



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
M-EG2
Component
Diesel Engine
Fluid
MOBIL 15W40 (75 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0011916	KL0006428	KLM2304068
Sample Date		Client Info		18 Oct 2023	15 Mar 2023	31 Jan 2012
Machine Age	hrs	Client Info		152	146	307
Oil Age	hrs	Client Info		41	35	13
Filter Age	hrs	Client Info		6	24	13
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<1	1	2
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	<1	1
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	40	39	<1
Tin	ppm	ASTM D5185m	>15	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

CONTAMINATION

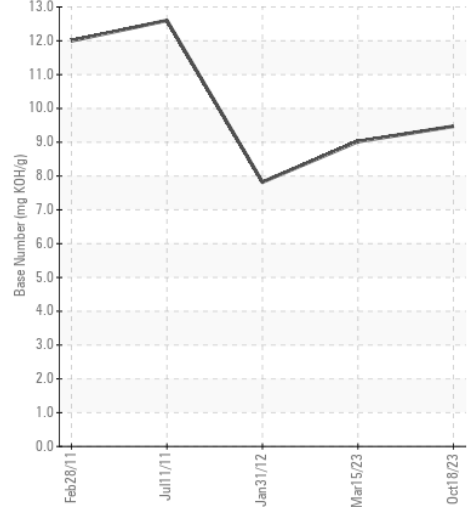
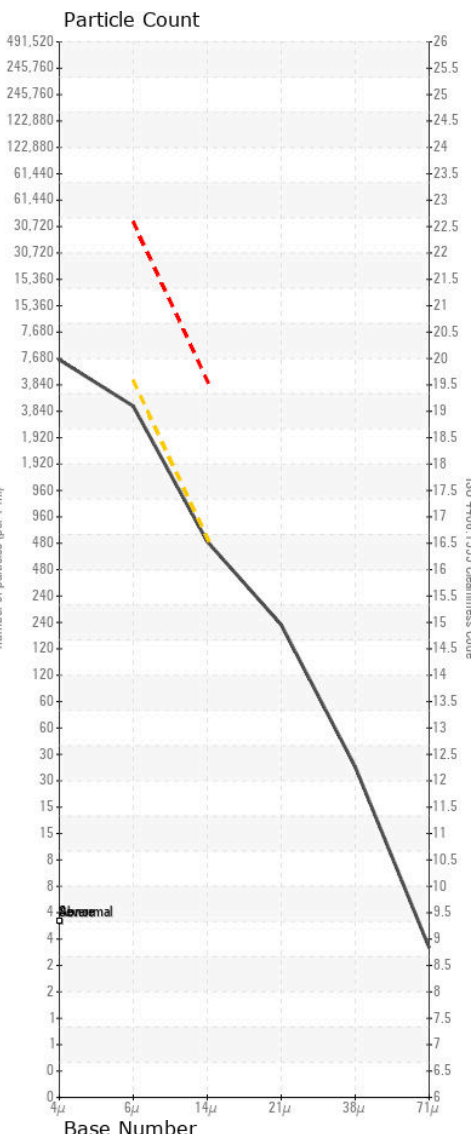
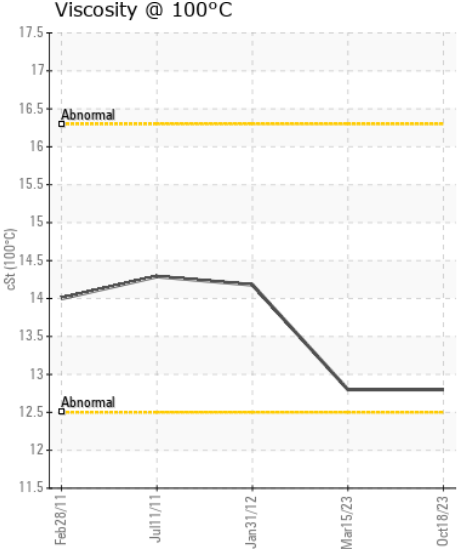
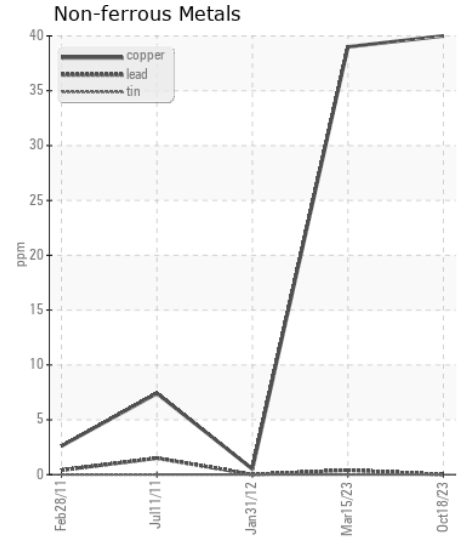
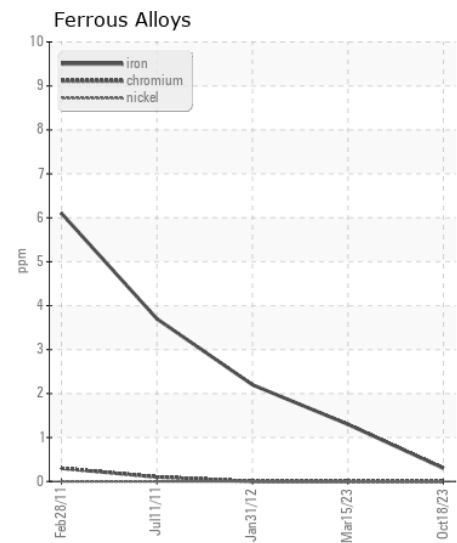
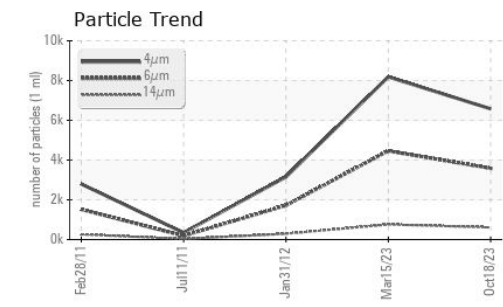
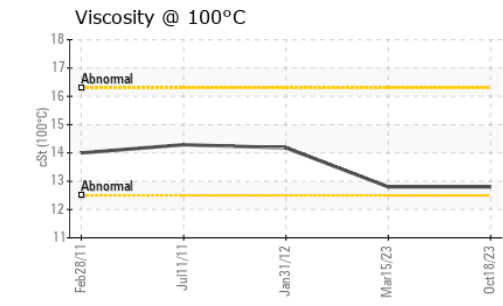
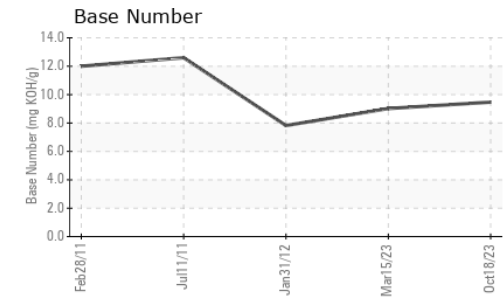
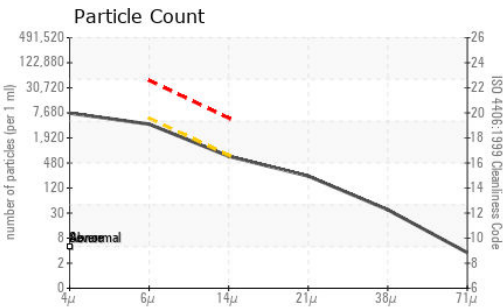
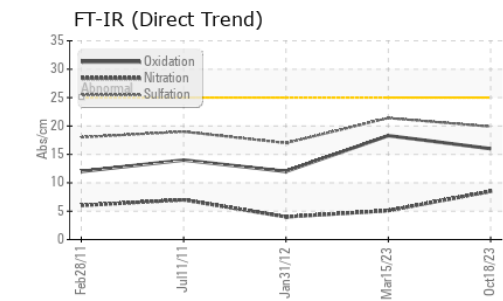
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>25	5	6	6
Potassium	ppm	ASTM D5185m	>20	0	<1	0
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	0.5	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	8.5	5.1	4.
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	21.4	17.
