



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**462102**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (44 QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>IL0036557</b>	IL0026923	IL0021355
Sample Date		Client Info		<b>29 Mar 2024</b>	22 Sep 2022	03 Dec 2021
Machine Age	mls	Client Info		<b>247844</b>	158523	116125
Oil Age	mls	Client Info		<b>43844</b>	42398	52000
Filter Age	mls	Client Info		<b>43844</b>	42398	52000
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>34</b>	26	12
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	2	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>9</b>	8	6
Lead	ppm	ASTM D5185m	>40	<b>7</b>	10	2
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	2
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	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

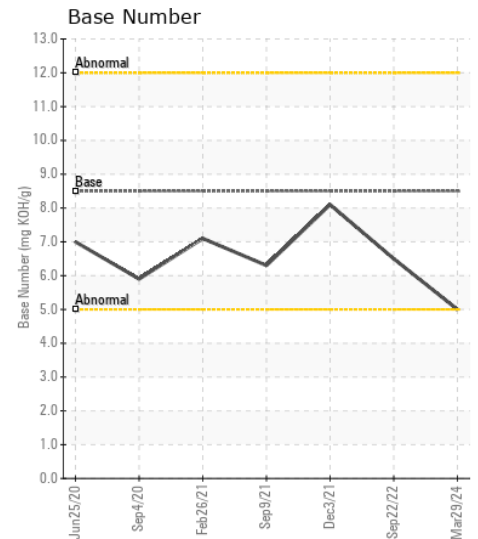
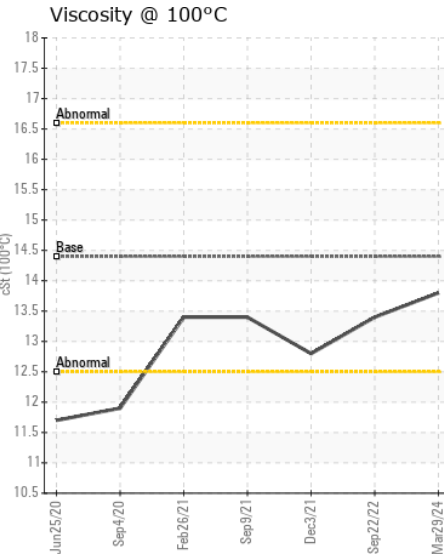
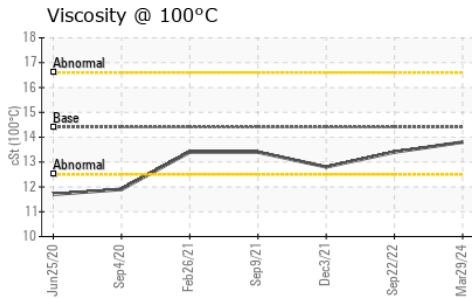
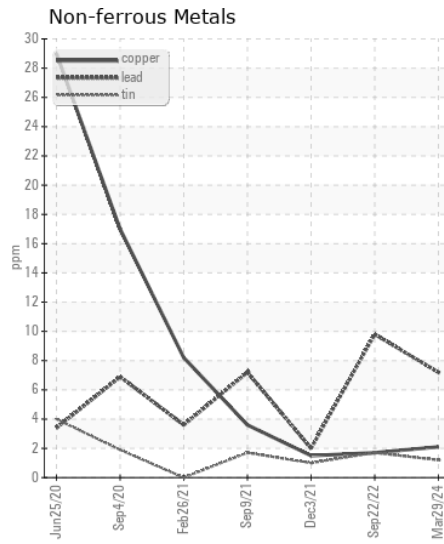
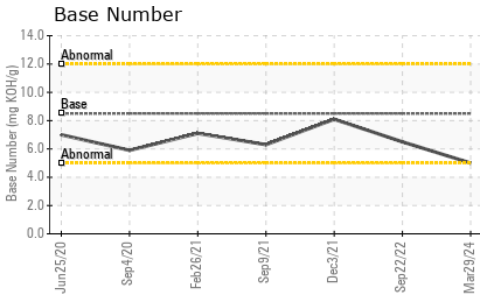
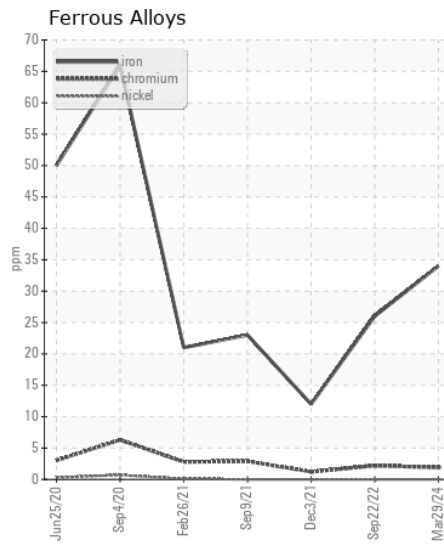
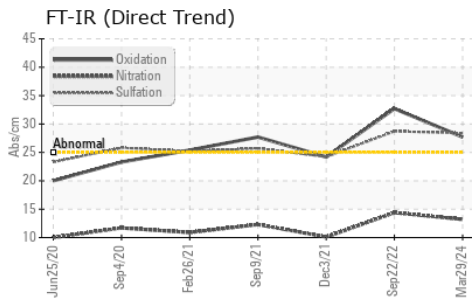
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>18</b>	14	14
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>0.8</b>	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.2</b>	14.4	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>28.4</b>	28.7	24.2
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	>158	<b>2</b>	2	0
Boron	ppm	ASTM D5185m	250	<b>4</b>	21	36
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>70</b>	53	39
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>1018</b>	540	571
Calcium	ppm	ASTM D5185m	3000	<b>1173</b>	1701	1842
Phosphorus	ppm	ASTM D5185m	1150	<b>1082</b>	736	834
Zinc	ppm	ASTM D5185m	1350	<b>1329</b>	968	940
Sulfur	ppm	ASTM D5185m	4250	<b>3253</b>	2841	2147
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>27.7</b>	32.7	24.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>5.0</b>	6.5	8.1
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.8</b>	13.4	12.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0036557  
**Lab Number** : 06158301  
**Unique Number** : 10993724  
**Test Package** : FLEET  
**Received** : 23 Apr 2024  
**Tested** : 24 Apr 2024  
**Diagnosed** : 25 Apr 2024 - Sean Felton

**RUSH TRUCK LEASING - CLEVELAND IDEALEASE**  
 5 ACORN DR  
 OAKWOOD VILLAGE, OH  
 US 44146-5550  
 Contact: JOHN FOSTER  
 FosterJ4@RushEnterprises.com  
 T: (440)359-7000  
 F: (440)439-5657

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)