



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
Mobile Fleet
 Machine Id
345 345
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (9 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0939276	WC0819197	WC0740716
Sample Date		Client Info		16 May 2024	22 Jun 2023	16 Sep 2022
Machine Age	hrs	Client Info		31225	30695	30119
Oil Age	hrs	Client Info		1129	599	770
Filter Age	hrs	Client Info		1129	599	770
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	25	25	44
Chromium	ppm	ASTM D5185m	>20	1	<1	2
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	3	1	2
Lead	ppm	ASTM D5185m	>40	7	6	25
Copper	ppm	ASTM D5185m	>330	7	7	8
Tin	ppm	ASTM D5185m	>15	2	1	2
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

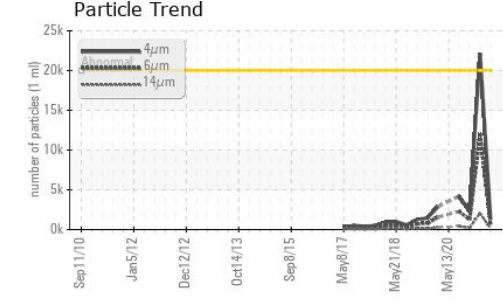
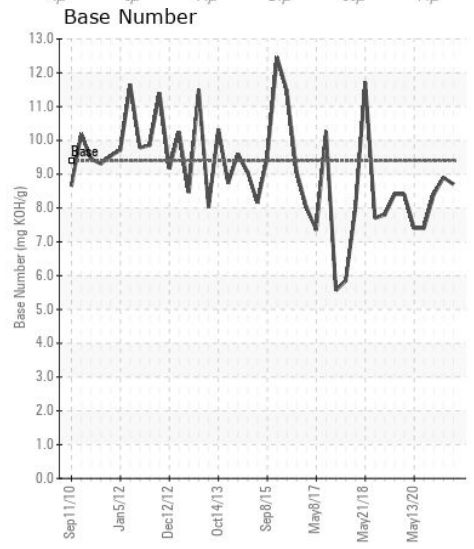
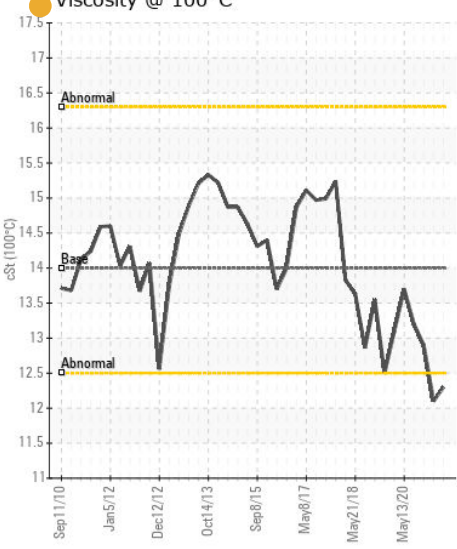
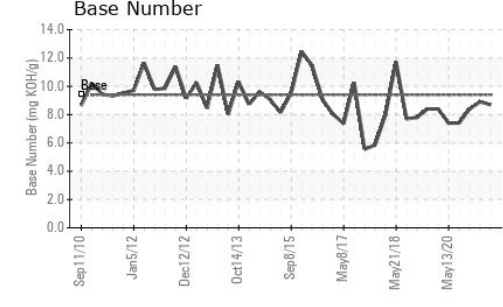
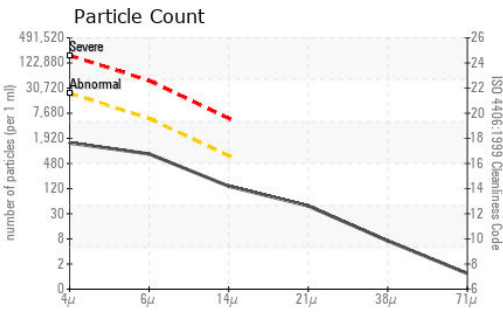
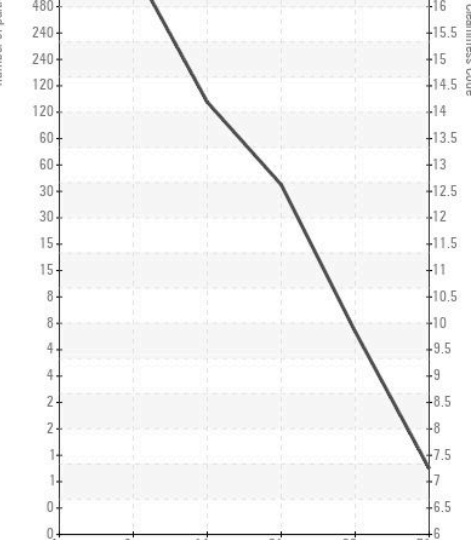
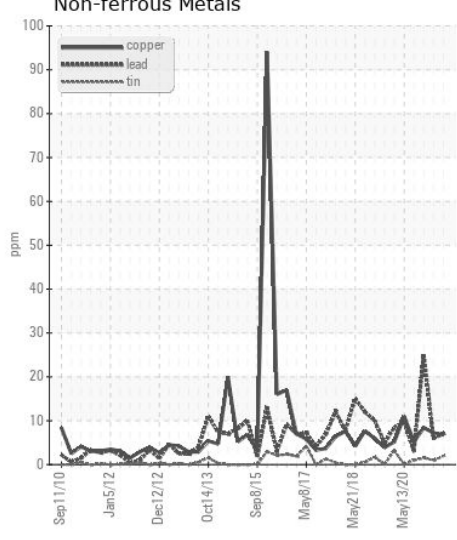
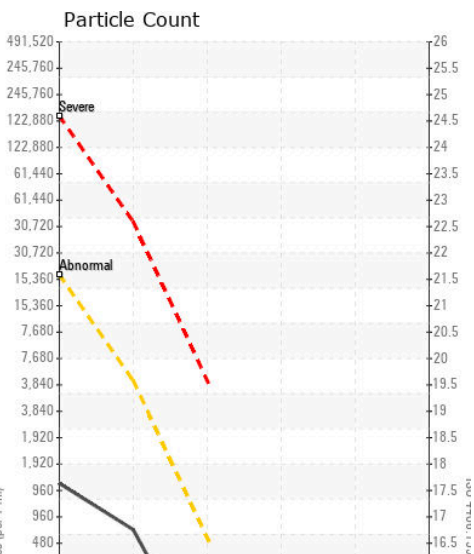
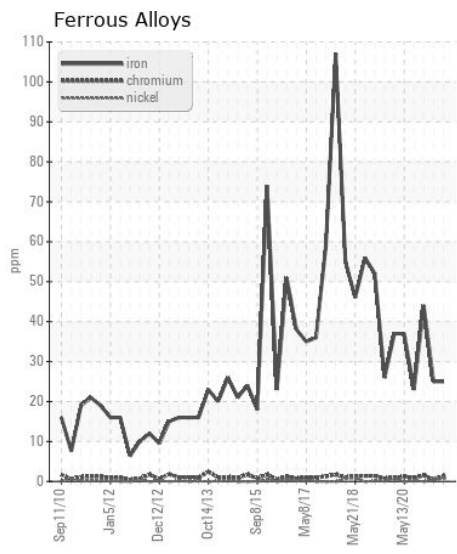
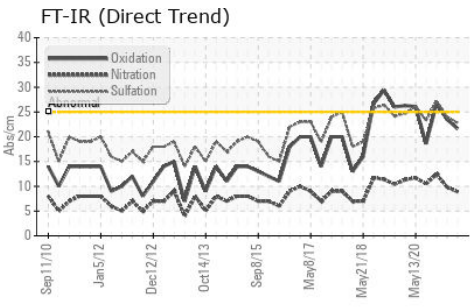
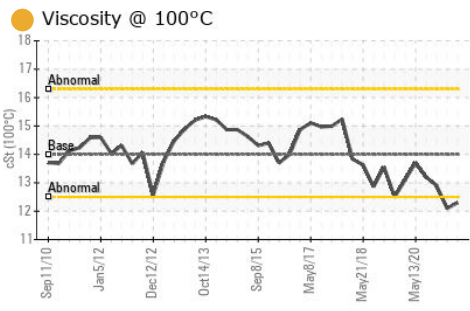
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>25	8	8	13
Potassium	ppm	ASTM D5185m	>20	2	1	1
Fuel		WC Method	>5	<1.0	▲ 3.2	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.6
