CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
Mobile Fleet
Machine Id
8043 8043
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

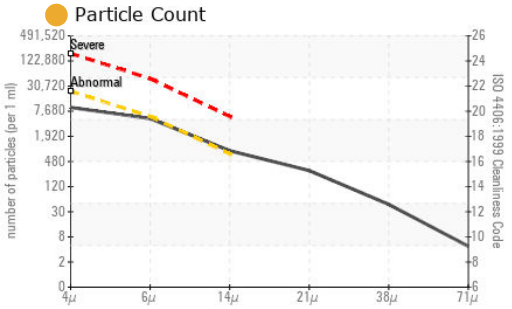
CONTAMINATION

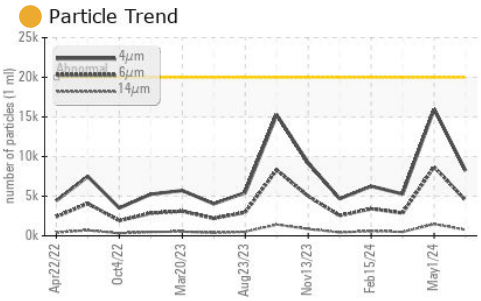
There is a moderate amount of particulates present in the oil.

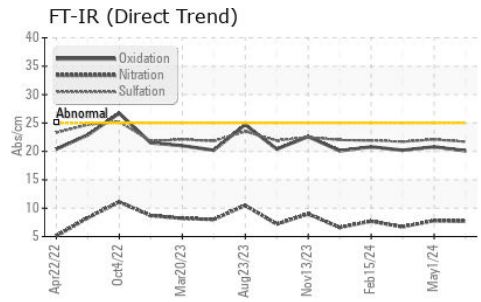
FLUID CONDITION

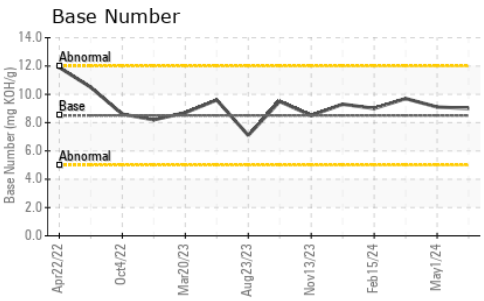
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

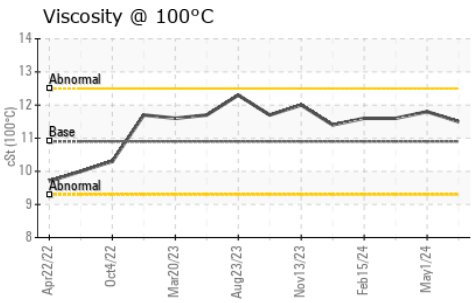
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0947746	WC0937882	WC0919015
Sample Date		Client Info		19 Jun 2024	01 May 2024	29 Mar 2024
Machine Age	hrs	Client Info		4908	4655	4464
Oil Age	hrs	Client Info		253	465	274
Filter Age	hrs	Client Info		253	465	274
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ATTENTION	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	3	7	5
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	2
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	<1	2	<1
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	5	6	4
Potassium	ppm	ASTM D5185m	>20	7	6	2
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	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.7	7.8	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	22.1	21.7
Particles >4µm		ASTM D7647	>20000	8212	15973	5272
Particles >6µm		ASTM D7647	>5000	4474	▲ 8701	2872
Particles >14µm		ASTM D7647	>640	● 761	▲ 1481	489
Particles >21µm		ASTM D7647	>160	● 256	▲ 499	165
Particles >38µm		ASTM D7647	>40	40	▲ 77	25
Particles >71µm		ASTM D7647	>10	4	8	3
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 20/19/17	▲ 21/20/18	20/19/16
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
Sodium	ppm	ASTM D5185m		2	1	2
Boron	ppm	ASTM D5185m	250	42	39	40
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	48	48	46
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	550	497	530
Calcium	ppm	ASTM D5185m	3000	1701	1668	1760
Phosphorus	ppm	ASTM D5185m	1150	782	750	717
Zinc	ppm	ASTM D5185m	1350	963	919	892
Sulfur	ppm	ASTM D5185m	4250	2986	2608	2901
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.1	20.8	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.0	9.1	9.7
Visc @ 100°C	cSt	ASTM D445	10.9	11.5	11.8	11.6

