



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>MARGINAL</b>
FLUID CONDITION	<b>ABNORMAL</b>

Machine Id  
**HINO 8464620**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER 15W40 (16 QTS)**

## RECOMMENDATION

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as MOBIL DELVAC 1300 SUPER 15W40, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL0021048</b>	RPL0019443	RPL0016835
Sample Date		Client Info		<b>08 Jun 2024</b>	09 Mar 2024	08 Dec 2023
Machine Age	mls	Client Info		<b>188165</b>	178307	167097
Oil Age	mls	Client Info		<b>9858</b>	11210	11481
Filter Age	mls	Client Info		<b>9858</b>	11210	11481
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	SEVERE

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>12</b>	17	15
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	3	7
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

Light fuel dilution occurring. No other contaminants were detected in the oil.

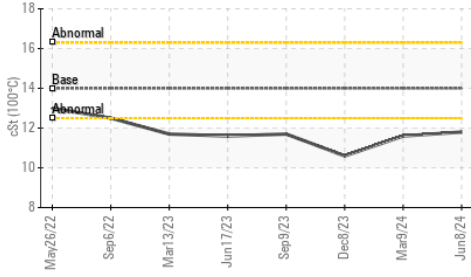
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	3
Fuel	%	ASTM D3524	>5	<b>▲ 3.2</b>	▲ 4.4	▲ 10.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.7	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.7</b>	10.8	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.8</b>	21.9	23.5
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

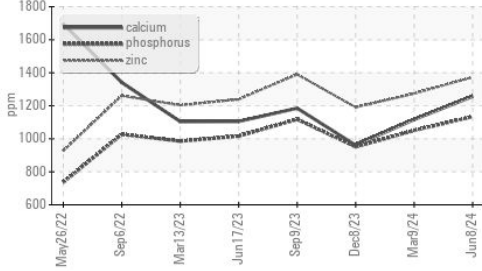
The BN result indicates that there is suitable alkalinity remaining in the oil. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	<1	2
Boron	ppm	ASTM D5185m	0	<b>2</b>	2	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>66</b>	64	54
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	0	<b>● 1099</b>	● 965	883
Calcium	ppm	ASTM D5185m		<b>1257</b>	● 1117	961
Phosphorus	ppm	ASTM D5185m		<b>● 1134</b>	1050	951
Zinc	ppm	ASTM D5185m		<b>● 1373</b>	1274	1191
Sulfur	ppm	ASTM D5185m		<b>3829</b>	3298	2885
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.8</b>	20.6	23.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>8.3</b>	8.3	7.1
Visc @ 100°C	cSt	ASTM D445	14	<b>▲ 11.8</b>	▲ 11.6	▲ 10.6

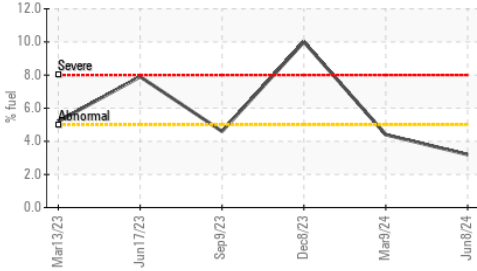
▲ Viscosity @ 100°C



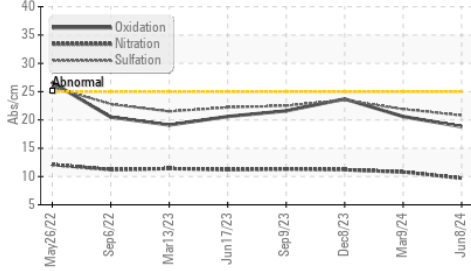
● Additives



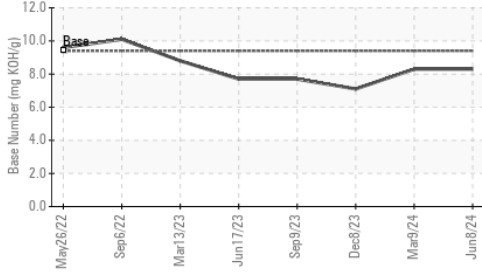
▲ Fuel Dilution



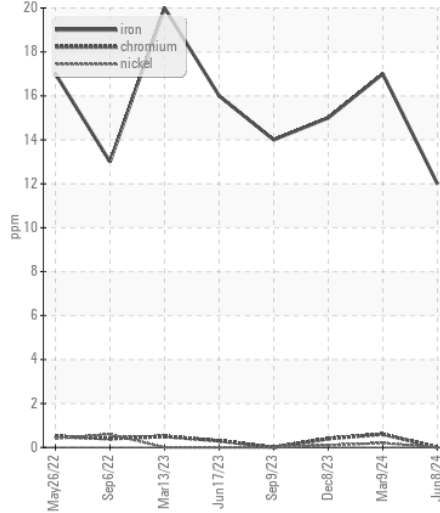
FT-IR (Direct Trend)



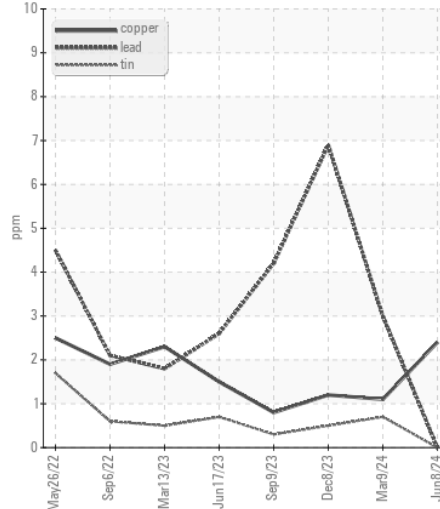
Base Number



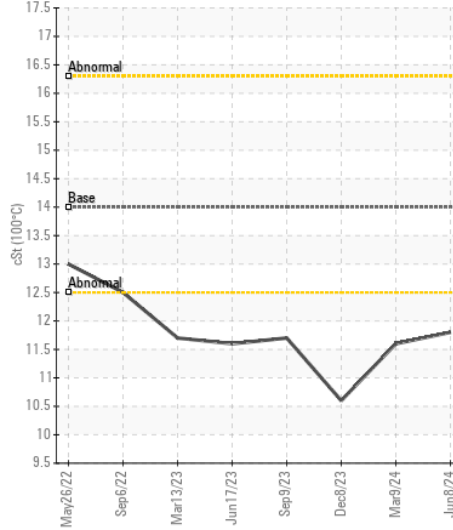
Ferrous Alloys



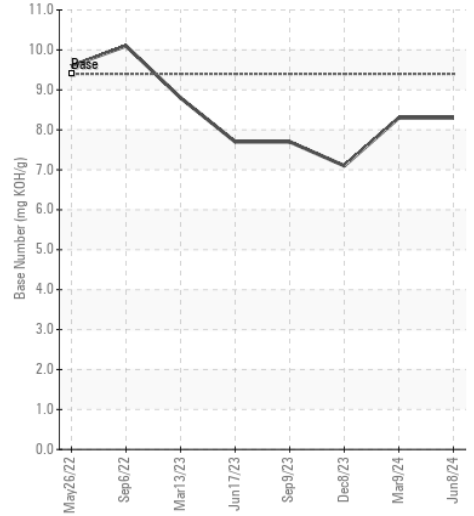
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : RPL0021048

Lab Number : 06213182

Unique Number : 11086046

Test Package : FLEET ( Additional Tests: FUELDILUTION, PercentFuel )

Received : 18 Jun 2024

Tested : 24 Jun 2024

Diagnosed : 24 Jun 2024 - Wes Davis

RTL PACLEASE - 7006 - Pico Rivera

7837 Telegraph Rd

Pico Rivera, CA

US 90660

Contact: GERARDO CARROLA

carrolag@rushenterprises.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)

T:

F: