



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Mobile Fleet
 Machine Id
6414 6414
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER 10W30 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0947879	WC0939303	WC0918665
Sample Date		Client Info		09 Jul 2024	15 May 2024	27 Mar 2024
Machine Age	hrs	Client Info		15855	15580	15358
Oil Age	hrs	Client Info		272	223	318
Filter Age	hrs	Client Info		272	223	318
Oil Changed		Client Info		Not Chngd	Changed	Not Chngd
Filter Changed		Client Info		Not Chngd	Changed	Not Chngd
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>65	15	29	22
Chromium	ppm	ASTM D5185m	>5	<1	2	1
Nickel	ppm	ASTM D5185m	>3	0	0	<1
Titanium	ppm	ASTM D5185m	>5	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>35	6	12	10
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>180	3	2	2
Tin	ppm	ASTM D5185m	>8	0	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

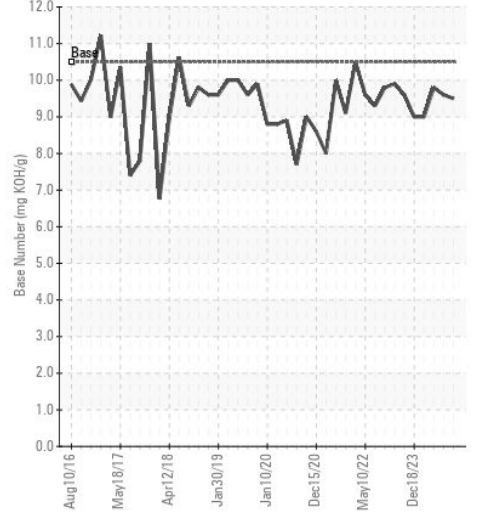
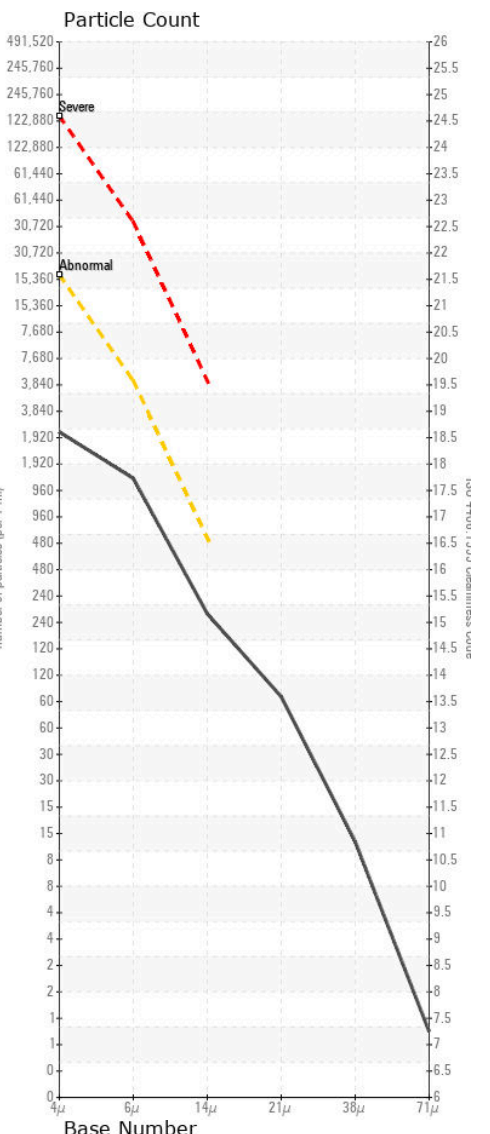
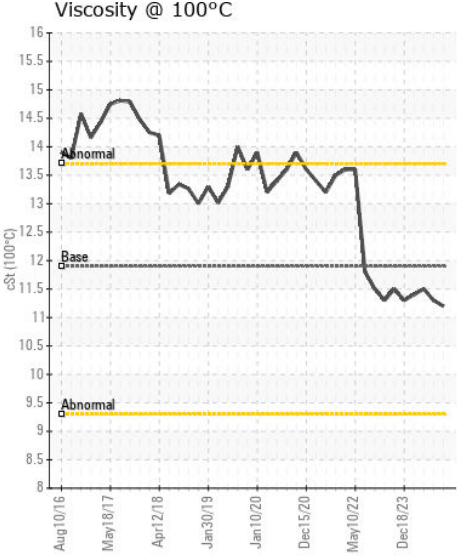
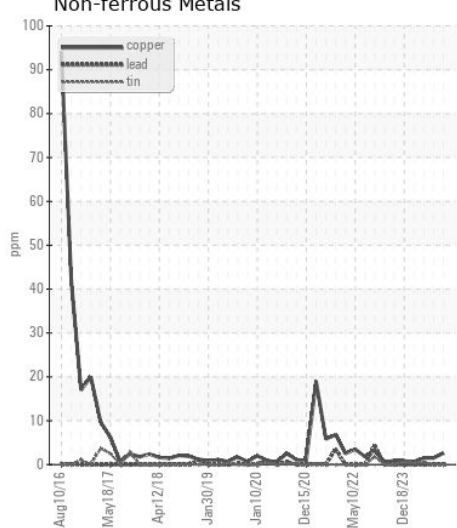
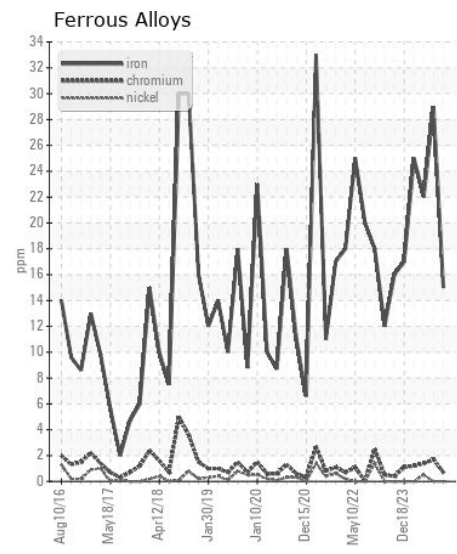
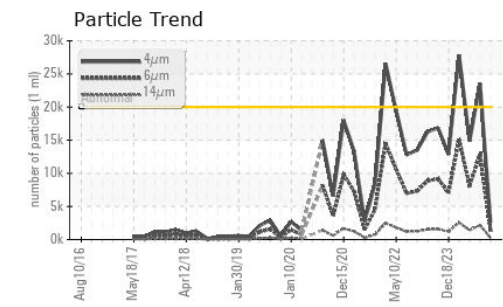
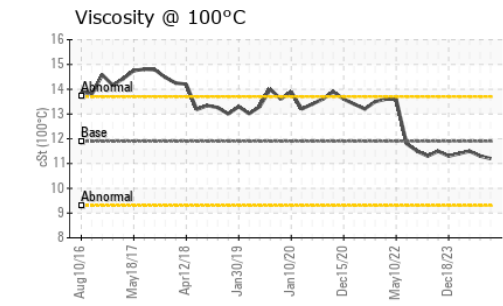
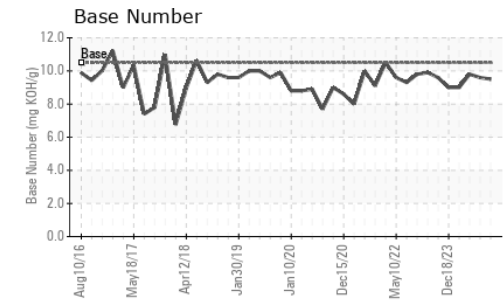
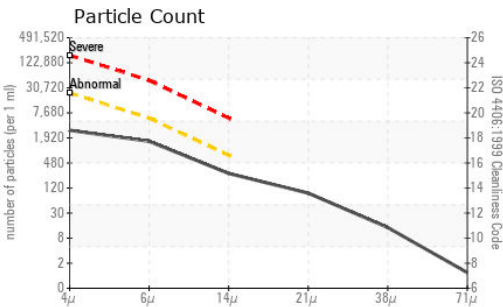
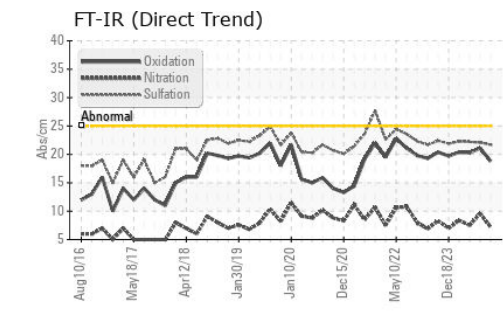
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>15	5	7	10
Potassium	ppm	ASTM D5185m	>20	<1	<1	2
