CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Mobile Fleet
Machine Id
781 781
Component
Diesel Engine
Fluid
MOBIL 15W40 (12 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

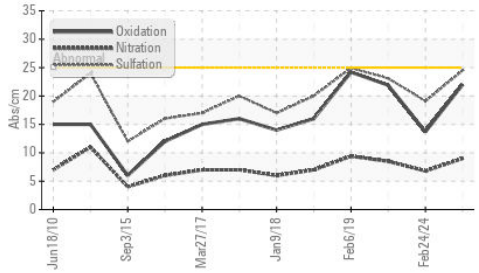
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

FLUID CONDITION

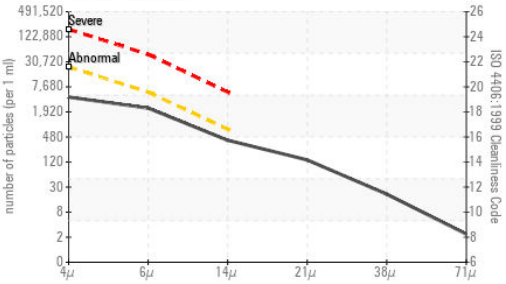
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0861698**	WC0861697	WC0462488
Sample Date		Client Info		**21 Apr 2024**	24 Feb 2024	24 Apr 2020
Machine Age	hrs	Client Info		**7679**	7333	7265
Oil Age	hrs	Client Info		**0**	170	552
Filter Age	hrs	Client Info		**0**	170	552
Oil Changed		Client Info		**N/A**	Changed	Changed
Filter Changed		Client Info		**N/A**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>75	**22**	6	17
Chromium	ppm	ASTM D5185m	>4	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>5	**0**	<1	<1
Titanium	ppm	ASTM D5185m	>2	**<1**	<1	<1
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>54	**4**	1	2
Lead	ppm	ASTM D5185m	>20	**3**	<1	3
Copper	ppm	ASTM D5185m	>240	**0**	2	4
Tin	ppm	ASTM D5185m	>5	**<1**	<1	0
Vanadium	ppm	ASTM D5185m		**0**	<1	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>35	**12**	5	4
Potassium	ppm	ASTM D5185m	>20	**3**	4	4
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	**1.2**	0.2	0.5
Nitration	Abs/cm	*ASTM D7624	>20	**9.0**	6.8	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	**24.5**	19.1	23.1
Particles >4µm		ASTM D7647	>20000	**3802**	2740	---
Particles >6µm		ASTM D7647	>5000	**2071**	1493	---
Particles >14µm		ASTM D7647	>640	**352**	254	---
Particles >21µm		ASTM D7647	>160	**119**	86	---
Particles >38µm		ASTM D7647	>40	**18**	13	---
Particles >71µm		ASTM D7647	>10	**2**	1	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	**19/18/16**	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	>118	**6**	4	10
Boron	ppm	ASTM D5185m		**46**	85	42
Barium	ppm	ASTM D5185m		**0**	1	0
Molybdenum	ppm	ASTM D5185m		**45**	10	40
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**535**	555	468
Calcium	ppm	ASTM D5185m		**1707**	1081	1614
Phosphorus	ppm	ASTM D5185m		**776**	648	697
Zinc	ppm	ASTM D5185m		**918**	726	795
Sulfur	ppm	ASTM D5185m		**2787**	3423	2494
Oxidation	Abs/.1mm	*ASTM D7414	>25	**22.0**	13.7	21.9
Base Number (BN)	mg KOH/g	ASTM D2896		**9.0**	7.7	9.2
Visc @ 100°C	cSt	ASTM D445		**13.8**	13.6	12.8

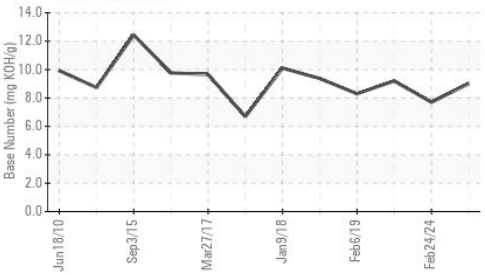
FT-IR (Direct Trend)



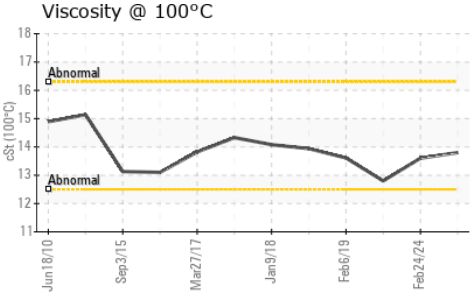
Particle Count



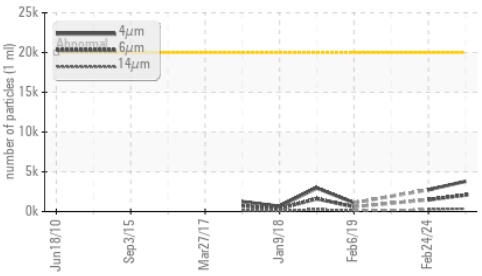
Base Number



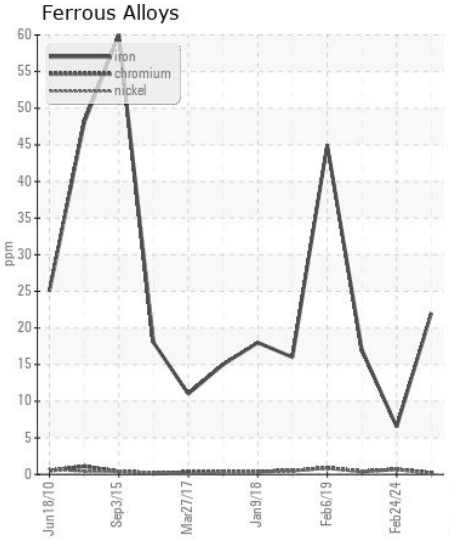
Viscosity @ 100°C



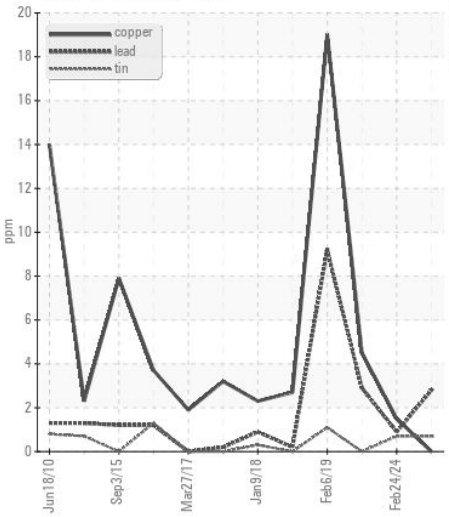
Particle Trend



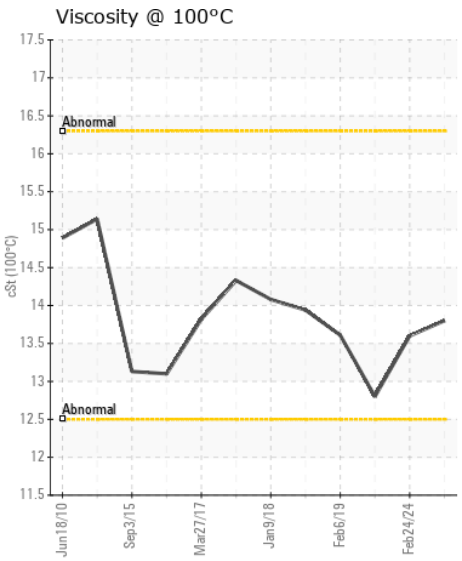
Ferrous Alloys



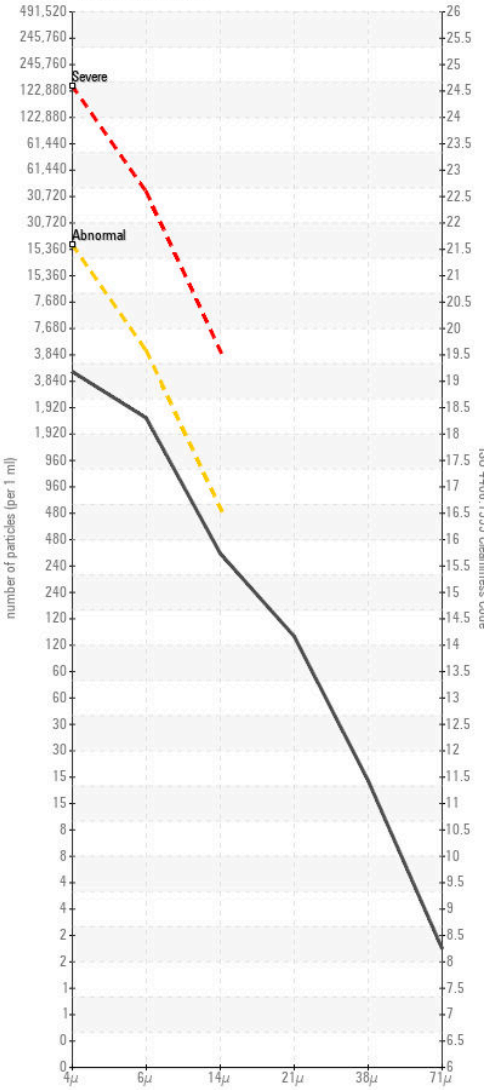
Non-ferrous Metals



Viscosity @ 100°C



Particle Count



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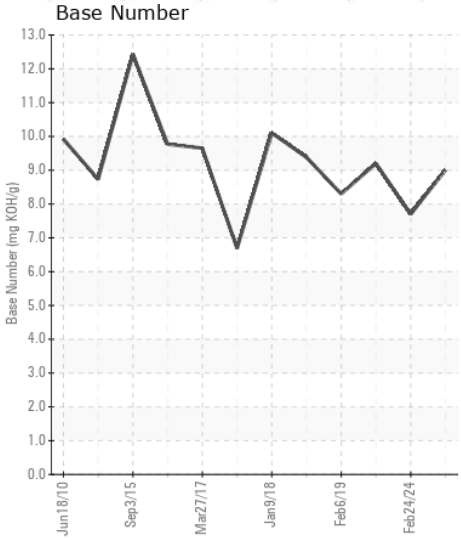

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0861698
Lab Number : 06156809
Unique Number : 10992232
Test Package : CONST (Additional Tests: PrtCount, TBN)

Received : 22 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Sean Felton

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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