MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
KAWASAKI KZ95Z5-2 227 (S/N 97C5-5471)
Component
Diesel Engine
Fluid
SHELL ROTELLA T 15W40 (12 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted.

WEAR

All component wear rates are normal.

CONTAMINATION

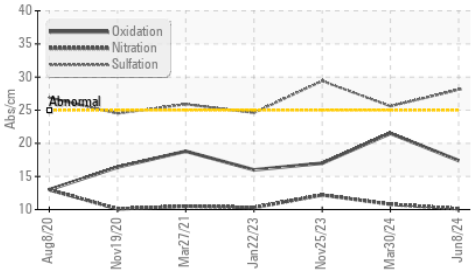
Light concentration of carbon/soot present in the oil.

FLUID CONDITION

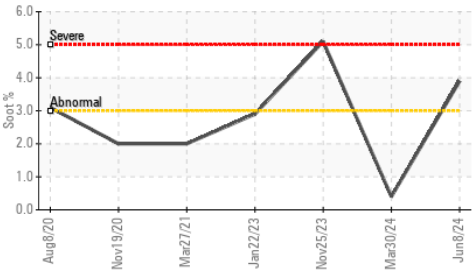
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0960437	RO06157115	RO06028852
Sample Date		Client Info		08 Jun 2024	30 Mar 2024	25 Nov 2023
Machine Age	hrs	Client Info		22046	21588	20740
Oil Age	hrs	Client Info		458	848	1176
Filter Age	hrs	Client Info		458	848	1176
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	35	21	83
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	5	6
Lead	ppm	ASTM D5185m	>40	0	12	<1
Copper	ppm	ASTM D5185m	>330	<1	14	2
Tin	ppm	ASTM D5185m	>15	0	3	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	7	11	23
Potassium	ppm	ASTM D5185m	>20	9	5	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	▲ 3.9	0.4	▲ 5.1
Nitration	Abs/cm	*ASTM D7624	>20	10.1	10.8	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.1	25.6	29.4
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		4	11	3
Boron	ppm	ASTM D5185m	316	132	65	55
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	1.2	<1	199	28
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	24	42	676	192
Calcium	ppm	ASTM D5185m	2292	2122	1516	1978
Phosphorus	ppm	ASTM D5185m	1064	969	869	1018
Zinc	ppm	ASTM D5185m	1160	1177	1039	1239
Sulfur	ppm	ASTM D5185m	4996	3253	3145	3219
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	21.5	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	9.07	6.54	7.91
Visc @ 100°C	cSt	ASTM D445	15.7	15.0	14.3	14.9

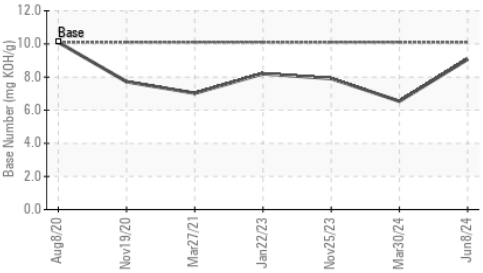
FT-IR (Direct Trend)



