



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
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. 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		WC0939241	WC0918636	WC0861784
Sample Date		Client Info		23 May 2024	18 Mar 2024	17 Jan 2024
Machine Age	hrs	Client Info		10413	10151	9813
Oil Age	hrs	Client Info		601	339	465
Filter Age	hrs	Client Info		601	339	465
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				SEVERE	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	37	22	21
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	13	6	7
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	2	1	1
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

CONTAMINATION

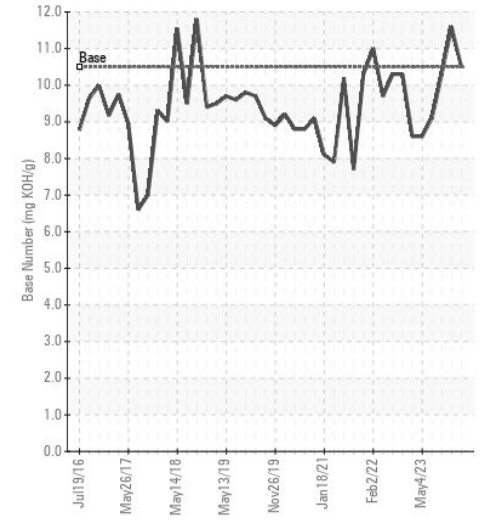
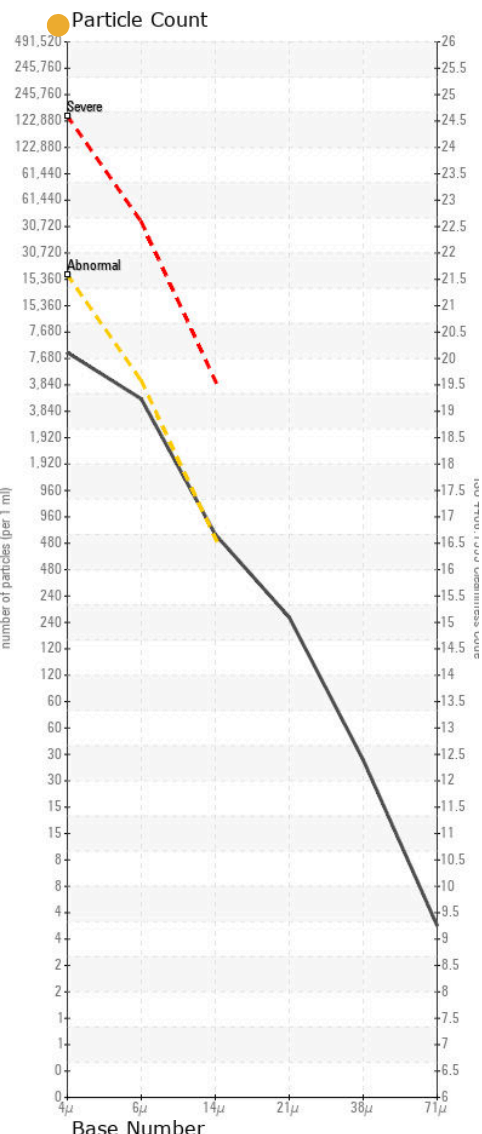
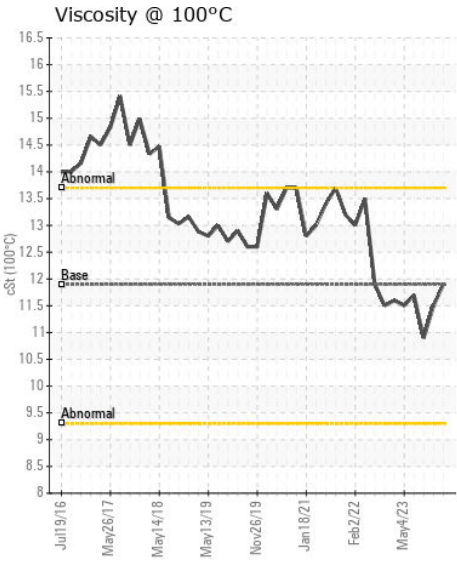
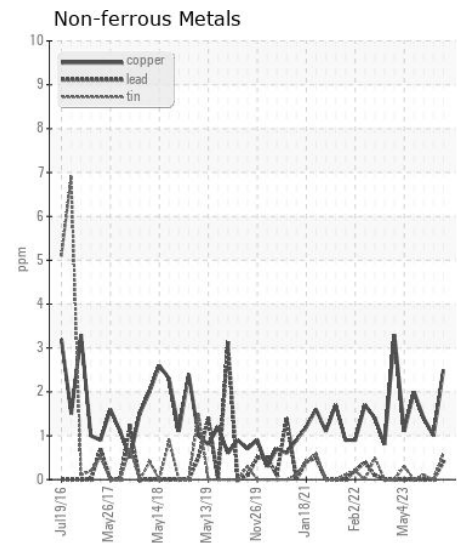
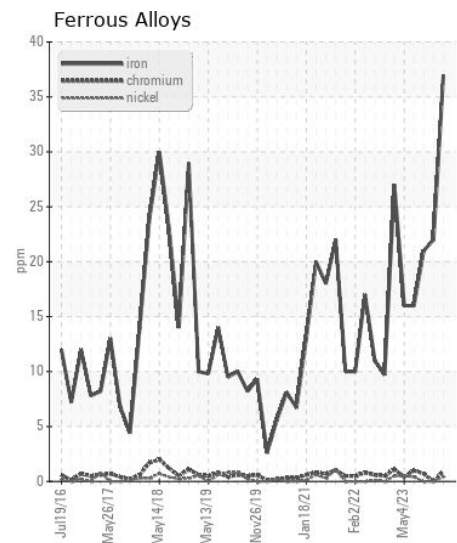
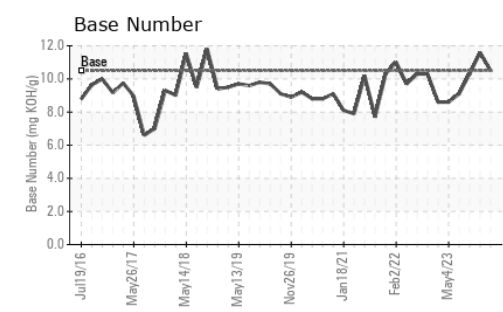
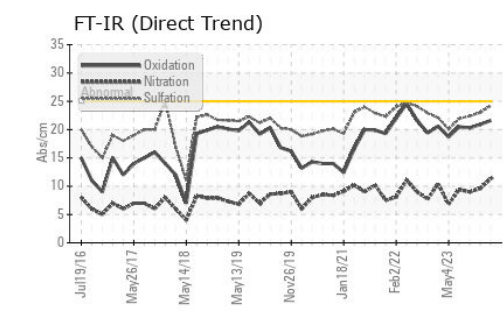
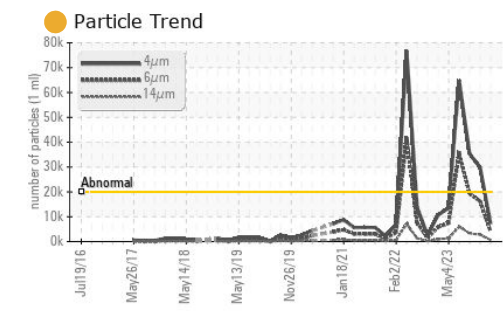
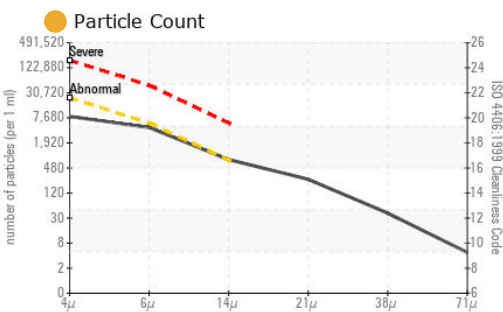
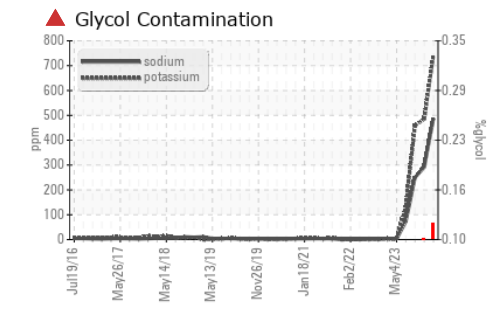
Sodium and/or potassium levels are high. Test for glycol is positive. There is a moderate amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	11	12	8
Potassium	ppm	ASTM D5185m	>20	▲ 745	▲ 485	▲ 459
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		▲ 0.12	▲ 0.10	NEG
