MOB I WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
1604
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

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

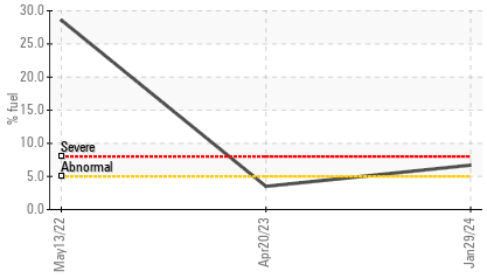
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

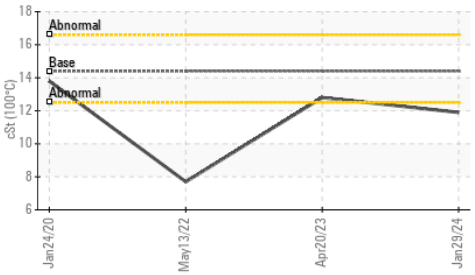
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0870770	WC0806583	WC0697173
Sample Date		Client Info		29 Jan 2024	20 Apr 2023	13 May 2022
Machine Age	mls	Client Info		0	214102	204602
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	MARGINAL	SEVERE
Iron	ppm	ASTM D5185m	>100	60	22	16
Chromium	ppm	ASTM D5185m	>20	3	2	4
Nickel	ppm	ASTM D5185m	>4	2	1	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	11	6	4
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	2	<1	<1
Tin	ppm	ASTM D5185m	>15	0	0	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	8	5	11
Potassium	ppm	ASTM D5185m	>20	4	3	0
Fuel	%	ASTM D3524	>5	▲ 6.7	▲ 3.5	▲ 28.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.2	0.5	0.1
Nitration	Abs/cm	*ASTM D7624	>20	13.0	10.3	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1	19.3	18.5
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	>158	2	4	1
Boron	ppm	ASTM D5185m	250	18	44	48
Barium	ppm	ASTM D5185m	10	0	2	0
Molybdenum	ppm	ASTM D5185m	100	87	92	59
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	87	88	37
Calcium	ppm	ASTM D5185m	3000	2094	2239	1573
Phosphorus	ppm	ASTM D5185m	1150	973	1096	732
Zinc	ppm	ASTM D5185m	1350	1167	1280	840
Sulfur	ppm	ASTM D5185m	4250	3936	4178	2335
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	15.3	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.1	7.0	10.3
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.9	12.8	▲ 7.7

