



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
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. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0861784	WC0862013	WC0765087
Sample Date		Client Info		17 Jan 2024	05 Oct 2023	04 May 2023
Machine Age	hrs	Client Info		9813	9351	9030
Oil Age	hrs	Client Info		465	321	276
Filter Age	hrs	Client Info		465	321	276
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	21	16	16
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	7	16	6
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	1	2	1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

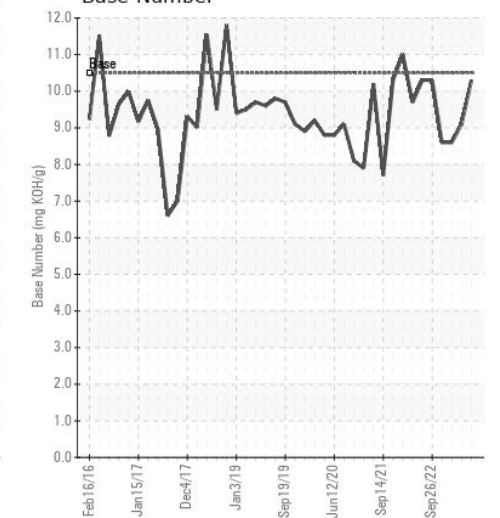
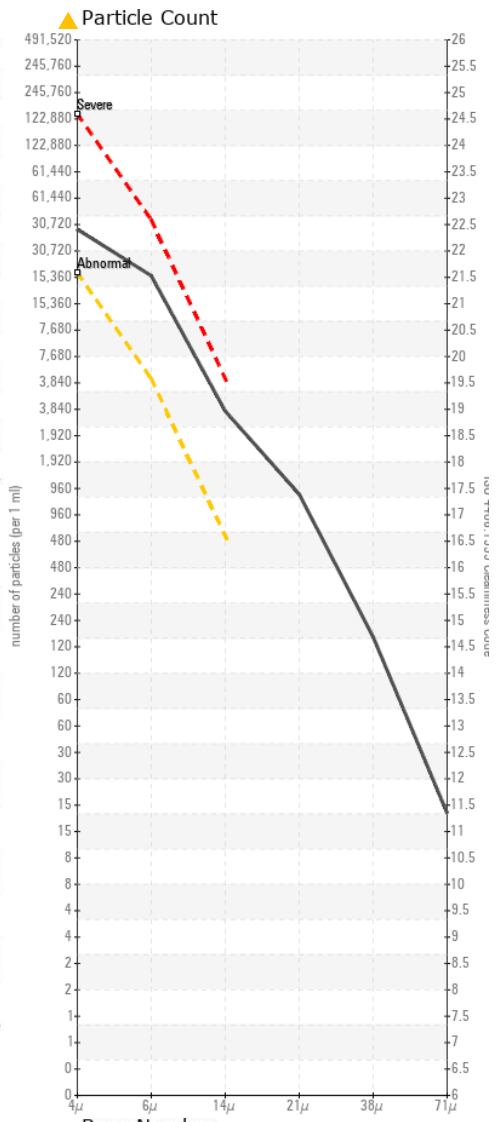
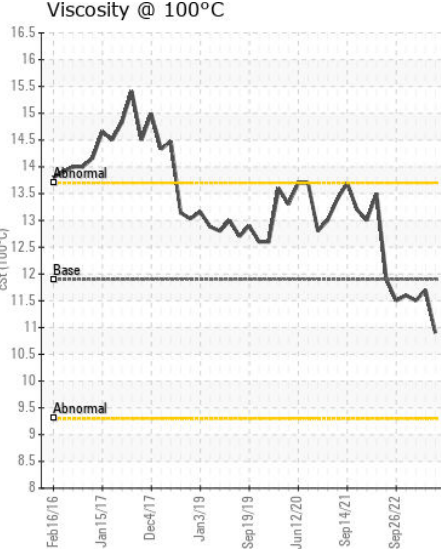
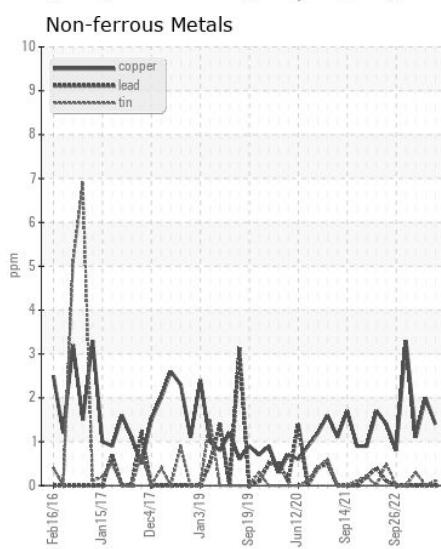
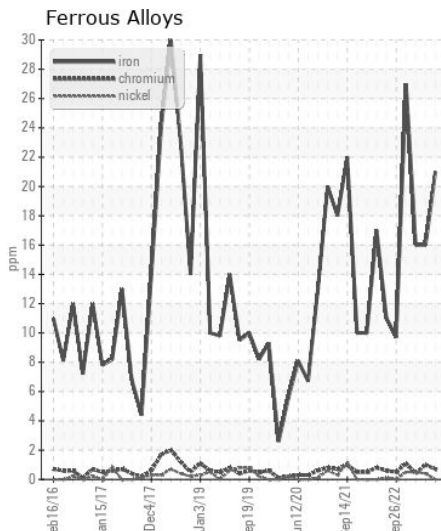
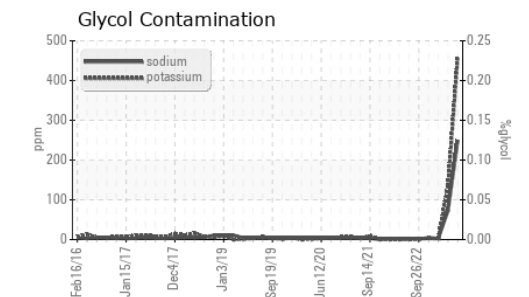
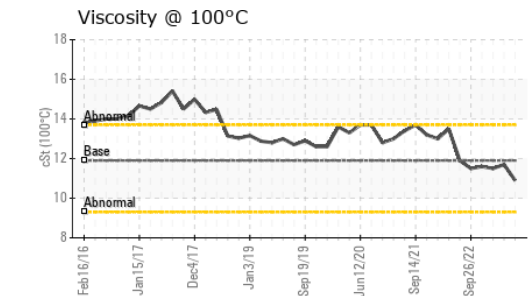
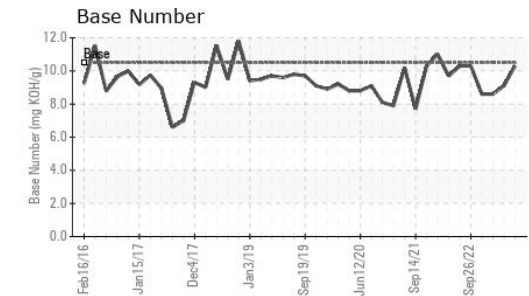
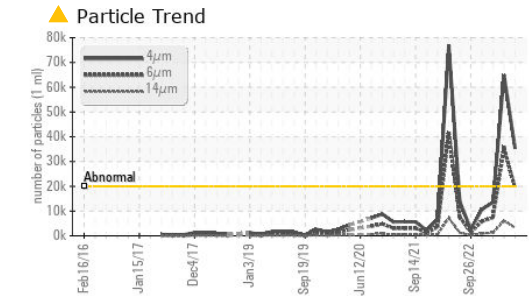
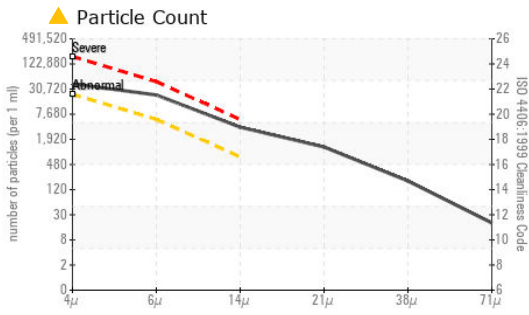
Sodium and/or potassium levels are high. There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	8	8	10
Potassium	ppm	ASTM D5185m	>20	▲ 459	▲ 134	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.0	9.4	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	21.9	20.1
