MOBIL WEAR CHECK II

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
R202-P-02
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

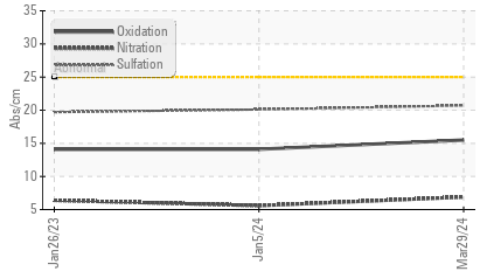
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

FLUID CONDITION

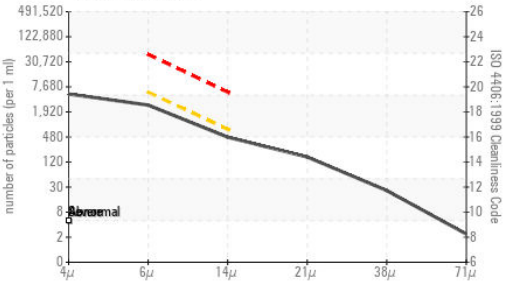
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0014220	KL0013991	KLM2337561
Sample Date		Client Info		29 Mar 2024	05 Jan 2024	26 Jan 2023
Machine Age	hrs	Client Info		45326	45297	44946
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	34	6	5
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	3	<1
Lead	ppm	ASTM D5185m	>40	<1	<1	1
Copper	ppm	ASTM D5185m	>330	4	1	6
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	5	5	3
Potassium	ppm	ASTM D5185m	>20	3	2	<1
Fuel		WC Method	>5	<1.0	<1.0	▲ 3.7
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.9	5.6	6.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	20.1	19.7
Particles >4µm		ASTM D7647		4498	11110	26960
Particles >6µm		ASTM D7647	>5000	2450	● 6052	▲ 14867
Particles >14µm		ASTM D7647	>640	417	● 1030	▲ 2500
Particles >21µm		ASTM D7647	>160	140	▲ 347	▲ 842
Particles >38µm		ASTM D7647	>40	22	54	▲ 130
Particles >71µm		ASTM D7647	>10	2	5	▲ 13
Oil Cleanliness		ISO 4406 (c)	>19/16	18/16	● 20/17	▲ 21/18
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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	>216	9	6	<1
Boron	ppm	ASTM D5185m	250	346	498	362
Barium	ppm	ASTM D5185m	10	<1	0	0
Molybdenum	ppm	ASTM D5185m	100	59	93	76
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	450	260	426	425
Calcium	ppm	ASTM D5185m	3000	973	1374	1232
Phosphorus	ppm	ASTM D5185m	1150	838	1172	813
Zinc	ppm	ASTM D5185m	1350	895	1303	1037
Sulfur	ppm	ASTM D5185m	4250	3213	4242	3346
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	14.1	14.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.24	7.39	8.04
Visc @ 100°C	cSt	ASTM D445	14.4	13.6	13.3	12.2

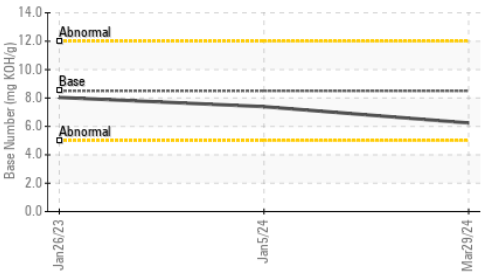
FT-IR (Direct Trend)



