



Machine Id
1134
Component
Diesel Engine
Fluid
LEAHY WOLF PREMIUM 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LW0009217	LW0008393	LW0007706
Sample Date		Client Info		27 Jun 2024	27 Oct 2023	23 Aug 2023
Machine Age	hrs	Client Info		2448	1913	1631
Oil Age	hrs	Client Info		2166	282	291
Filter Age	hrs	Client Info		0	282	291
Oil Changed		Client Info		Changed	Not Changed	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	7	7	6
Chromium	ppm	ASTM D5185m	>11	<1	<1	0
Nickel	ppm	ASTM D5185m	>5	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	4	4	2
Lead	ppm	ASTM D5185m	>26	2	2	<1
Copper	ppm	ASTM D5185m	>26	10	11	4
Tin	ppm	ASTM D5185m	>4	2	2	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

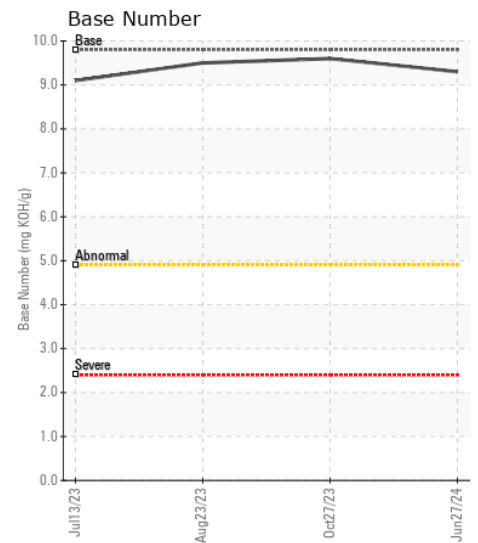
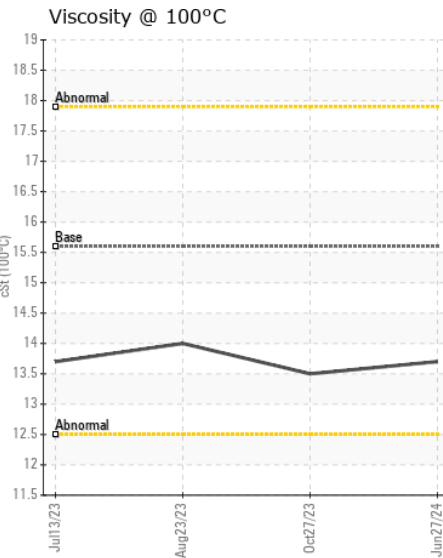
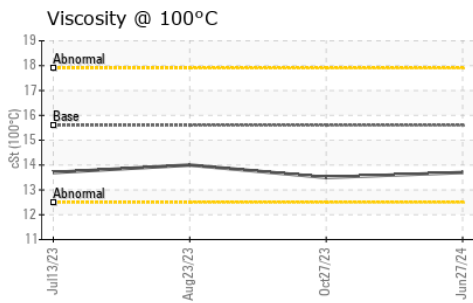
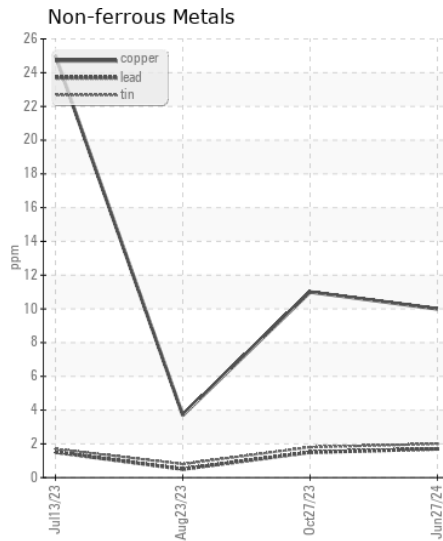
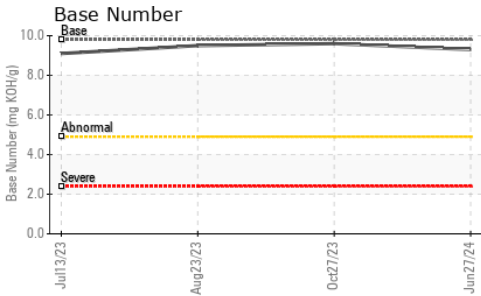
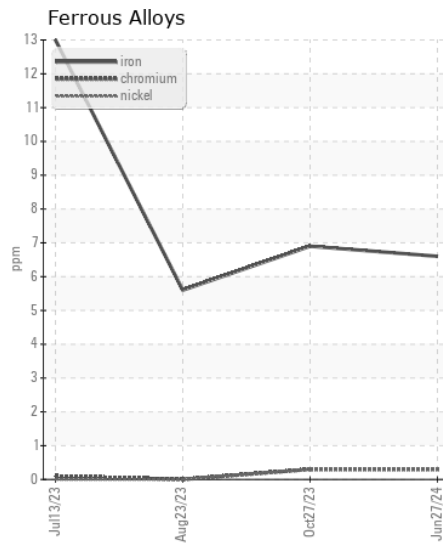
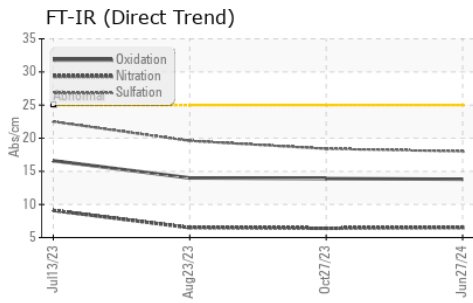
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	3	3	6
Potassium	ppm	ASTM D5185m	>20	2	2	<1
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.5	6.4	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	18.4	19.6
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

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	>31	2	4	3
Boron	ppm	ASTM D5185m		20	25	321
Barium	ppm	ASTM D5185m		<1	<1	0
Molybdenum	ppm	ASTM D5185m		80	82	268
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		887	927	904
Calcium	ppm	ASTM D5185m		1090	1124	1502
Phosphorus	ppm	ASTM D5185m		904	1055	972
Zinc	ppm	ASTM D5185m		1144	1271	1123
Sulfur	ppm	ASTM D5185m		2573	3810	3898
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	13.9	14.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.3	9.6	9.5
Visc @ 100°C	cSt	ASTM D445	15.6	13.7	13.5	14.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LW0009217
Lab Number : 06225798
Unique Number : 11109291
Test Package : FLEET

Received : 02 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 03 Jul 2024 - Wes Davis

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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)