CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
Mobile Fleet
Machine Id
6420 6420
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER 10W30 (8 GAL)

RECOMMENDATION

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

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

CONTAMINATION

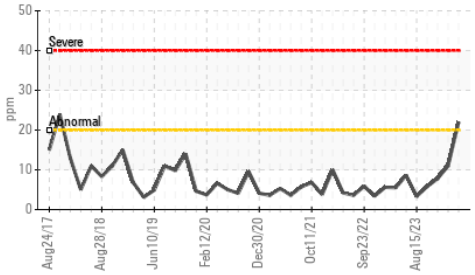
There is a moderate amount of particulates present in the oil.

FLUID CONDITION

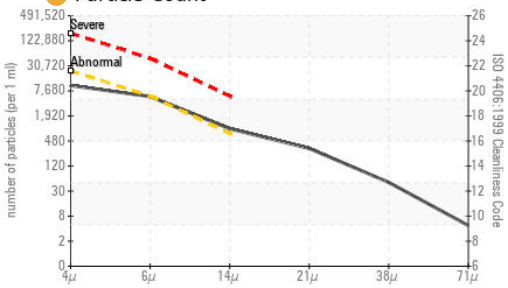
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0939389	WC0902931	WC0861892
Sample Date		Client Info		08 May 2024	08 Mar 2024	12 Jan 2024
Machine Age	hrs	Client Info		14491	14103	13806
Oil Age	hrs	Client Info		680	292	339
Filter Age	hrs	Client Info		680	292	339
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ABNORMAL	ATTENTION	NORMAL
Iron	ppm	ASTM D5185m	>100	30	11	11
Chromium	ppm	ASTM D5185m	>20	2	<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	▲ 22	11	8
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	3	1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	14	10	8
Potassium	ppm	ASTM D5185m	>20	12	7	4
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	0.5	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.3	6.7	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	21.5	21.6
Particles >4µm		ASTM D7647	>20000	8978	8482	5559
Particles >6µm		ASTM D7647	>5000	4891	4621	3028
Particles >14µm		ASTM D7647	>640	● 832	● 786	515
Particles >21µm		ASTM D7647	>160	● 280	● 265	174
Particles >38µm		ASTM D7647	>40	● 43	● 41	27
Particles >71µm		ASTM D7647	>10	4	4	3
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 20/19/17	● 20/19/17	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		3	0	2
Boron	ppm	ASTM D5185m		70	53	37
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		73	45	42
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		770	484	502
Calcium	ppm	ASTM D5185m		2567	1612	1530
Phosphorus	ppm	ASTM D5185m		1208	722	771
Zinc	ppm	ASTM D5185m		1400	898	890
Sulfur	ppm	ASTM D5185m		4168	2573	2416
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.9	19.8	20.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	9.1	10.0	9.2
Visc @ 100°C	cSt	ASTM D445	11.9	11.5	11.4	11.4

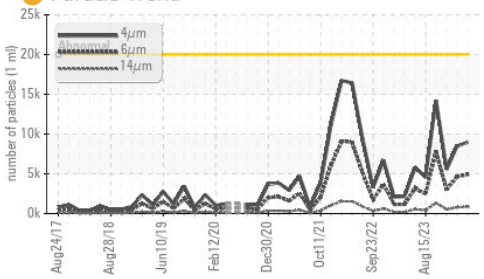
Aluminum (ppm)



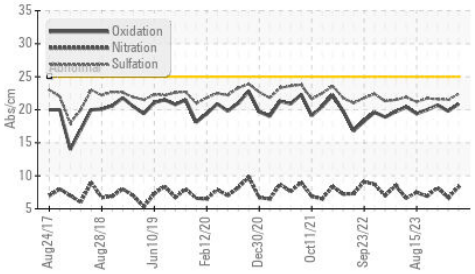
Particle Count



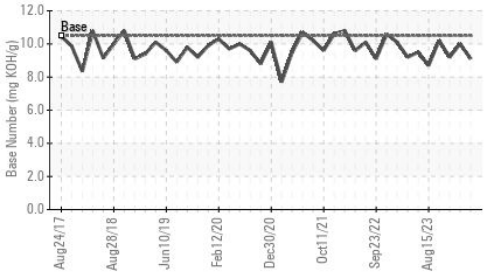
Particle Trend



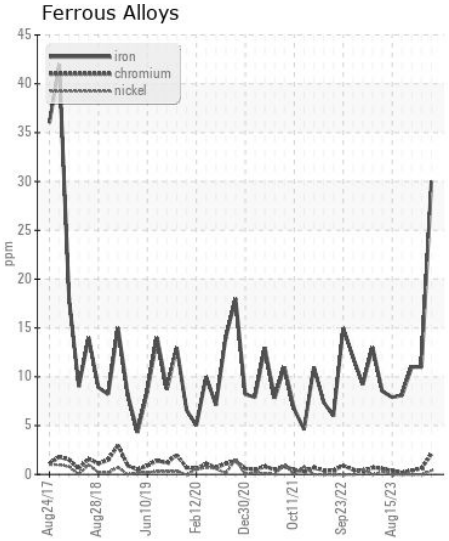
FT-IR (Direct Trend)



