



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
Mobile Fleet

Machine Id
6408 6408

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 10W30 (10 GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0918627	WC0902783	WC0867101
Sample Date		Client Info		15 Mar 2024	05 Feb 2024	29 Nov 2023
Machine Age	hrs	Client Info		19556	19303	19054
Oil Age	hrs	Client Info		261	253	392
Filter Age	hrs	Client Info		261	253	392
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	30	16	32
Chromium	ppm	ASTM D5185m	>20	2	<1	2
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	14	8	14
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	3	<1	4
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

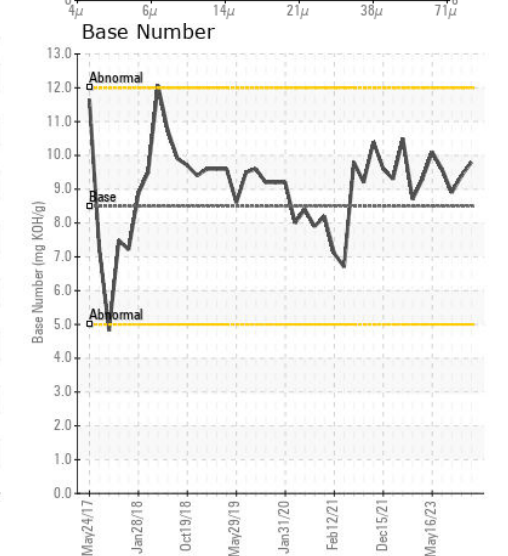
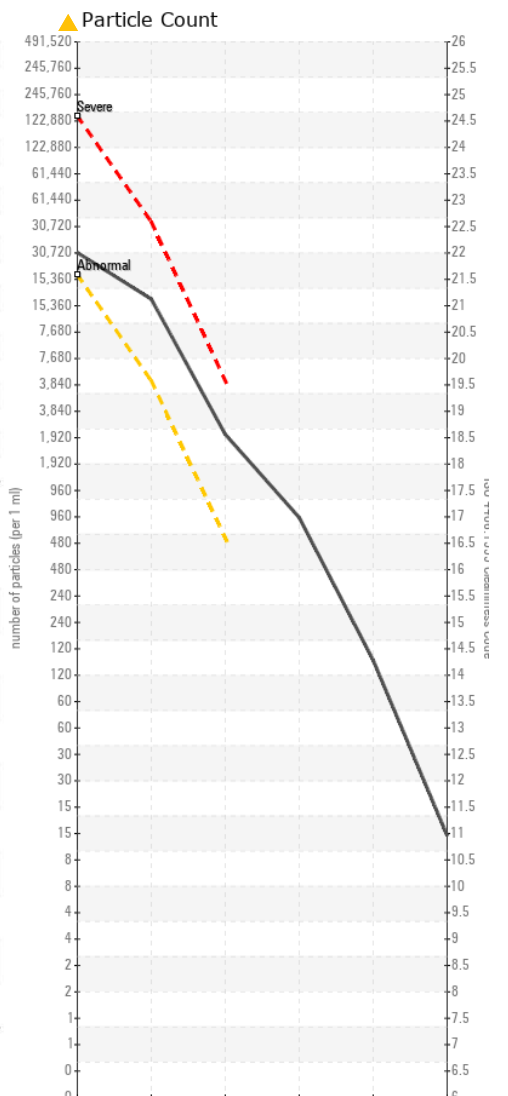
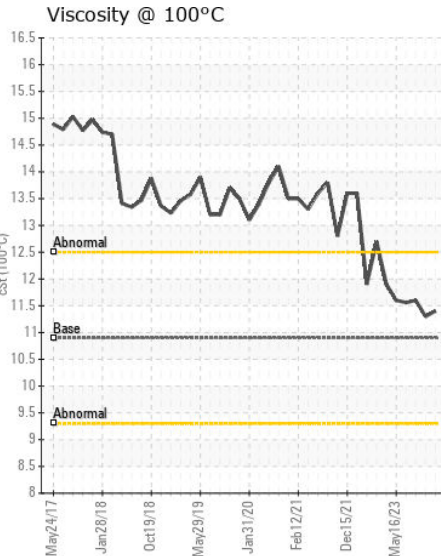
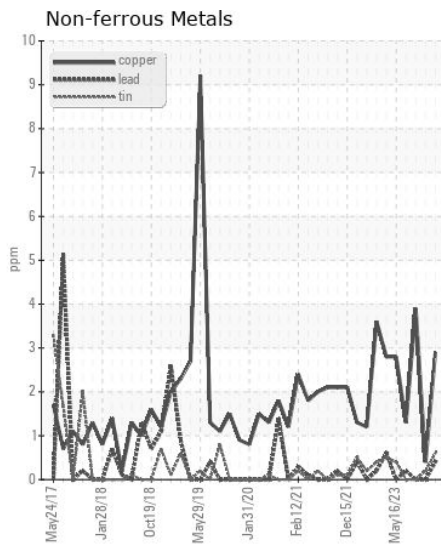
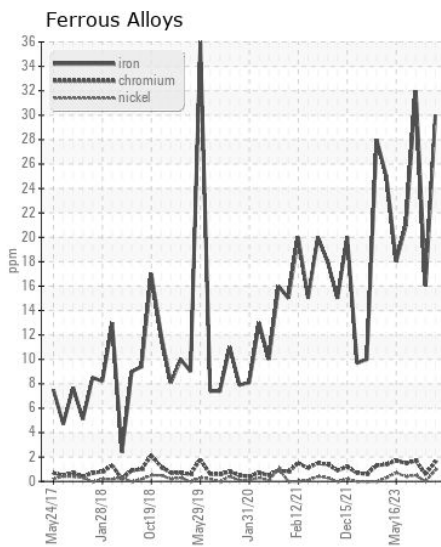
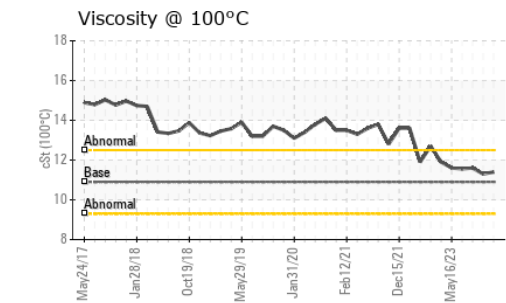
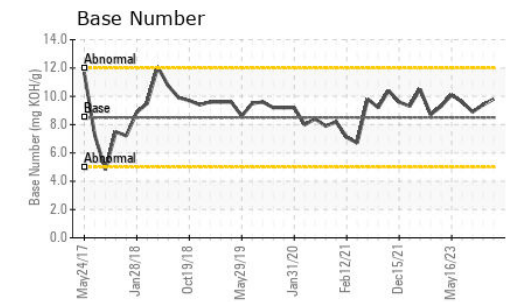
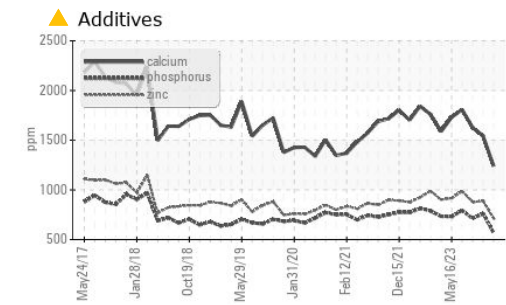
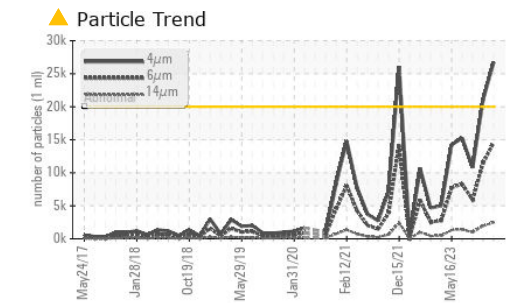
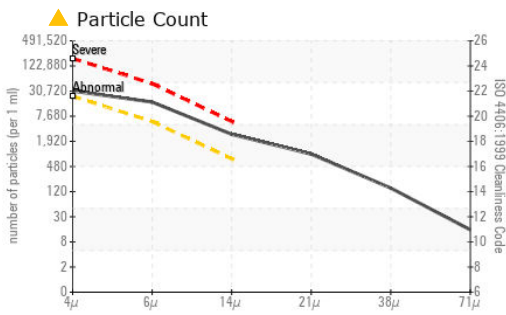
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	8	8	8
Potassium	ppm	ASTM D5185m	>20	4	0	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	0.3	0.4	0.9
Nitration	Abs/cm	*ASTM D7624	>20	6.7	6.9	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	21.8	22.4
