



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Area
Store 9 - Marietta
Machine Id
507
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		LEC0051113	LEC0049481	LEC0041335
Sample Date		Client Info		31 May 2024	07 May 2024	02 Aug 2023
Machine Age	hrs	Client Info		6867	6865	6340
Oil Age	hrs	Client Info		2	525	261
Filter Age	hrs	Client Info		2	525	261
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				MARGINAL	SEVERE	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	7	35	68
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		69	57	58
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	3	4
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	<1	1	1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

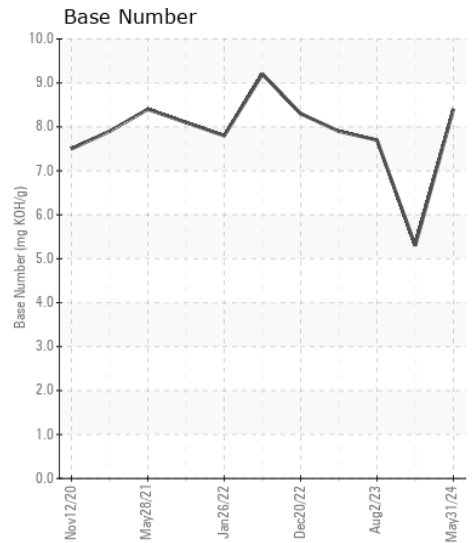
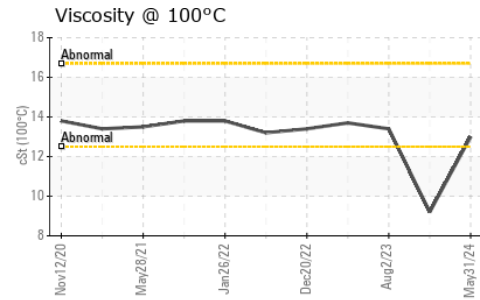
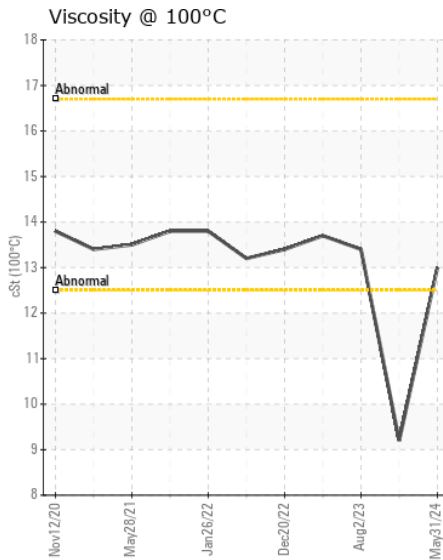
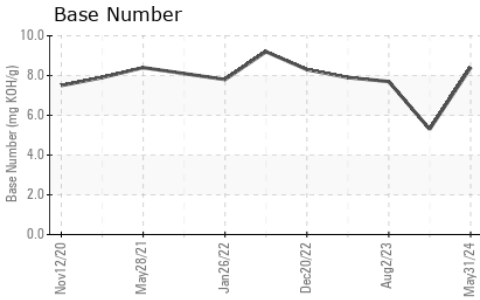
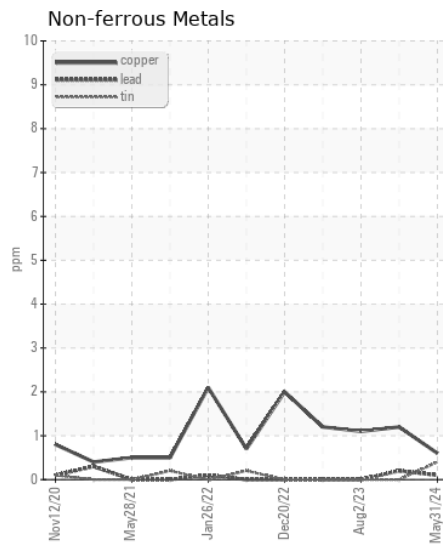
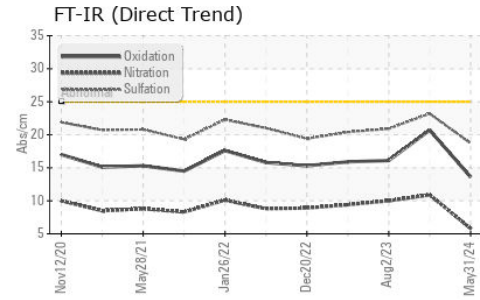
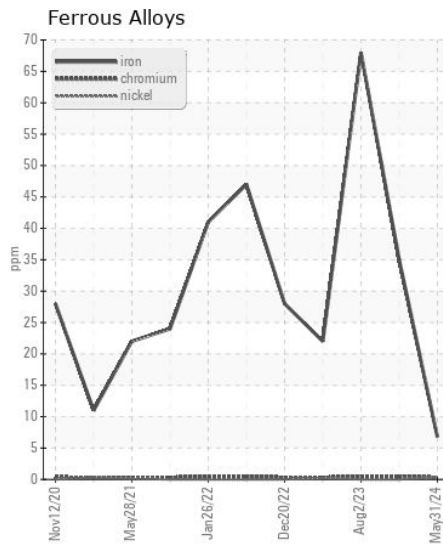
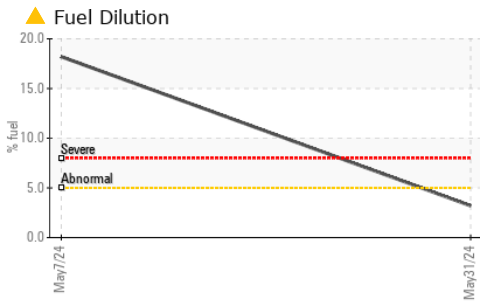
Light fuel dilution occurring. Fuel dilution is high for time on oil.

Silicon	ppm	ASTM D5185m	>120	9	7	7
Potassium	ppm	ASTM D5185m	>20	3	2	2
Fuel	%	ASTM D3524	>5	3.2	18.2	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	5.8	10.9	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.7	23.2	20.9
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		2	2	2
Boron	ppm	ASTM D5185m		129	55	80
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		9	8	7
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		375	341	575
Calcium	ppm	ASTM D5185m		1505	1519	1794
Phosphorus	ppm	ASTM D5185m		896	831	1082
Zinc	ppm	ASTM D5185m		1061	997	1316
Sulfur	ppm	ASTM D5185m		3671	3322	4536
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	20.7	16.1
Base Number (BN)	mg KOH/g	ASTM D2896		8.4	5.3	7.7
Visc @ 100°C	cSt	ASTM D445		13.0	9.2	13.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0051113 **Received** : 18 Jun 2024
Lab Number : 06213096 **Tested** : 20 Jun 2024
Unique Number : 11085960 **Diagnosed** : 20 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PercentFuel, 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)

LAROCHE TREE SERVICE
 7 COMMERCE PKWY
 BELLAIRE, OH
 US 43906
 Contact: GLEN VARGO
 glen.vargo@larochetree.com
 T:
 F: