



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
Mobile Fleet
Machine Id
339 339
Component
Transmission (Auto)
Fluid
DIESEL ENGINE OIL SAE 15W40 (28 GAL)

RECOMMENDATION

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		WC0939231	WC0630599	WC0559766
Sample Date		Client Info		24 May 2024	10 Nov 2021	05 Mar 2021
Machine Age	hrs	Client Info		10366	9451	8918
Oil Age	hrs	Client Info		928	2286	1753
Filter Age	hrs	Client Info		928	2286	1753
Oil Changed		Client Info		Not Chngd	Changed	Not Chngd
Filter Changed		Client Info		Not Chngd	Changed	Not Chngd
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>160	<1	22	5
Chromium	ppm	ASTM D5185m	>5	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>5	0	<1	3
Aluminum	ppm	ASTM D5185m	>50	<1	4	1
Lead	ppm	ASTM D5185m	>50	0	3	2
Copper	ppm	ASTM D5185m	>225	5	7	5
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	VLITE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

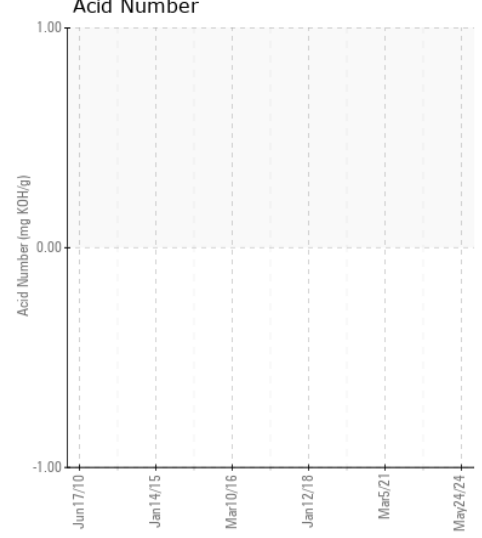
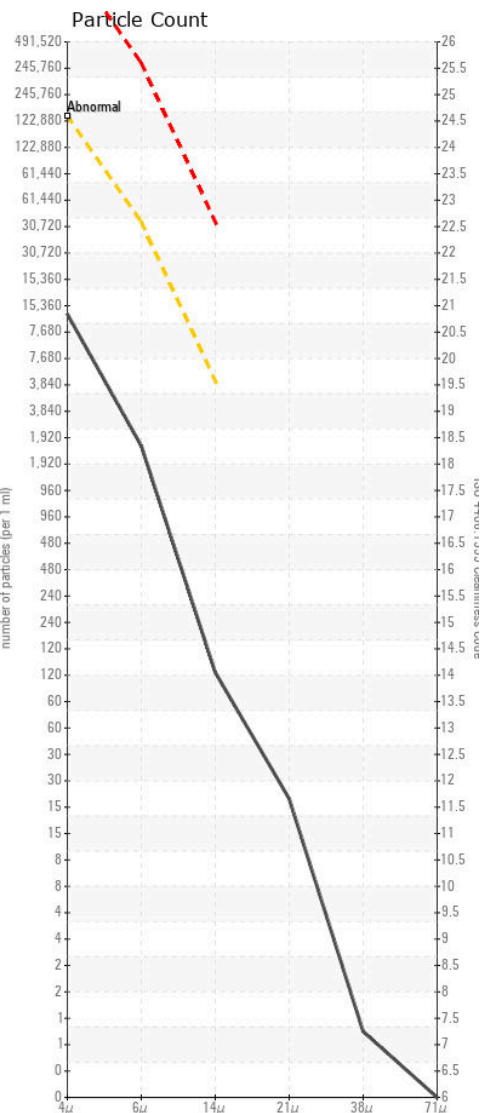
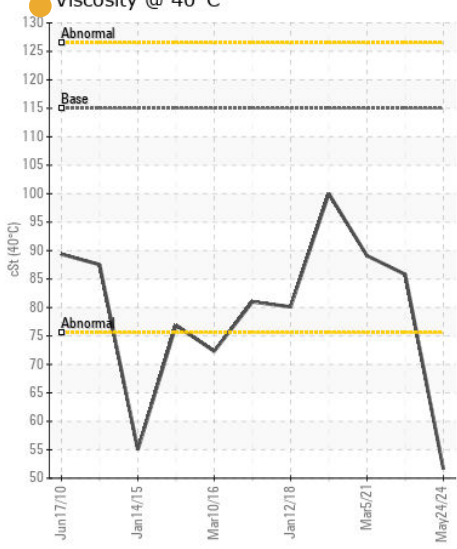
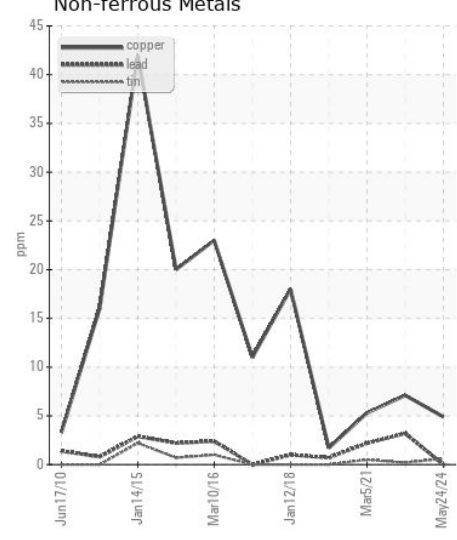
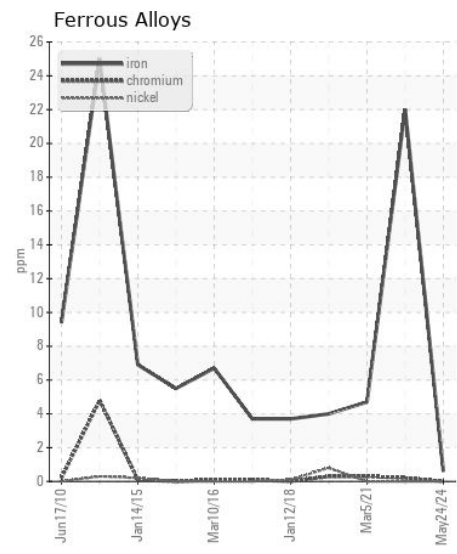
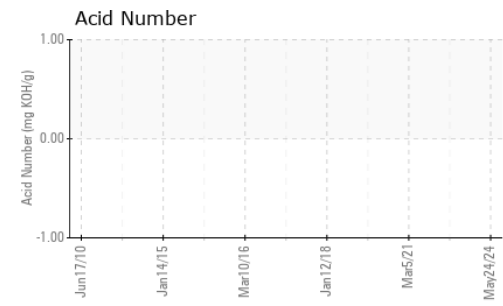
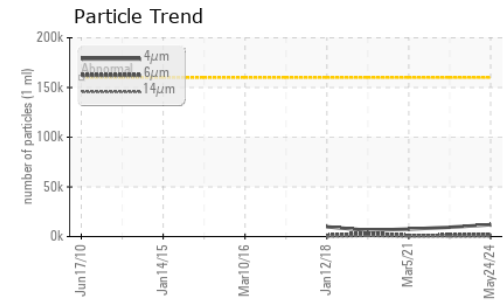
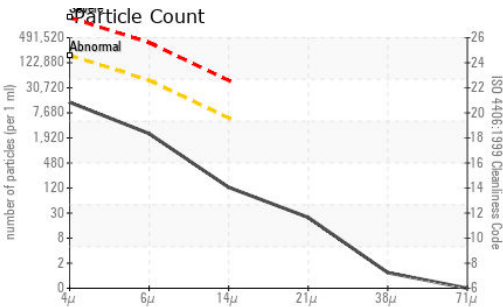
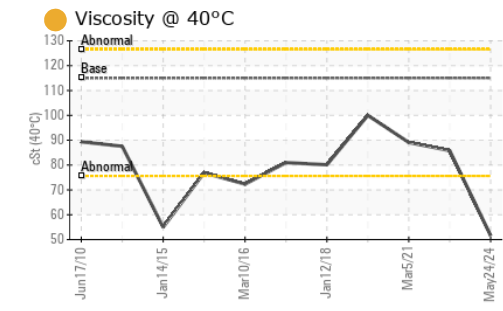
There is no indication of any contamination in the fluid. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	6	14	5