Particles >4µm		ASTM D7647	>20000	▲ 26717	▲ 21079	10796
Particles >6µm		ASTM D7647	>5000	▲ 14554	▲ 11483	5881
Particles >14µm		ASTM D7647	>640	▲ 2477	▲ 1954	1001
Particles >21µm		ASTM D7647	>160	▲ 834	▲ 658	337
Particles >38µm		ASTM D7647	>40	▲ 129	▲ 102	52
Particles >71µm		ASTM D7647	>10	▲ 13	10	5
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 22/21/18	▲ 22/21/18	▲ 21/20/17
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

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.

Sodium	ppm	ASTM D5185m		7	2	0
Boron	ppm	ASTM D5185m	250	22	54	29
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	35	48	51
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	450	392	500	476
Calcium	ppm	ASTM D5185m	3000	1240	1543	1626
Phosphorus	ppm	ASTM D5185m	1150	▲ 567	763	712
Zinc	ppm	ASTM D5185m	1350	713	885	880
Sulfur	ppm	ASTM D5185m	4250	2062	2363	2306
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	19.6	20.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.8	9.4	8.9
Visc @ 100°C	cSt	ASTM D445	10.9	11.4	11.3	11.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0918627 **Received** : 20 Mar 2024
Lab Number : 06123522 **Tested** : 21 Mar 2024
Unique Number : 10937673 **Diagnosed** : 22 Mar 2024 - Jonathan Hester
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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