CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
Mobile Fleet
Machine Id
5220 5220
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (9 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

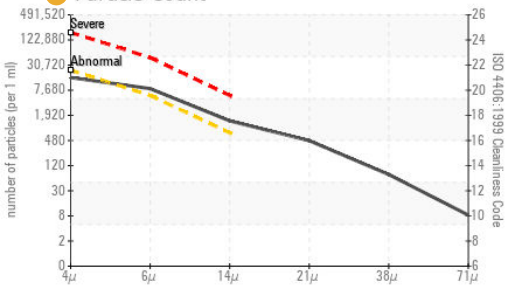
There is a moderate amount of particulates present in the oil.

FLUID CONDITION

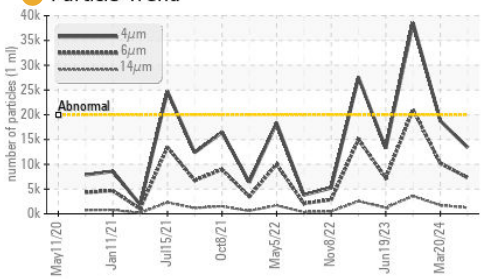
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0937922	WC0919000	WC0852498
Sample Date		Client Info		12 Jun 2024	20 Mar 2024	08 Sep 2023
Machine Age	hrs	Client Info		9669	9049	8164
Oil Age	hrs	Client Info		583	885	569
Filter Age	hrs	Client Info		583	885	569
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>51	41	▲ 58	23
Chromium	ppm	ASTM D5185m	>11	<1	2	<1
Nickel	ppm	ASTM D5185m	>5	7	▲ 11	8
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>31	6	4	<1
Lead	ppm	ASTM D5185m	>26	<1	2	0
Copper	ppm	ASTM D5185m	>26	2	5	<1
Tin	ppm	ASTM D5185m	>4	<1	2	<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	>22	14	17	10
Potassium	ppm	ASTM D5185m	>20	3	3	1
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.9	0.7
Nitration	Abs/cm	*ASTM D7624	>20	8.0	10.5	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	22.9	21.9
Particles >4µm		ASTM D7647	>20000	13389	18765	▲ 38557
Particles >6µm		ASTM D7647	>5000	● 7294	▲ 10222	▲ 21004
Particles >14µm		ASTM D7647	>640	● 1241	▲ 1740	▲ 3575
Particles >21µm		ASTM D7647	>160	● 418	▲ 586	▲ 1204
Particles >38µm		ASTM D7647	>40	● 65	▲ 90	▲ 186
Particles >71µm		ASTM D7647	>10	7	9	▲ 19
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 21/20/17	▲ 21/21/18	▲ 22/22/19
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	>0.21	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>31	2	2	4
Boron	ppm	ASTM D5185m	0	20	38	17
Barium	ppm	ASTM D5185m	0	0	1	0
Molybdenum	ppm	ASTM D5185m	0	52	72	48
Manganese	ppm	ASTM D5185m		<1	2	<1
Magnesium	ppm	ASTM D5185m	0	561	543	548
Calcium	ppm	ASTM D5185m		1824	1731	1812
Phosphorus	ppm	ASTM D5185m		775	843	816
Zinc	ppm	ASTM D5185m		1021	995	1009
Sulfur	ppm	ASTM D5185m		3000	2754	3262
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	22.0	19.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	9.4	8.2	8.8
Visc @ 100°C	cSt	ASTM D445	14	13.3	13.4	13.0

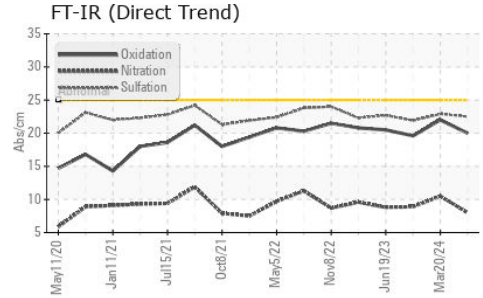
Particle Count



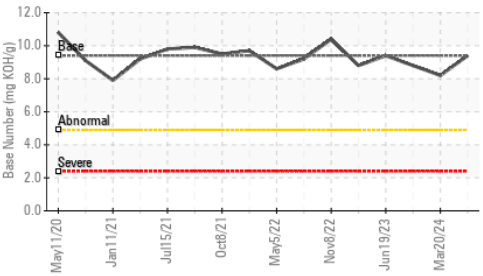
Particle Trend



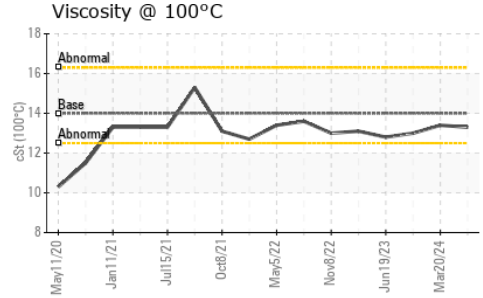
FT-IR (Direct Trend)



