CONST

LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
Store 9 - Marietta
Machine Id
5017
Component
Diesel Engine
Fluid
LYDEN 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

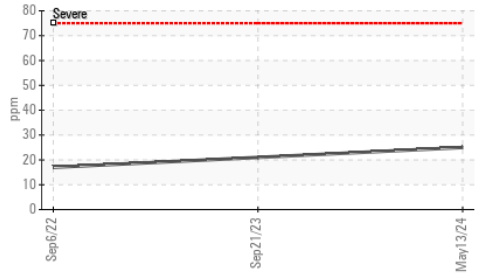
Elemental level of silicon (Si) above normal indicating ingress of seal material.

FLUID CONDITION

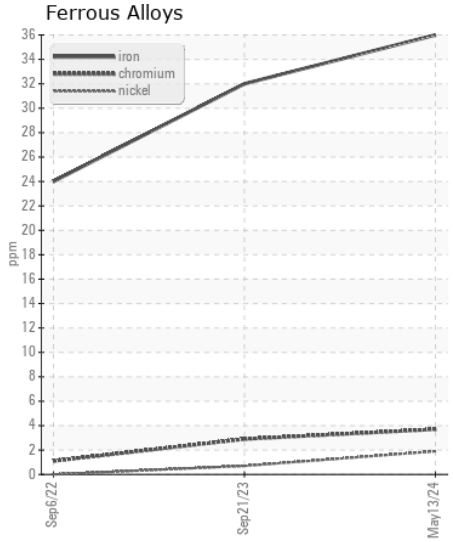
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0049511	LEC0041257	LEC0028800
Sample Date		Client Info		13 May 2024	21 Sep 2023	06 Sep 2022
Machine Age	hrs	Client Info		712	511	235
Oil Age	hrs	Client Info		201	276	235
Filter Age	hrs	Client Info		201	276	235
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	MARGINAL
Iron	ppm	ASTM D5185m	>100	36	32	24
Chromium	ppm	ASTM D5185m	>20	4	3	1
Nickel	ppm	ASTM D5185m	>4	2	<1	0
Titanium	ppm	ASTM D5185m		45	47	<1
Silver	ppm	ASTM D5185m	>3	1	0	<1
Aluminum	ppm	ASTM D5185m	>20	4	2	2
Lead	ppm	ASTM D5185m	>40	1	<1	1
Copper	ppm	ASTM D5185m	>330	2	3	12
Tin	ppm	ASTM D5185m	>15	1	<1	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>!20	▲ 25	▲ 21	▲ 17
Potassium	ppm	ASTM D5185m	>20	4	<1	8
Fuel		WC Method	>5	<1.0	<1.0	▲ 2.7
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.4	8.2	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	19.1	22.1
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	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		2	<1	3
Boron	ppm	ASTM D5185m		102	78	157
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		26	24	11
Manganese	ppm	ASTM D5185m		1	1	4
Magnesium	ppm	ASTM D5185m		453	541	171
Calcium	ppm	ASTM D5185m		1550	1589	1687
Phosphorus	ppm	ASTM D5185m		972	985	791
Zinc	ppm	ASTM D5185m		1142	1212	988
Sulfur	ppm	ASTM D5185m		3866	3608	2948
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	15.0	18.9
Base Number (BN)	mg KOH/g	ASTM D2896		8.4	8.0	8.4
Visc @ 100°C	cSt	ASTM D445		12.9	13.1	▲ 12.0

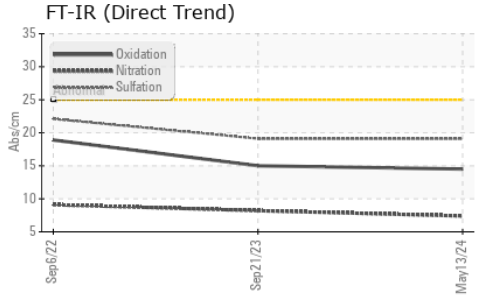
Silicon (ppm)



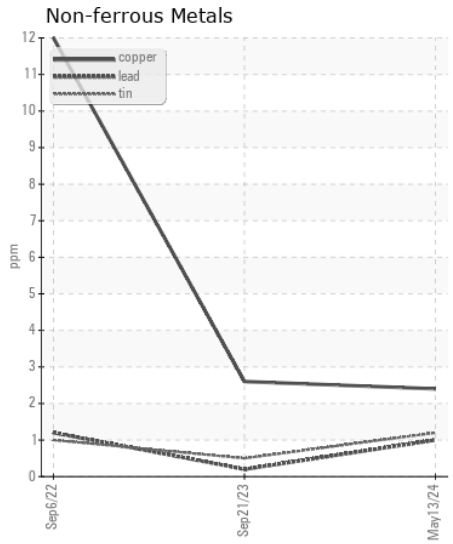
Ferrous Alloys



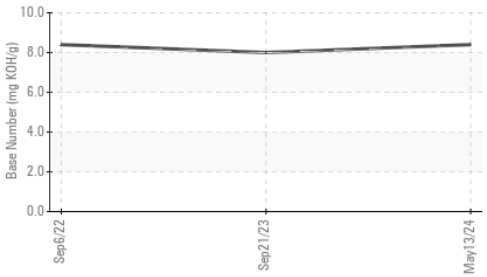
FT-IR (Direct Trend)



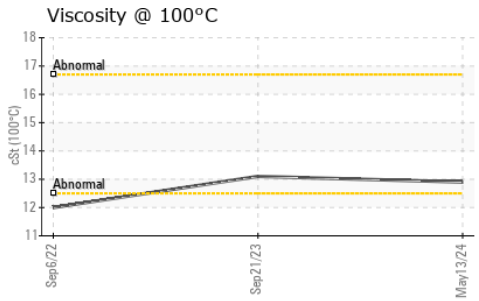
Non-ferrous Metals



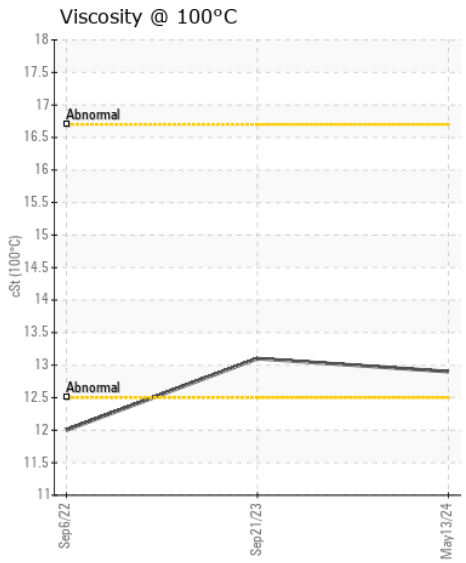
Base Number



Viscosity @ 100°C



Viscosity @ 100°C



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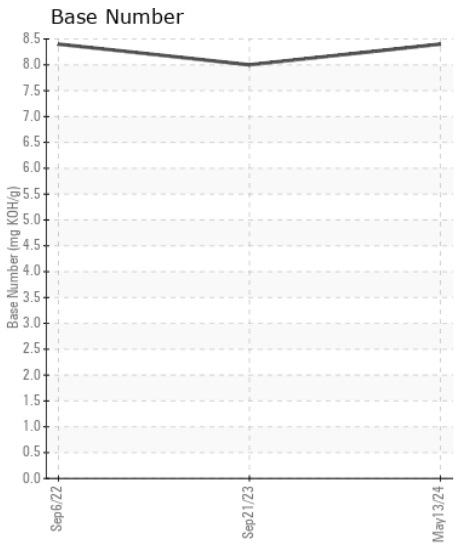

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0049511 **Received** : 29 May 2024
Lab Number : 06193653 **Tested** : 30 May 2024
Unique Number : 11050405 **Diagnosed** : 30 May 2024 - Sean Felton
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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