



# OIL ANALYSIS REPORT

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

Machine Id  
**CUMMINS 846-4217**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL0019385</b>	RPL0017399	RPL0015492
Sample Date		Client Info		<b>29 Mar 2024</b>	10 Jan 2024	29 Sep 2023
Machine Age	mls	Client Info		<b>242226</b>	235539	227320
Oil Age	mls	Client Info		<b>15986</b>	2413	12194
Filter Age	mls	Client Info		<b>15986</b>	2413	12194
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>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>31</b>	15	12
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>9</b>	5	4
Lead	ppm	ASTM D5185m	>40	<b>5</b>	3	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

There is no indication of any contamination in the oil.

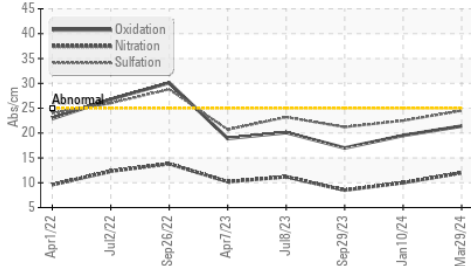
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>21</b>	10	5
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.8</b>	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.0</b>	10.0	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.5</b>	22.5	21.2
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

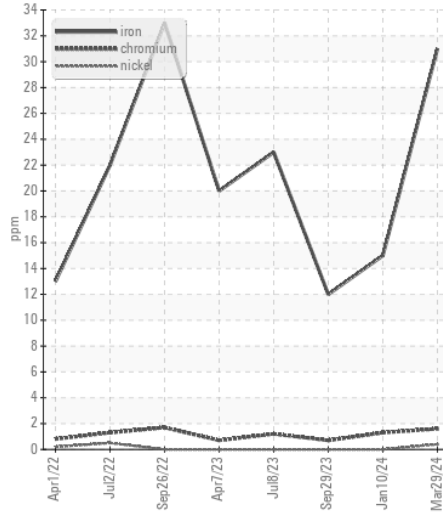
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	2
Boron	ppm	ASTM D5185m	0	<b>&lt;1</b>	1	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>63</b>	57	58
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	0	<b>1032</b>	975	879
Calcium	ppm	ASTM D5185m		<b>1174</b>	1055	1032
Phosphorus	ppm	ASTM D5185m		<b>1074</b>	1019	896
Zinc	ppm	ASTM D5185m		<b>1336</b>	1260	1128
Sulfur	ppm	ASTM D5185m		<b>3543</b>	3042	2714
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.4</b>	19.5	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>7.3</b>	7.5	8.9
Visc @ 100°C	cSt	ASTM D445	14	<b>13.1</b>	13.0	13.5

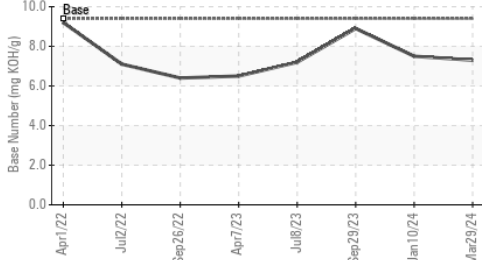
**FT-IR (Direct Trend)**



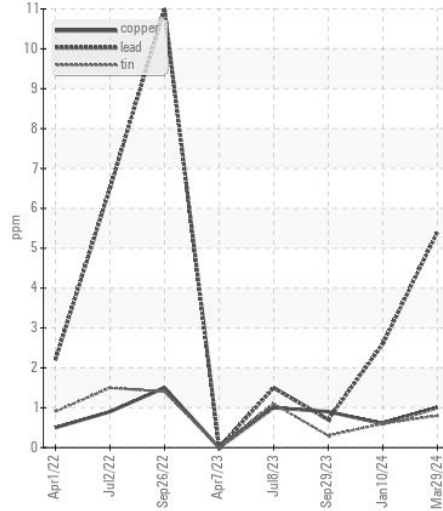
**Ferrous Alloys**



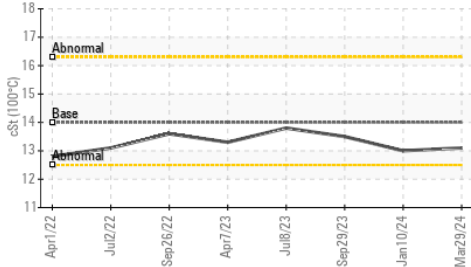
**Base Number**



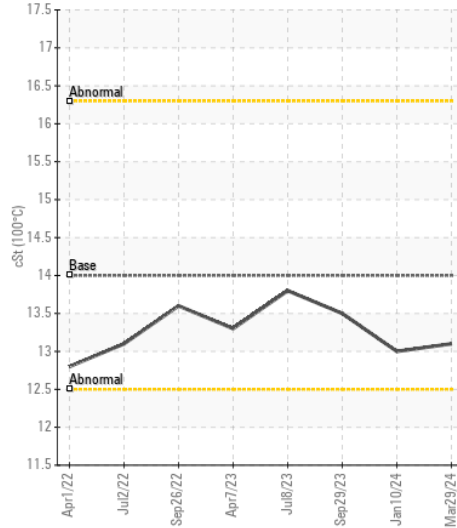
**Non-ferrous Metals**



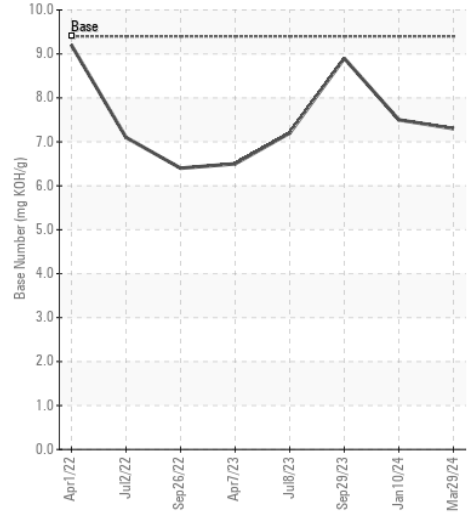
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

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

**Sample No.** : RPL0019385

**Lab Number** : 06145601

**Unique Number** : 10970409

**Test Package** : FLEET

**Received** : 11 Apr 2024

**Tested** : 12 Apr 2024

**Diagnosed** : 14 Apr 2024 - Don Baldrige

**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: