MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Machine Id
KOMATSU TH04 - PCS
Component
Diesel Engine
Fluid
CHEVRON DELO 400 SDE SAE 15W40 (26 QTS)

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

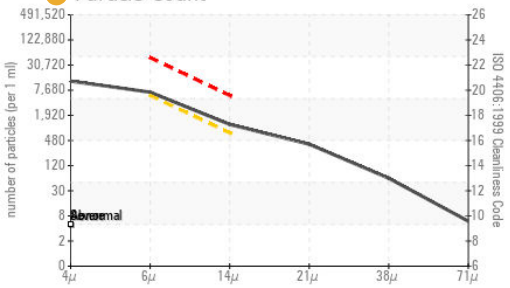
There is a moderate amount of particulates present in the oil.

FLUID CONDITION

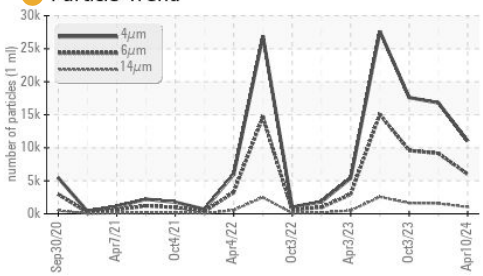
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0013781	KL0014082	KL0013081
Sample Date		Client Info		10 Apr 2024	10 Jan 2024	03 Oct 2023
Machine Age	hrs	Client Info		11522	11104	10735
Oil Age	hrs	Client Info		468	50	1375
Filter Age	hrs	Client Info		468	50	1375
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ATTENTION	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	32	43	18
Chromium	ppm	ASTM D5185m	>20	2	2	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	4	0
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	5	7	4
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	8	6	5
Potassium	ppm	ASTM D5185m	>20	2	0	3
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	1.8	2.6	1.6
Nitration	Abs/cm	*ASTM D7624	>20	10.1	11.3	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.0	29.5	24.8
Particles >4µm		ASTM D7647		11014	16808	17608
Particles >6µm		ASTM D7647	>5000	6000	9156	9592
Particles >14µm		ASTM D7647	>640	1021	1558	1632
Particles >21µm		ASTM D7647	>160	344	525	550
Particles >38µm		ASTM D7647	>40	53	81	85
Particles >71µm		ASTM D7647	>10	5	8	9
Oil Cleanliness		ISO 4406 (c)	>19/16	20/17	20/18	20/18
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		3	2	0
Boron	ppm	ASTM D5185m		252	98	191
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		88	86	86
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		376	382	360
Calcium	ppm	ASTM D5185m		1458	1291	1197
Phosphorus	ppm	ASTM D5185m	760	1095	929	910
Zinc	ppm	ASTM D5185m	800	1250	1175	1131
Sulfur	ppm	ASTM D5185m	3000	3774	2855	3070
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.9	24.7	20.0
Base Number (BN)	mg KOH/g	ASTM D2896	10	5.21	5.13	7.18
Visc @ 100°C	cSt	ASTM D445	14.6	13.1	12.6	12.3

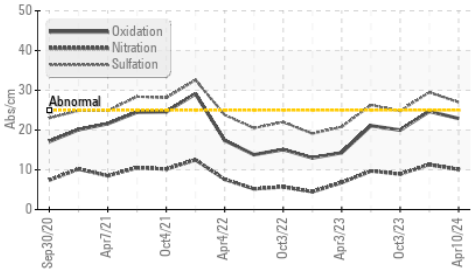
Particle Count



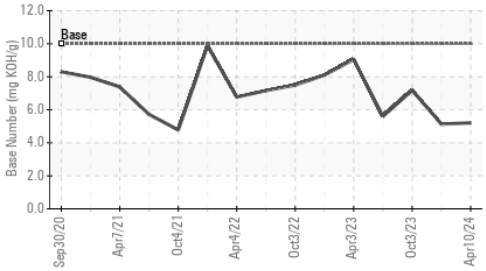
Particle Trend



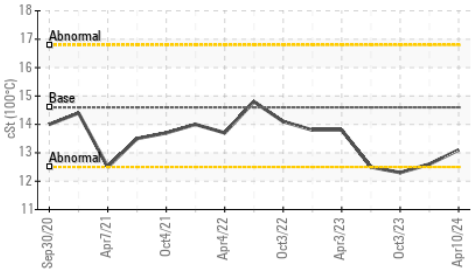
FT-IR (Direct Trend)