Soot %	%	*ASTM D7844	>3	1	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	11.3	9.6	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.2	23.0	22.4
Particles >4µm		ASTM D7647	>20000	7229	▲ 29866	● 35303
Particles >6µm		ASTM D7647	>5000	3938	▲ 16270	▲ 19232
Particles >14µm		ASTM D7647	>640	● 670	▲ 2769	▲ 3273
Particles >21µm		ASTM D7647	>160	● 226	▲ 933	▲ 1102
Particles >38µm		ASTM D7647	>40	35	▲ 144	▲ 170
Particles >71µm		ASTM D7647	>10	4	▲ 15	● 17
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 20/19/17	▲ 22/21/19	▲ 22/21/19
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		▲ 487	▲ 292	▲ 250
Boron	ppm	ASTM D5185m		19	12	22
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		179	115	117
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		510	440	532
Calcium	ppm	ASTM D5185m		1657	1573	1606
Phosphorus	ppm	ASTM D5185m		750	724	766
Zinc	ppm	ASTM D5185m		896	789	929
Sulfur	ppm	ASTM D5185m		2861	2648	2624
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.6	20.9	20.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	10.5	11.6	10.3
Visc @ 100°C	cSt	ASTM D445	11.9	11.9	11.5	10.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0939241
Lab Number : 06193449
Unique Number : 11050201
Test Package : CONST (Additional Tests: PrtCount, TBN)

Received : 28 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 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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