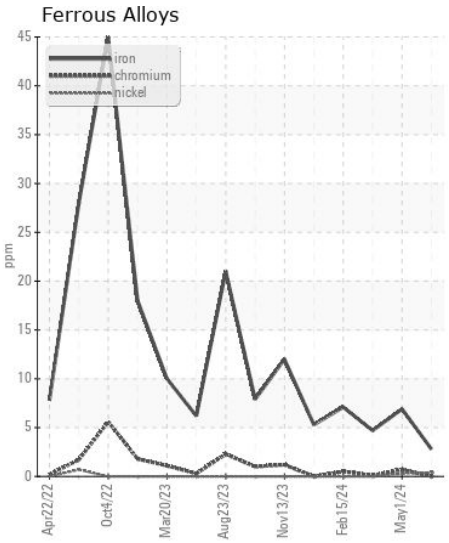


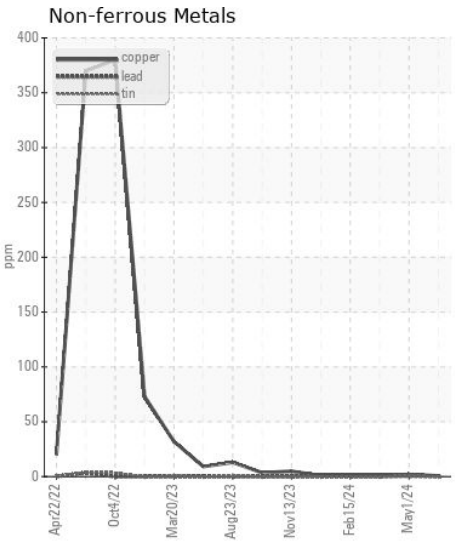


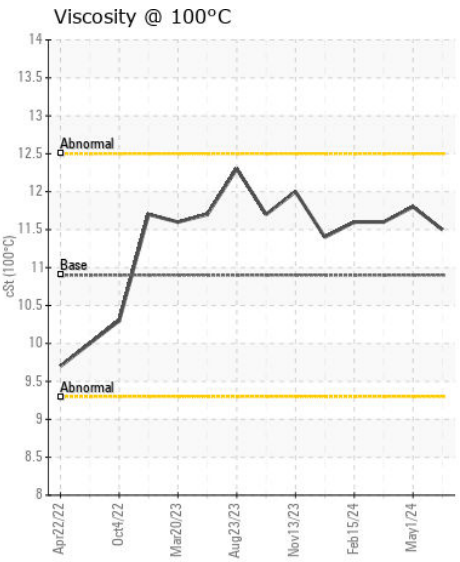


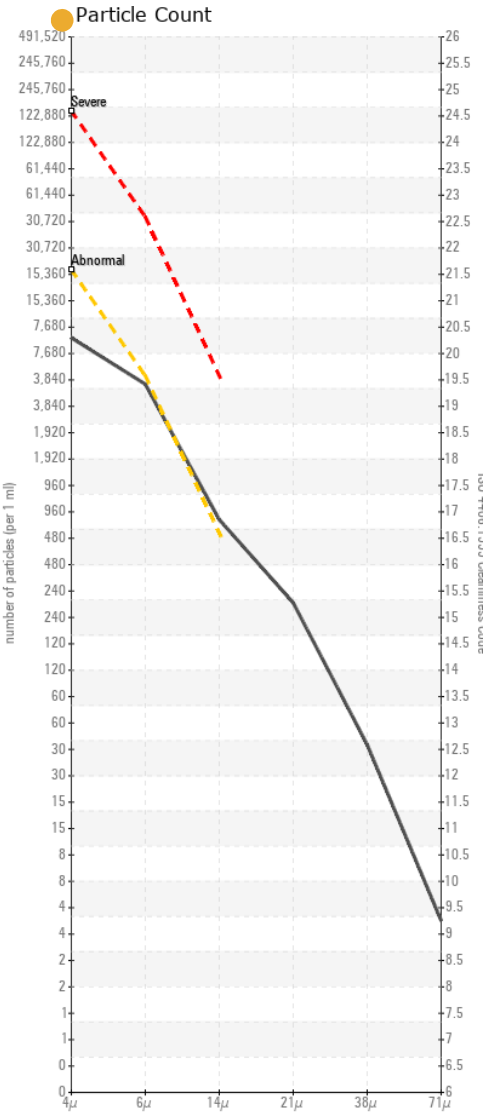


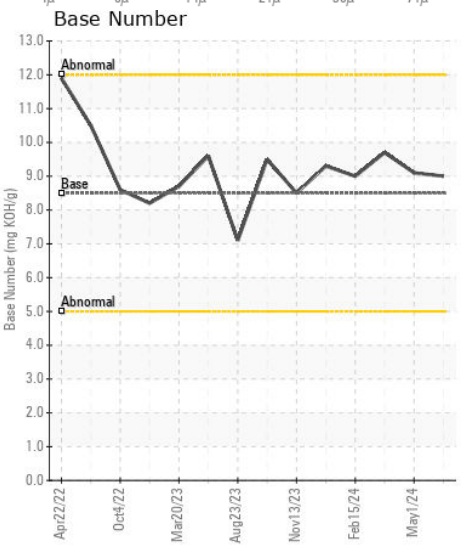












Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0947746
Lab Number : 06216746
Unique Number : 11089610
Test Package : CONST (Additional Tests: PrtCount, TBN)

Received : 21 Jun 2024
Tested : 24 Jun 2024
Diagnosed : 24 Jun 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