CONST

LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
Store 9 - Marietta
Machine Id
KENWORTH 1030
Component
Diesel Engine
Fluid
SHELL ROTELLA T 15W40 (10 GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

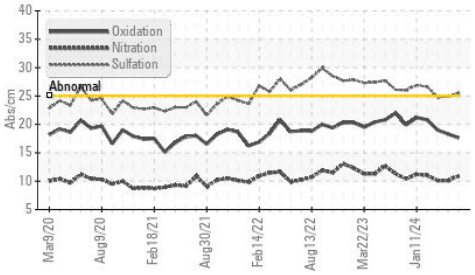
Sodium and/or potassium levels are high.

FLUID CONDITION

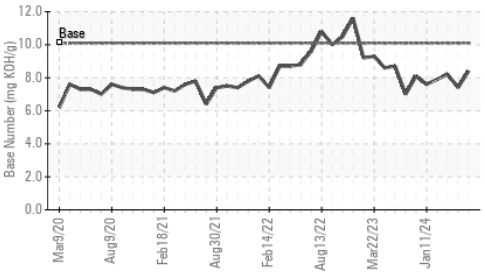
The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0051462	LEC0050630	LEC0049230
Sample Date		Client Info		18 Jun 2024	15 May 2024	28 Mar 2024
Machine Age	hrs	Client Info		49398	48968	48467
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	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	31	27	21
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		1	2	2
Silver	ppm	ASTM D5185m	>3	0	1	0
Aluminum	ppm	ASTM D5185m	>20	6	6	6
Lead	ppm	ASTM D5185m	>40	2	6	10
Copper	ppm	ASTM D5185m	>330	4	6	8
Tin	ppm	ASTM D5185m	>15	0	1	0
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	8	10	10
Potassium	ppm	ASTM D5185m	>20	▲ 499	▲ 281	▲ 113
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.1	0.9	1
Nitration	Abs/cm	*ASTM D7624	>20	10.9	10.1	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.5	24.9	24.8
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		▲ 486	▲ 203	▲ 123
Boron	ppm	ASTM D5185m	316	154	246	234
Barium	ppm	ASTM D5185m	0.0	<1	0	0
Molybdenum	ppm	ASTM D5185m	1.2	215	150	143
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m	24	451	484	605
Calcium	ppm	ASTM D5185m	2292	1426	1461	1626
Phosphorus	ppm	ASTM D5185m	1064	1048	984	881
Zinc	ppm	ASTM D5185m	1160	1245	1177	1060
Sulfur	ppm	ASTM D5185m	4996	3767	3727	3459
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.6	18.3	19.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	8.4	7.4	8.2
Visc @ 100°C	cSt	ASTM D445	15.7	13.8	13.6	13.7

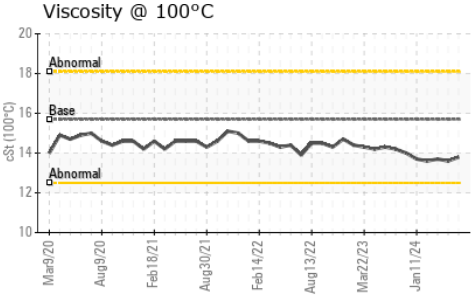
FT-IR (Direct Trend)



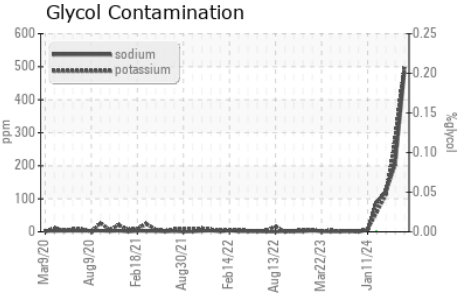
Base Number



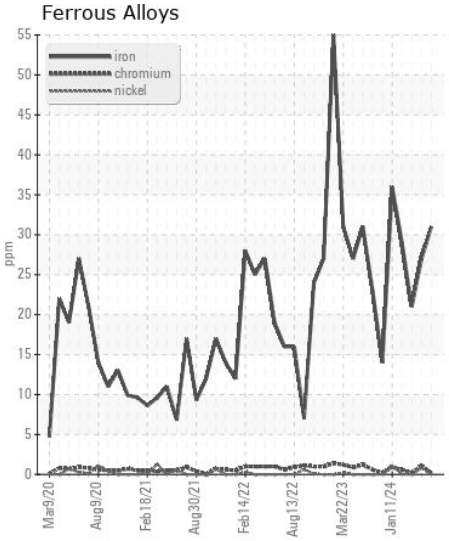
Viscosity @ 100°C



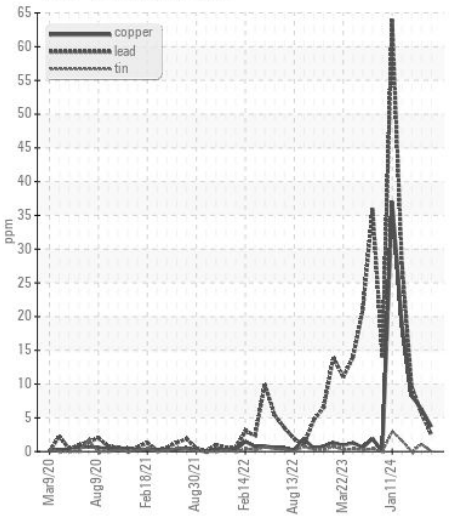
Glycol Contamination



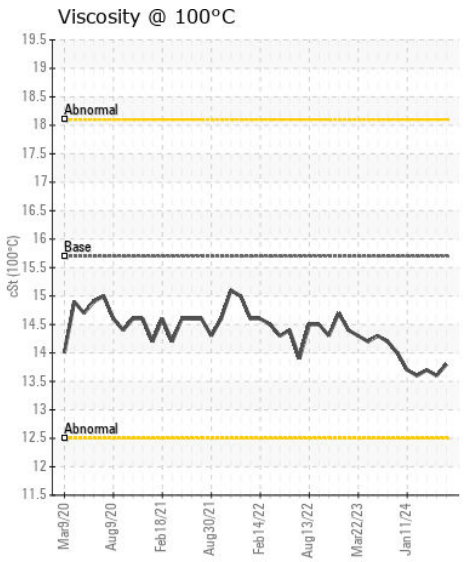
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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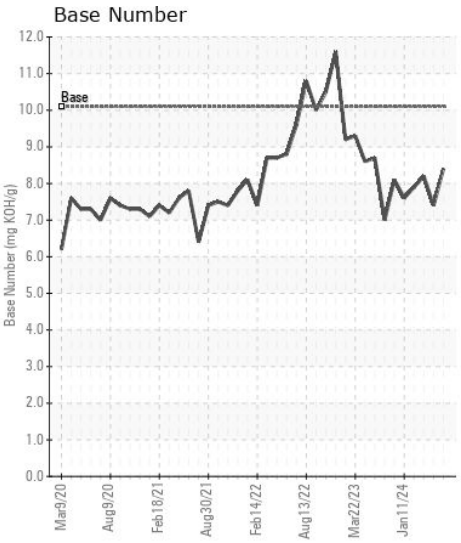

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0051462 **Received** : 26 Jun 2024
Lab Number : 06220840 **Tested** : 27 Jun 2024
Unique Number : 11099037 **Diagnosed** : 27 Jun 2024 - Sean Felton
Test Package : CONST (Additional Tests: Glycol, 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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