



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 9 - Marietta
Machine Id
530
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		LEC0046969	LEC0034713	LEC0034573
Sample Date		Client Info		08 Jan 2024	22 Mar 2023	19 Dec 2022
Machine Age	hrs	Client Info		3458	2965	2693
Oil Age	hrs	Client Info		493	272	260
Filter Age	hrs	Client Info		493	272	260
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	28	13	20
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		69	63	20
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	1	<1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	2	<1	1
Tin	ppm	ASTM D5185m	>15	0	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

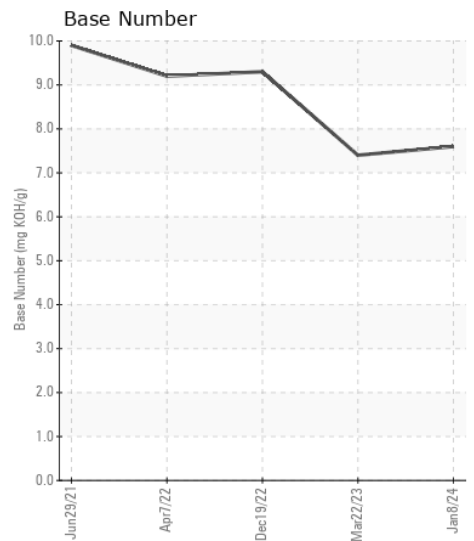
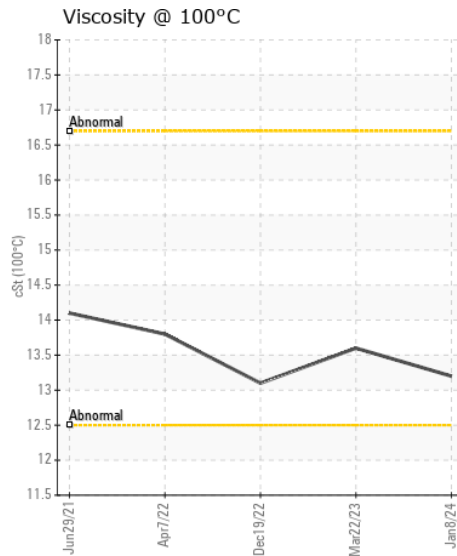
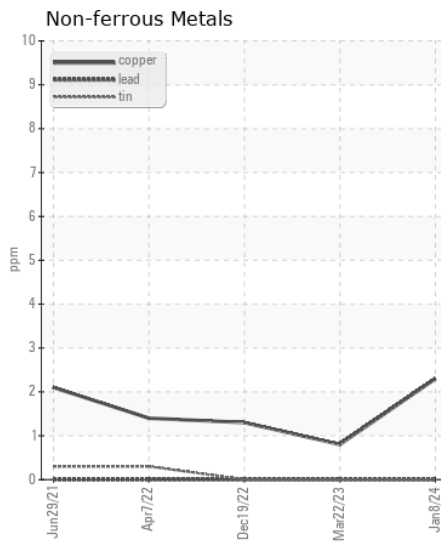
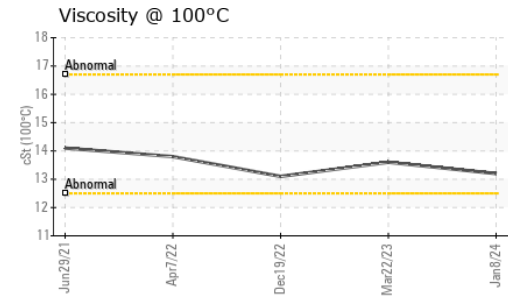
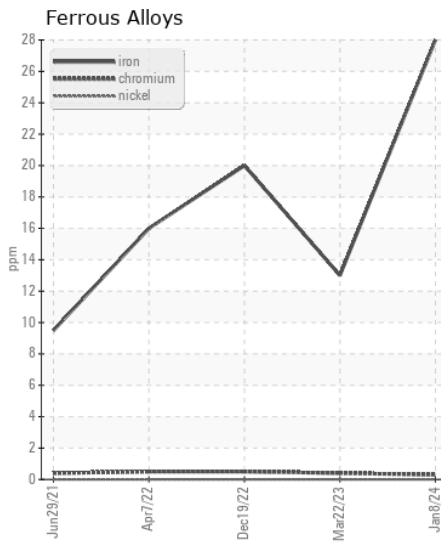
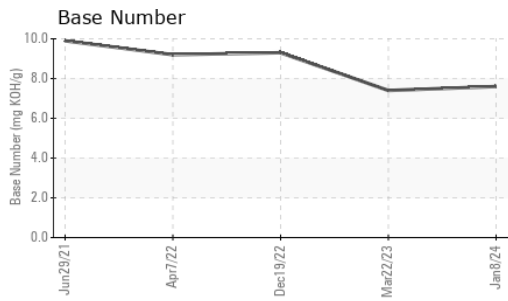
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	6	7	5
Potassium	ppm	ASTM D5185m	>20	5	0	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	0.4	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.1	7.8	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	17.6	18.3
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		<1	0	1
Boron	ppm	ASTM D5185m		118	107	101
Barium	ppm	ASTM D5185m		4	0	0
Molybdenum	ppm	ASTM D5185m		10	13	47
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		663	464	709
Calcium	ppm	ASTM D5185m		1835	1731	1260
Phosphorus	ppm	ASTM D5185m		1191	1001	972
Zinc	ppm	ASTM D5185m		1437	1221	1162
Sulfur	ppm	ASTM D5185m		5076	4523	3852
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	13.9	13.6
Base Number (BN)	mg KOH/g	ASTM D2896		7.6	7.4	9.3
Visc @ 100°C	cSt	ASTM D445		13.2	13.6	13.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0046969 **Received** : 18 Jan 2024
Lab Number : 06064045 **Diagnosed** : 20 Jan 2024
Unique Number : 10835427 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: TBN)

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

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)