



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

Machine Id  
**441909**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 30 (--- QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>IL06055281</b>	IL05702200	IL05481058
Sample Date		Client Info		<b>08 Dec 2023</b>	10 Nov 2022	20 Jan 2022
Machine Age	hrs	Client Info		<b>4871</b>	3206	2322
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>39</b>	60	17
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	13	5
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>3</b>	113	18
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
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

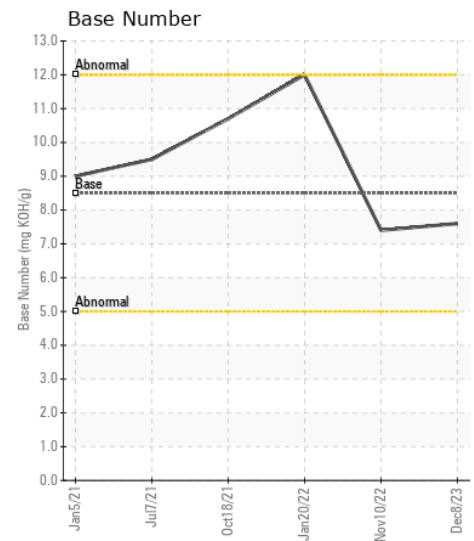
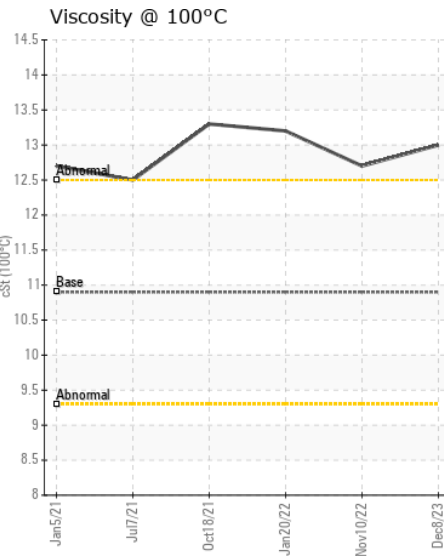
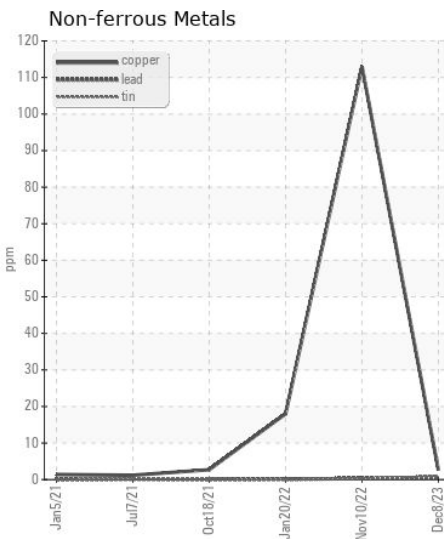
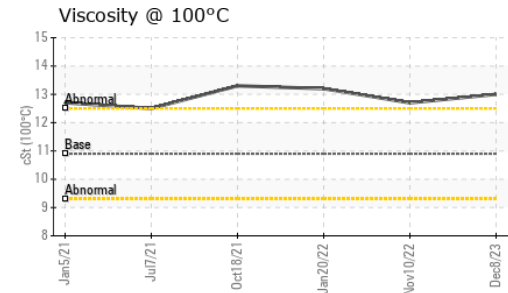
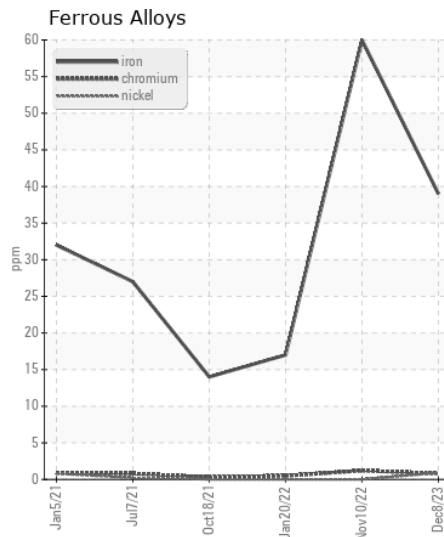
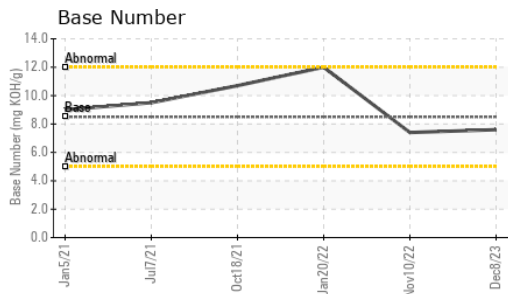
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	13	5
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>	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.4</b>	12.9	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.4</b>	25.2	19.9
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	>75	<b>0</b>	3	<1
Boron	ppm	ASTM D5185m	250	<b>1</b>	2	7
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>65</b>	65	58
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>972</b>	906	986
Calcium	ppm	ASTM D5185m	3000	<b>1140</b>	1249	1106
Phosphorus	ppm	ASTM D5185m	1150	<b>885</b>	961	1094
Zinc	ppm	ASTM D5185m	1350	<b>1273</b>	1190	1338
Sulfur	ppm	ASTM D5185m	4250	<b>3192</b>	3109	2832
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.3</b>	23.1	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.6</b>	7.4	12
Visc @ 100°C	cSt	ASTM D445	10.9	<b>13.0</b>	12.7	13.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL06055281 **Received** : 09 Jan 2024  
**Lab Number** : 06055281 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821230 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET

**RUSH TRUCK LEASING - CINCINNATI IDEALEASE**  
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 CINCINNATI, OH  
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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)