



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**I5159**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER 15W40 (--- GAL)**

### RECOMMENDATION

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>IL0033178</b>	IL0029457	IL0013272
Sample Date		Client Info		<b>16 May 2024</b>	19 May 2023	27 Feb 2020
Machine Age	mls	Client Info		<b>116381</b>	95421	9612
Oil Age	mls	Client Info		<b>20960</b>	17141	9612
Filter Age	mls	Client Info		<b>20960</b>	17141	9612
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>27</b>	19	24
Chromium	ppm	ASTM D5185m	>20	<b>3</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>8</b>	3	6
Lead	ppm	ASTM D5185m	>40	<b>4</b>	4	0
Copper	ppm	ASTM D5185m	>330	<b>1</b>	1	17
Tin	ppm	ASTM D5185m	>15	<b>2</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

There is no indication of any contamination in the oil.

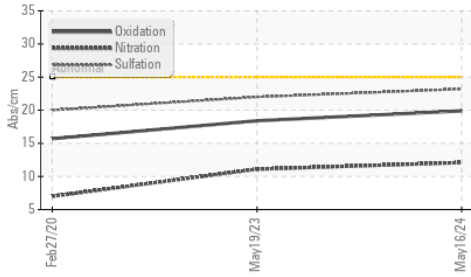
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	8	34
Potassium	ppm	ASTM D5185m	>20	<b>13</b>	6	19
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1.1</b>	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.1</b>	11.1	7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.2</b>	22.0	20
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

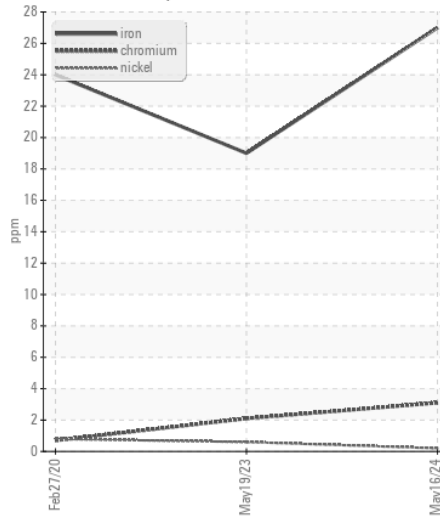
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>1</b>	2	5
Boron	ppm	ASTM D5185m	0	<b>37</b>	6	107
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	4
Molybdenum	ppm	ASTM D5185m	0	<b>102</b>	51	58
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	5
Magnesium	ppm	ASTM D5185m	0	<b>692</b>	919	413
Calcium	ppm	ASTM D5185m		<b>1243</b>	1249	1756
Phosphorus	ppm	ASTM D5185m		<b>722</b>	1038	1024
Zinc	ppm	ASTM D5185m		<b>952</b>	1300	1223
Sulfur	ppm	ASTM D5185m		<b>3140</b>	3821	2762
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.9</b>	18.4	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>6.2</b>	8.1	9.2
Visc @ 100°C	cSt	ASTM D445	14	<b>12.8</b>	12.8	11.3

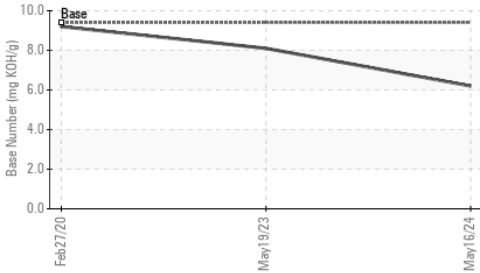
FT-IR (Direct Trend)



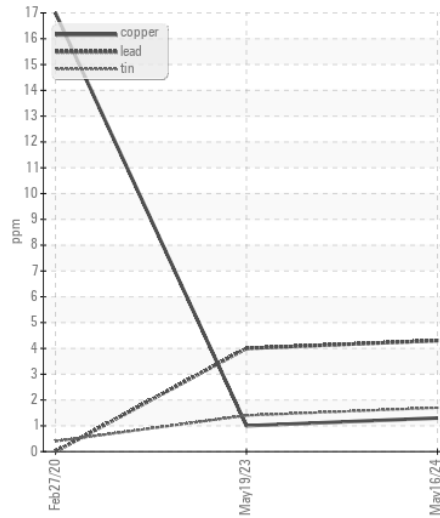
Ferrous Alloys



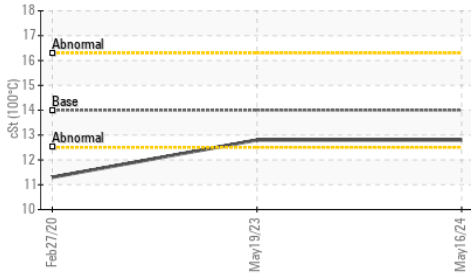
Base Number



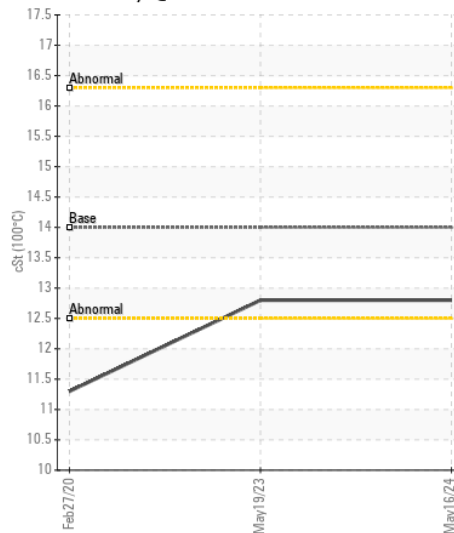
Non-ferrous Metals



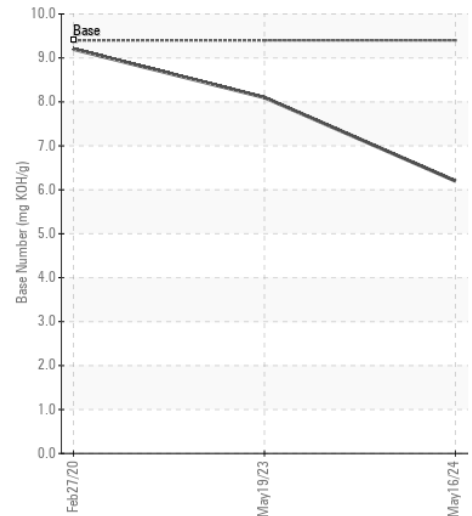
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : IL0033178  
 Lab Number : 06209901  
 Unique Number : 11082765  
 Test Package : FLEET

Received : 14 Jun 2024  
 Tested : 17 Jun 2024  
 Diagnosed : 17 Jun 2024 - Wes Davis

RUSH TRUCK LEASING - BOISE IDEALEASE  
 770 WEST AMITY ROAD  
 BOISE, ID  
 US 83705

Contact: MATT BORCHARDT  
 borchardtm@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)

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