MOB I WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
156 (S/N 1XKDP4TX0FR418919)
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Check for low coolant level. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

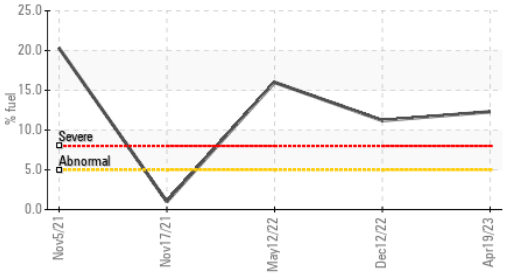
There is a high amount of fuel present in the oil. Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

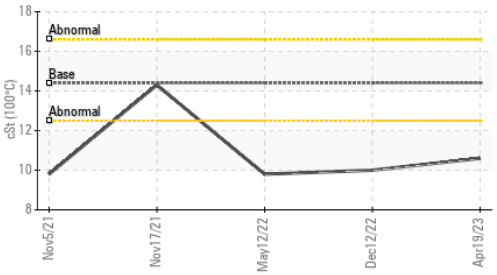
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants. The condition of the oil is acceptable for the time in service (see recommendation).

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0788824	WC0722169	WC0678987
Sample Date		Client Info		19 Apr 2023	12 Dec 2022	12 May 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>100	59	91	53
Chromium	ppm	ASTM D5185m	>20	3	4	4
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	4	11	▲ 7
Lead	ppm	ASTM D5185m	>40	6	12	11
Copper	ppm	ASTM D5185m	>330	1	2	2
Tin	ppm	ASTM D5185m	>15	<1	1	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	7	14	▲ 29
Potassium	ppm	ASTM D5185m	>20	▲ 44	▲ 247	▲ 990
Fuel	%	ASTM D3524	>5	⬢ 12.3	⬢ 11.2	⬢ 16.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		0.0	⬢ 0.20	⬢ 0.12
Soot %	%	*ASTM D7844	>3	0.9	1.8	0.9
Nitration	Abs/cm	*ASTM D7624	>20	11.8	18.1	13.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	36.4	26.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>216	7	▲ 37	▲ 158
Boron	ppm	ASTM D5185m	250	<1	2	3
Barium	ppm	ASTM D5185m	10	2	0	0
Molybdenum	ppm	ASTM D5185m	100	54	55	63
Manganese	ppm	ASTM D5185m		<1	1	1
Magnesium	ppm	ASTM D5185m	450	773	725	742
Calcium	ppm	ASTM D5185m	3000	927	927	882
Phosphorus	ppm	ASTM D5185m	1150	855	796	692
Zinc	ppm	ASTM D5185m	1350	1051	1006	951
Sulfur	ppm	ASTM D5185m	4250	2619	2761	2379
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.7	37.7	24.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.3	▲ 3.3	6.4
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 10.6	▲ 10.0	▲ 9.8

