MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
RAPCO
Machine Id
JOHN DEERE 744K LD07
Component
Diesel Engine
Fluid
CITGO CITGUARD 600 15W40 (36 QTS)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. No corrective action is recommended at this time. The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

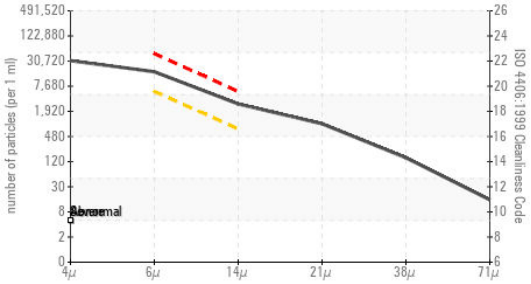
Fuel content negligible. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

FLUID CONDITION

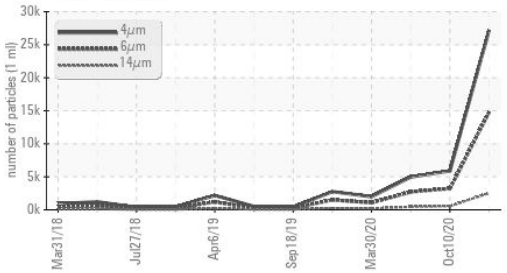
The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0014089	KLM2337822	KLM2340123
Sample Date		Client Info		10 Jan 2024	10 Oct 2020	07 Aug 2020
Machine Age	hrs	Client Info		6306	10990	10771
Oil Age	hrs	Client Info		50	2650	2431
Filter Age	hrs	Client Info		50	2650	2431
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	10	38	34
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	2	<1
Titanium	ppm	ASTM D5185m		0	5	1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	2	3	<1
Lead	ppm	ASTM D5185m	>26	0	2	<1
Copper	ppm	ASTM D5185m	>26	1	9	10
Tin	ppm	ASTM D5185m	>4	0	0	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	>22	8	15	18
Potassium	ppm	ASTM D5185m	>20	0	14	0
Fuel	%	ASTM D3524	>2.1	0.4	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	1	0.9
Nitration	Abs/cm	*ASTM D7624	>20	4.6	7.5	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	22.7	22.1
Particles >4µm		ASTM D7647		27195	5892	4967
Particles >6µm		ASTM D7647	>5000	▲ 14815	3210	2706
Particles >14µm		ASTM D7647	>640	▲ 2521	546	461
Particles >21µm		ASTM D7647	>160	▲ 849	184	155
Particles >38µm		ASTM D7647	>40	▲ 131	28	24
Particles >71µm		ASTM D7647	>10	13	3	2
Oil Cleanliness		ISO 4406 (c)	>19/16	▲ 21/19	19/16	19/16
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	>0.21	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>31	0	6	4
Boron	ppm	ASTM D5185m	13	196	68	73
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	57	56	65	67
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	825	438	425	414
Calcium	ppm	ASTM D5185m	1100	1462	1867	1780
Phosphorus	ppm	ASTM D5185m	933	838	891	1005
Zinc	ppm	ASTM D5185m	1089	1015	1074	1266
Sulfur	ppm	ASTM D5185m	2769	2836	2914	2716
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	17.3	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	9.66	8.31	9.13
Visc @ 100°C	cSt	ASTM D445	15.4	12.3	13.8	13.9

