LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
Store 9 - Marietta
Machine Id
KENWORTH 70
Component
Diesel Engine
Fluid
SHELL ROTELLA T 15W40 (10 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

The lead level is abnormal. All other component wear rates are normal.

CONTAMINATION

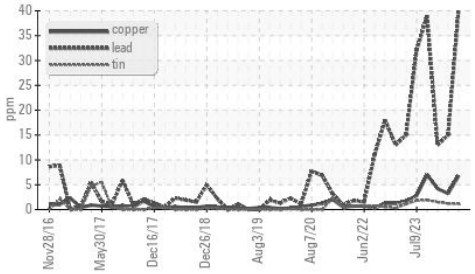
Sodium and/or potassium levels remain high. Test for glycol is negative.

FLUID CONDITION

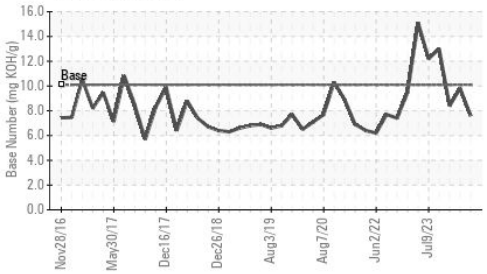
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0048147	LEC0045141	LEC0046474
Sample Date		Client Info		10 Mar 2024	22 Nov 2023	14 Oct 2023
Machine Age	hrs	Client Info		4699	3540	4034
Oil Age	hrs	Client Info		400	400	400
Filter Age	hrs	Client Info		400	400	400
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	SEVERE	ABNORMAL
Iron	ppm	ASTM D5185m	>100	19	37	22
Chromium	ppm	ASTM D5185m	>20	1	4	2
Nickel	ppm	ASTM D5185m	>4	0	0	1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	4	4	3
Lead	ppm	ASTM D5185m	>40	▲ 40	15	13
Copper	ppm	ASTM D5185m	>330	7	3	4
Tin	ppm	ASTM D5185m	>15	1	1	2
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>!20	6	10	8
Potassium	ppm	ASTM D5185m	>20	▲ 105	▲ 928	▲ 284
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	▲ 0.10	NEG
Soot %	%	*ASTM D7844	>3	1	1	0.7
Nitration	Abs/cm	*ASTM D7624	>20	11.5	10.6	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.2	25.7	24.7
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
Sodium	ppm	ASTM D5185m		41	▲ 433	▲ 112
Boron	ppm	ASTM D5185m	316	166	234	269
Barium	ppm	ASTM D5185m	0.0	2	0	2
Molybdenum	ppm	ASTM D5185m	1.2	135	301	177
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m	24	622	664	687
Calcium	ppm	ASTM D5185m	2292	1443	1551	1467
Phosphorus	ppm	ASTM D5185m	1064	632	631	717
Zinc	ppm	ASTM D5185m	1160	775	853	892
Sulfur	ppm	ASTM D5185m	4996	2703	2395	2646
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.1	18.7	18.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	7.6	9.8	8.4
Visc @ 100°C	cSt	ASTM D445	15.7	13.5	13.5	13.3

