



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Area
Mobile Fleet
 Machine Id
7091 7091
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0919101	---	---
Sample Date		Client Info		12 Apr 2024	---	---
Machine Age	hrs	Client Info		8867	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	5	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	2	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	<1	---	---
Tin	ppm	ASTM D5185m	>15	1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

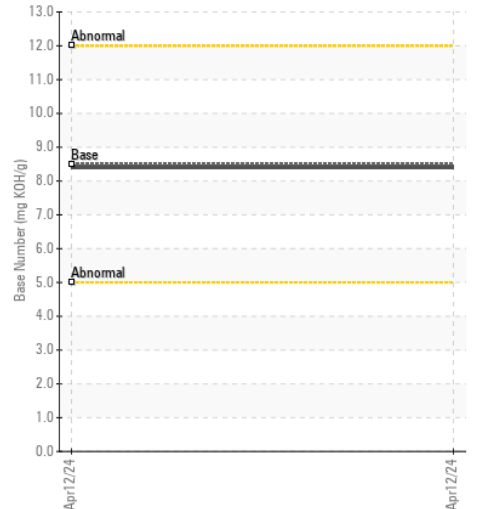
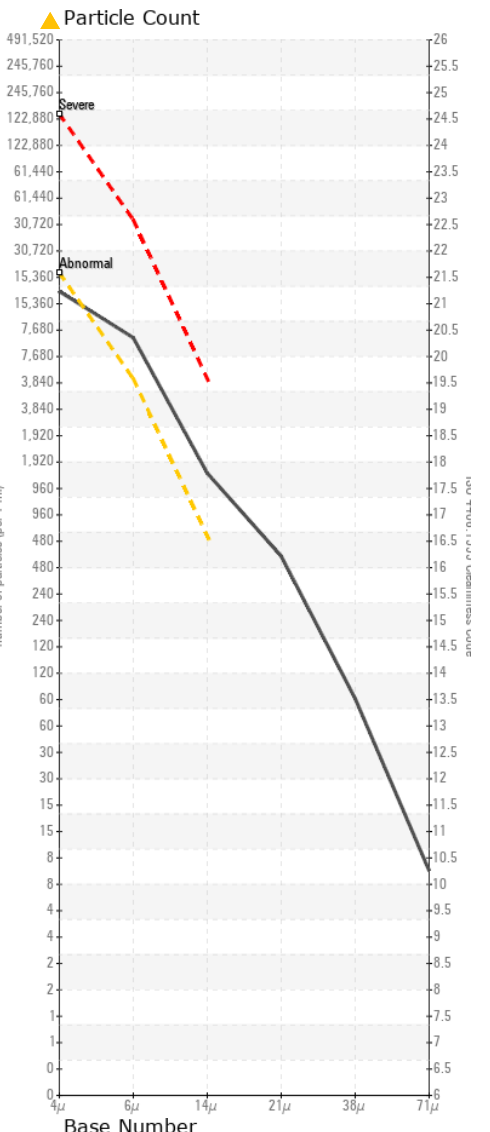
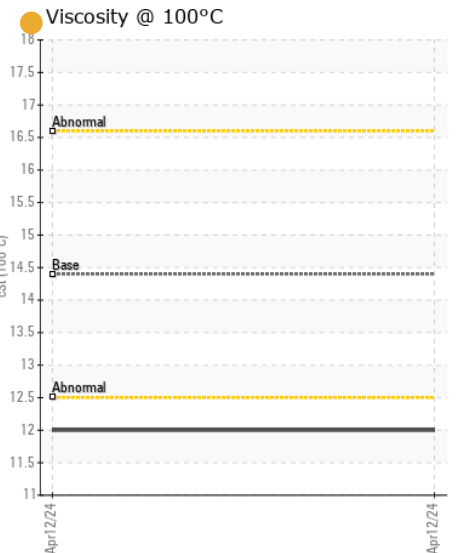
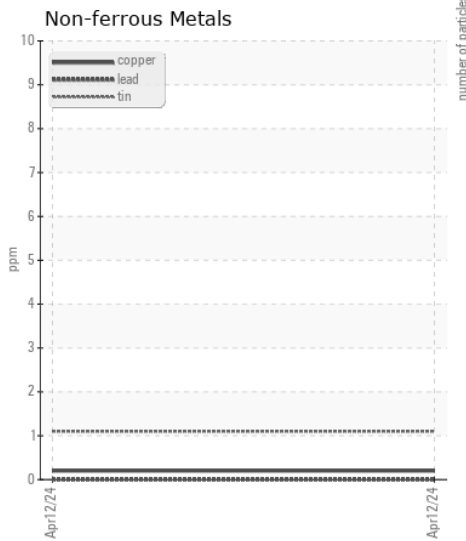
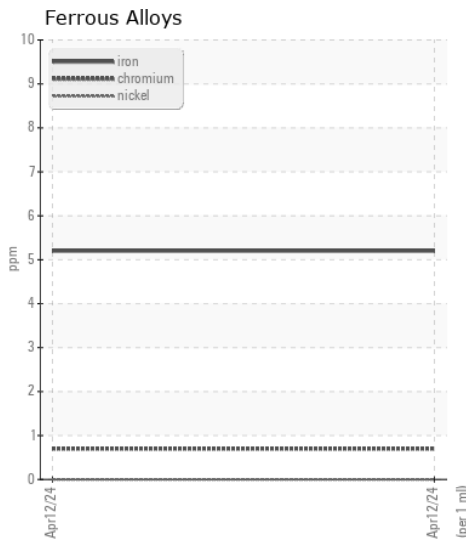
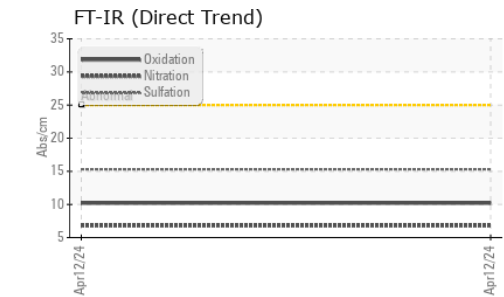
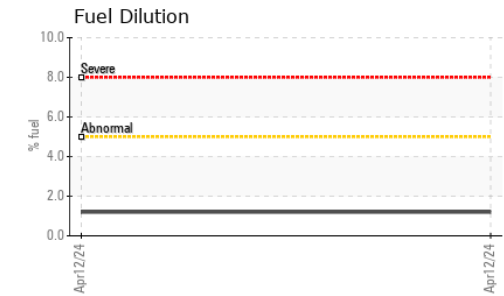
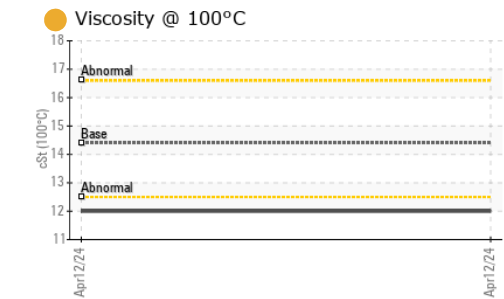
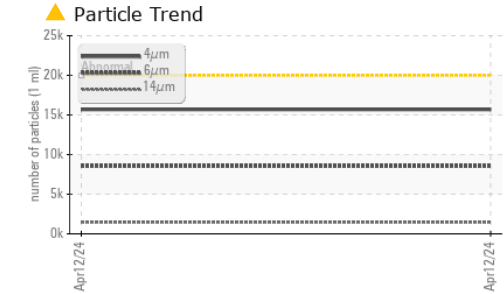
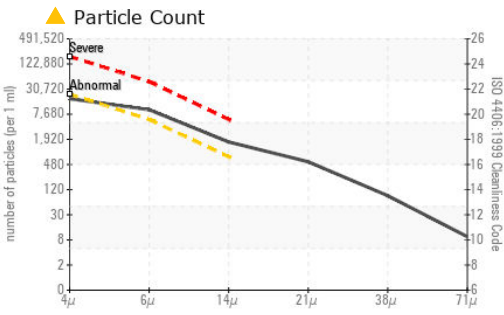
There is a high amount of particulates present in the oil. Fuel content negligible.

