



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

Mobile Fleet

Machine Id

8050 8050

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0918625	WC0861797	WC0867057
Sample Date		Client Info		15 Mar 2024	26 Jan 2024	31 Oct 2023
Machine Age	hrs	Client Info		2193	1890	1625
Oil Age	hrs	Client Info		603	300	294
Filter Age	hrs	Client Info		603	300	294
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	10	33	69
Chromium	ppm	ASTM D5185m	>20	<1	2	4
Nickel	ppm	ASTM D5185m	>4	1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	4	12	27
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	1	91	251
Tin	ppm	ASTM D5185m	>15	<1	<1	<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

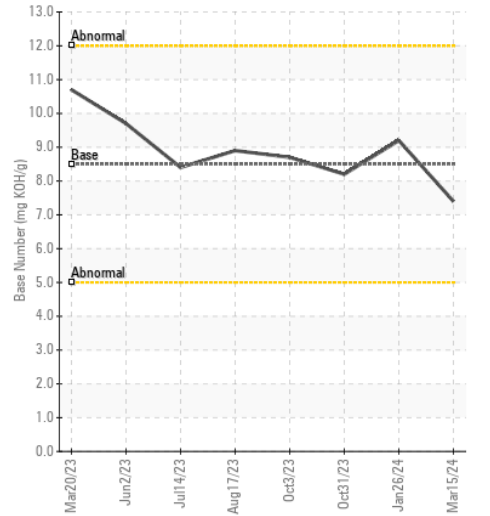
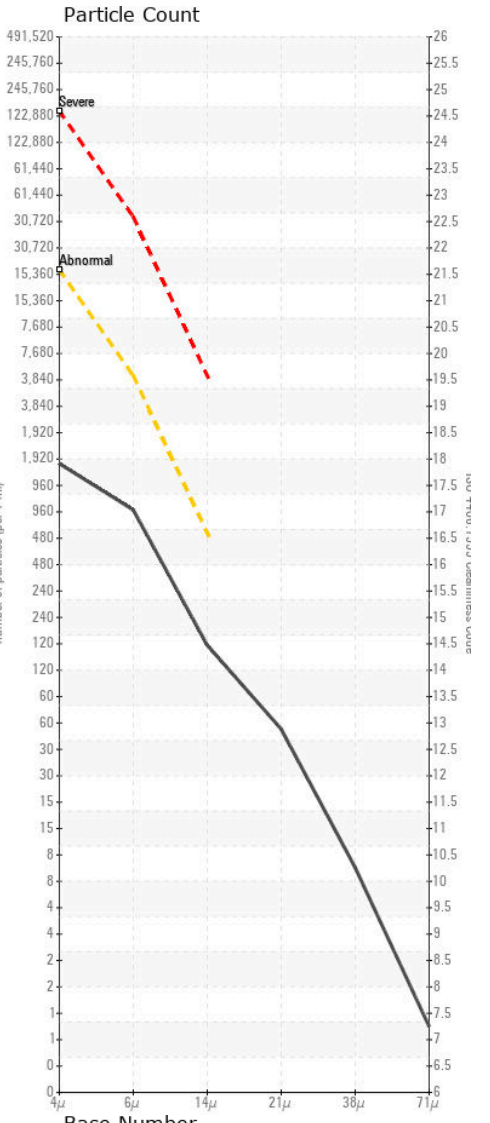
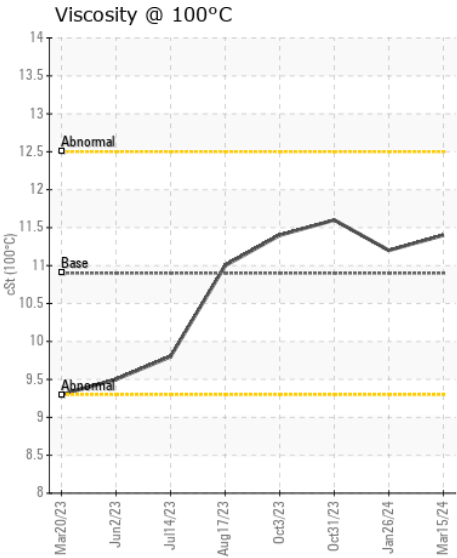
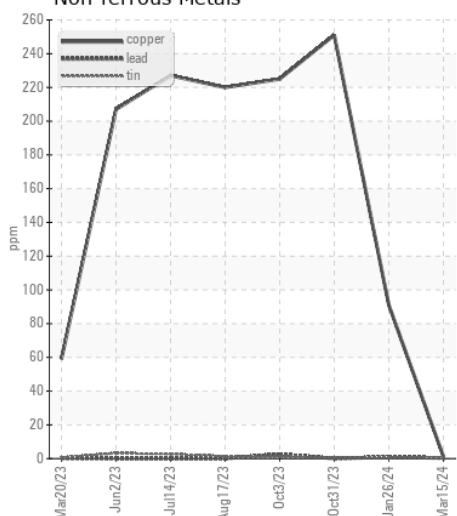
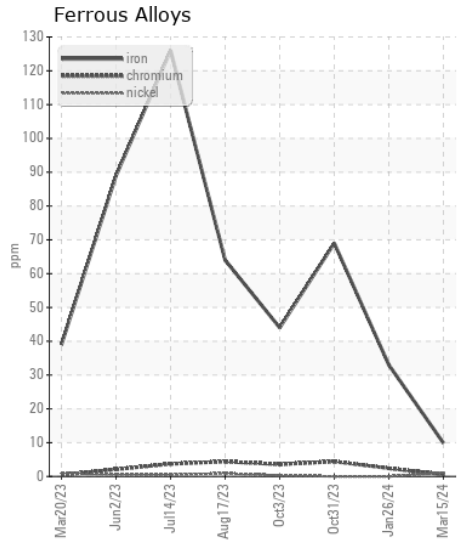
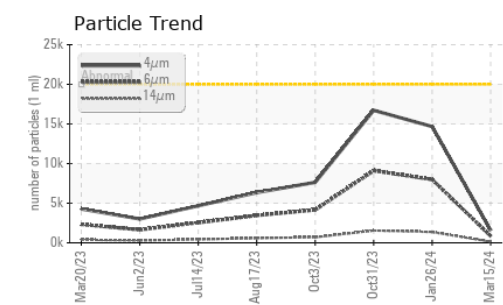
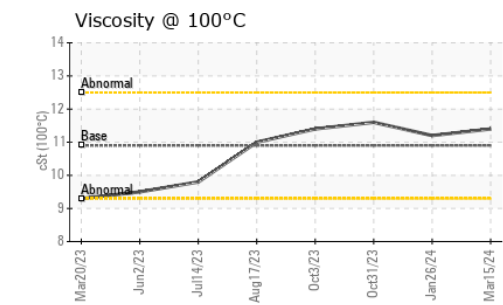
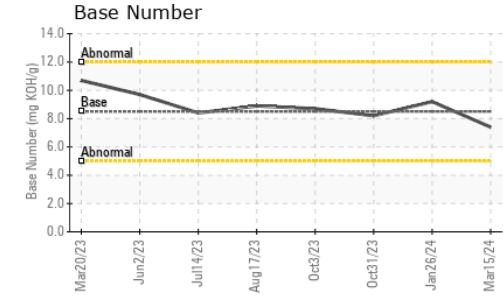
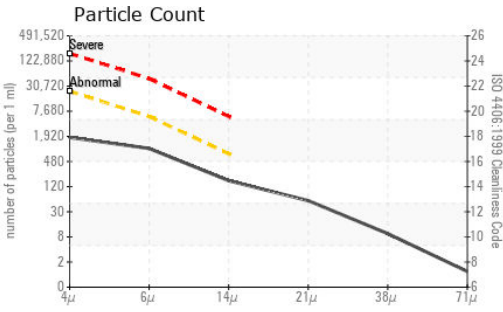
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>25	6	19	45
Potassium	ppm	ASTM D5185m	>20	4	9	26
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	0.4	0.2	0.5