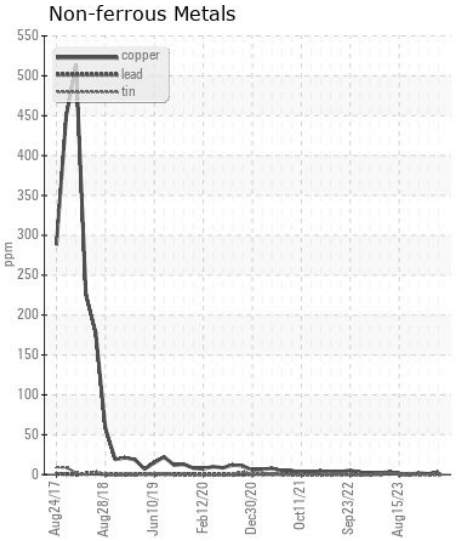
Base Number



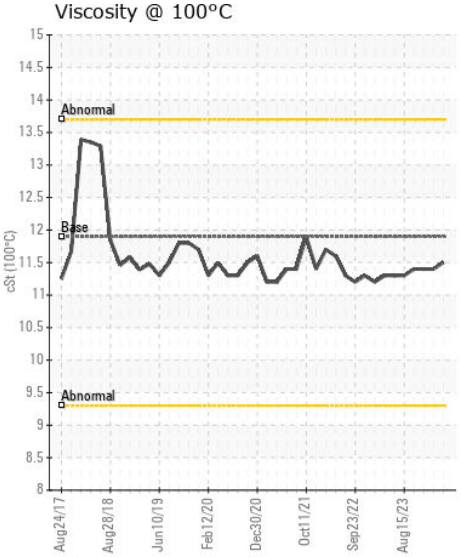
Ferrous Alloys



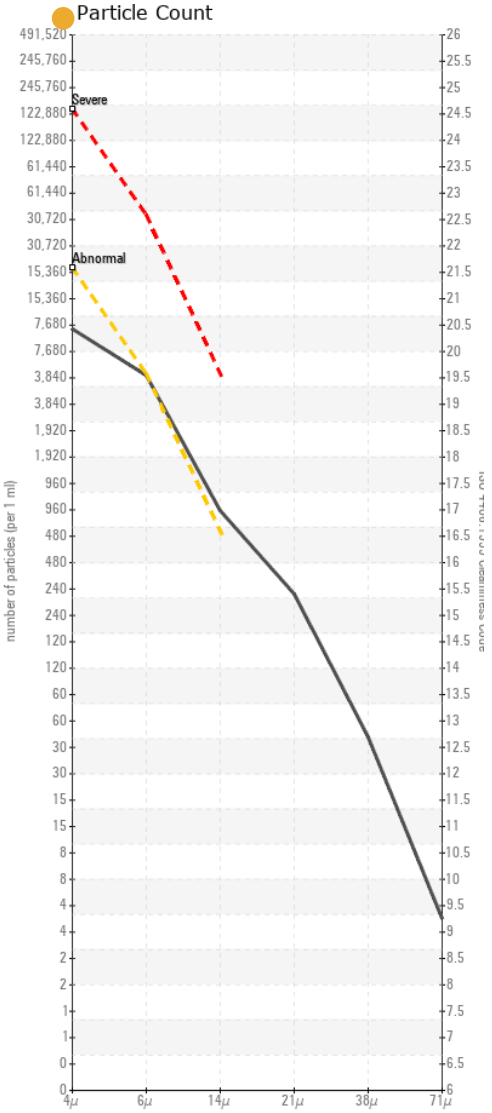
Non-ferrous Metals



Viscosity @ 100°C



Particle Count



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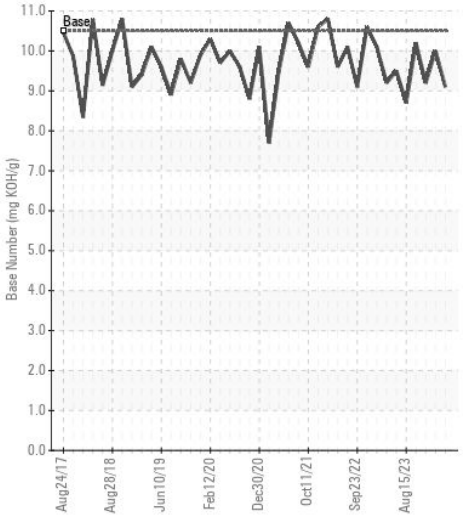

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0939389 **Received** : 10 May 2024
Lab Number : 06176630 **Tested** : 15 May 2024
Unique Number : 11022683 **Diagnosed** : 15 May 2024 - Sean Felton
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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