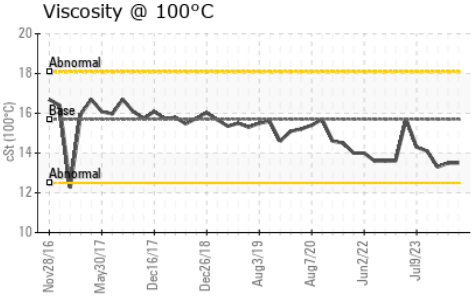
Non-ferrous Metals



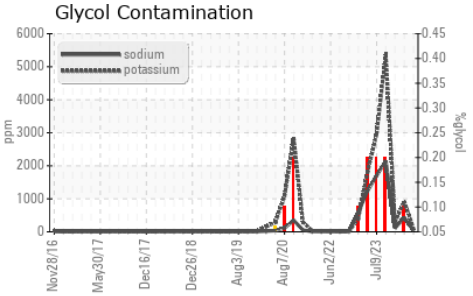
Base Number



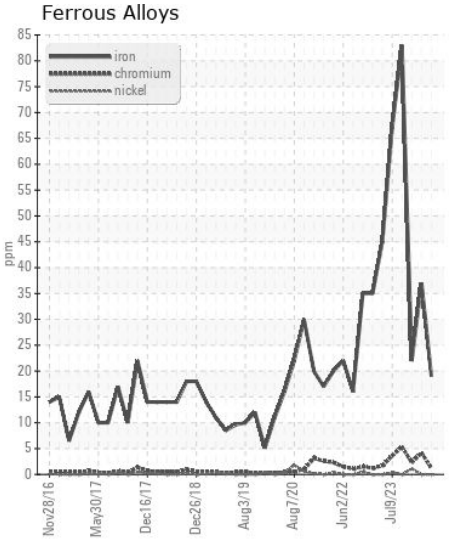
Viscosity @ 100°C



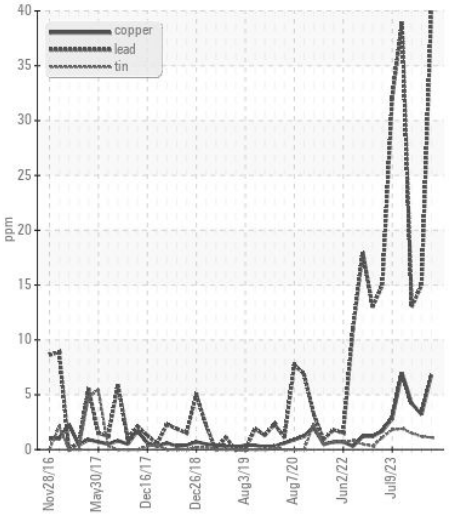
Glycol Contamination



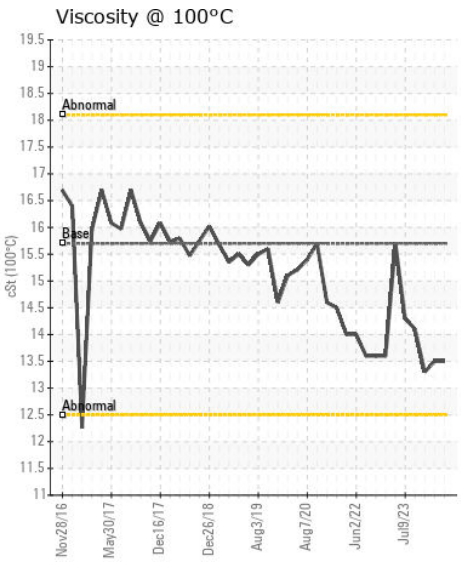
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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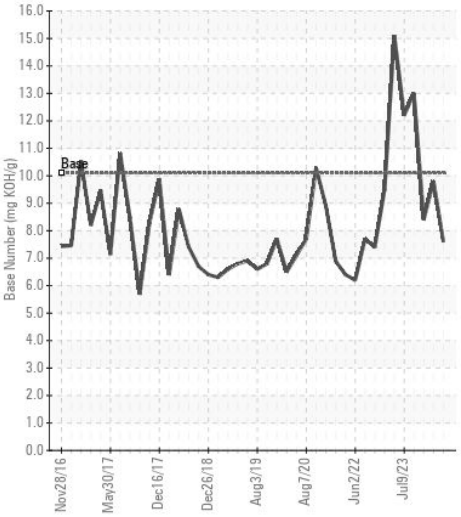

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0048147 **Received** : 20 Mar 2024
Lab Number : 06124160 **Tested** : 25 Mar 2024
Unique Number : 10938311 **Diagnosed** : 25 Mar 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: TBN)

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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