



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
Mobile Fleet
 Machine Id
6412 6412
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER 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		WC0939394	WC0919121	WC0861795
Sample Date		Client Info		20 May 2024	11 Apr 2024	01 Mar 2024
Machine Age	hrs	Client Info		17572	17318	17083
Oil Age	hrs	Client Info		255	256	331
Filter Age	hrs	Client Info		255	256	331
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ABNORMAL	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	11	9	11
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	5	5	6
Lead	ppm	ASTM D5185m	>40	<1	0	3
Copper	ppm	ASTM D5185m	>330	1	1	<1
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

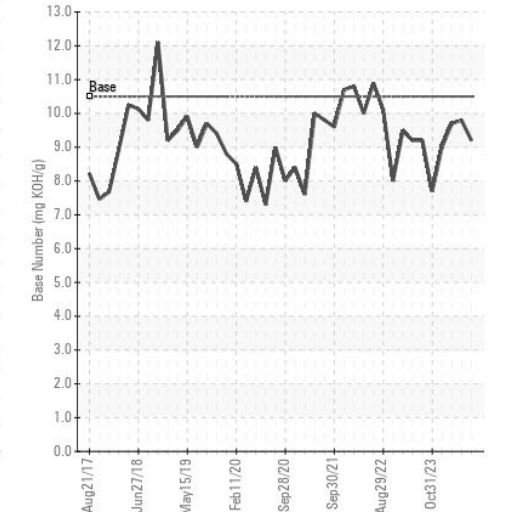
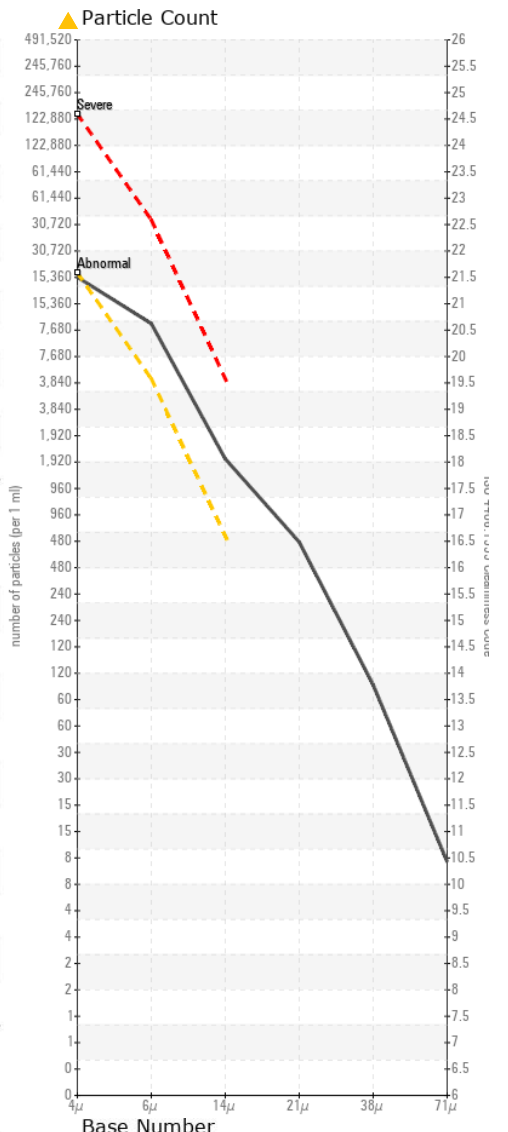
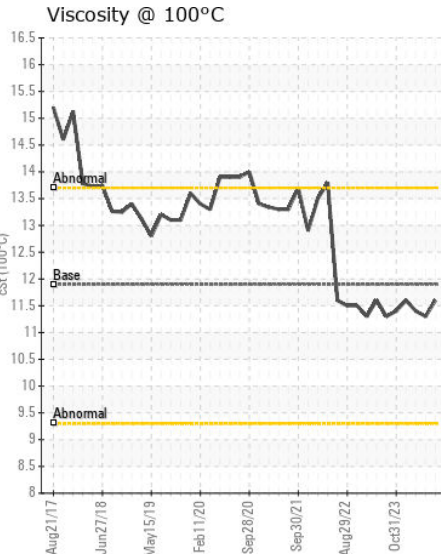
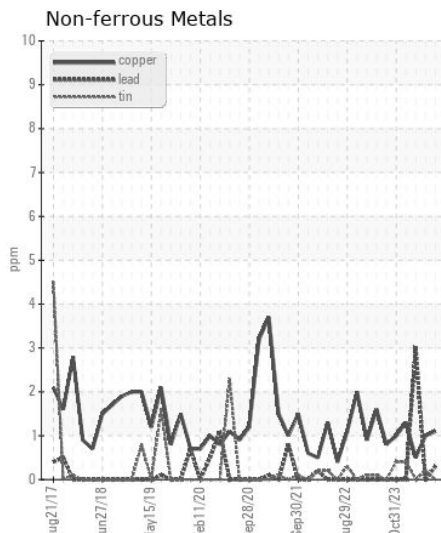
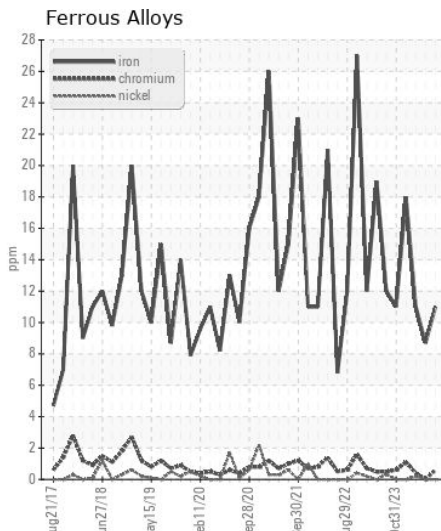
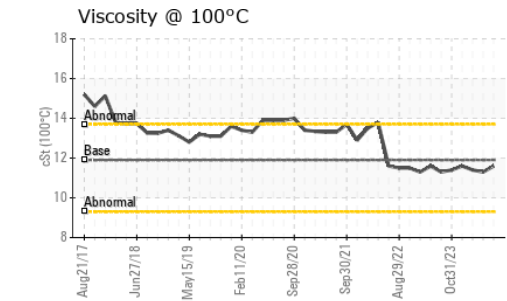
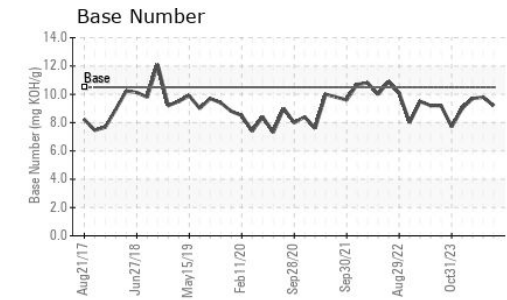
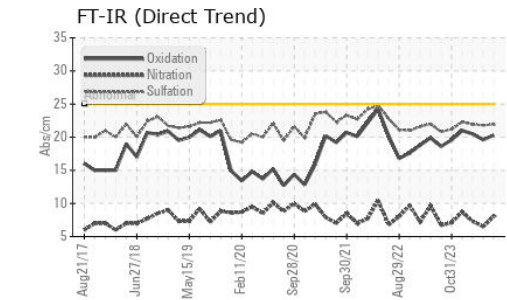
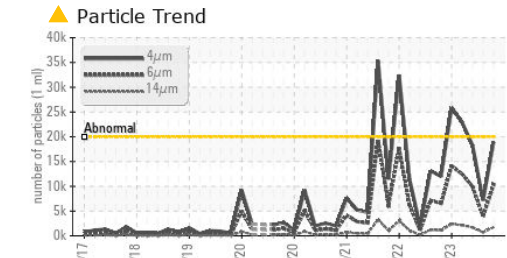
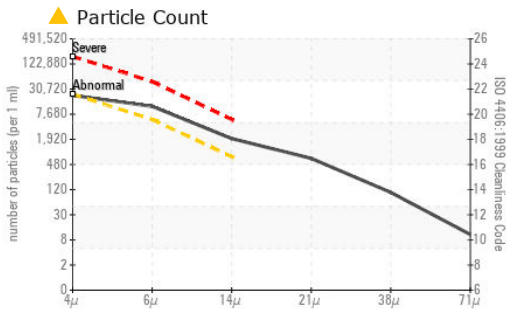
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	8	12	8
Potassium	ppm	ASTM D5185m	>20	5	3	4
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	0.5	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.0	6.5	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	21.8	21.9