Nitration	Abs/cm	*ASTM D7624	>20	8.8	6.8	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1	22.3	22.3
Particles >4µm		ASTM D7647	>20000	1583	14668	16721
Particles >6µm		ASTM D7647	>5000	863	7990	9109
Particles >14µm		ASTM D7647	>640	147	1360	1550
Particles >21µm		ASTM D7647	>160	49	458	522
Particles >38µm		ASTM D7647	>40	8	71	81
Particles >71µm		ASTM D7647	>10	1	7	8
Oil Cleanliness		ISO 4406 (c)	>21/19/16	18/17/14	21/20/18	21/20/18
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		6	2	3
Boron	ppm	ASTM D5185m	250	147	48	26
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	172	46	45
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m	450	627	494	540
Calcium	ppm	ASTM D5185m	3000	1325	1661	1746
Phosphorus	ppm	ASTM D5185m	1150	784	727	725
Zinc	ppm	ASTM D5185m	1350	896	922	935
Sulfur	ppm	ASTM D5185m	4250	2840	2333	2149
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.1	20.0	22.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.4	9.2	8.2
Visc @ 100°C	cSt	ASTM D445	10.9	11.4	11.2	11.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0918625 **Received** : 20 Mar 2024
Lab Number : 06123517 **Tested** : 21 Mar 2024
Unique Number : 10937668 **Diagnosed** : 22 Mar 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: 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)