



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**4287R**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>IL06175106</b>	IL0032494	IL0029006
Sample Date		Client Info		<b>19 Apr 2024</b>	10 Oct 2023	15 Feb 2023
Machine Age	mls	Client Info		<b>0</b>	199804	174325
Oil Age	mls	Client Info		<b>15000</b>	15000	0
Filter Age	mls	Client Info		<b>0</b>	15000	0
Oil Changed		Client Info		<b>N/A</b>	Changed	N/A
Filter Changed		Client Info		<b>N/A</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>53</b>	33	51
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	4	14
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
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.

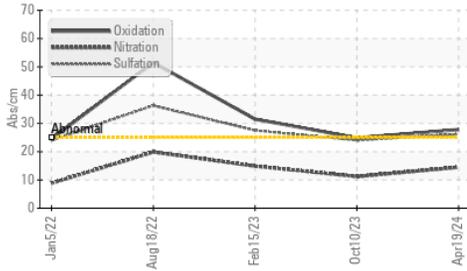
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	4	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.4	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.5</b>	11.2	14.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.2</b>	24.0	27.5
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

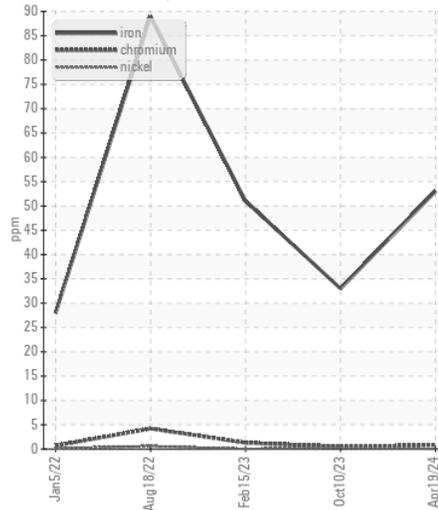
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	<b>2</b>	0	2
Boron	ppm	ASTM D5185m		<b>0</b>	0	4
Barium	ppm	ASTM D5185m		<b>0</b>	4	0
Molybdenum	ppm	ASTM D5185m		<b>63</b>	67	57
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>994</b>	978	919
Calcium	ppm	ASTM D5185m		<b>1162</b>	1136	1125
Phosphorus	ppm	ASTM D5185m		<b>1028</b>	980	924
Zinc	ppm	ASTM D5185m		<b>1256</b>	1272	1203
Sulfur	ppm	ASTM D5185m		<b>3238</b>	3260	2892
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>27.8</b>	24.9	31.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.3</b>	7.3	5.8
Visc @ 100°C	cSt	ASTM D445		<b>13.3</b>	13.0	13.3

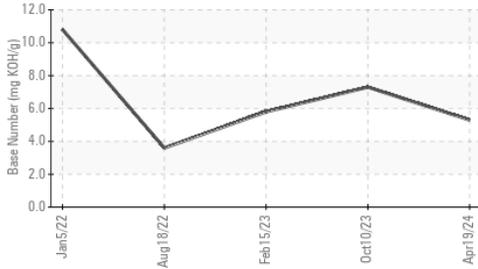
**FT-IR (Direct Trend)**



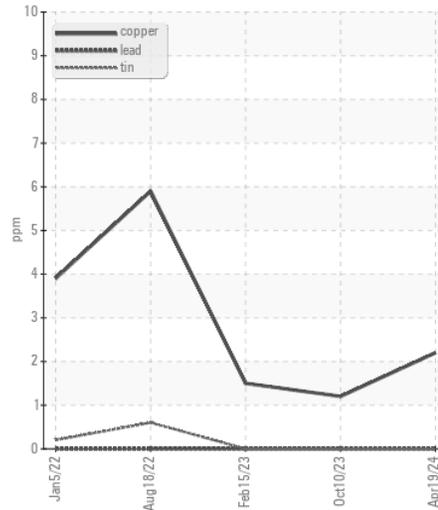
**Ferrous Alloys**



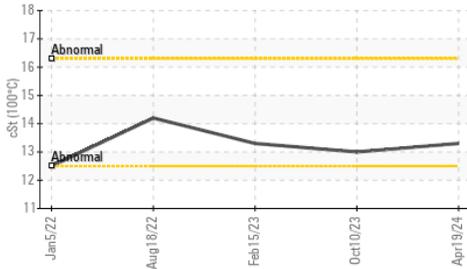
**Base Number**



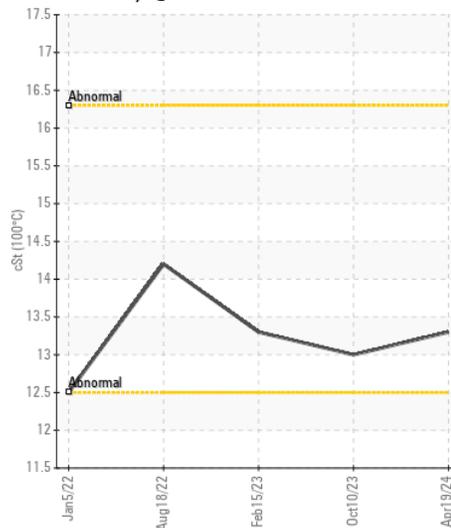
**Non-ferrous Metals**



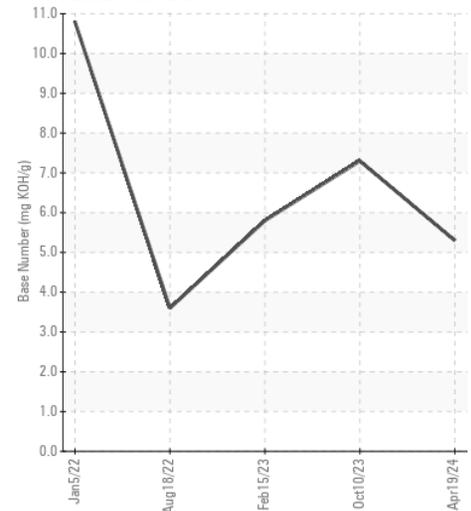
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

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

**Sample No.** : IL06175106

**Lab Number** : 06175106

**Unique Number** : 11021159

**Test Package** : FLEET

**Received** : 10 May 2024

**Tested** : 10 May 2024

**Diagnosed** : 13 May 2024 - Don Baldrige

**RUSH TRUCK CENTER - CHICAGO IDEALEASE**

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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)