



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area

Mobile Fleet

Machine Id

6410 6410

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 10W30 (10 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0956012	WC0861851	WC0918594
Sample Date		Client Info		15 Jul 2024	24 Apr 2024	19 Mar 2024
Machine Age	hrs	Client Info		20506	20090	19829
Oil Age	hrs	Client Info		403	261	331
Filter Age	hrs	Client Info		403	261	331
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	37	30	55
Chromium	ppm	ASTM D5185m	>20	1	<1	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	11	8	▲ 26
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	5	4	8
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

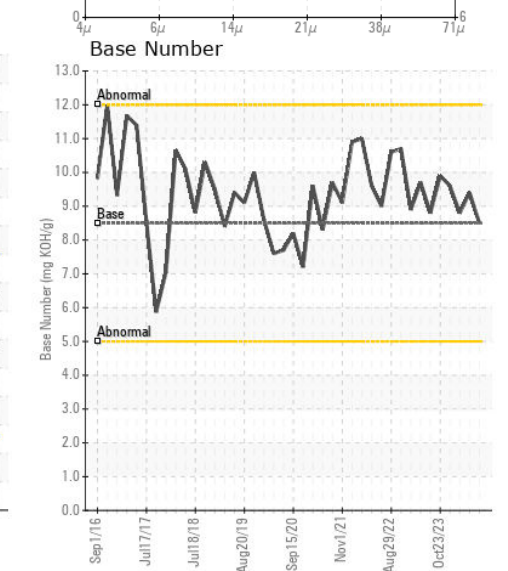
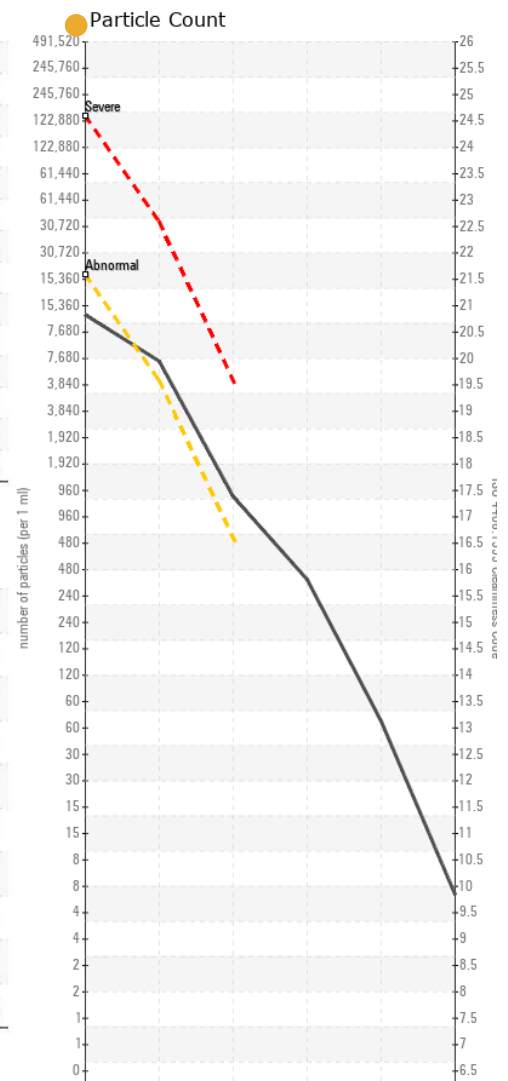
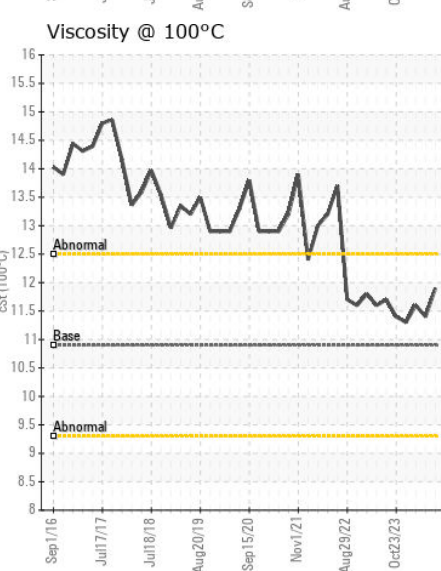
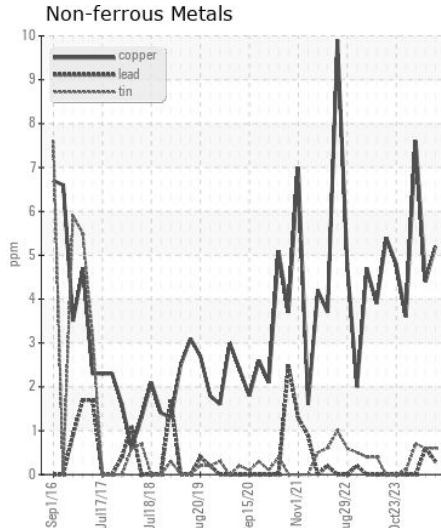
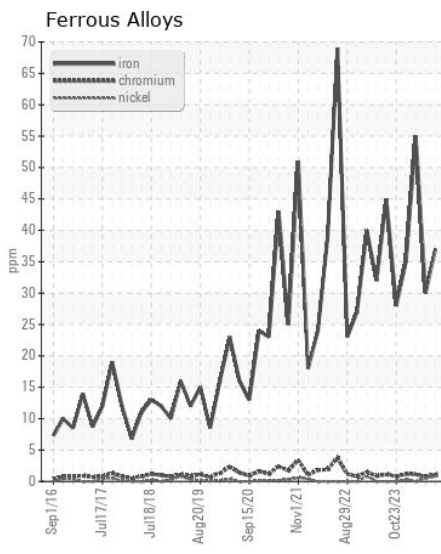
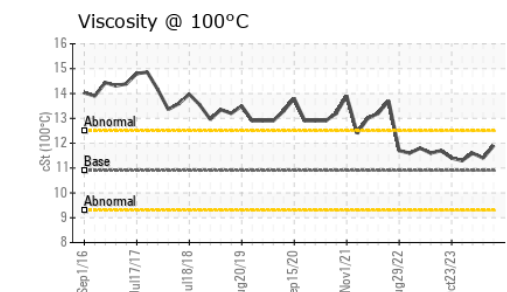
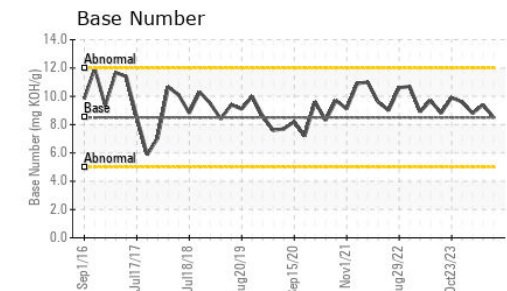
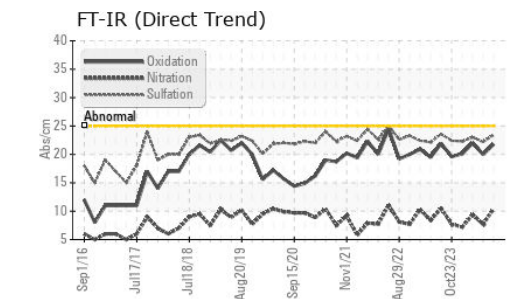
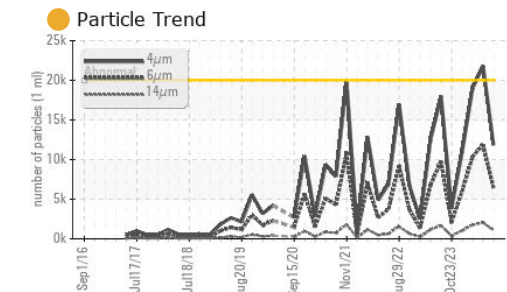
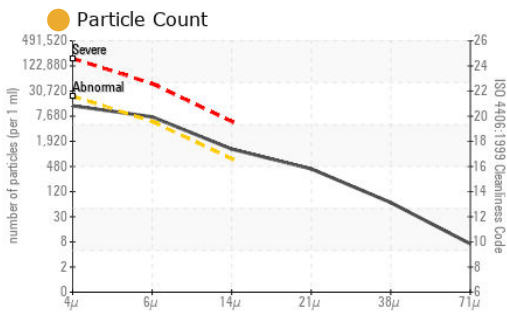
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	13	11	25
Potassium	ppm	ASTM D5185m	>20	4	3	1
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	1.1	0.5	0.7
