



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**Store 9 - Marietta**  
Machine Id  
**5098**  
Component  
**Diesel Engine**  
Fluid  
**LYDEN 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0046999</b>	LEC0041308	LEC0034689
Sample Date		Client Info		<b>12 Jan 2024</b>	05 Sep 2023	08 May 2023
Machine Age	hrs	Client Info		<b>746</b>	502	266
Oil Age	hrs	Client Info		<b>244</b>	236	266
Filter Age	hrs	Client Info		<b>244</b>	236	266
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>21</b>	23	28
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	0
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>69</b>	67	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	0	5
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>3</b>	18	52
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

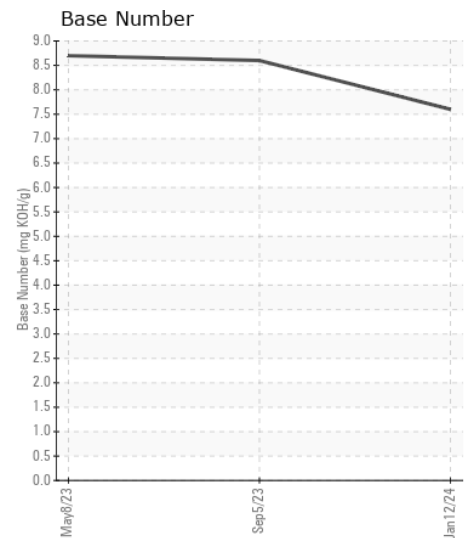
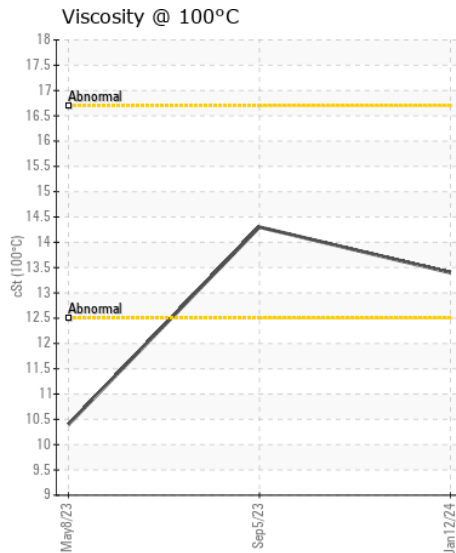
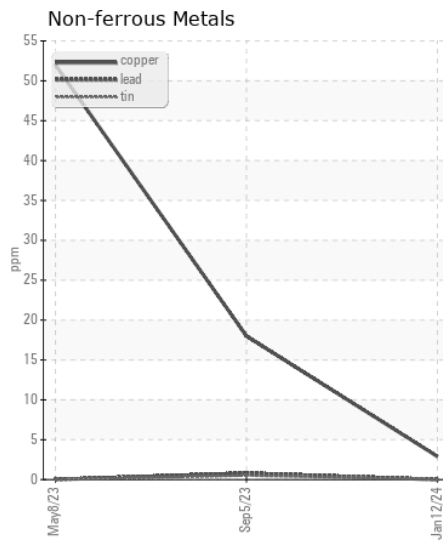
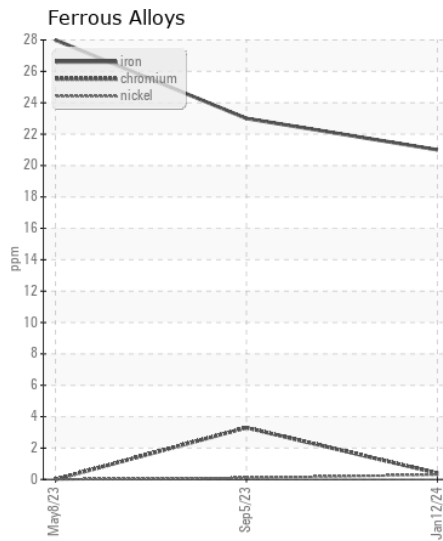
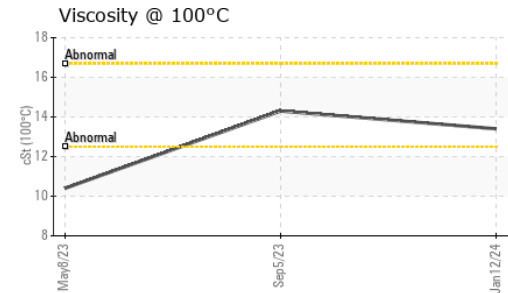
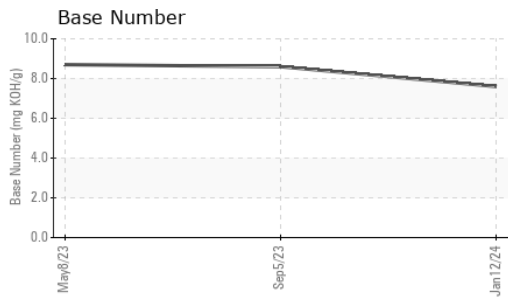
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>11</b>	11	18
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	15	▲ 124
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	▲ 3.8
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	0.0
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.8	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.6</b>	9.5	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	20.7	16.3
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>0</b>	2	3
Boron	ppm	ASTM D5185m		<b>115</b>	102	121
Barium	ppm	ASTM D5185m		<b>3</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>22</b>	20	140
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>439</b>	445	116
Calcium	ppm	ASTM D5185m		<b>1642</b>	1837	2332
Phosphorus	ppm	ASTM D5185m		<b>937</b>	922	492
Zinc	ppm	ASTM D5185m		<b>1164</b>	1167	570
Sulfur	ppm	ASTM D5185m		<b>4014</b>	3678	3754
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.2</b>	15.3	9.9
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.6</b>	8.6	8.7
Visc @ 100°C	cSt	ASTM D445		<b>13.4</b>	14.3	▲ 10.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0046999 **Recieved** : 18 Jan 2024  
**Lab Number** : 06064053 **Diagnosed** : 20 Jan 2024  
**Unique Number** : 10835435 **Diagnostician** : Don Baldrige  
**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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