



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PRINOTH T14R 935310209
 Component
Diesel Engine
 Fluid
CAT DIESEL ENGINE OIL 15W40 (5 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		LEC0039898	LEC0028238	---
Sample Date		Client Info		07 Mar 2023	11 Jan 2022	---
Machine Age	hrs	Client Info		1044	481	---
Oil Age	hrs	Client Info		563	481	---
Filter Age	hrs	Client Info		563	481	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ATTENTION	---

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	83	98	---
Chromium	ppm	ASTM D5185m	>20	3	3	---
Nickel	ppm	ASTM D5185m	>4	<1	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	▲ 31	22	---
Lead	ppm	ASTM D5185m	>40	<1	<1	---
Copper	ppm	ASTM D5185m	>330	23	54	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
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.

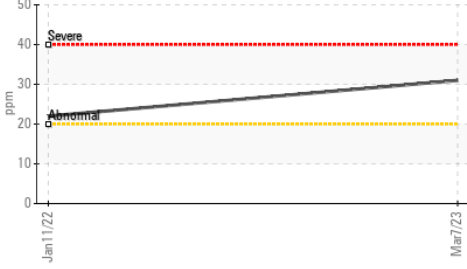
Silicon	ppm	ASTM D5185m	>120	11	10	---
Potassium	ppm	ASTM D5185m	>20	9	16	---
Fuel		WC Method	>5	<1.0	0.4	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	9.3	10.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	32.7	---
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

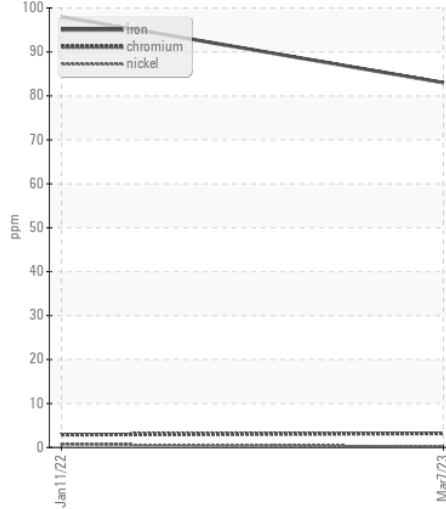
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	1	---
Boron	ppm	ASTM D5185m		129	32	---
Barium	ppm	ASTM D5185m		0	<1	---
Molybdenum	ppm	ASTM D5185m		213	7	---
Manganese	ppm	ASTM D5185m		2	2	---
Magnesium	ppm	ASTM D5185m		690	56	---
Calcium	ppm	ASTM D5185m		1533	2233	---
Phosphorus	ppm	ASTM D5185m		773	960	---
Zinc	ppm	ASTM D5185m	1460	1024	1077	---
Sulfur	ppm	ASTM D5185m		3051	3195	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.3	34.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.3	7.7	4.9	---
Visc @ 100°C	cSt	ASTM D445	15.5	13.1	● 11.8	---

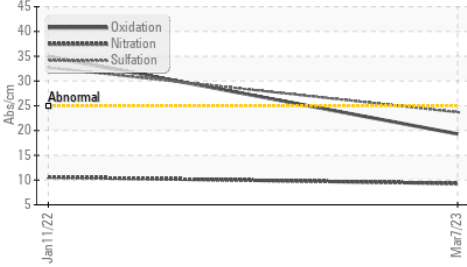
▲ Aluminum (ppm)



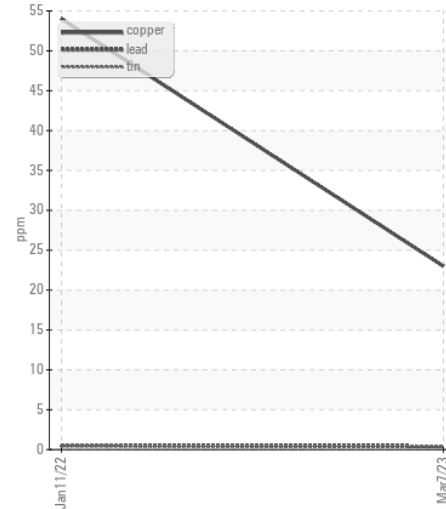
Ferrous Alloys



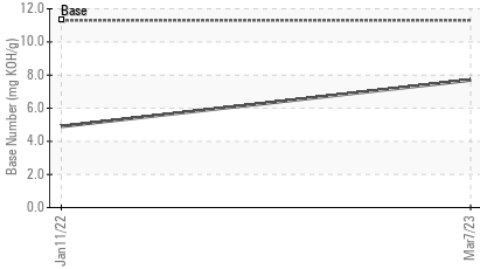
FT-IR (Direct Trend)



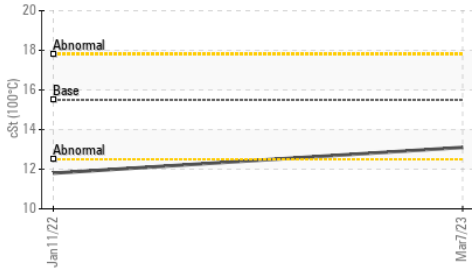
Non-ferrous Metals



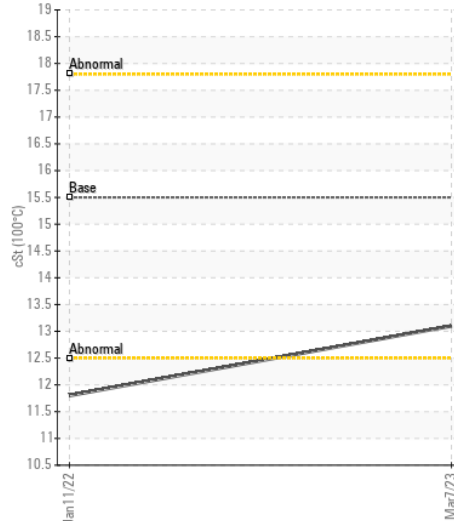
Base Number



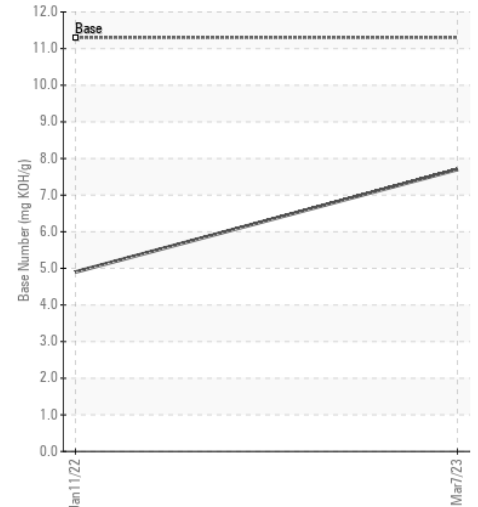
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0039898 **Received** : 09 Mar 2023
Lab Number : 05787197 **Tested** : 10 Mar 2023
Unique Number : 10371868 **Diagnosed** : 11 Mar 2023 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.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)

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