Nitration	Abs/cm	*ASTM D7624	>20	8.9	9.8	12.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.8	24.0	27.2
Particles >4µm		ASTM D7647	>20000	1305	▲ 22115	2279
Particles >6µm		ASTM D7647	>5000	711	▲ 12047	1242
Particles >14µm		ASTM D7647	>640	121	▲ 2050	211
Particles >21µm		ASTM D7647	>160	41	▲ 691	71
Particles >38µm		ASTM D7647	>40	6	▲ 107	11
Particles >71µm		ASTM D7647	>10	1	▲ 11	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	18/17/14	▲ 22/21/18	18/17/15
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		6	0	8
Boron	ppm	ASTM D5185m	0	43	46	28
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	48	53	43
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	518	514	656
Calcium	ppm	ASTM D5185m		1665	1676	1756
Phosphorus	ppm	ASTM D5185m		826	769	781
Zinc	ppm	ASTM D5185m		942	934	1056
Sulfur	ppm	ASTM D5185m		2860	2448	3162
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.6	23.5	26.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	8.7	8.9	8.4
Visc @ 100°C	cSt	ASTM D445	14	12.3	12.1	12.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0939276 **Received** : 21 May 2024
Lab Number : 06185988 **Tested** : 23 May 2024
Unique Number : 11042740 **Diagnosed** : 23 May 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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