



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 9 - Marietta

Machine Id

315

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0045743	LEC0043947	LEC0041268
Sample Date		Client Info		31 May 2024	08 Dec 2023	18 Aug 2023
Machine Age	mls	Client Info		202381	191827	181236
Oil Age	mls	Client Info		10554	10591	9303
Filter Age	mls	Client Info		10554	10591	9303
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>100	▲ 107	▲ 102	80
Chromium	ppm	ASTM D5185m	>20	1	2	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		68	72	63
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	<1
Lead	ppm	ASTM D5185m	>40	1	<1	1
Copper	ppm	ASTM D5185m	>330	2	1	1
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

CONTAMINATION

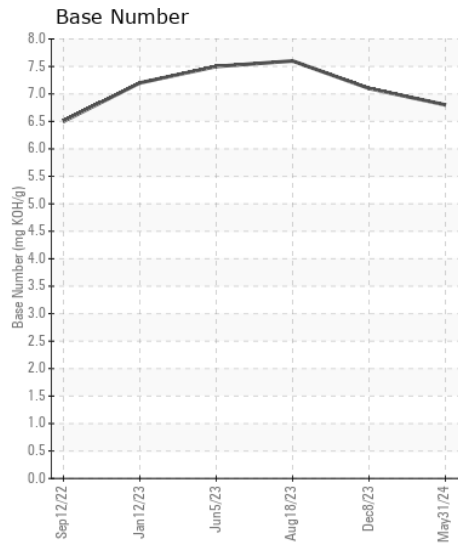
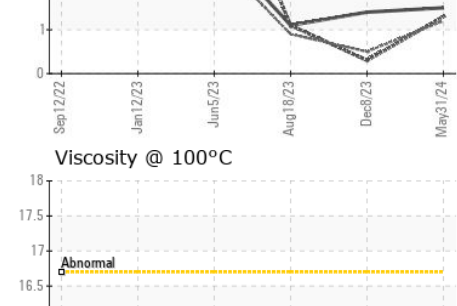
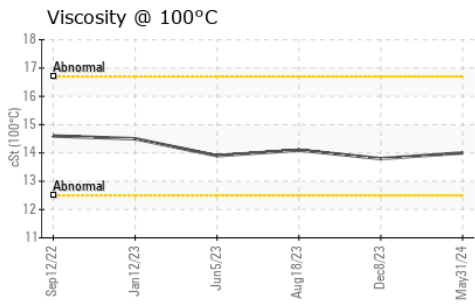
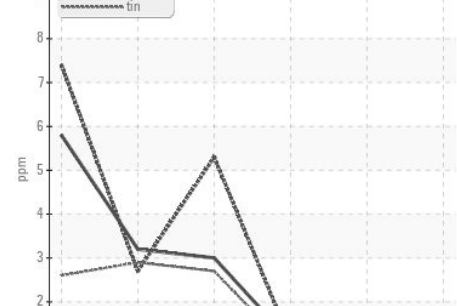
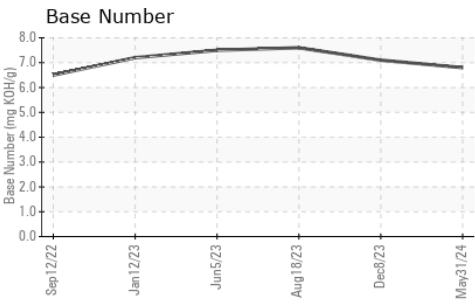
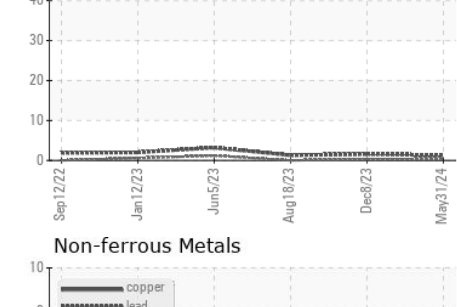
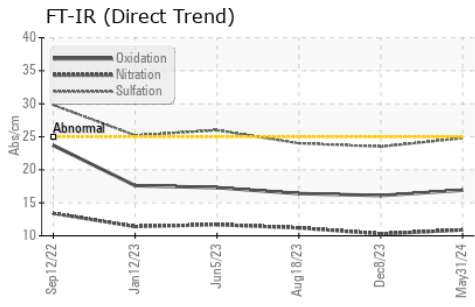
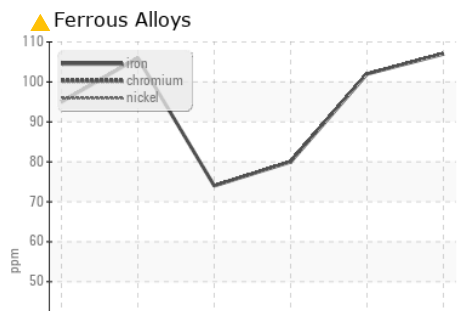
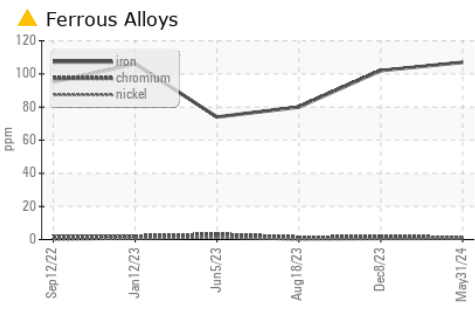
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	9	9	10
Potassium	ppm	ASTM D5185m	>20	6	6	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	2.1	1.9	2.2
Nitration	Abs/cm	*ASTM D7624	>20	10.9	10.3	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.8	23.5	24.0
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

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		4	0	2
Boron	ppm	ASTM D5185m		43	69	46
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		13	18	13
Manganese	ppm	ASTM D5185m		2	<1	1
Magnesium	ppm	ASTM D5185m		426	405	413
Calcium	ppm	ASTM D5185m		1730	1670	1778
Phosphorus	ppm	ASTM D5185m		1063	874	973
Zinc	ppm	ASTM D5185m		1203	1105	1207
Sulfur	ppm	ASTM D5185m		4166	4068	3634
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	16.1	16.4
Base Number (BN)	mg KOH/g	ASTM D2896		6.8	7.1	7.6
Visc @ 100°C	cSt	ASTM D445		14.0	13.8	14.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0045743 **Received** : 18 Jun 2024
Lab Number : 06213322 **Tested** : 19 Jun 2024
Unique Number : 11086186 **Diagnosed** : 20 Jun 2024 - Sean Felton
Test Package : CONST (Additional Tests: TBN)

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Certificate L2367
 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)