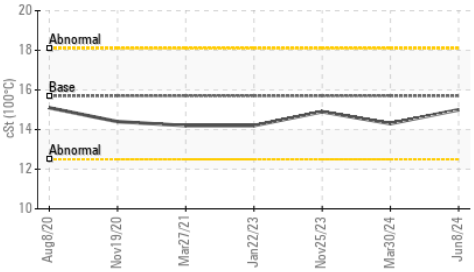
Soot %



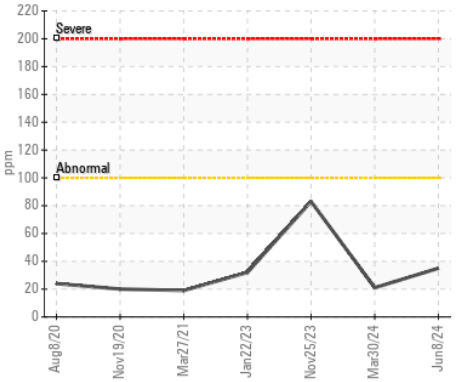
Base Number



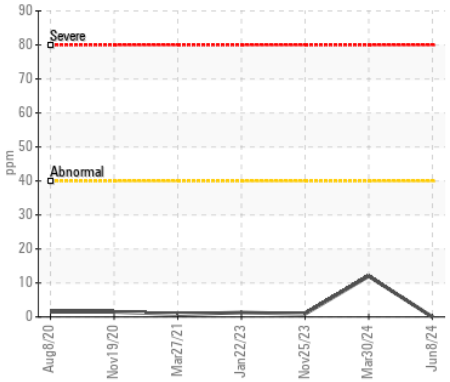
Viscosity @ 100°C



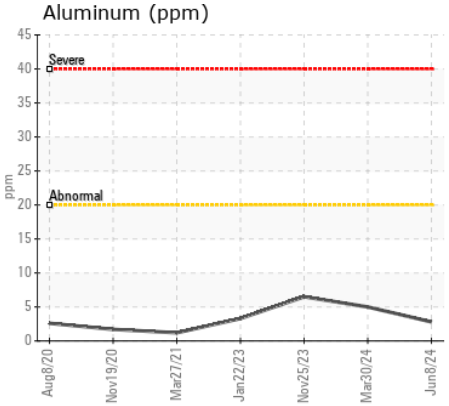
Iron (ppm)



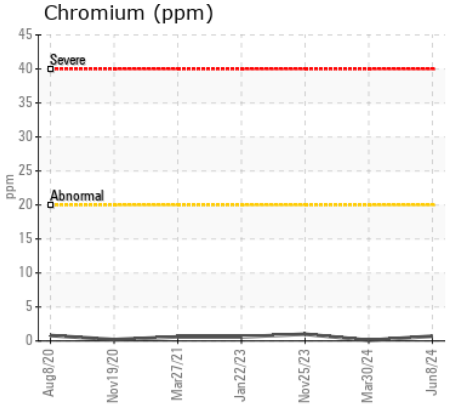
Lead (ppm)



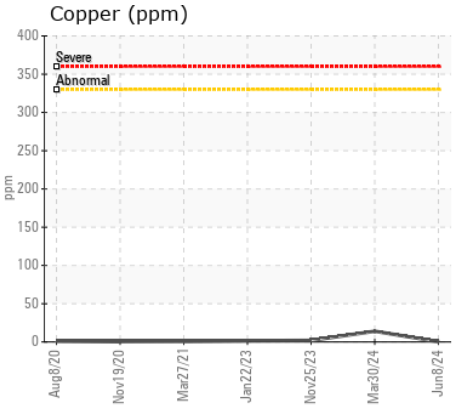
Aluminum (ppm)



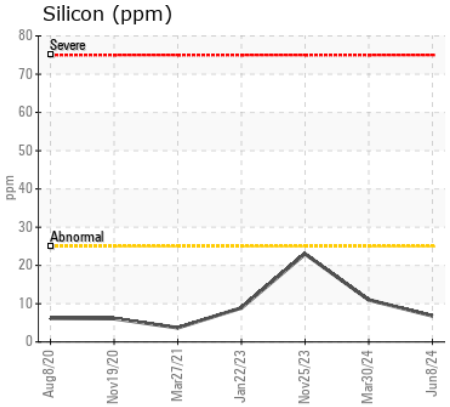
Chromium (ppm)



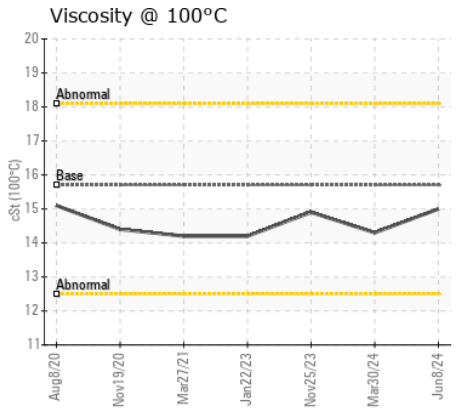
Copper (ppm)



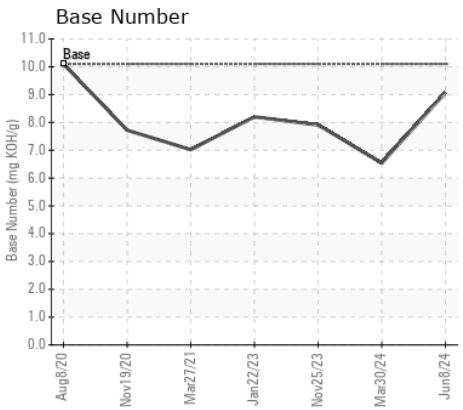
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0960437
Lab Number : 06237050
Unique Number : 11125884
Test Package : MOB 2

Received : 15 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 2024 - Wes Davis

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)

BIG 4 INC
301 WORTH ST
HEMPHILL, TX
US 75948
Contact: JODIE MCGEE
jodie.mcgee@big4inc.com
T: (936)275-7532
F: (409)787-2071