



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	MARGINAL



Area
Mobile Fleet
Machine Id
7732 7732
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (2 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		WC0902831	WC0808385	WC0606845
Sample Date		Client Info		07 Feb 2024	23 Aug 2023	05 Aug 2021
Machine Age	hrs	Client Info		1707	1484	884
Oil Age	hrs	Client Info		237	1484	7
Filter Age	hrs	Client Info		237	1484	7
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	24	47	279
Chromium	ppm	ASTM D5185m	>20	<1	2	15
Nickel	ppm	ASTM D5185m	>2	0	0	6
Titanium	ppm	ASTM D5185m	>2	0	<1	2
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	6	8	▲ 34
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	2	10	44
Tin	ppm	ASTM D5185m	>15	<1	2	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

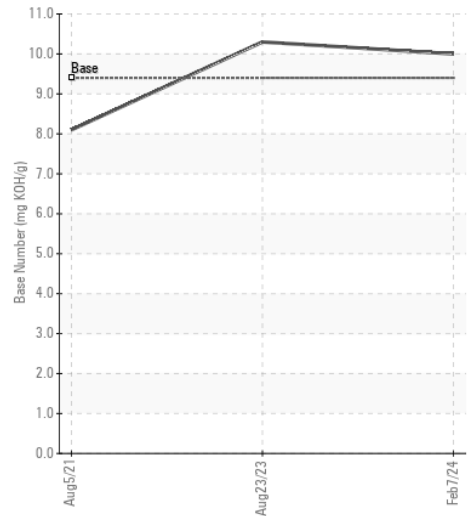
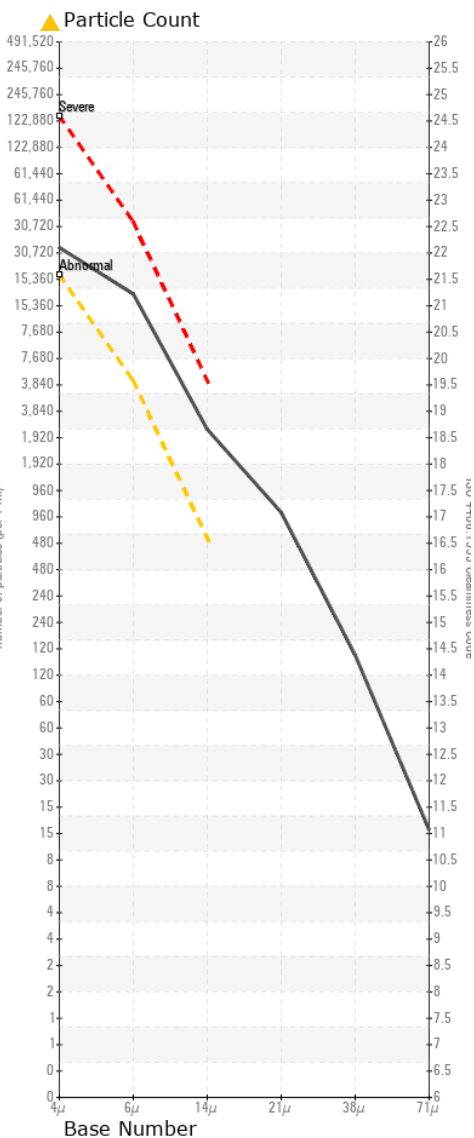
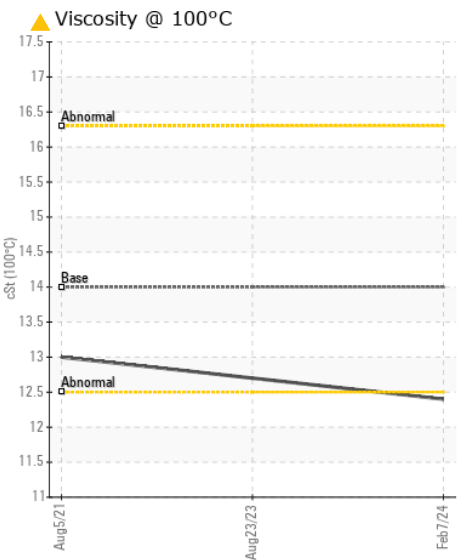
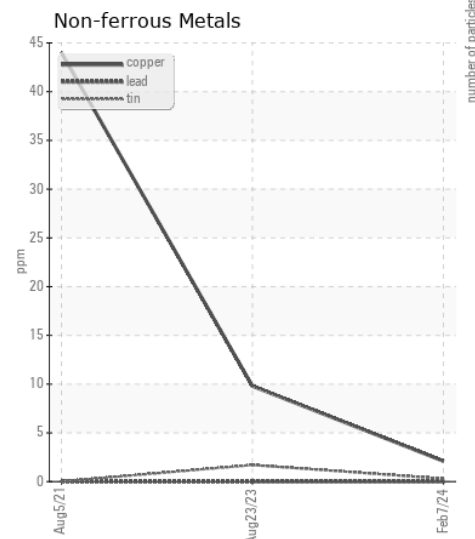
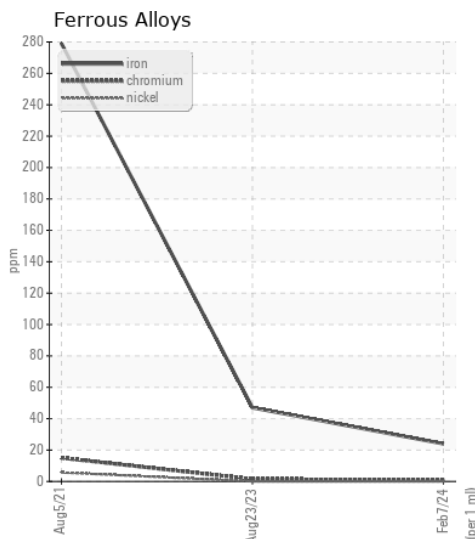
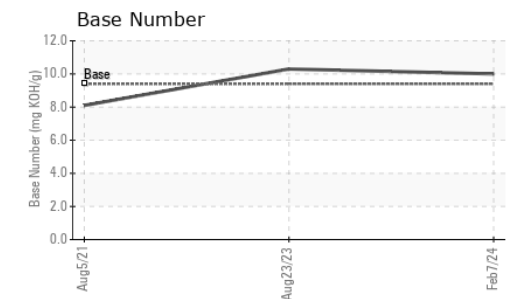
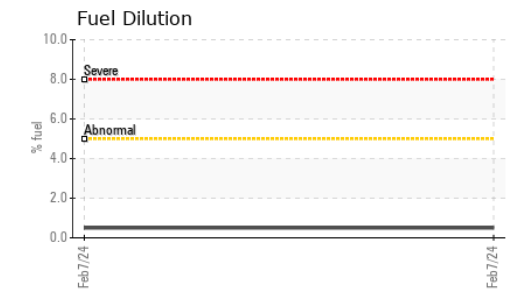
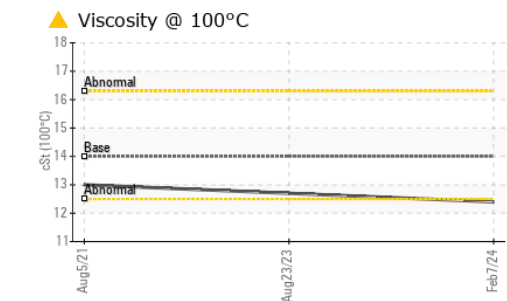
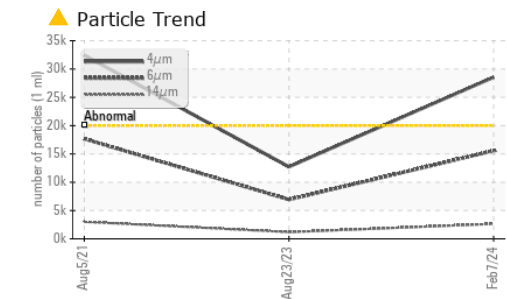
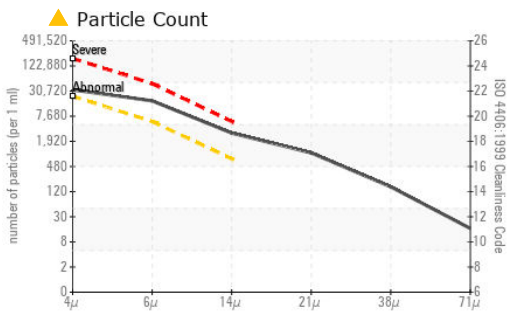
There is a high amount of particulates present in the oil. Fuel content negligible.

