



# OIL ANALYSIS REPORT

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

Machine Id  
**459607**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

## RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL0021262</b>	RPL0017232	RPL0015416
Sample Date		Client Info		<b>27 Jun 2024</b>	10 Jan 2024	16 Oct 2023
Machine Age	mls	Client Info		<b>18038</b>	7912	3321
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>66</b>	23	15
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>11</b>	10	9
Lead	ppm	ASTM D5185m	>40	<b>3</b>	2	2
Copper	ppm	ASTM D5185m	>330	<b>32</b>	27	17
Tin	ppm	ASTM D5185m	>15	<b>2</b>	2	2
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.

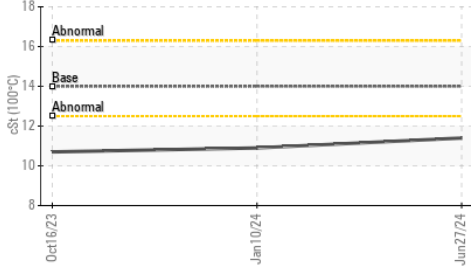
Silicon	ppm	ASTM D5185m	>25	<b>47</b>	44	42
Potassium	ppm	ASTM D5185m	>20	<b>16</b>	5	7
Fuel	%	ASTM D3524	>5	<b>▲ 2.0</b>	▲ 2.9	▲ 3.4
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.0</b>	9.4	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.5</b>	20.2	18.4
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

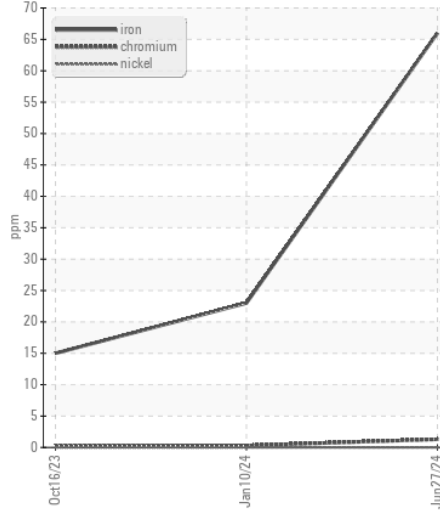
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>7</b>	1	4
Boron	ppm	ASTM D5185m	0	<b>40</b>	61	76
Barium	ppm	ASTM D5185m	0	<b>5</b>	5	4
Molybdenum	ppm	ASTM D5185m	0	<b>16</b>	13	12
Manganese	ppm	ASTM D5185m		<b>6</b>	4	4
Magnesium	ppm	ASTM D5185m	0	<b>731</b>	683	661
Calcium	ppm	ASTM D5185m		<b>1411</b>	1213	1176
Phosphorus	ppm	ASTM D5185m		<b>717</b>	668	657
Zinc	ppm	ASTM D5185m		<b>810</b>	761	738
Sulfur	ppm	ASTM D5185m		<b>2994</b>	2447	2583
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.8</b>	16.8	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>5.5</b>	6.7	8.6
Visc @ 100°C	cSt	ASTM D445	14	<b>▲ 11.4</b>	▲ 10.9	▲ 10.7

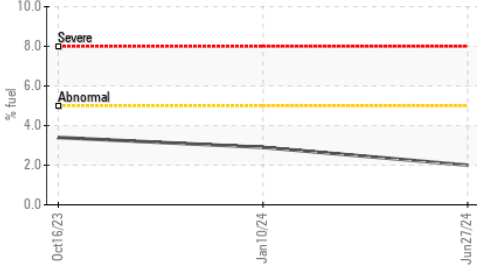
▲ Viscosity @ 100°C



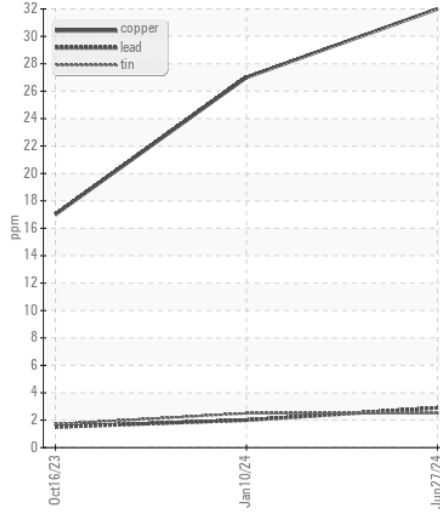
Ferrous Alloys



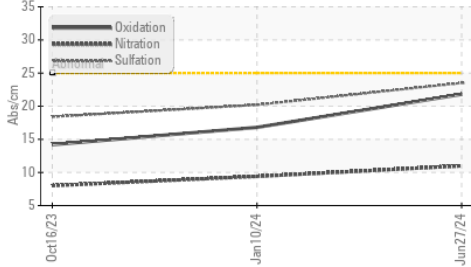
▲ Fuel Dilution



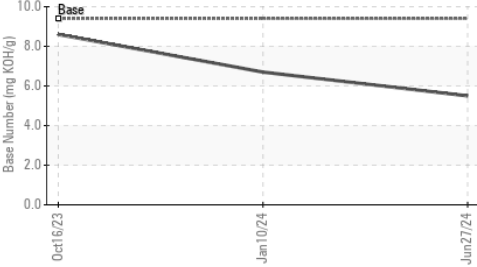
Non-ferrous Metals



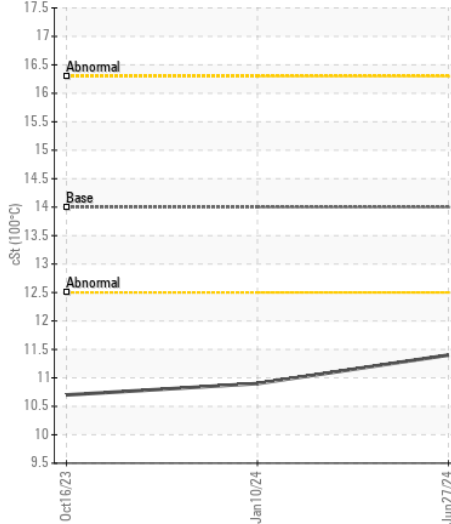
FT-IR (Direct Trend)



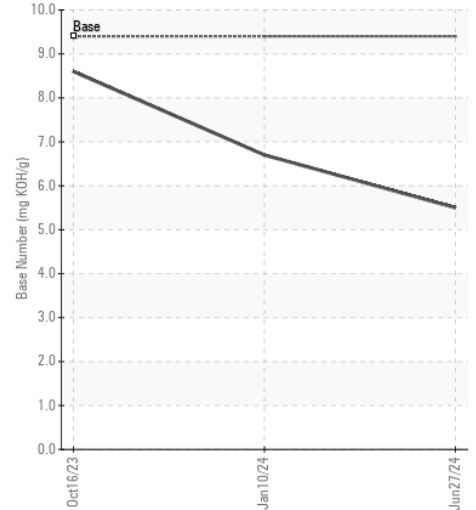
Base Number



▲ Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : RPL0021262

Lab Number : 06235616

Unique Number : 11124450

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

Received : 15 Jul 2024

Tested : 17 Jul 2024

Diagnosed : 17 Jul 2024 - Wes Davis

RTL PACLEASE - 7051 -Las Vegas

4150 Arctic Spring Ave

North Las Vegas, NV

US 89115

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F:

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)