MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT TK9745
Component
Diesel Engine
Fluid
SHELL ROTELLA T 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

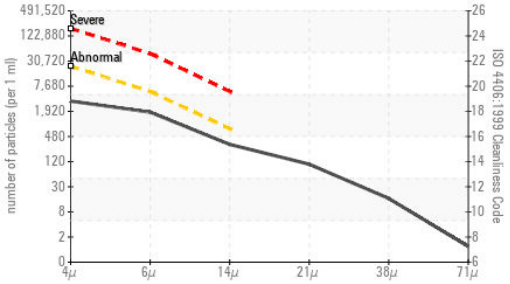
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

FLUID CONDITION

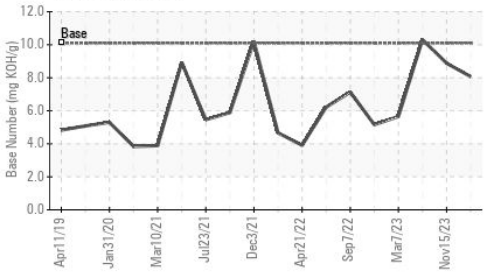
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0857789**	WC0857792	WC0793354
Sample Date		Client Info		**08 Feb 2024**	15 Nov 2023	02 Aug 2023
Machine Age	hrs	Client Info		**11084**	10445	9937
Oil Age	hrs	Client Info		**2678**	2039	1531
Filter Age	hrs	Client Info		**639**	508	755
Oil Changed		Client Info		**Changed**	Not Changd	Changed
Filter Changed		Client Info		**Changed**	Changed	N/A
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>110	**13**	7	6
Chromium	ppm	ASTM D5185m	>4	**<1**	0	<1
Nickel	ppm	ASTM D5185m	>2	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**1**	<1	0
Lead	ppm	ASTM D5185m	>45	**1**	1	<1
Copper	ppm	ASTM D5185m	>85	**2**	1	<1
Tin	ppm	ASTM D5185m	>4	**0**	0	<1
Vanadium	ppm	ASTM D5185m		**0**	<1	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>30	**6**	5	4
Potassium	ppm	ASTM D5185m	>20	**3**	0	<1
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	**0.1**	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**11.0**	9.9	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	**23.3**	21.6	19.7
Particles >4µm		ASTM D7647	>20000	**2949**	2923	1061
Particles >6µm		ASTM D7647	>5000	**1607**	1592	578
Particles >14µm		ASTM D7647	>640	**273**	271	98
Particles >21µm		ASTM D7647	>160	**92**	91	33
Particles >38µm		ASTM D7647	>40	**14**	14	5
Particles >71µm		ASTM D7647	>10	**1**	1	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	**19/18/15**	19/18/15	17/16/14
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**	3	2
Boron	ppm	ASTM D5185m	316	**3**	4	4
Barium	ppm	ASTM D5185m	0.0	**11**	0	0
Molybdenum	ppm	ASTM D5185m	1.2	**59**	57	58
Manganese	ppm	ASTM D5185m		**0**	0	<1
Magnesium	ppm	ASTM D5185m	24	**868**	949	950
Calcium	ppm	ASTM D5185m	2292	**1091**	1206	1246
Phosphorus	ppm	ASTM D5185m	1064	**906**	1035	1074
Zinc	ppm	ASTM D5185m	1160	**1214**	1318	1329
Sulfur	ppm	ASTM D5185m	4996	**3241**	3233	4244
Oxidation	Abs/.1mm	*ASTM D7414	>25	**20.5**	18.3	16.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	**8.07**	8.88	10.31
Visc @ 100°C	cSt	ASTM D445	15.7	**14.4**	14.2	14.1