Nitration	Abs/cm	*ASTM D7624	>20	10.4	7.7	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	22.2	23.0
Particles >4µm		ASTM D7647	>20000	11840	▲ 21793	18965
Particles >6µm		ASTM D7647	>5000	● 6450	▲ 11872	▲ 10331
Particles >14µm		ASTM D7647	>640	● 1098	▲ 2020	▲ 1758
Particles >21µm		ASTM D7647	>160	● 370	▲ 681	▲ 592
Particles >38µm		ASTM D7647	>40	● 58	▲ 105	▲ 91
Particles >71µm		ASTM D7647	>10	6	▲ 11	9
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 21/20/17	▲ 22/21/15	▲ 21/21/18
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		<1	2	5
Boron	ppm	ASTM D5185m	250	23	50	34
Barium	ppm	ASTM D5185m	10	<1	0	0
Molybdenum	ppm	ASTM D5185m	100	51	50	53
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m	450	506	489	532
Calcium	ppm	ASTM D5185m	3000	1678	1615	1763
Phosphorus	ppm	ASTM D5185m	1150	786	756	783
Zinc	ppm	ASTM D5185m	1350	964	906	931
Sulfur	ppm	ASTM D5185m	4250	2582	2672	2760
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.8	20.0	22.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.5	9.4	8.8
Visc @ 100°C	cSt	ASTM D445	10.9	11.9	11.4	11.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0956012 **Received** : 17 Jul 2024
Lab Number : 06239021 **Tested** : 18 Jul 2024
Unique Number : 11127855 **Diagnosed** : 18 Jul 2024 - Don Baldridge
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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