Particles >4µm		ASTM D7647	>20000	18887	7168	18208
Particles >6µm		ASTM D7647	>5000	▲ 10289	3905	● 9919
Particles >14µm		ASTM D7647	>640	▲ 1751	● 665	▲ 1688
Particles >21µm		ASTM D7647	>160	▲ 590	● 224	▲ 569
Particles >38µm		ASTM D7647	>40	▲ 91	35	▲ 88
Particles >71µm		ASTM D7647	>10	9	4	9
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 21/21/18	● 20/19/17	▲ 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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	4	2
Boron	ppm	ASTM D5185m		36	64	51
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		49	46	42
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		555	506	524
Calcium	ppm	ASTM D5185m		1906	1680	1745
Phosphorus	ppm	ASTM D5185m		836	794	832
Zinc	ppm	ASTM D5185m		1023	929	918
Sulfur	ppm	ASTM D5185m		3106	3144	2638
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.3	19.6	20.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	9.2	9.8	9.7
Visc @ 100°C	cSt	ASTM D445	11.9	11.6	11.3	11.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0939394
Lab Number : 06187523
Unique Number : 11044275
Test Package : CONST (Additional Tests: PrtCount, TBN)

Received : 22 May 2024
Tested : 23 May 2024
Diagnosed : 24 May 2024 - Don Baldrige

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)

CAROLINA SUNROCK
 PO BOX 25
 BUTNER, NC
 US 27509

Contact: Leigh Dennis
 rdennis@thesunrockgroup.com

T: (919)575-4505
 F: (919)575-0162