



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
4184L
Component
Diesel Engine
Fluid
{not provided} (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL06101403	IL05702213	IL05617582
Sample Date		Client Info		15 Feb 2024	01 Nov 2022	03 Aug 2022
Machine Age	hrs	Client Info		6957	0	5714
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	81	33	82
Chromium	ppm	ASTM D5185m	>20	2	<1	2
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 21	8	30
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	2	<1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

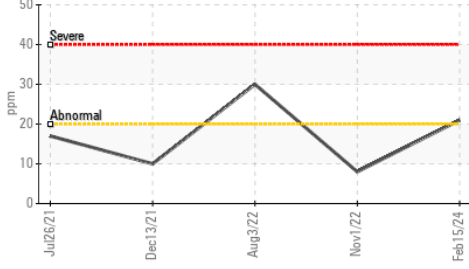
Silicon	ppm	ASTM D5185m	>25	8	4	6
Potassium	ppm	ASTM D5185m	>20	33	14	51
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.2	0.5
Nitration	Abs/cm	*ASTM D7624	>20	11.5	8.0	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	20.9	22.5
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

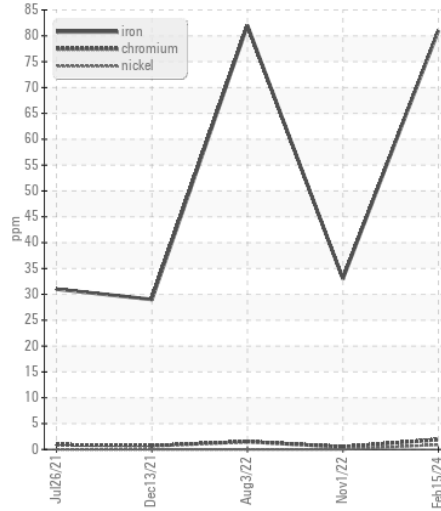
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	2	2
Boron	ppm	ASTM D5185m		2	8	8
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		60	58	60
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		831	840	951
Calcium	ppm	ASTM D5185m		991	1319	1226
Phosphorus	ppm	ASTM D5185m		930	1061	1077
Zinc	ppm	ASTM D5185m		1124	1211	1328
Sulfur	ppm	ASTM D5185m		2983	3941	3424
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.5	16.7	18.8
Base Number (BN)	mg KOH/g	ASTM D2896		7.2	10.8	9.1
Visc @ 100°C	cSt	ASTM D445		13.3	13.0	13.0

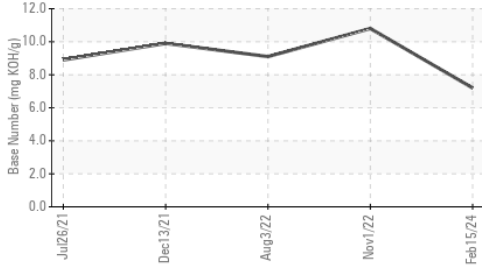
▲ Aluminum (ppm)



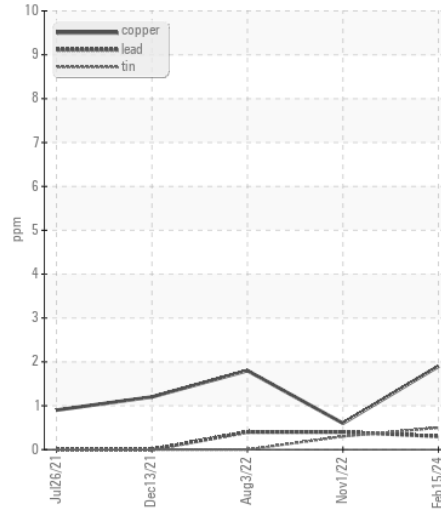
Ferrous Alloys



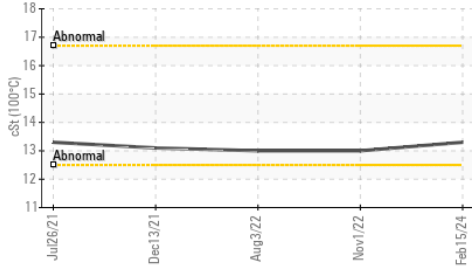
Base Number



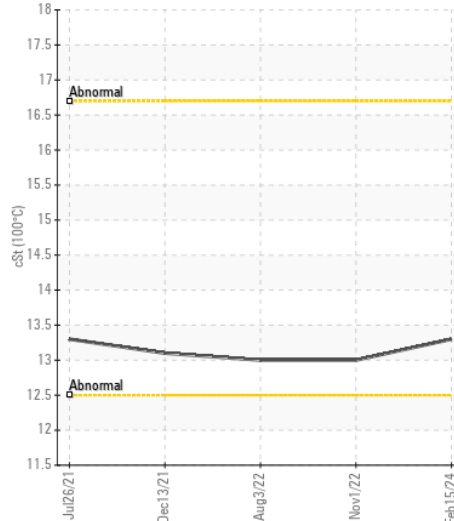
Non-ferrous Metals



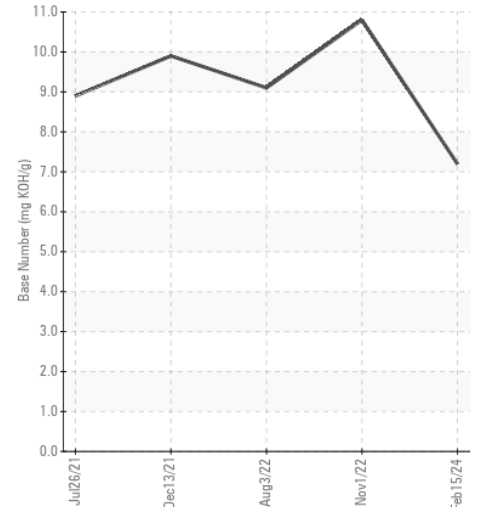
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : IL06101403
 Lab Number : 06101403
 Unique Number : 10899633
 Test Package : FLEET

Received : 27 Feb 2024
 Tested : 28 Feb 2024
 Diagnosed : 28 Feb 2024 - Don Baldrige

RUSH TRUCK LEASING - CINCINNATI IDEALEASE
 11777 HIGHWAY DRIVE
 CINCINNATI, OH
 US 45241

Contact: ROBERT BAIER
 baierr@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)

T: (513)657-7901
 F: (513)733-0537