CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
Mobile Fleet
Machine Id
8044 8044
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER 10W30 (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

WEAR

An increase in the copper level is noted.

CONTAMINATION

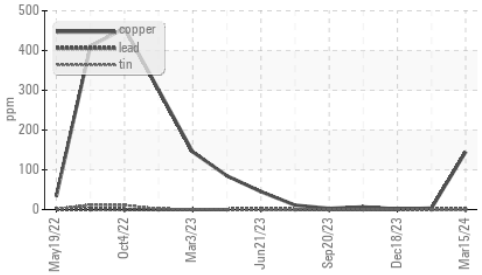
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The amount and size of particulates present in the system are acceptable.

FLUID CONDITION

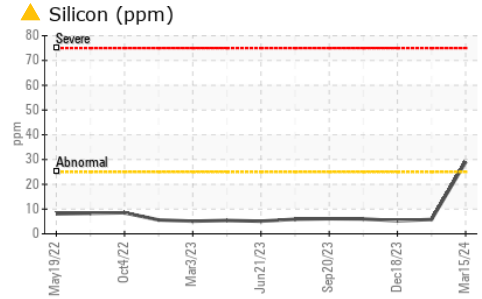
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0918632	WC0902869	WC0885875
Sample Date		Client Info		15 Mar 2024	31 Jan 2024	18 Dec 2023
Machine Age	hrs	Client Info		4627	4320	4113
Oil Age	hrs	Client Info		307	232	296
Filter Age	hrs	Client Info		307	232	296
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	49	7	4
Chromium	ppm	ASTM D5185m	>20	3	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	● 19	4	3
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	▲ 145	4	2
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	▲ 29	6	5
Potassium	ppm	ASTM D5185m	>20	17	7	5
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.8	7.6	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	21.8	22.0
Particles >4µm		ASTM D7647	>20000	4393	6438	6881
Particles >6µm		ASTM D7647	>5000	2393	3507	3749
Particles >14µm		ASTM D7647	>640	407	597	638
Particles >21µm		ASTM D7647	>160	137	201	215
Particles >38µm		ASTM D7647	>40	21	31	33
Particles >71µm		ASTM D7647	>10	2	3	3
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/18/16	20/19/16	20/19/16
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		6	2	2
Boron	ppm	ASTM D5185m		29	38	47
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		44	50	50
Manganese	ppm	ASTM D5185m		1	0	<1
Magnesium	ppm	ASTM D5185m		445	560	515
Calcium	ppm	ASTM D5185m		1427	1763	1701
Phosphorus	ppm	ASTM D5185m		617	796	800
Zinc	ppm	ASTM D5185m		776	968	948
Sulfur	ppm	ASTM D5185m		2002	2560	2602
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.6	20.8	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	9.6	8.9	9.4
Visc @ 100°C	cSt	ASTM D445	11.9	11.5	11.6	11.5

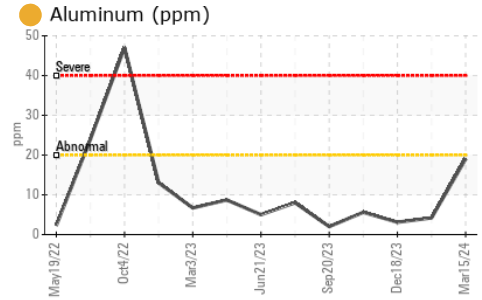
Non-ferrous Metals



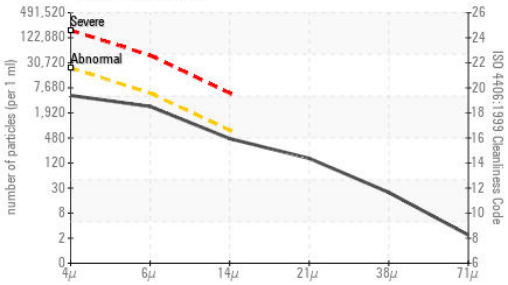
Silicon (ppm)



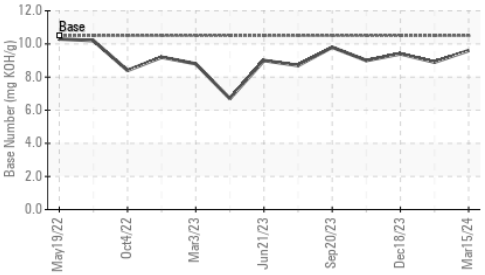
Aluminum (ppm)