Particles >4µm		ASTM D7647		6577	8186	3153
Particles >6µm		ASTM D7647	>5000	3583	4460	1718
Particles >14µm		ASTM D7647	>640	610	759	292
Particles >21µm		ASTM D7647	>160	205	256	98
Particles >38µm		ASTM D7647	>40	32	39	15
Particles >71µm		ASTM D7647	>10	3	4	1
Oil Cleanliness		ISO 4406 (c)	>19/16	19/16	19/17	18/15
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

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.

Sodium	ppm	ASTM D5185m	>118	2	2	2
Boron	ppm	ASTM D5185m		71	62	24
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		37	39	19
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		482	530	51
Calcium	ppm	ASTM D5185m		1513	1656	3030
Phosphorus	ppm	ASTM D5185m		911	913	1217
Zinc	ppm	ASTM D5185m		1071	1159	1259
Sulfur	ppm	ASTM D5185m		2750	3159	4331
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	18.3	12.
Base Number (BN)	mg KOH/g	ASTM D2896		9.47	9.02	7.82
Visc @ 100°C	cSt	ASTM D445		12.8	12.8	14.18



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0011916 **Received** : 01 Nov 2023
Lab Number : 05996379 **Tested** : 03 Nov 2023
Unique Number : 10724739 **Diagnosed** : 03 Nov 2023 - Wes Davis
Test Package : MOB 2 (Additional Tests: PrtCount)

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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)