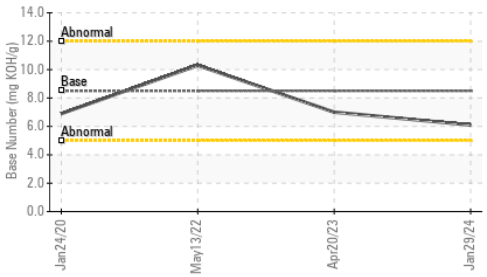
Fuel Dilution



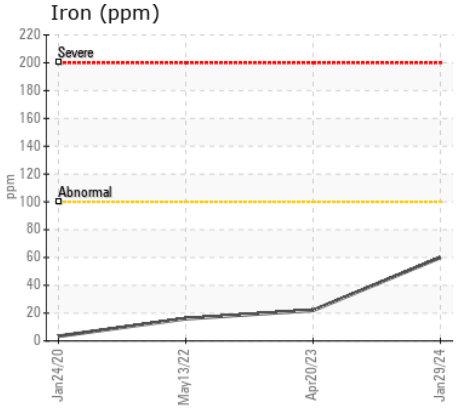
Viscosity @ 100°C



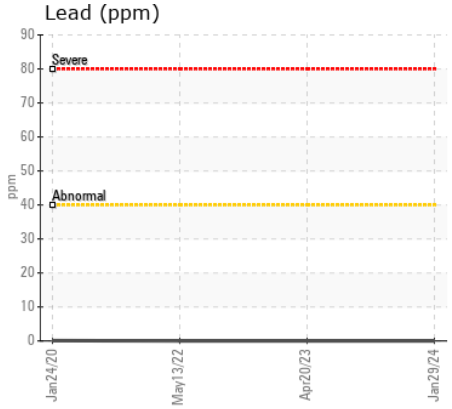
Base Number



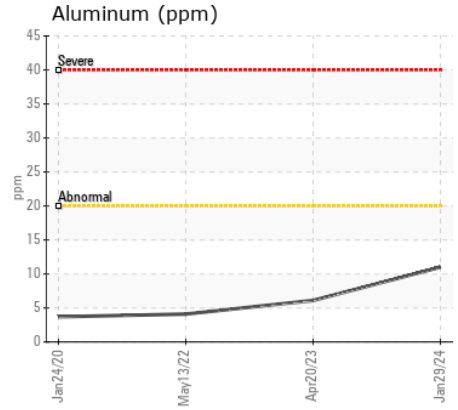
Iron (ppm)



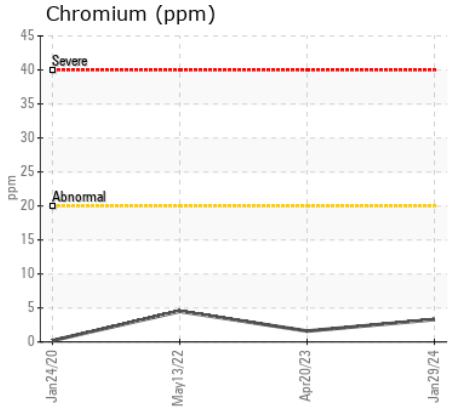
Lead (ppm)



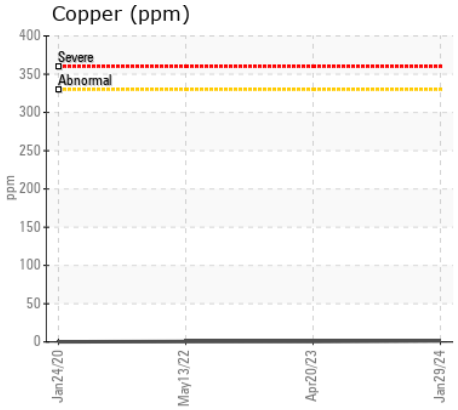
Aluminum (ppm)



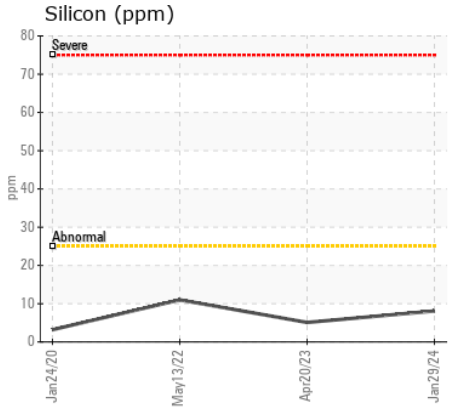
Chromium (ppm)



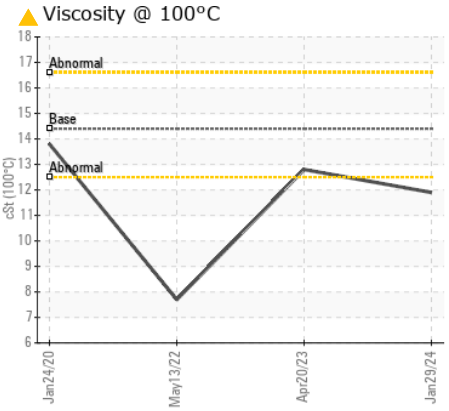
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



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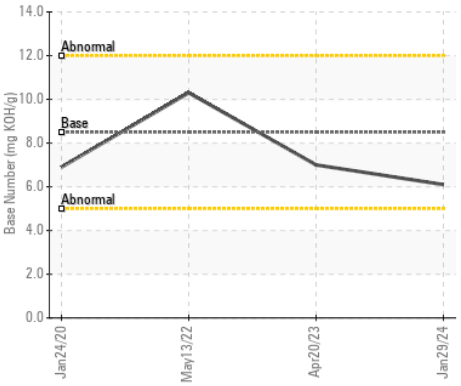

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0870770 **Received** : 29 Feb 2024
Lab Number : 06104860 **Tested** : 04 Mar 2024
Unique Number : 10903090 **Diagnosed** : 04 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, 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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