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>160000	11968	9378	7540
Particles >6µm		ASTM D7647	>40000	2132	1241	1018
Particles >14µm		ASTM D7647	>5000	110	46	54
Particles >21µm		ASTM D7647	>1300	21	13	9
Particles >38µm		ASTM D7647	>320	1	3	0
Particles >71µm		ASTM D7647	>80	0	2	0
Oil Cleanliness		ISO 4406 (c)	>24/22/19	21/18/14	20/17/13	20/17/13
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE	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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The fluid viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>158	2	3	3
Boron	ppm	ASTM D5185m	250	56	278	269
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	39	217	224
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	649	760	767
Calcium	ppm	ASTM D5185m	3000	691	1448	1571
Phosphorus	ppm	ASTM D5185m	1150	990	865	907
Zinc	ppm	ASTM D5185m	1350	1132	1016	1023
Sulfur	ppm	ASTM D5185m	4250	5743	3528	2931
Visc @ 40°C	cSt	ASTM D445	115	51.63	85.8	89.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0939231 **Received** : 29 May 2024
Lab Number : 06193852 **Tested** : 03 Jun 2024
Unique Number : 11055975 **Diagnosed** : 03 Jun 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: PrtCount)

CAROLINA SUNROCK
 PO BOX 25
 BUTNER, NC
 US 27509
 Contact: Leigh Dennis
 rdennis@thesunrockgroup.com
 T: (919)575-4505
 F: (919)575-0162

Certificate L2367
 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)