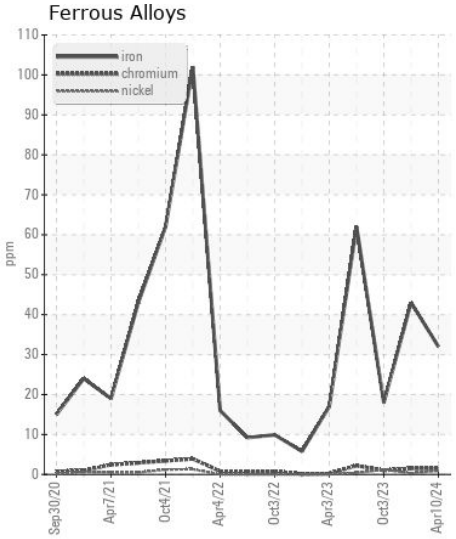
Base Number



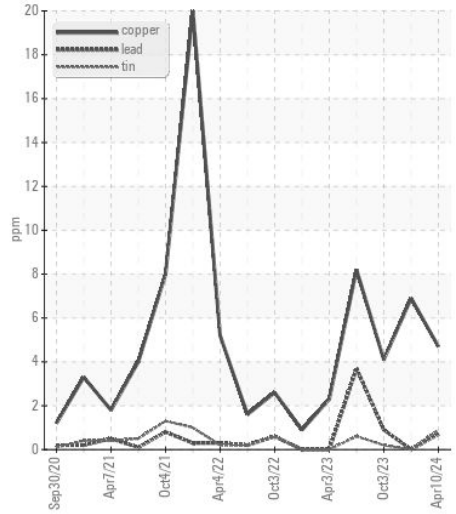
Viscosity @ 100°C



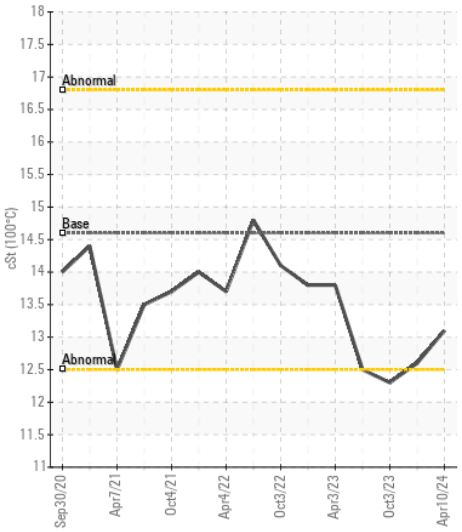
Ferrous Alloys



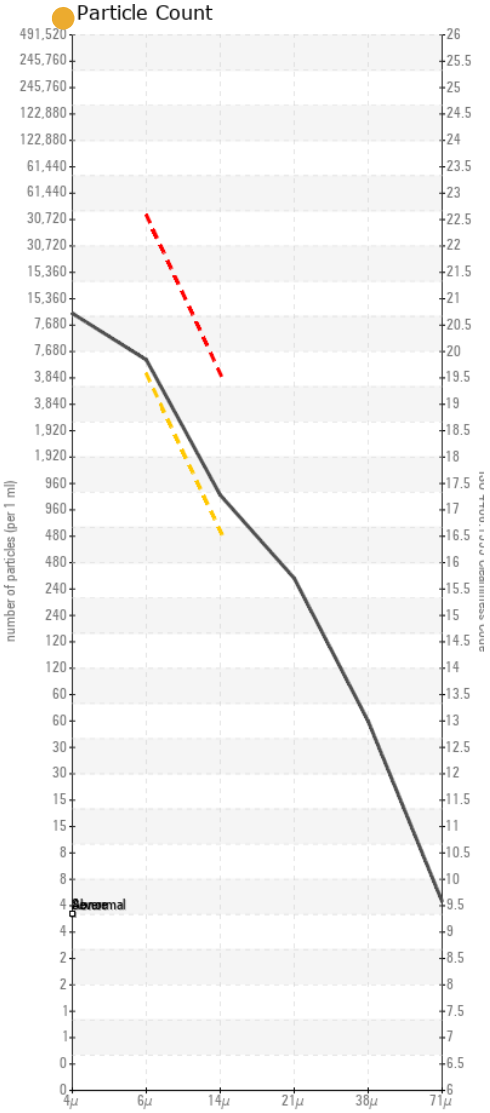
Non-ferrous Metals



Viscosity @ 100°C



Particle Count



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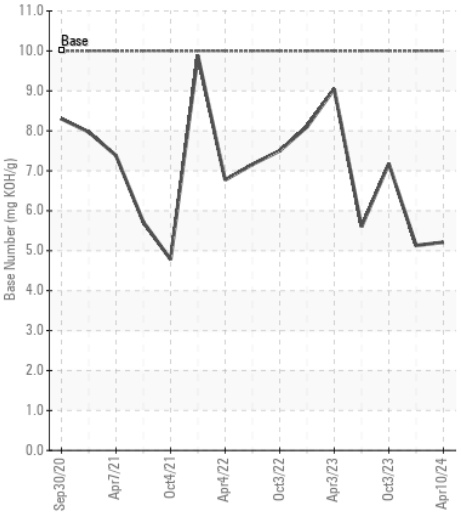

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013781
Lab Number : 06150608
Unique Number : 10980686
Test Package : MOB 2 (Additional Tests: PrtCount)

Received : 16 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 18 Apr 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)

PIKES PEAK PERFORMANCE PRODUCTS
7888 BULLET RD
PEYTON, CO
US 80831
Contact: SCOTT RIGGS
sriggs.pikespeakperformance@gmail.com
T: (303)434-0126
F: x: