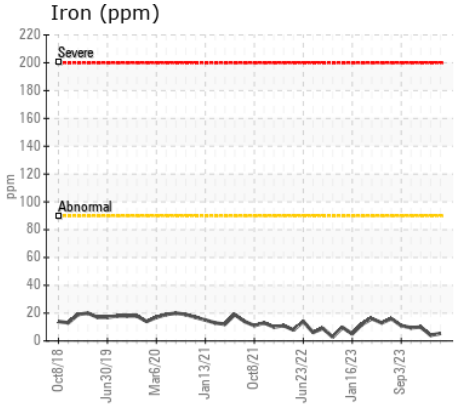
Glycol Contamination



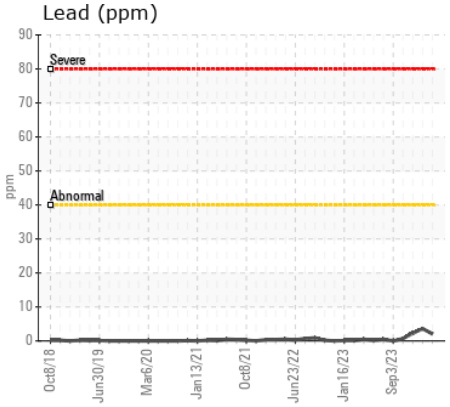
Viscosity @ 100°C



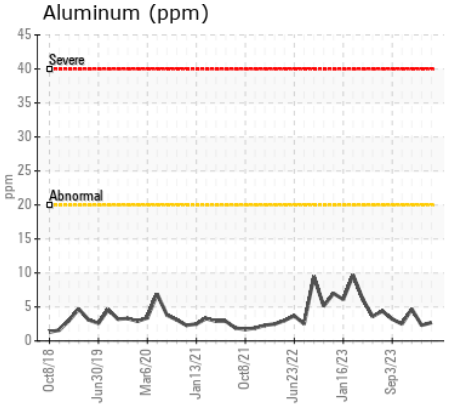
Iron (ppm)



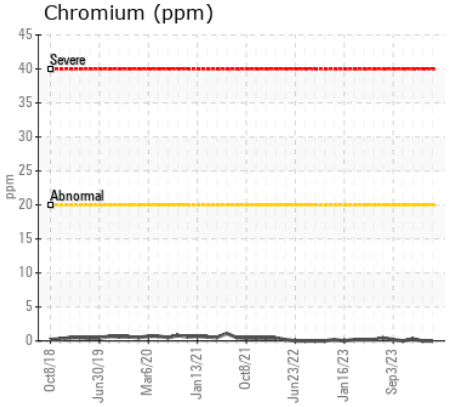
Lead (ppm)



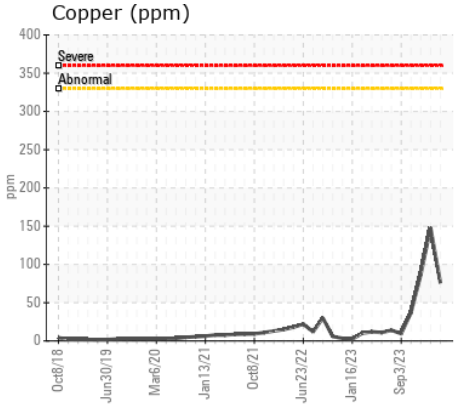
Aluminum (ppm)



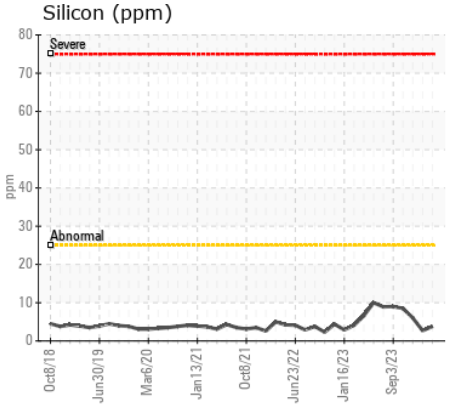
Chromium (ppm)



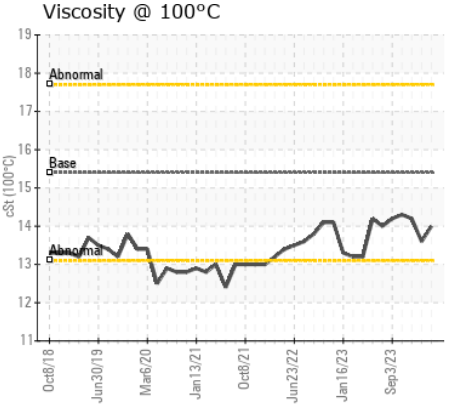
Copper (ppm)



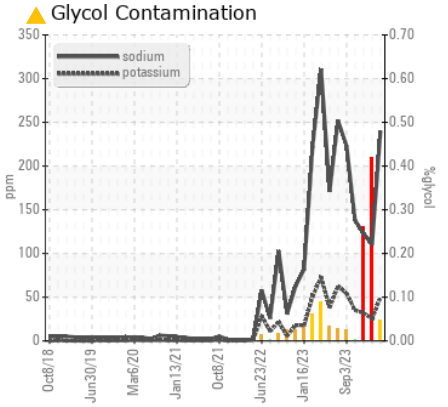
Silicon (ppm)



Viscosity @ 100°C



Glycol Contamination



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: WC0889131	**Received**	: 28 Feb 2024
Lab Number	: 02618656	**Tested**	: 28 Feb 2024
Unique Number	: 5735766	**Diagnosed**	: 28 Feb 2024 - Wes Davis
Test Package	: MOB 1		

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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