



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
813590
 Component
Diesel Engine
 Fluid
MOBIL DELVAC EXTREME 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

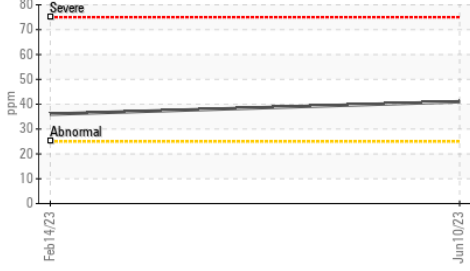
Elemental level of silicon (Si) above normal indicating ingress of seal material. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.

FLUID CONDITION

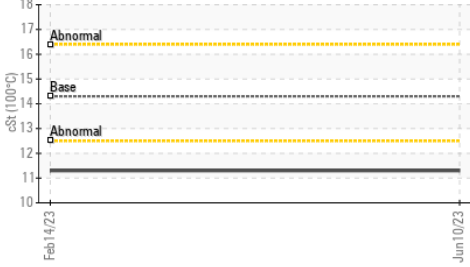
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0008151	RPL0008009	---
Sample Date		Client Info		10 Jun 2023	14 Feb 2023	---
Machine Age	hrs	Client Info		1429	8984	---
Oil Age	hrs	Client Info		1429	8984	---
Filter Age	hrs	Client Info		1429	8984	---
Oil Changed		Client Info		Changed	Not Changed	---
Filter Changed		Client Info		Changed	Not Changed	---
Sample Status				ABNORMAL	ATTENTION	---
Iron	ppm	ASTM D5185m	>100	87	37	---
Chromium	ppm	ASTM D5185m	>20	4	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	85	18	---
Lead	ppm	ASTM D5185m	>40	4	2	---
Copper	ppm	ASTM D5185m	>330	32	30	---
Tin	ppm	ASTM D5185m	>15	3	1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	▲ 41	36	---
Potassium	ppm	ASTM D5185m	>20	254	80	---
Fuel		WC Method	>5	<1.0	1.4	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.6	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	12.2	9.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.4	20.2	---
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	---
Sodium	ppm	ASTM D5185m		7	4	---
Boron	ppm	ASTM D5185m		19	54	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		20	18	---
Manganese	ppm	ASTM D5185m		6	5	---
Magnesium	ppm	ASTM D5185m		767	731	---
Calcium	ppm	ASTM D5185m		1438	1384	---
Phosphorus	ppm	ASTM D5185m		746	700	---
Zinc	ppm	ASTM D5185m		907	872	---
Sulfur	ppm	ASTM D5185m		3273	3151	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.7	15.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	5.4	6.6	---
Visc @ 100°C	cSt	ASTM D445	14.3	● 11.3	● 11.3	---

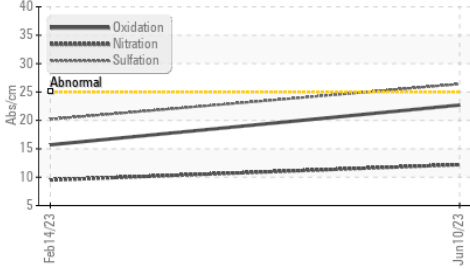
▲ Silicon (ppm)



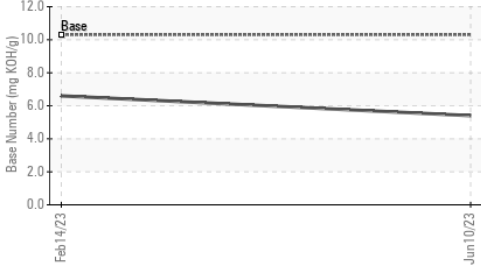
● Viscosity @ 100°C



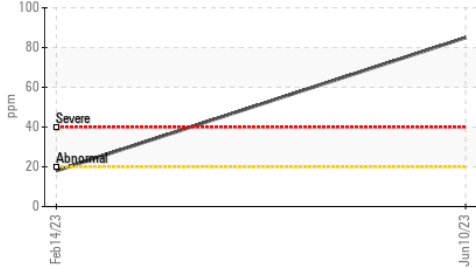
FT-IR (Direct Trend)



