



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LAY-MOR BR-1
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CL0005160	CLMC162889	---
Sample Date		Client Info		23 Feb 2024	12 Jan 2018	---
Machine Age	hrs	Client Info		1248	994	---
Oil Age	hrs	Client Info		254	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	64	104	---
Chromium	ppm	ASTM D5185m	>20	4	7	---
Nickel	ppm	ASTM D5185m	>4	<1	2	---
Titanium	ppm	ASTM D5185m		1	4	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	27	▲ 58	---
Lead	ppm	ASTM D5185m	>40	1	0	---
Copper	ppm	ASTM D5185m	>330	4	4	---
Tin	ppm	ASTM D5185m	>15	1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

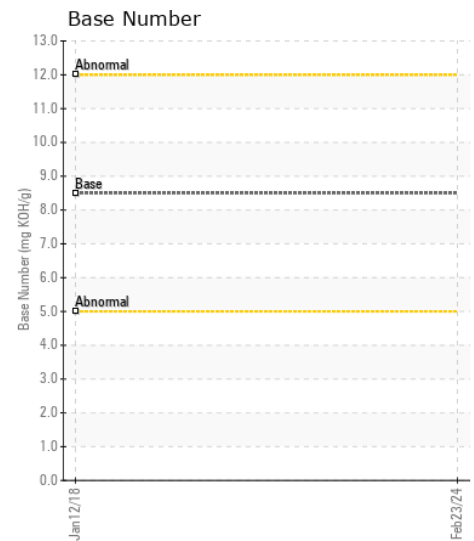
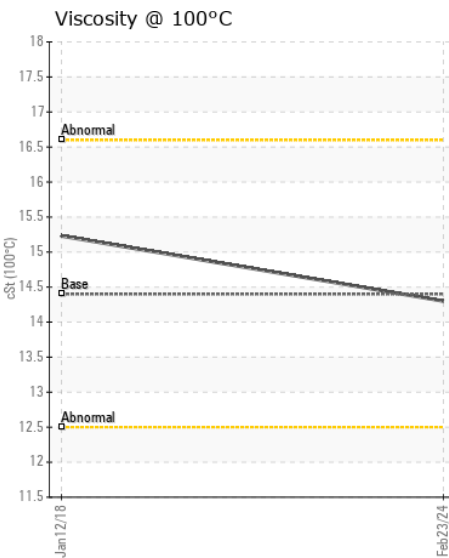
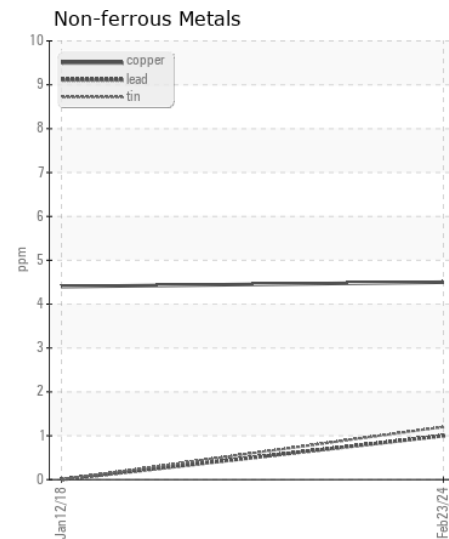
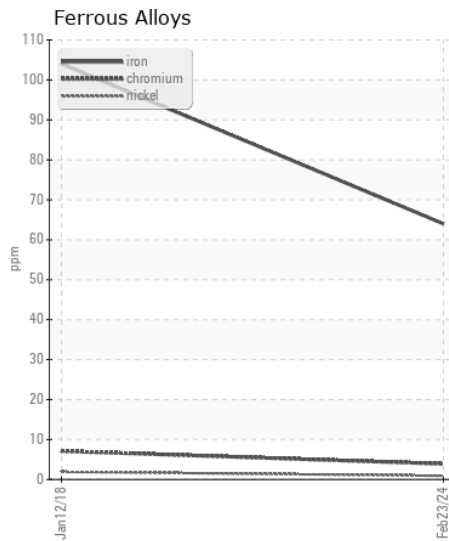
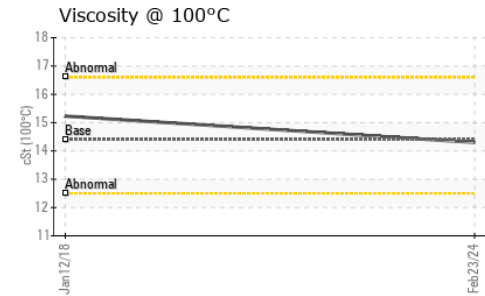
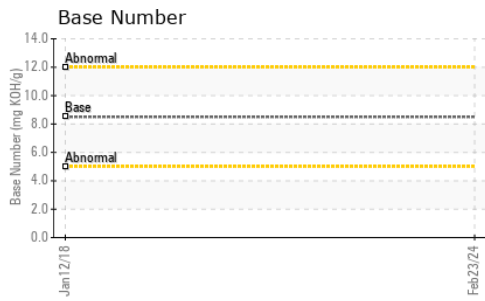
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	50	▲ 118	---
Potassium	ppm	ASTM D5185m	>20	1	8	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0	---
Nitration	Abs/cm	*ASTM D7624	>20	6.8	8.	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.1	18.	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	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	>158	3	5	---
Boron	ppm	ASTM D5185m	250	10	48	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	64	48	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m	450	895	531	---
Calcium	ppm	ASTM D5185m	3000	1315	2665	---
Phosphorus	ppm	ASTM D5185m	1150	973	1121	---
Zinc	ppm	ASTM D5185m	1350	1221	1348	---
Sulfur	ppm	ASTM D5185m	4250	2973	4057	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.2	14.	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.7	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	14.3	15.23	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : CL0005160 **Received** : 22 Feb 2024
Lab Number : 06097383 **Tested** : 23 Feb 2024
Unique Number : 10890236 **Diagnosed** : 23 Feb 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

BULLSEYE CONSTRUCTION
 581 N POLK ST
 PINEVILLE, NC
 US 28134
 Contact: SERVICE MANAGER

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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F: