



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

Machine Id  
**84469**  
 Component  
**Diesel Engine**  
 Fluid  
**{not provided} (--- QTS)**

### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. ( Customer Sample Comment: Hours=765 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>IL0033814</b>	IL0030617	---
Sample Date		Client Info		<b>22 May 2024</b>	29 Feb 2024	---
Machine Age	mls	Client Info		<b>26099</b>	15799	---
Oil Age	mls	Client Info		<b>26099</b>	0	---
Filter Age	mls	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	N/A	---
Filter Changed		Client Info		<b>Changed</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>28</b>	89	---
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	2	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	12	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>5</b>	41	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

There is no indication of any contamination in the oil.

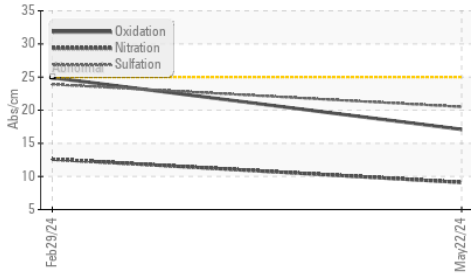
Silicon	ppm	ASTM D5185m	>25	<b>9</b>	31	---
Potassium	ppm	ASTM D5185m	>20	<b>13</b>	31	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	1.9	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	12.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.5</b>	23.9	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

### FLUID CONDITION

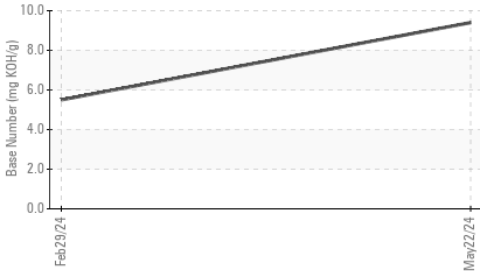
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	7	---
Boron	ppm	ASTM D5185m		<b>6</b>	23	---
Barium	ppm	ASTM D5185m		<b>0</b>	7	---
Molybdenum	ppm	ASTM D5185m		<b>62</b>	47	---
Manganese	ppm	ASTM D5185m		<b>2</b>	7	---
Magnesium	ppm	ASTM D5185m		<b>972</b>	842	---
Calcium	ppm	ASTM D5185m		<b>1151</b>	1212	---
Phosphorus	ppm	ASTM D5185m		<b>1083</b>	700	---
Zinc	ppm	ASTM D5185m		<b>1289</b>	898	---
Sulfur	ppm	ASTM D5185m		<b>3684</b>	1942	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.1</b>	24.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.4</b>	5.5	---
Visc @ 100°C	cSt	ASTM D445		<b>12.9</b>	11.8	---

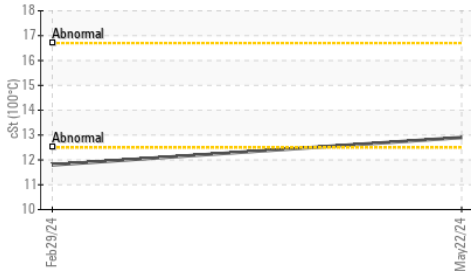
FT-IR (Direct Trend)



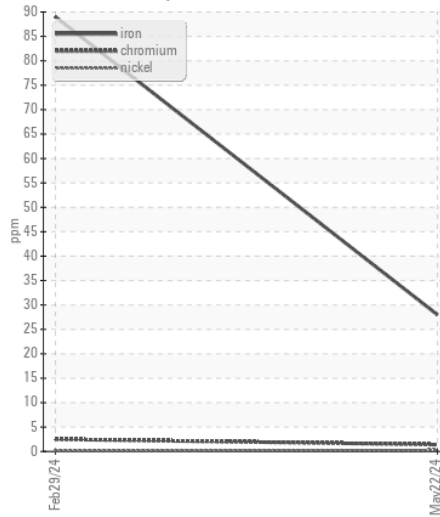
Base Number



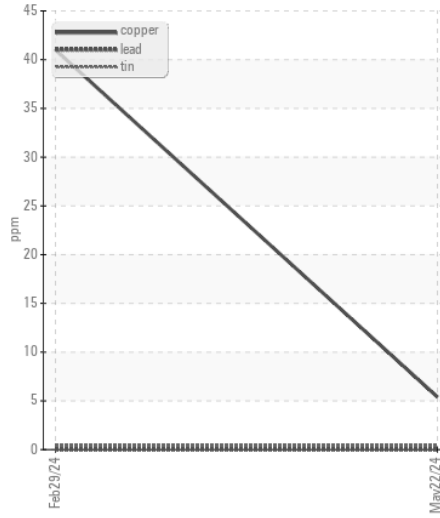
Viscosity @ 100°C



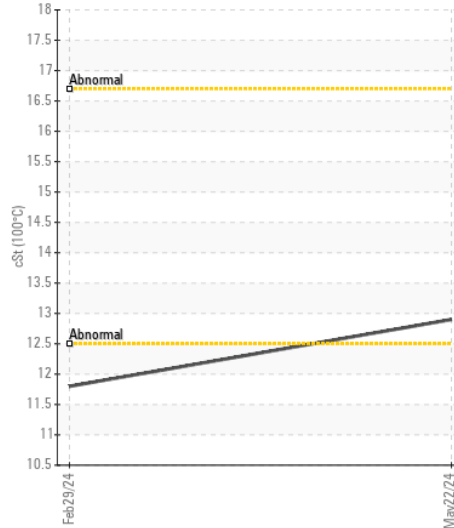
Ferrous Alloys



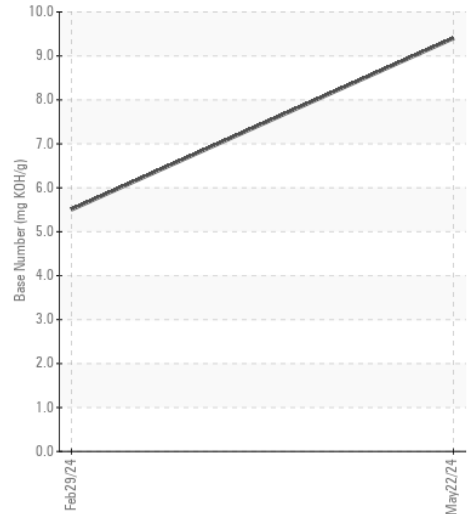
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : IL0033814

Lab Number : 06212826

Unique Number : 11085690

Test Package : FLEET

Received : 17 Jun 2024

Tested : 19 Jun 2024

Diagnosed : 19 Jun 2024 - Angela Borella

RUSH TRUCK LEASING - CHARLOTTE IDEALEASE

1333 AMERON DR

CHARLOTTE, NC

US 28206

Contact: JERRY DIXON

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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)