



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LUDLOW
Component
Port Genset
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0057086	MW0048261	MW0032796
Sample Date		Client Info		07 Feb 2024	23 Dec 2023	06 Jun 2022
Machine Age	hrs	Client Info		22375	21742	18314
Oil Age	hrs	Client Info		500	500	500
Filter Age	hrs	Client Info		500	500	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	37	9	11
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	8	4	3
Lead	ppm	ASTM D5185m	>17	0	0	0
Copper	ppm	ASTM D5185m	>70	0	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

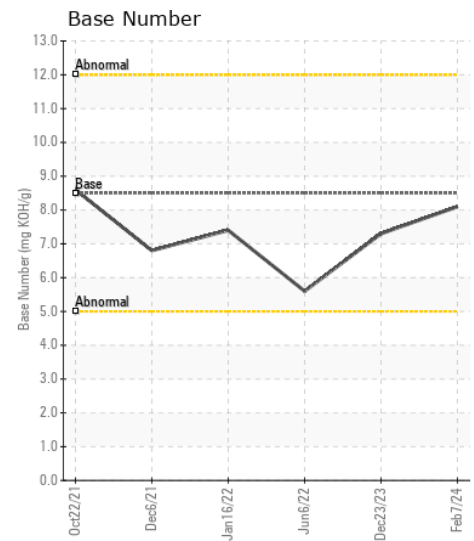
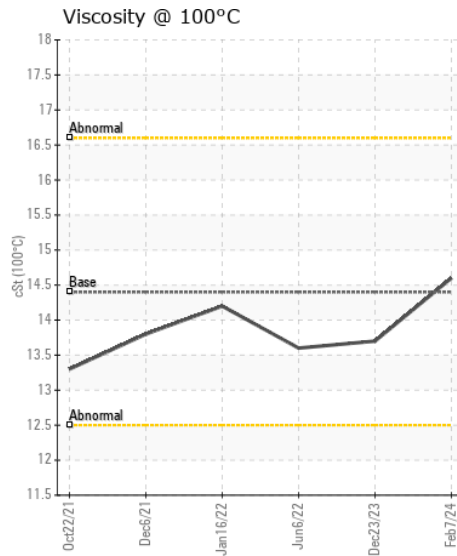
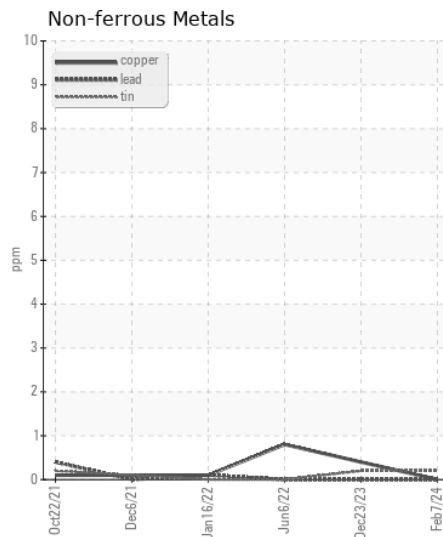
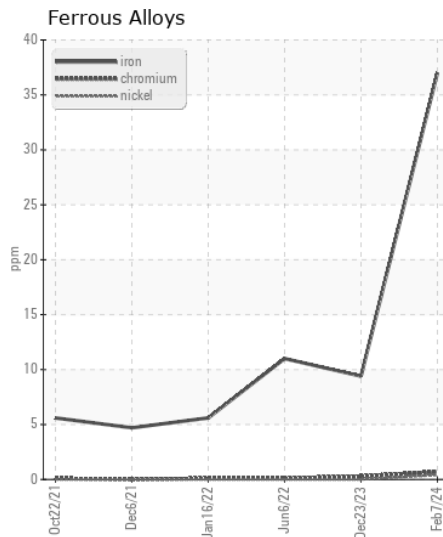
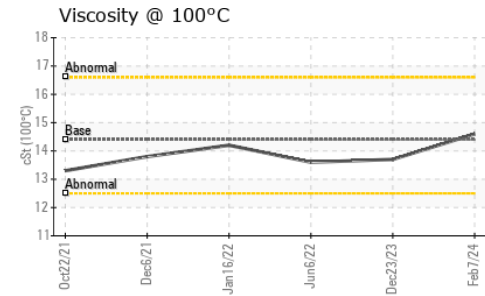
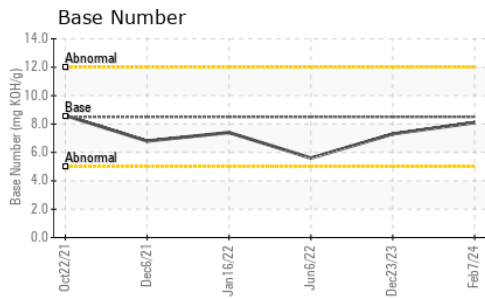
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	11	8	11
Potassium	ppm	ASTM D5185m	>20	<1	1	0
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		1.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	12.4	11.6	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.3	26.0	27.1
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	>0.1	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	>158	2	3	0
Boron	ppm	ASTM D5185m	250	276	232	186
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	128	121	97
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	699	653	497
Calcium	ppm	ASTM D5185m	3000	1521	1568	1549
Phosphorus	ppm	ASTM D5185m	1150	711	656	590
Zinc	ppm	ASTM D5185m	1350	875	828	743
Sulfur	ppm	ASTM D5185m	4250	2367	2261	1957
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.9	28.2	32.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.1	7.3	5.6
Visc @ 100°C	cSt	ASTM D445	14.4	14.6	13.7	13.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : MW0057086

Lab Number : 06087965

Unique Number : 10875410

Test Package : MAR 2

Received : 13 Feb 2024

Tested : 14 Feb 2024

Diagnosed : 15 Feb 2024 - Don Baldrige

C & B MARINE
50 E RIVERCENTER BLVD, SUITE 1180

COVINGTON, KY

US 41011

Contact: DAVID WESTRICH

dwestrich@carlislebray.com

T: (812)290-4063

F: (859)655-7504

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)