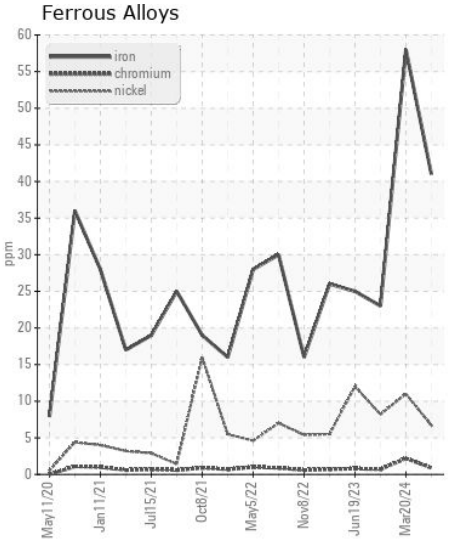
Base Number



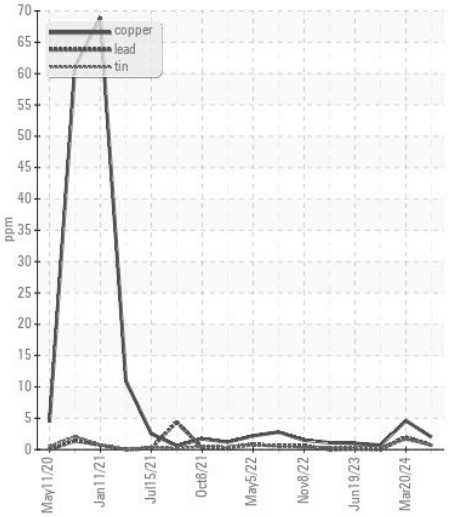
Viscosity @ 100°C



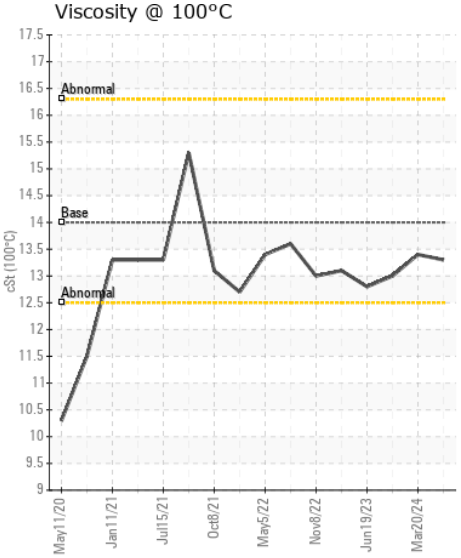
Ferrous Alloys



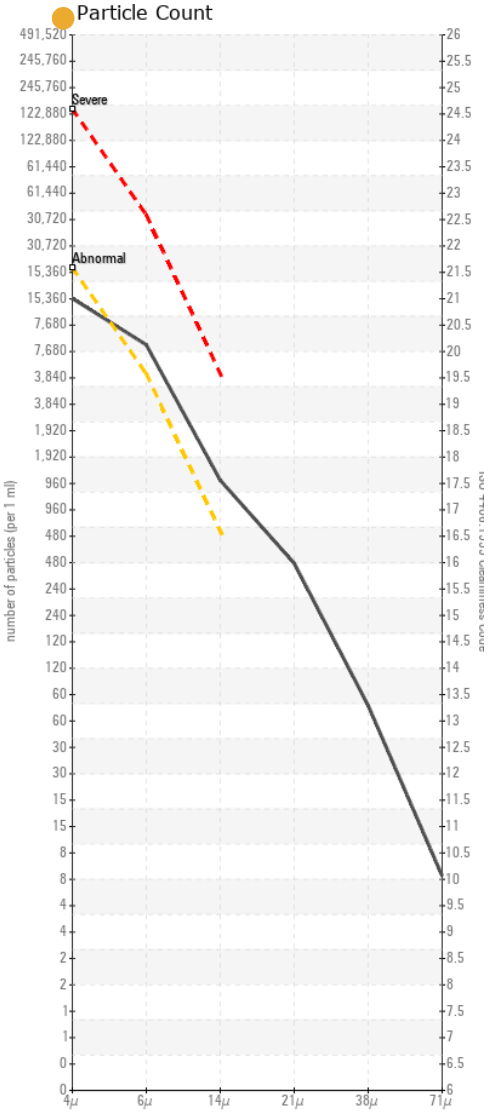
Non-ferrous Metals



Viscosity @ 100°C



Particle Count



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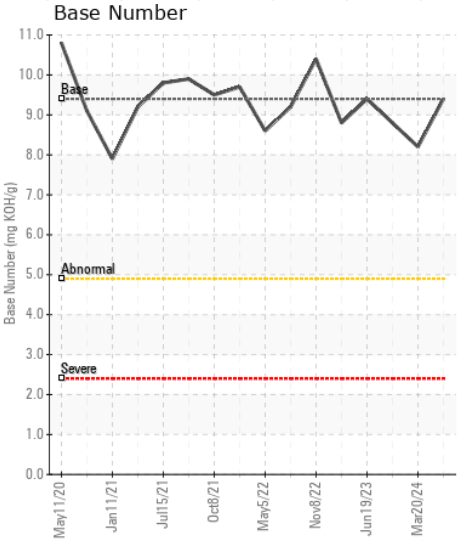

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0937922 **Received** : 14 Jun 2024
Lab Number : 06209936 **Tested** : 19 Jun 2024
Unique Number : 11082800 **Diagnosed** : 19 Jun 2024 - Don Baldridge
Test Package : CONST (Additional Tests: PrtCount, 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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