Silicon	ppm	ASTM D5185m	>25	8	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Fuel	%	ASTM D3524	>5	1.2	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.8	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.3	---	---
Particles >4µm		ASTM D7647	>20000	15686	---	---
Particles >6µm		ASTM D7647	>5000	▲ 8545	---	---
Particles >14µm		ASTM D7647	>640	▲ 1454	---	---
Particles >21µm		ASTM D7647	>160	▲ 490	---	---
Particles >38µm		ASTM D7647	>40	▲ 76	---	---
Particles >71µm		ASTM D7647	>10	8	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 21/20/18	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>158	<1	---	---
Boron	ppm	ASTM D5185m	250	12	---	---
Barium	ppm	ASTM D5185m	10	0	---	---
Molybdenum	ppm	ASTM D5185m	100	9	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m	450	93	---	---
Calcium	ppm	ASTM D5185m	3000	2909	---	---
Phosphorus	ppm	ASTM D5185m	1150	1110	---	---
Zinc	ppm	ASTM D5185m	1350	1391	---	---
Sulfur	ppm	ASTM D5185m	4250	4297	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.4	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	● 12.0	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0919101
Lab Number : 06150192
Unique Number : 10980270
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, PrtCount, TBN)

Received : 16 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 22 Apr 2024 - Jonathan Hester

CAROLINA SUNROCK
 PO BOX 25
 BUTNER, NC
 US 27509

Contact: Leigh Dennis
 rdennis@thesunrockgroup.com

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)

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