Silicon	ppm	ASTM D5185m	>25	18	21	▲ 84
Potassium	ppm	ASTM D5185m	>20	0	2	9
Fuel	%	ASTM D3524	>5	0.5	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.7	8.0	6.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	21.9	20.4
Particles >4µm		ASTM D7647	>20000	▲ 28561	12728	▲ 32411
Particles >6µm		ASTM D7647	>5000	▲ 15559	▲ 6933	▲ 17656
Particles >14µm		ASTM D7647	>640	▲ 2648	▲ 1180	▲ 3005
Particles >21µm		ASTM D7647	>160	▲ 892	▲ 397	▲ 1012
Particles >38µm		ASTM D7647	>40	▲ 138	▲ 61	▲ 156
Particles >71µm		ASTM D7647	>10	▲ 14	6	▲ 16
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 22/21/19	▲ 21/20/17	▲ 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		3	5	4
Boron	ppm	ASTM D5185m	0	56	49	287
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	43	45	101
Manganese	ppm	ASTM D5185m		1	3	2
Magnesium	ppm	ASTM D5185m	0	515	630	482
Calcium	ppm	ASTM D5185m		1627	1737	1399
Phosphorus	ppm	ASTM D5185m		794	890	664
Zinc	ppm	ASTM D5185m		918	1061	780
Sulfur	ppm	ASTM D5185m		2432	3539	2414
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.7	19.7	14.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	10.0	10.3	8.1
Visc @ 100°C	cSt	ASTM D445	14	▲ 12.4	12.7	13.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0902831 **Received** : 12 Feb 2024
Lab Number : 06085941 **Tested** : 15 Feb 2024
Unique Number : 10873386 **Diagnosed** : 15 Feb 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, PrtCount, TBN)

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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)