Fuel		WC Method	>3.0	<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	0.8	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.2	9.6	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	22.1	22.2
Particles >4µm		ASTM D7647	>20000	2558	▲ 23516	▲ 14876
Particles >6µm		ASTM D7647	>5000	1393	▲ 12810	▲ 8104
Particles >14µm		ASTM D7647	>640	237	▲ 2180	▲ 1379
Particles >21µm		ASTM D7647	>160	80	▲ 734	▲ 465
Particles >38µm		ASTM D7647	>40	12	▲ 113	▲ 72
Particles >71µm		ASTM D7647	>10	1	12	7
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/18/15	▲ 22/21/18	▲ 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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		4	3	2
Boron	ppm	ASTM D5185m		35	38	66
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		49	47	63
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		517	535	666
Calcium	ppm	ASTM D5185m		1779	1808	2233
Phosphorus	ppm	ASTM D5185m		787	808	912
Zinc	ppm	ASTM D5185m		900	956	1198
Sulfur	ppm	ASTM D5185m		2848	3003	3490
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.8	21.1	20.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	9.5	9.6	9.8
Visc @ 100°C	cSt	ASTM D445	11.9	11.2	11.3	11.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0947879
Lab Number : 06233144
Unique Number : 11116637
Test Package : CONST (Additional Tests: PrtCount, TBN)

Received : 11 Jul 2024
Tested : 12 Jul 2024
Diagnosed : 12 Jul 2024 - Don Baldridge

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