Particles >4µm		ASTM D7647	>20000	▲ 35303	▲ 64960	13545
Particles >6µm		ASTM D7647	>5000	▲ 19232	▲ 35388	▲ 7379
Particles >14µm		ASTM D7647	>640	▲ 3273	▲ 6023	▲ 1256
Particles >21µm		ASTM D7647	>160	▲ 1102	▲ 2029	▲ 423
Particles >38µm		ASTM D7647	>40	▲ 170	▲ 313	▲ 65
Particles >71µm		ASTM D7647	>10	▲ 17	▲ 32	7
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 22/21/19	▲ 23/22/20	▲ 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.

Sodium	ppm	ASTM D5185m		▲ 250	▲ 73	3
Boron	ppm	ASTM D5185m		22	22	42
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		117	63	46
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		532	520	542
Calcium	ppm	ASTM D5185m		1606	1565	1694
Phosphorus	ppm	ASTM D5185m		766	754	745
Zinc	ppm	ASTM D5185m		929	943	927
Sulfur	ppm	ASTM D5185m		2624	2642	2628
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.3	20.5	18.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	10.3	9.1	8.6
Visc @ 100°C	cSt	ASTM D445	11.9	10.9	11.7	11.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0861784 **Received** : 19 Jan 2024
Lab Number : 06065473 **Diagnosed** : 23 Jan 2024
Unique Number : 10836855 **Diagnostician** : Angela Borella
Test Package : CONST (Additional Tests: Glycol, PrtCount, TBN)

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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)