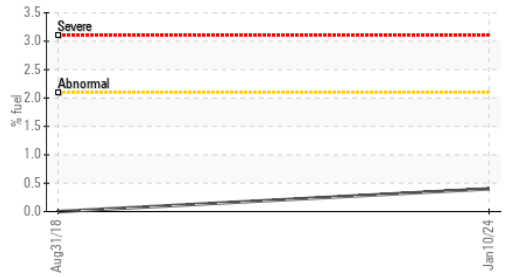
Particle Count



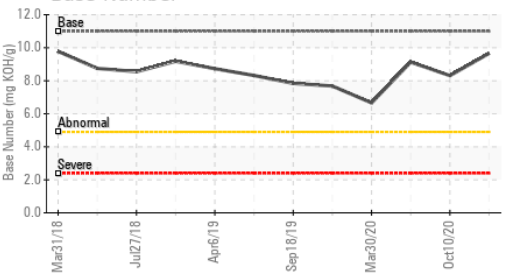
Particle Trend



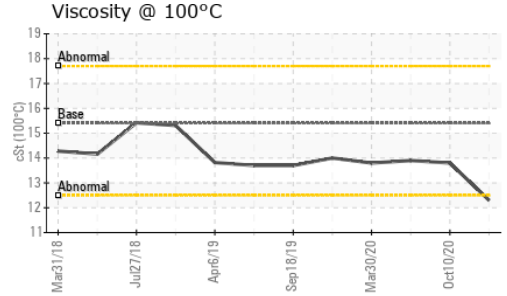
Fuel Dilution



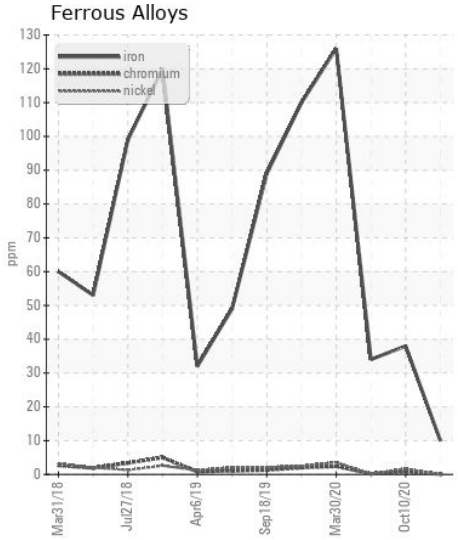
Base Number



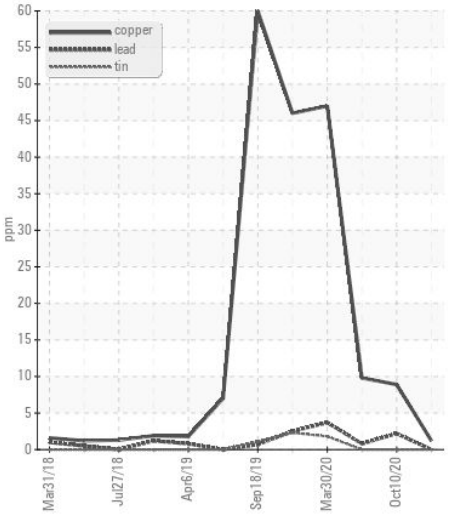
Viscosity @ 100°C



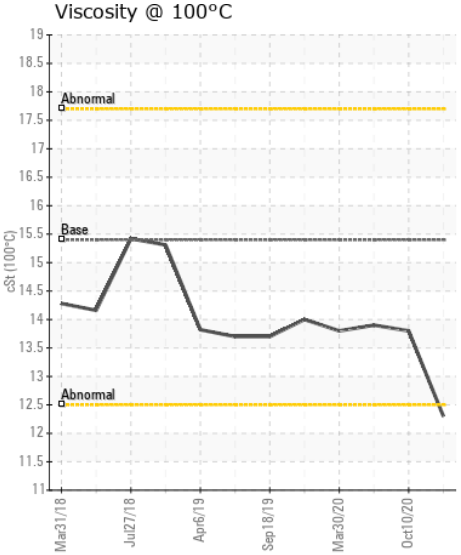
Ferrous Alloys



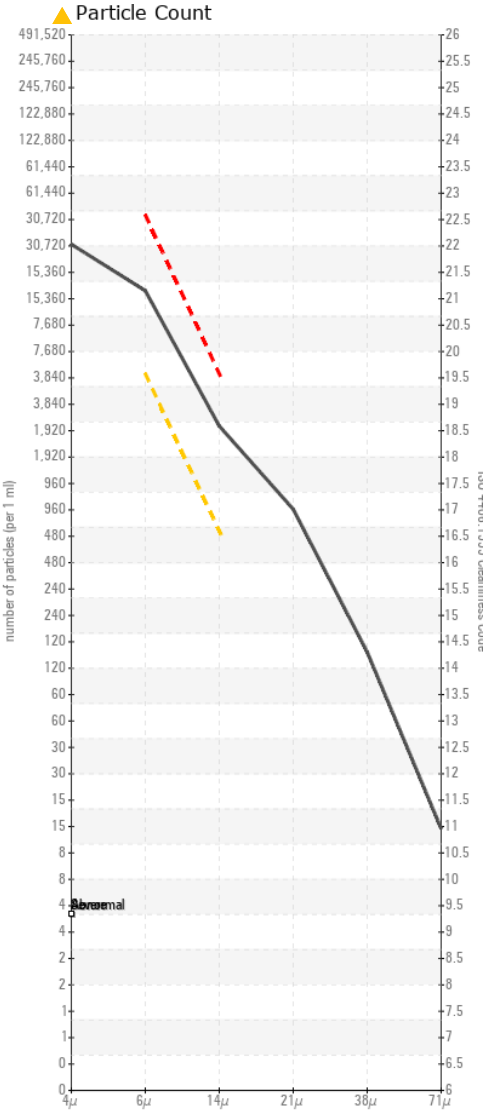
Non-ferrous Metals



Viscosity @ 100°C



Particle Count



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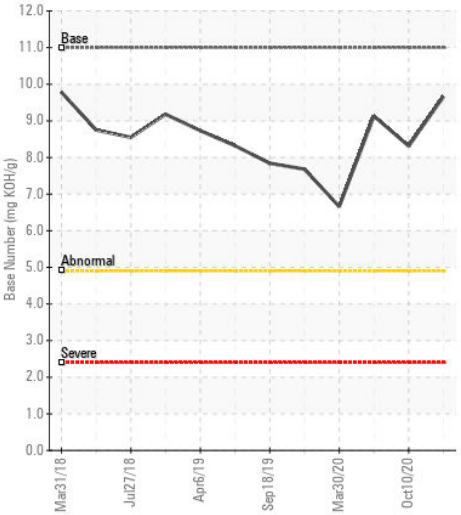

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014089 **Recieved** : 16 Jan 2024
Lab Number : 06061364 **Diagnosed** : 18 Jan 2024
Unique Number : 10832746 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel, PrtCount)

Certificate L2367

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To discuss this sample report, contact Customer Service at 1-800-237-1369.
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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)