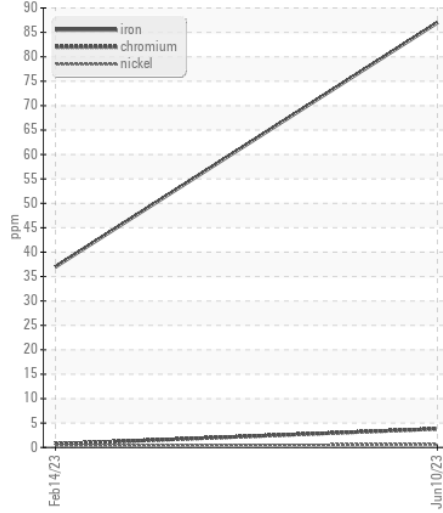
Base Number



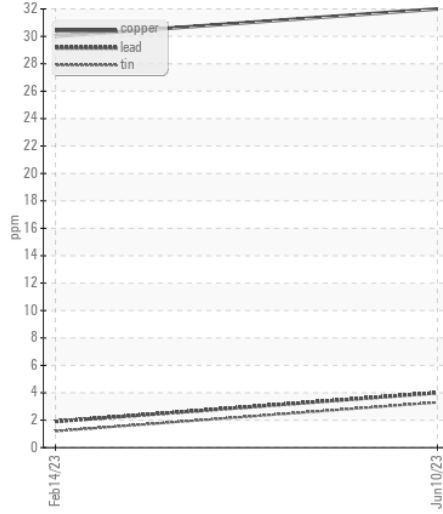
Aluminum (ppm)



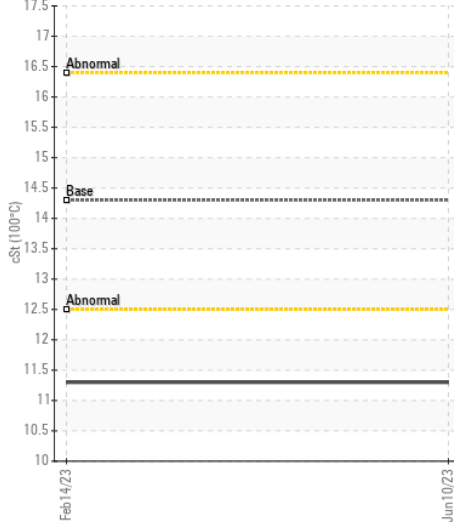
Ferrous Alloys



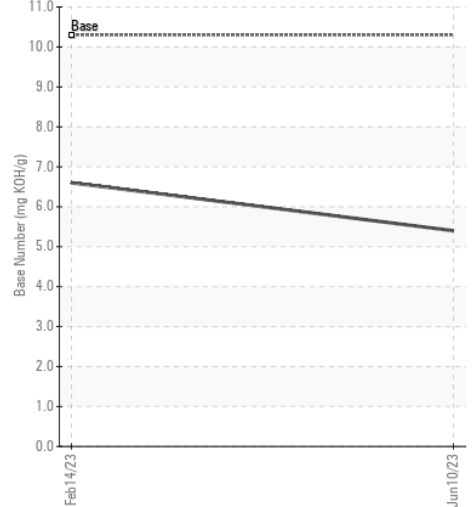
Non-ferrous Metals



● Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : RPL0008151
 Lab Number : 05876390
 Unique Number : 10521493
 Test Package : FLEET

Received : 19 Jun 2023
 Tested : 19 Jun 2023
 Diagnosed : 20 Jun 2023 - Jonathan Hester

RTL PACLEASE - 7017 - Oklahoma City
 8700 West I-40
 Oklahoma City, OK
 US 73128
 Contact: TECHNICIAN ACCOUNT
 catherine.anastasio@wearcheck.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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F: