CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
Mobile Fleet
Machine Id
8014 8014
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (8 PNT)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

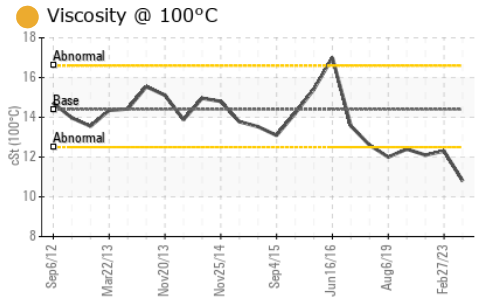
CONTAMINATION

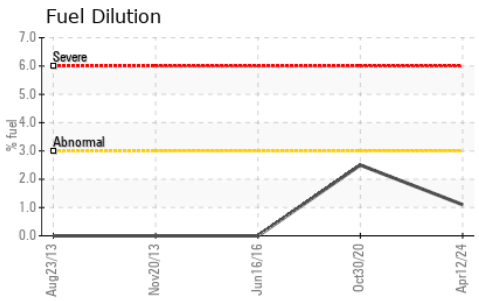
Fuel content negligible. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

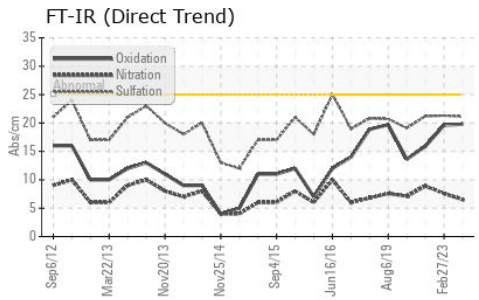
FLUID CONDITION

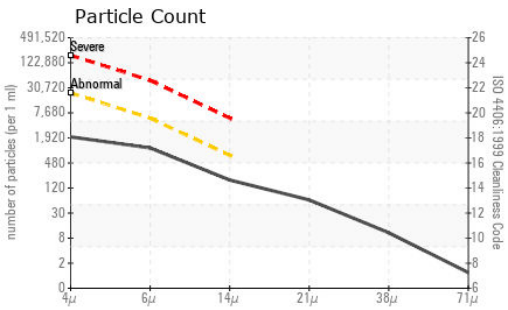
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

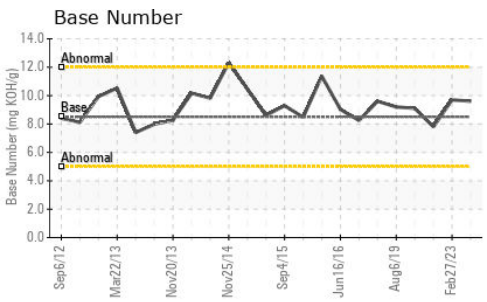
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0919102	WC0740818	WC0585509
Sample Date		Client Info		12 Apr 2024	27 Feb 2023	10 Jun 2021
Machine Age	hrs	Client Info		8354	8048	7595
Oil Age	hrs	Client Info		306	477	181
Filter Age	hrs	Client Info		306	477	181
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				ATTENTION	NORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>90	6	6	4
Chromium	ppm	ASTM D5185m	>4	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>15	<1	3	0
Lead	ppm	ASTM D5185m	>50	0	<1	0
Copper	ppm	ASTM D5185m	>55	1	1	<1
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>15	4	5	3
Potassium	ppm	ASTM D5185m	>20	0	2	1
Fuel	%	ASTM D3524	>3.0	1.1	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.1	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.5	7.6	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	21.3	21.2
Particles >4µm		ASTM D7647	>20000	1775	2201	2518
Particles >6µm		ASTM D7647	>5000	967	1199	1372
Particles >14µm		ASTM D7647	>640	165	204	233
Particles >21µm		ASTM D7647	>160	55	69	79
Particles >38µm		ASTM D7647	>40	9	11	12
Particles >71µm		ASTM D7647	>10	1	1	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	18/17/15	18/17/15	19/18/15
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	>158	2	0	0
Boron	ppm	ASTM D5185m	250	58	62	102
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	37	40	16
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	469	492	638
Calcium	ppm	ASTM D5185m	3000	1597	1649	1290
Phosphorus	ppm	ASTM D5185m	1150	680	773	707
Zinc	ppm	ASTM D5185m	1350	780	915	779
Sulfur	ppm	ASTM D5185m	4250	2742	2924	2351
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.8	19.6	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.6	9.7	7.8
Visc @ 100°C	cSt	ASTM D445	14.4	10.8	12.3	12.1

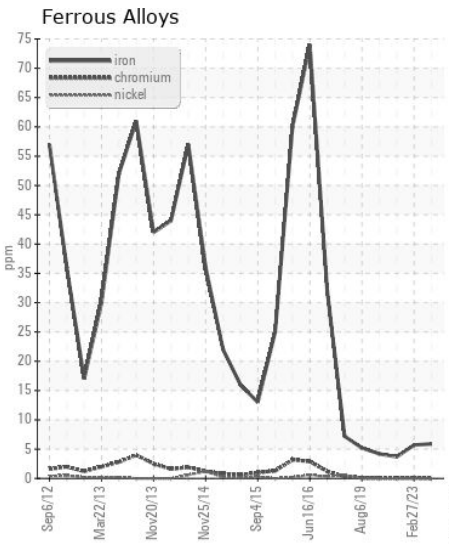


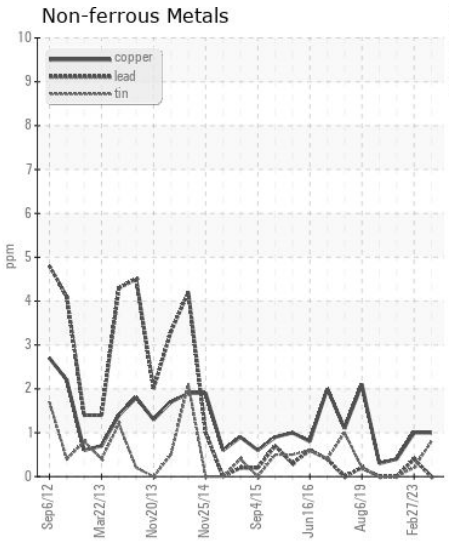


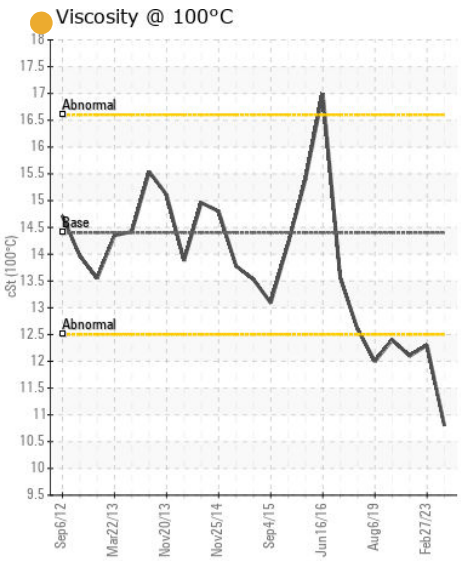


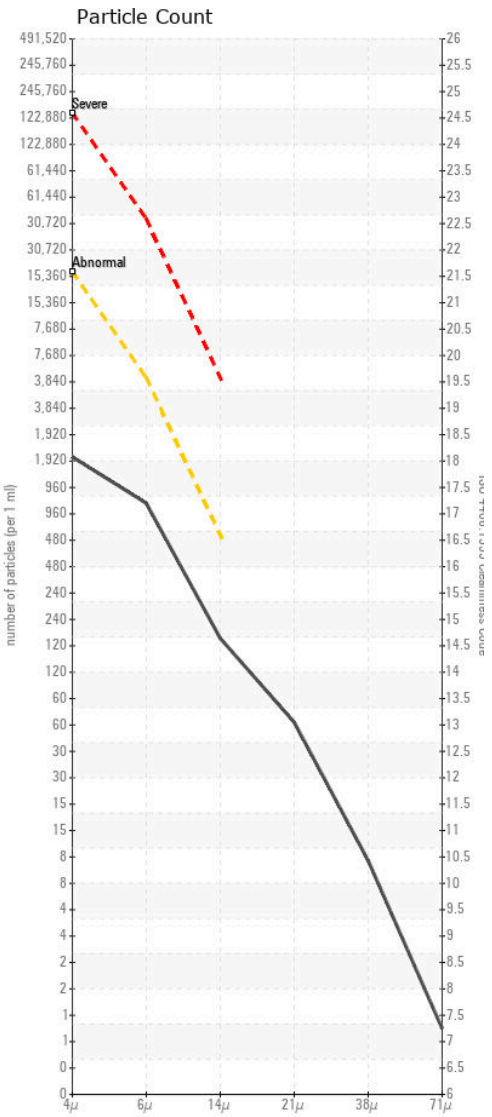


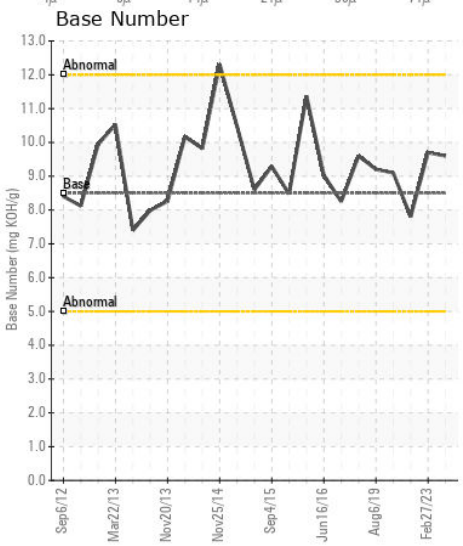












Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0919102
Lab Number : 06150194
Unique Number : 10980272
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, PrtCount, TBN)

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

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)

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