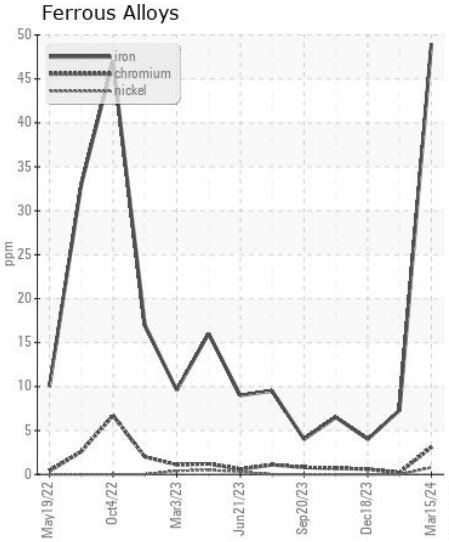
Particle Count



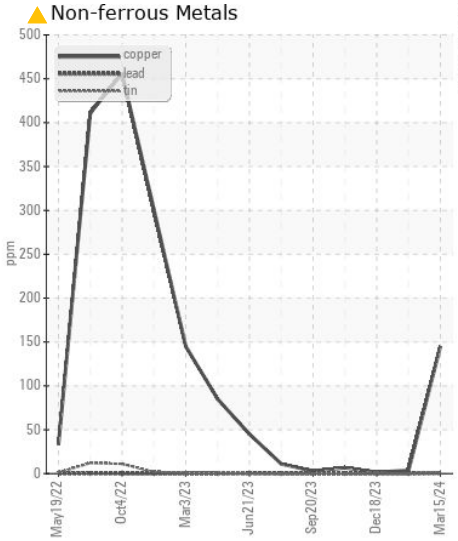
Base Number



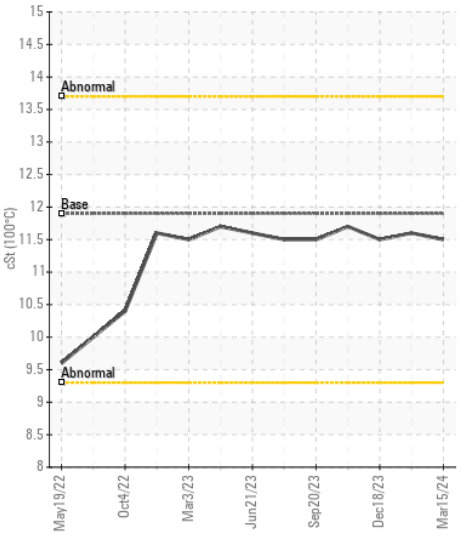
Ferrous Alloys



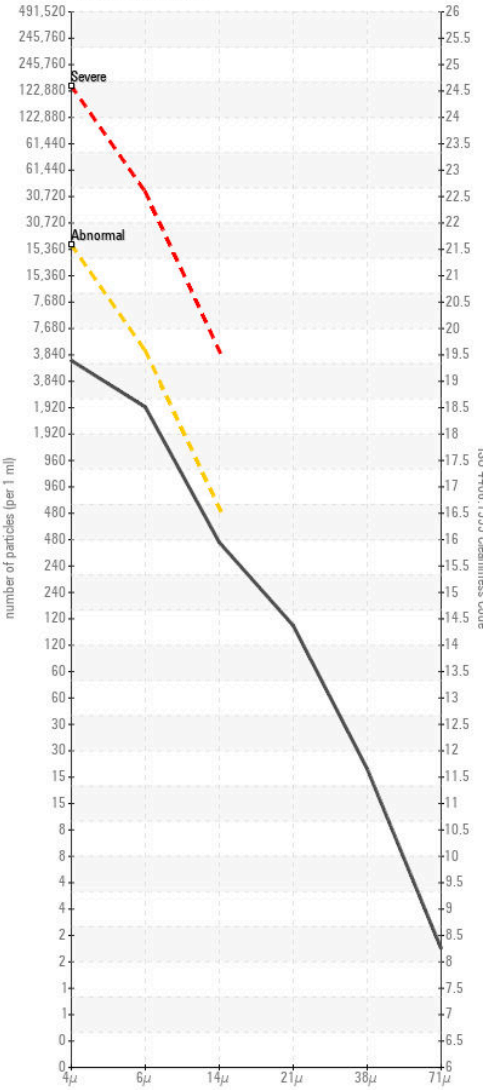
Non-ferrous Metals



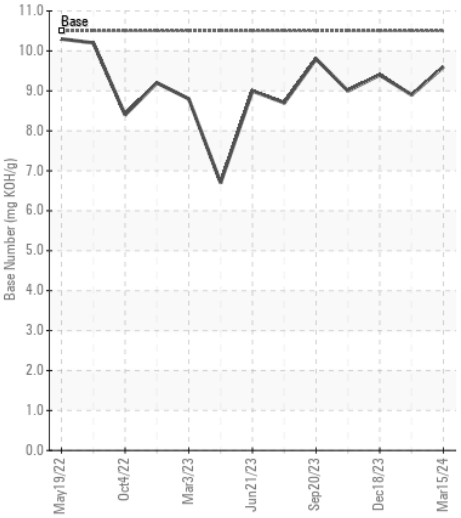
Viscosity @ 100°C



Particle Count



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0918632
Lab Number : 06123518
Unique Number : 10937669
Test Package : CONST (Additional Tests: PrtCount, TBN)

Received : 20 Mar 2024
Tested : 21 Mar 2024
Diagnosed : 22 Mar 2024 - Jonathan Hester

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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