

WEAR CONTAMINATION **FLUID CONDITION**

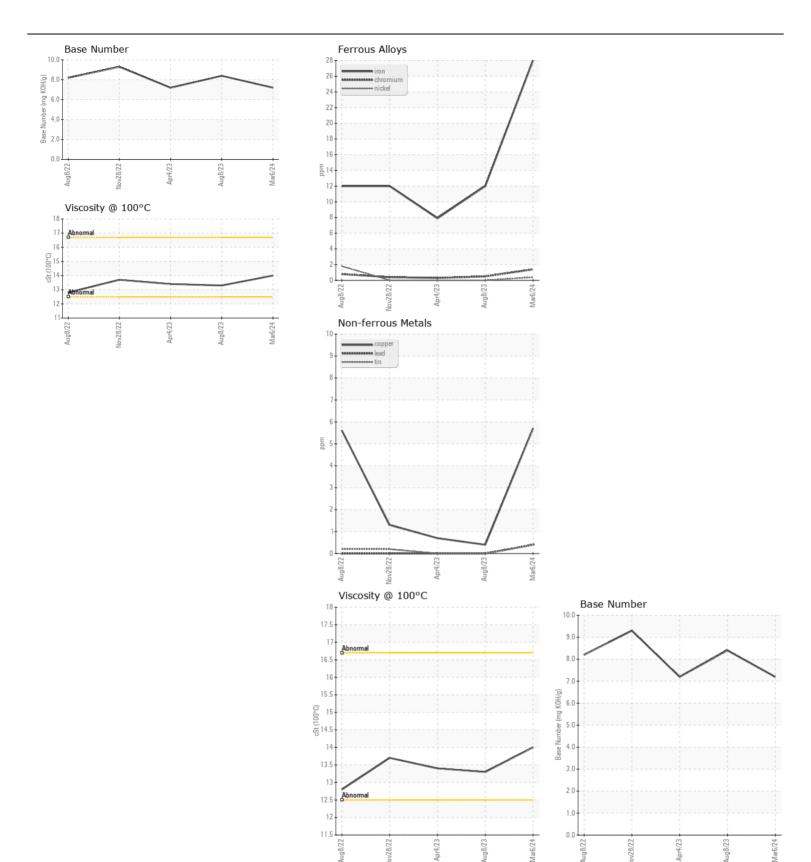
NORMAL NORMAL NORMAL

Store 9 - Marietta
Machine Id
564

Component Diesel Engine

Fluid	•		
LYDEN	15W40 ((GAL))

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		LEC0047012	LEC0041287	LEC003459
Resample at the next service interval to monitor.	Sample Date		Client Info		06 Mar 2024	08 Aug 2023	04 Apr 202
	Machine Age	hrs	Client Info		3349	2821	2545
	Oil Age	hrs	Client Info		528	276	256
	Filter Age	hrs	Client Info		528	276	256
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
MEAR	Iron	nnm	ASTM D5185m	. 100	00	12	0
WEAR	Iron Chromium	ppm	ASTM D5185m		28 1	<1	8 <1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		- <1	0	0
	Titanium	ppm	ASTM D5185m	>4	73	56	67
	Silver	ppm	ASTM D5185m	. 2	0	0	0
	Aluminum	ppm	ASTM D5185m		2	3	<1
	Lead	ppm	ASTM D5185m		<1	0	0
	Copper	ppm	ASTM D5185m		6	<1	<1
	Tin	ppm	ASTM D5185m		<1	0	0
	Vanadium	ppm	ASTM D5185m	>10	<1	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>!20	19	8	5
	Potassium	ppm	ASTM D5185m	>20	4	2	0
There is no indication of any contamination in the oil.	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	0.5	0.2	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	10.1	8.2	7.2
	Sulfation	Abs/.1mm	*ASTM D7415		22.2	19.3	17.5
	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	NORN
	Odor	scalar	*Visual	NORML	NORML	NORML	NORN
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	2	0
	Boron	ppm	ASTM D5185m		81	122	126
The BN result indicates that there is suitable alkalinity remaining in the	Barium	ppm	ASTM D5185m		0	0	0
oil. The condition of the oil is suitable for further service.	Molybdenum	ppm	ASTM D5185m		11	7	11
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		484	564	431
	Calcium	ppm	ASTM D5185m		1833	1698	1736
	Phosphorus	ppm	ASTM D5185m		1066	1056	1006
	Zinc	ppm	ASTM D5185m		1284	1248	1207
	Sulfur	ppm	ASTM D5185m		4070	4629	4603
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	14.1	13.7
	Base Number (BN)	mg KOH/g			7.2	8.4	7.2
	Visc @ 100°C	cSt	ASTM D445		14.0	13.3	13.4







Laboratory

Sample No.

Lab Number : 06122154 Unique Number : 10936305

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : LEC0047012 Received Tested

Diagnosed

: 20 Mar 2024 : 21 Mar 2024 - Don Baldridge

: 19 Mar 2024

Test Package : CONST (Additional Tests: TBN) To discuss this sample report, contact Customer Service at 1-800-237-1369.

LAROCHE TREE SERVICE 7 COMMERCE PKWY BELLAIRE, OH

US 43906 Contact: GLEN VARGO

glen.vargo@larochetree.com

T: F:

* - 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)