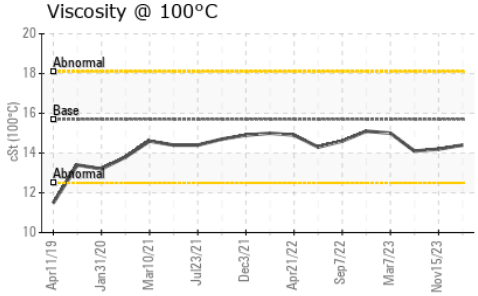
Particle Count



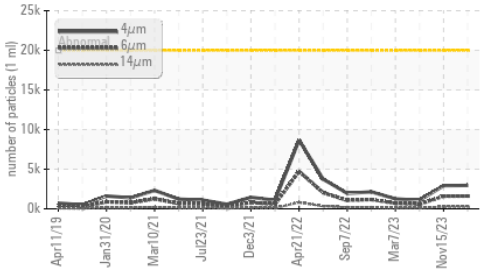
Base Number



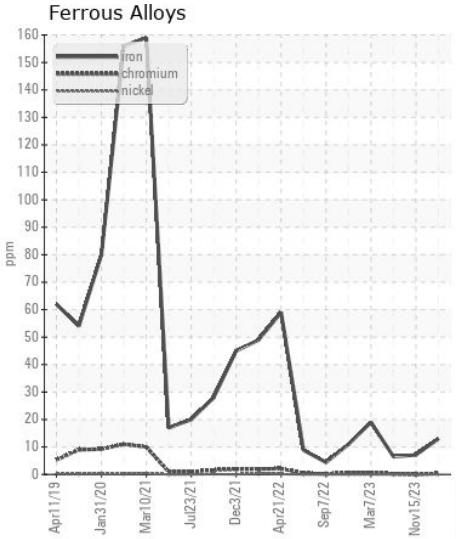
Viscosity @ 100°C



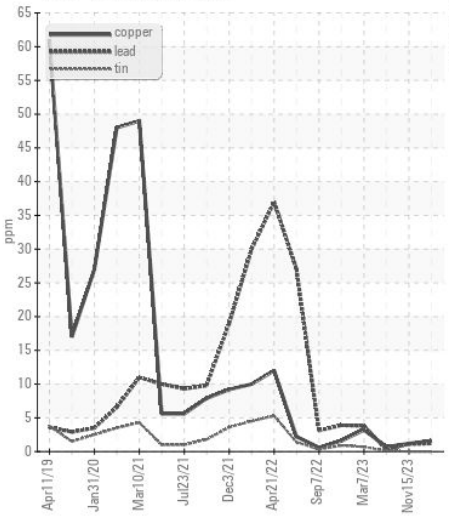
Particle Trend



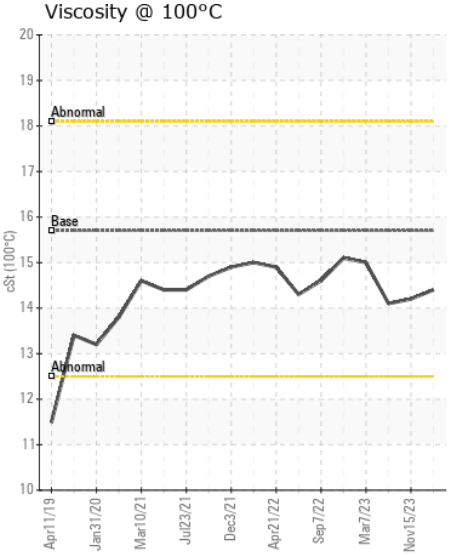
Ferrous Alloys



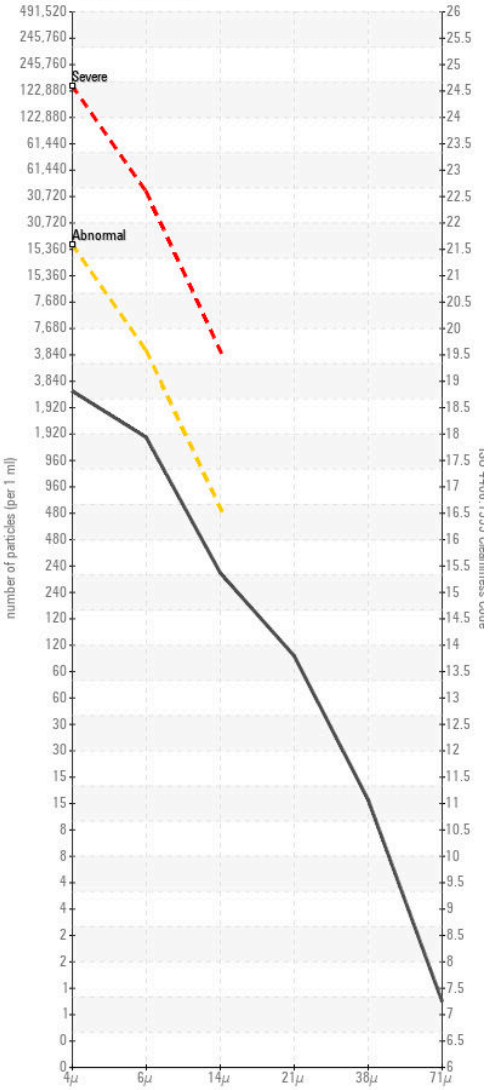
Non-ferrous Metals



Viscosity @ 100°C



Particle Count



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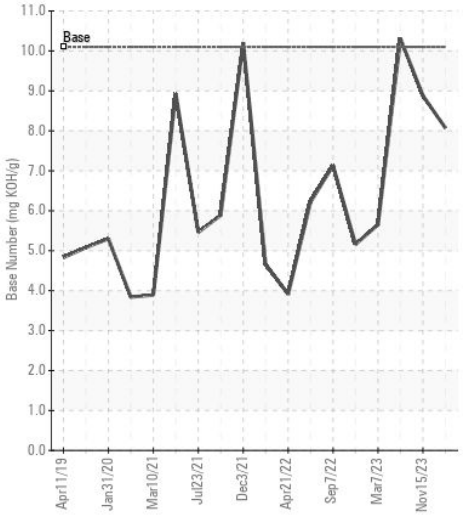

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0857789
Lab Number : 06089653
Unique Number : 10877098
Test Package : MOB 2 (Additional Tests: PrtCount)

Received : 14 Feb 2024
Tested : 16 Feb 2024
Diagnosed : 16 Feb 2024 - Jonathan Hester

Certificate L2367

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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)