MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
FP60
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.
Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

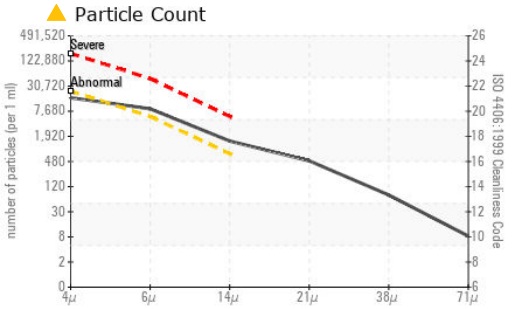
CONTAMINATION

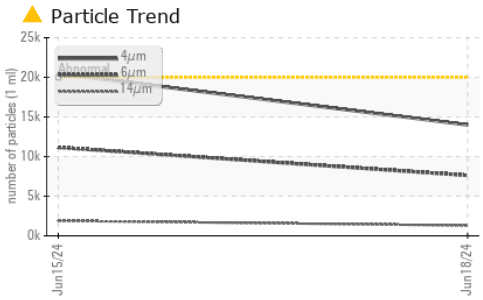
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

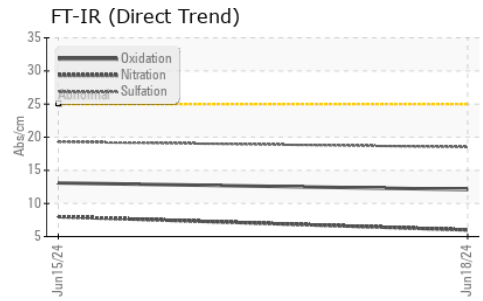
FLUID CONDITION

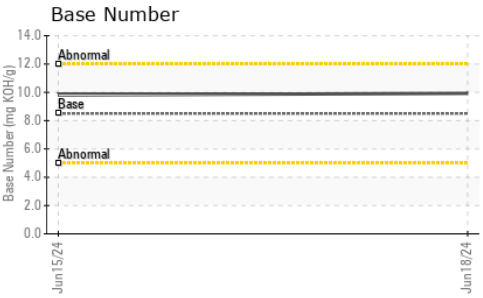
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

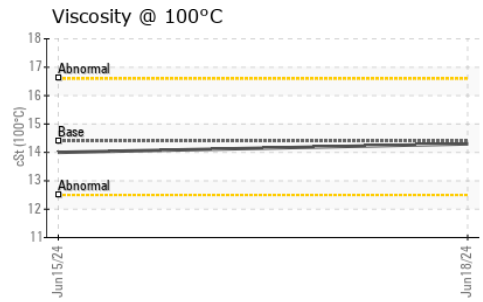
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0014466	KL0014473	---
Sample Date		Client Info		18 Jun 2024	15 Jun 2024	---
Machine Age	hrs	Client Info		11879	11838	---
Oil Age	hrs	Client Info		40	900	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	Changed	---
Filter Changed		Client Info		Not Changd	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185m	>100	0	9	---
Chromium	ppm	ASTM D5185m	>20	0	0	---
Nickel	ppm	ASTM D5185m	>4	<1	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	<1	2	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	0	4	---
Tin	ppm	ASTM D5185m	>15	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	▲ MODER	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	4	5	---
Potassium	ppm	ASTM D5185m	>20	3	6	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	6.0	8.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	19.3	---
Particles >4µm		ASTM D7647	>20000	13998	▲ 20470	---
Particles >6µm		ASTM D7647	>5000	● 7625	▲ 11151	---
Particles >14µm		ASTM D7647	>640	● 1298	▲ 1898	---
Particles >21µm		ASTM D7647	>160	▲ 437	▲ 639	---
Particles >38µm		ASTM D7647	>40	● 67	▲ 99	---
Particles >71µm		ASTM D7647	>10	7	▲ 10	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 21/20/17	▲ 22/21/18	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m	>216	2	26	---
Boron	ppm	ASTM D5185m	250	86	74	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	0	2	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	450	733	759	---
Calcium	ppm	ASTM D5185m	3000	1411	1508	---
Phosphorus	ppm	ASTM D5185m	1150	1089	1110	---
Zinc	ppm	ASTM D5185m	1350	1251	1352	---
Sulfur	ppm	ASTM D5185m	4250	5266	4795	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.1	13.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.93	9.81	---
Visc @ 100°C	cSt	ASTM D445	14.4	14.3	14.0	---

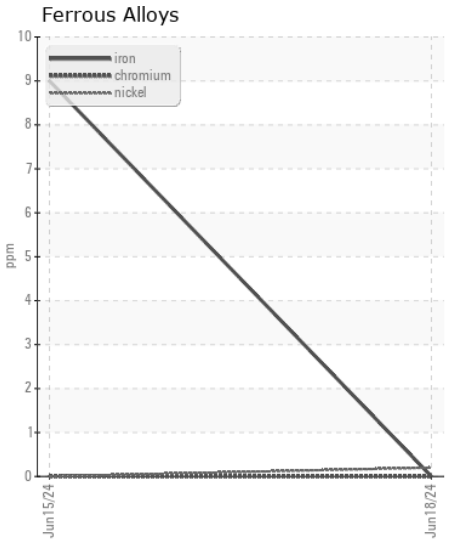


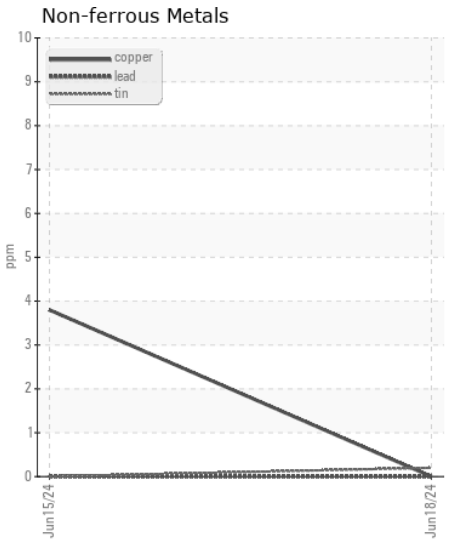


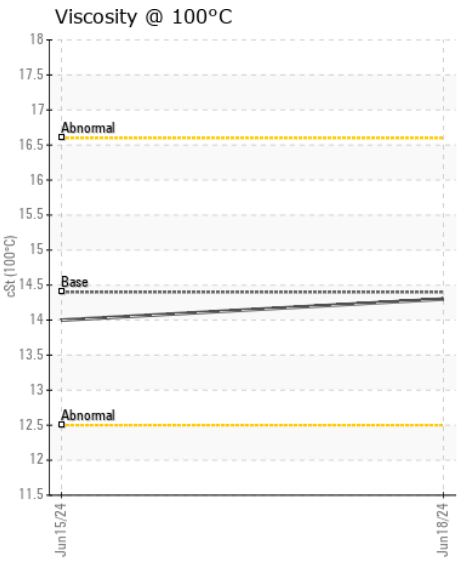


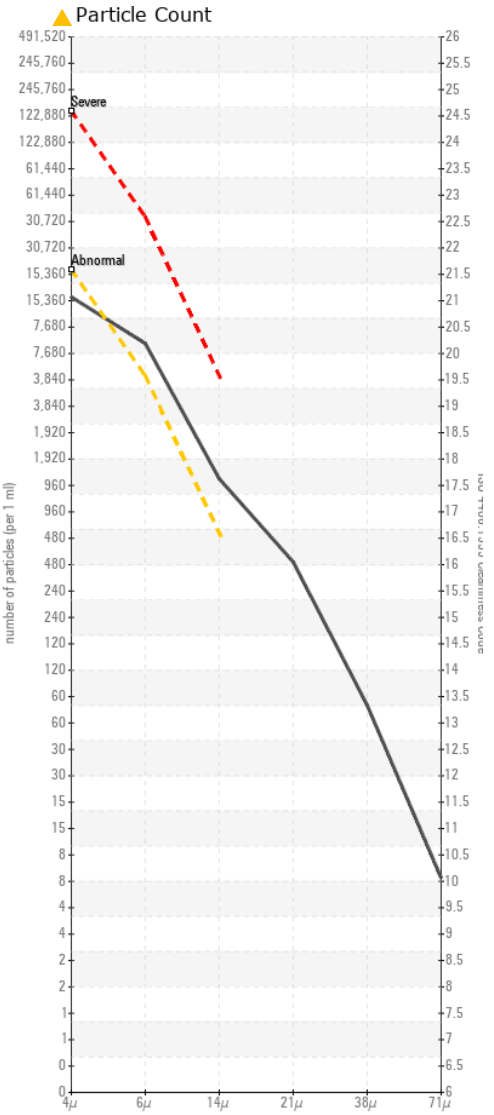


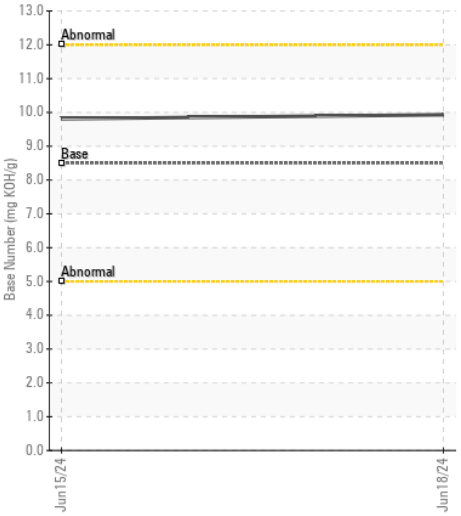












Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: KL0014466	**Received**	: 02 Jul 2024
Lab Number	: 06226439	**Tested**	: 03 Jul 2024
Unique Number	: 11109932	**Diagnosed**	: 03 Jul 2024 - Wes Davis
Test Package	: MOB 2 (Additional Tests: PrtCount)		

IRON CLAD ENERGY
9015 W COUNTY RD 127
MIDLAND, TX
US 79706
Contact: TREVOR FRENETTE

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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