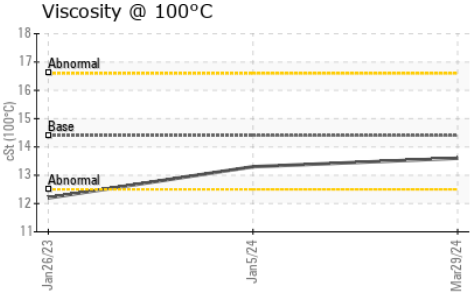
Particle Count



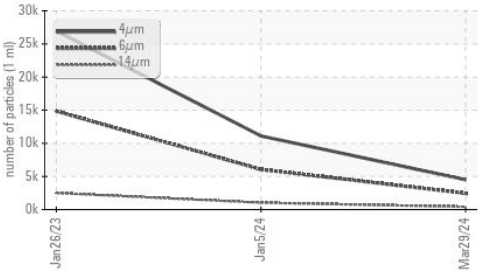
Base Number



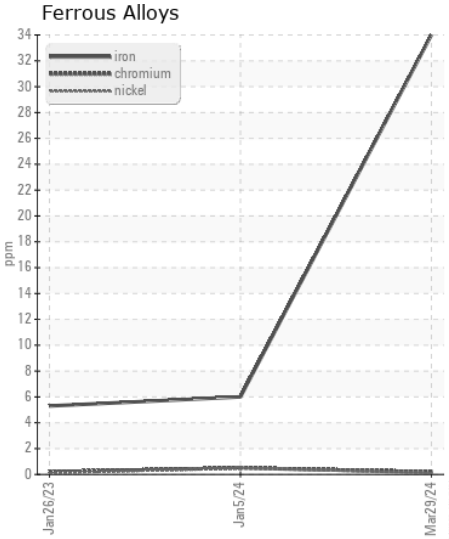
Viscosity @ 100°C



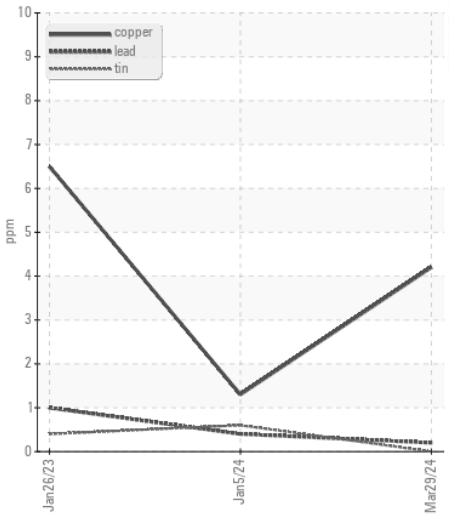
Particle Trend



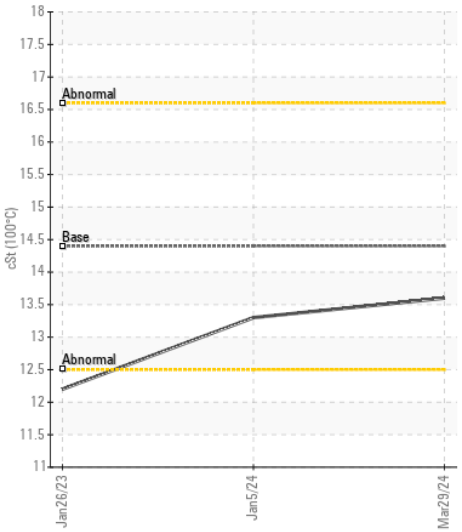
Ferrous Alloys



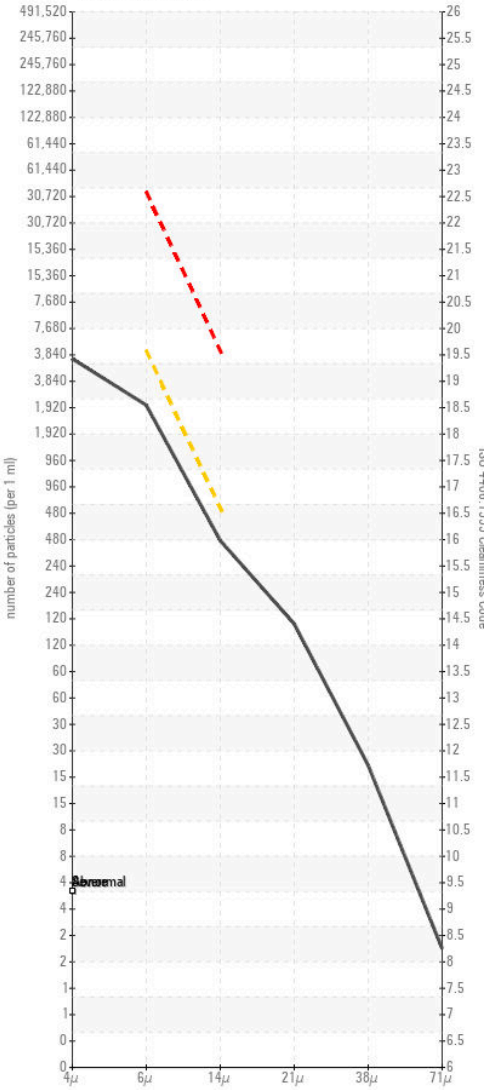
Non-ferrous Metals



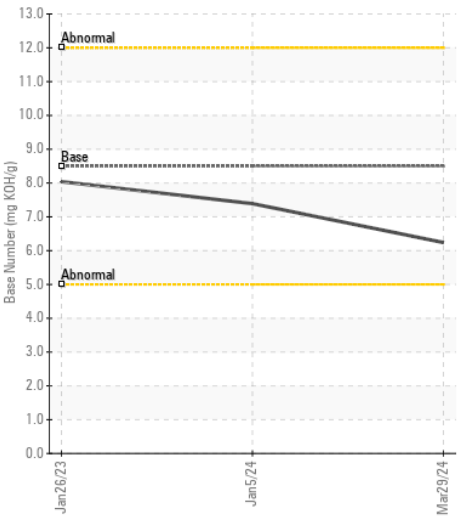
Viscosity @ 100°C



Particle Count



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014220
Lab Number : 06145362
Unique Number : 10970170
Test Package : MOB 2 (Additional Tests: PrtCount)

Received : 10 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 15 Apr 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)

STRATEGY LATERAL
PO BOX 80543
MIDLAND, TX
US 76065
Contact: KIRK WADE
KIRK.WADE@STRATEGYLATERAL.COM
T:
F: