CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
Mobile Fleet
Machine Id
6401 6401
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER 10W30 (10 GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

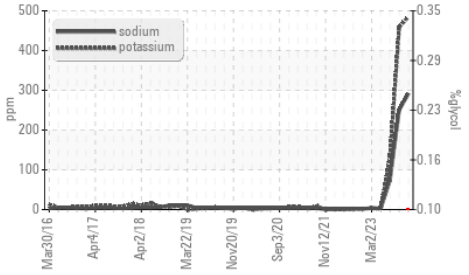
Sodium and/or potassium levels are high. Test for glycol is positive. There is a high amount of particulates present in the oil.

FLUID CONDITION

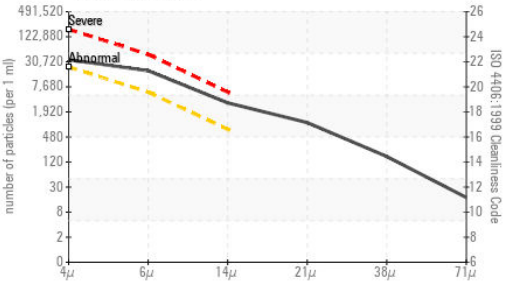
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0918636	WC0861784	WC0862013
Sample Date		Client Info		18 Mar 2024	17 Jan 2024	05 Oct 2023
Machine Age	hrs	Client Info		10151	9813	9351
Oil Age	hrs	Client Info		339	465	321
Filter Age	hrs	Client Info		339	465	321
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	22	21	16
Chromium	ppm	ASTM D5185m	>20	0	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	7	16
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	1	1	2
Tin	ppm	ASTM D5185m	>15	0	<1	0
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	12	8	8
Potassium	ppm	ASTM D5185m	>20	▲ 485	▲ 459	▲ 134
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		▲ 0.10	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.4	0.7
Nitration	Abs/cm	*ASTM D7624	>20	9.6	9.0	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.0	22.4	21.9
Particles >4µm		ASTM D7647	>20000	▲ 29866	● 35303	▲ 64960
Particles >6µm		ASTM D7647	>5000	▲ 16270	▲ 19232	▲ 35388
Particles >14µm		ASTM D7647	>640	▲ 2769	▲ 3273	▲ 6023
Particles >21µm		ASTM D7647	>160	▲ 933	▲ 1102	▲ 2029
Particles >38µm		ASTM D7647	>40	▲ 144	▲ 170	▲ 313
Particles >71µm		ASTM D7647	>10	▲ 15	● 17	▲ 32
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 22/21/19	▲ 22/21/19	▲ 23/22/20
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		▲ 292	▲ 250	▲ 73
Boron	ppm	ASTM D5185m		12	22	22
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		115	117	63
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		440	532	520
Calcium	ppm	ASTM D5185m		1573	1606	1565
Phosphorus	ppm	ASTM D5185m		724	766	754
Zinc	ppm	ASTM D5185m		789	929	943
Sulfur	ppm	ASTM D5185m		2648	2624	2642
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.9	20.3	20.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	11.6	10.3	9.1
Visc @ 100°C	cSt	ASTM D445	11.9	11.5	10.9	11.7