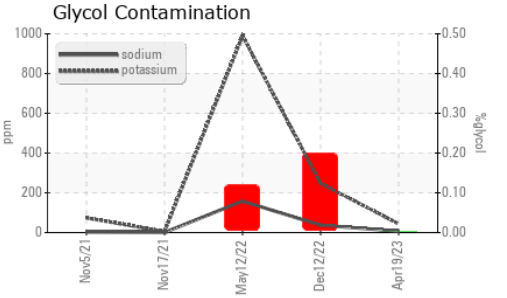
Fuel Dilution



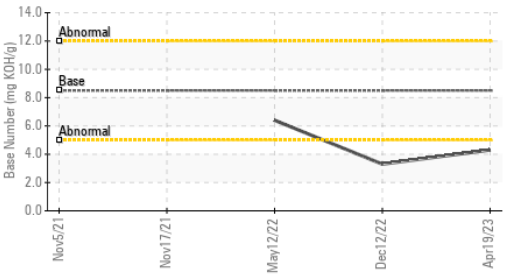
Viscosity @ 100°C



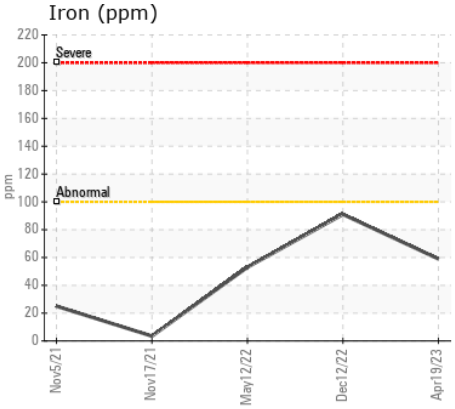
Glycol Contamination



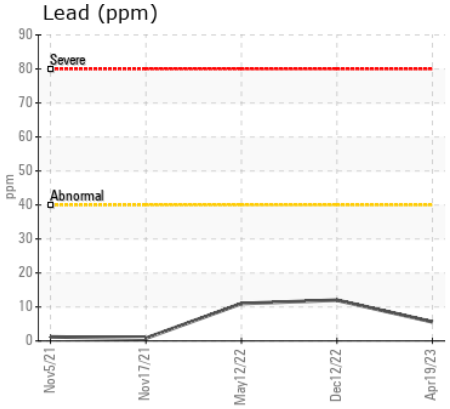
Base Number



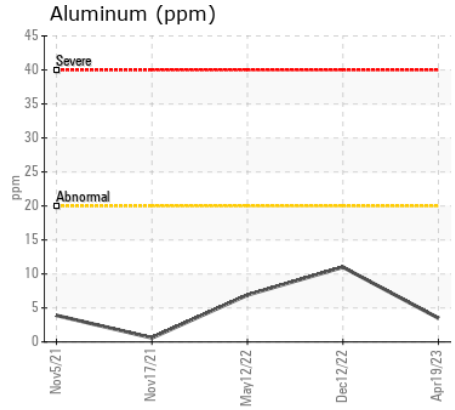
Iron (ppm)



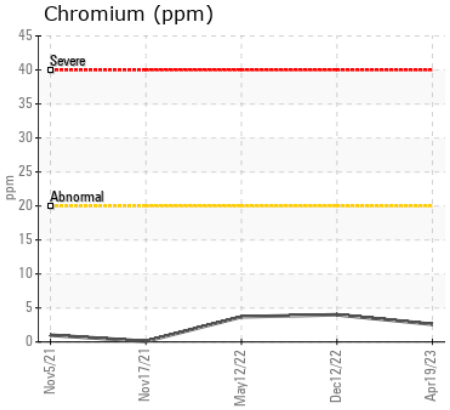
Lead (ppm)



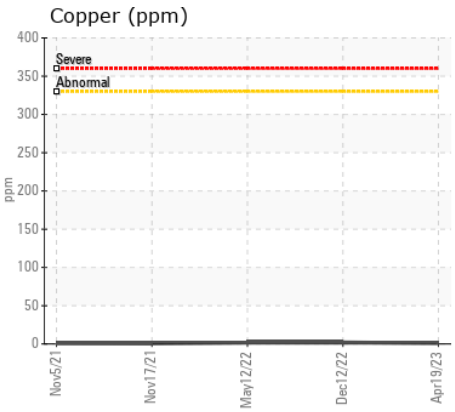
Aluminum (ppm)



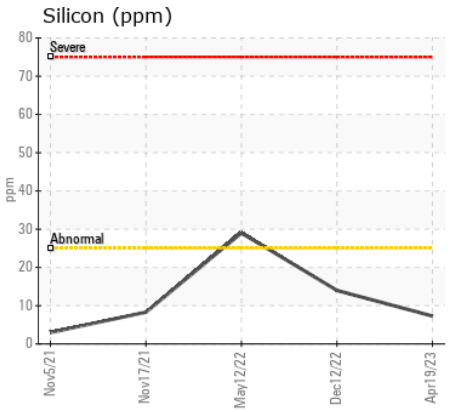
Chromium (ppm)



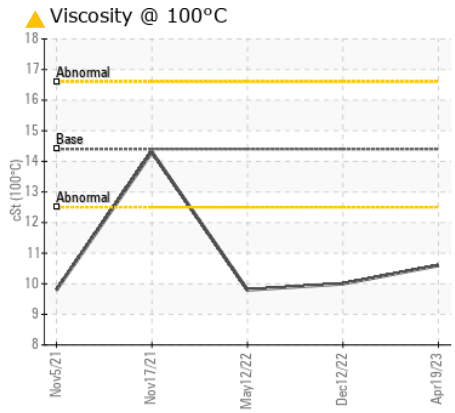
Copper (ppm)



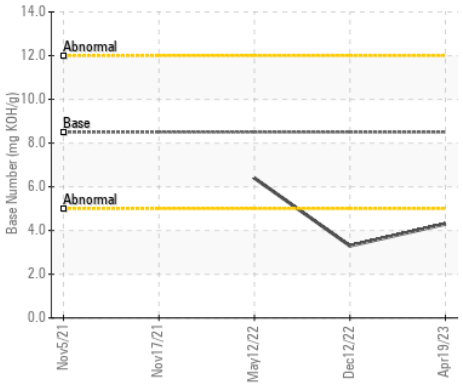
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0788824 **Recieved** : 20 Apr 2023
Lab Number : 05825442 **Diagnosed** : 25 Apr 2023
Unique Number : 10433525 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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