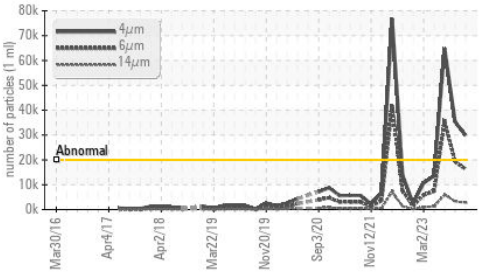
Glycol Contamination



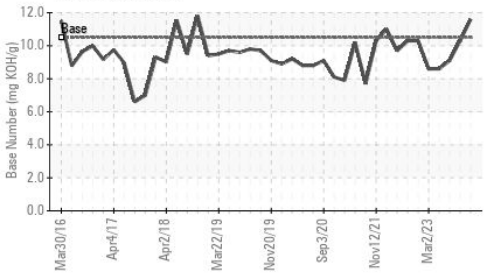
Particle Count



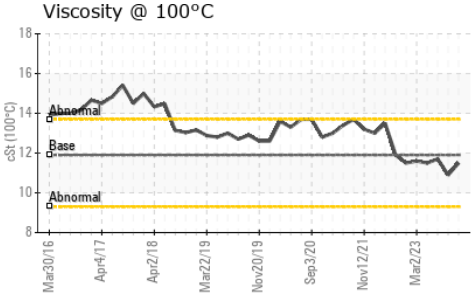
Particle Trend



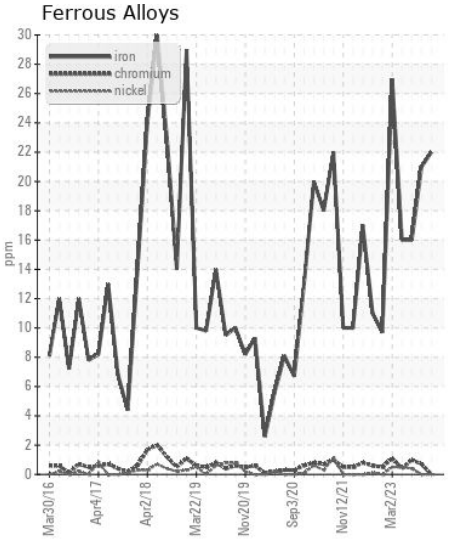
Base Number



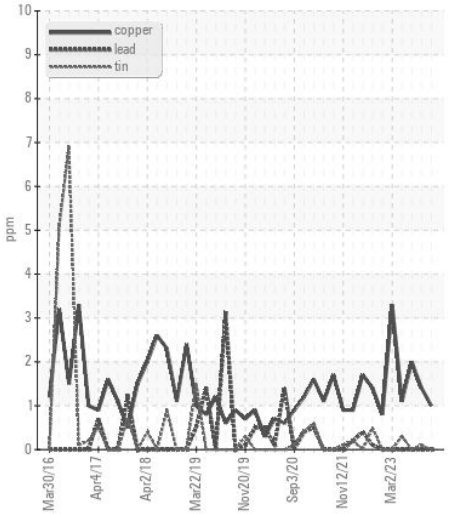
Viscosity @ 100°C



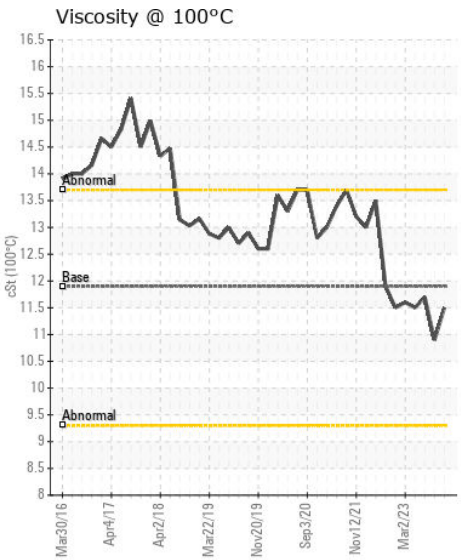
Ferrous Alloys



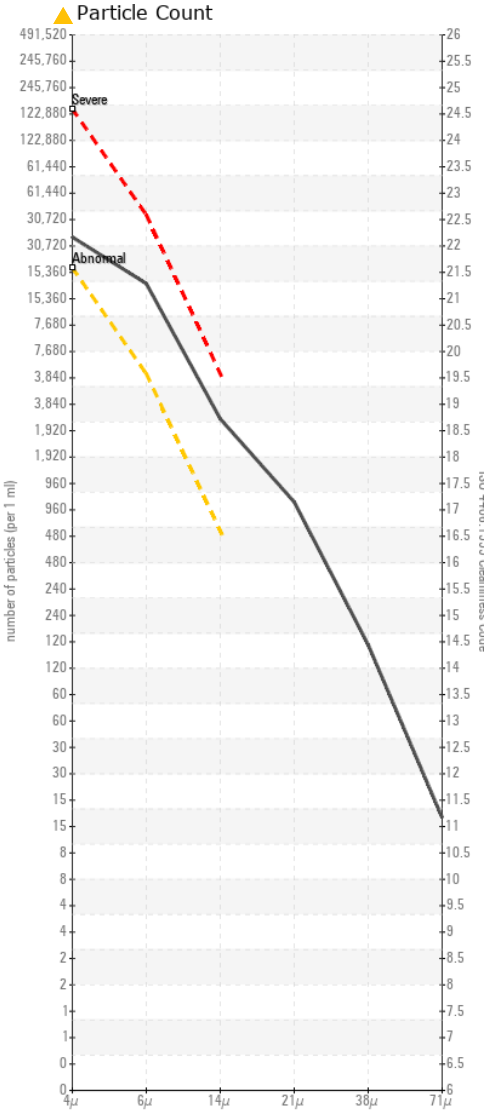
Non-ferrous Metals



Viscosity @ 100°C



Particle Count



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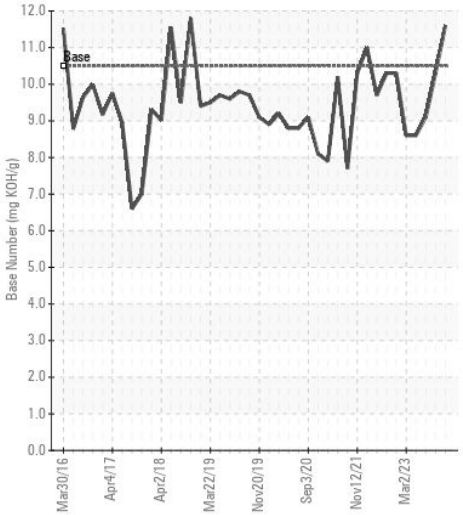

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0918636 **Received** : 20 Mar 2024
Lab Number : 06123525 **Tested** : 27 Mar 2024
Unique Number : 10937676 **Diagnosed** : 27 Mar 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: Glycol, PrtCount, TBN)

Certificate L2367

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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