

Machine Id **162108** Component **Diesel Engine** Fluid **{not provided} (--- GAL) RECOMMENDATION**

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

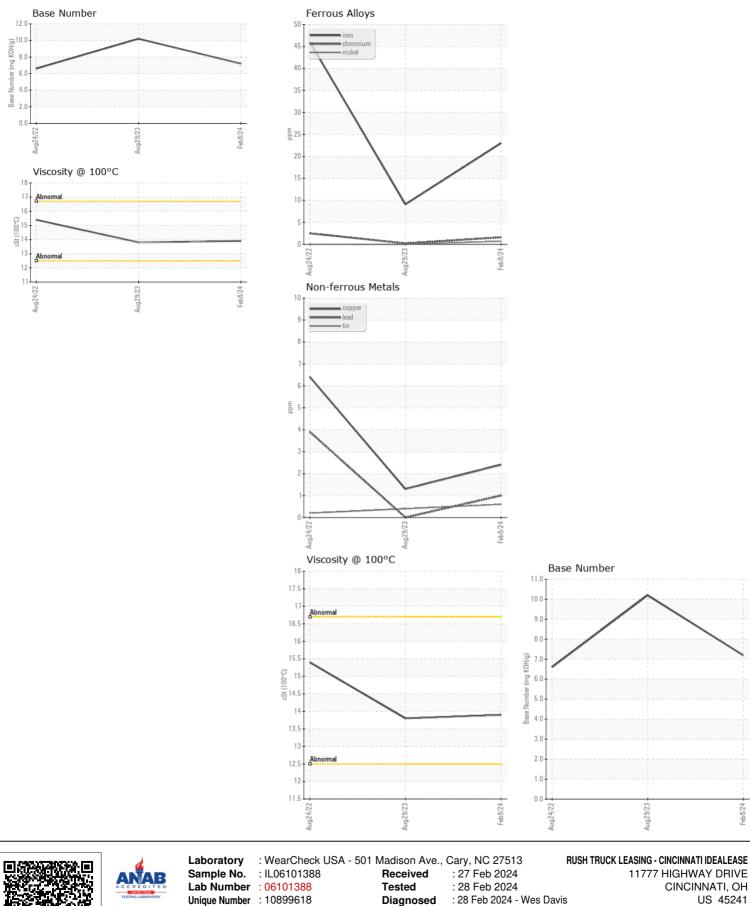
CONTAMINATION

There is no indication of any contamination in the oil.

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.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL06101388	IL05952085	IL05655162
Sample Date		Client Info		08 Feb 2024	29 Aug 2023	24 Aug 2022
Machine Age	hrs	Client Info		12035	10720	7463
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				NORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	23	9	46
Chromium	ppm	ASTM D5185m	>20	2	<1	2
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m	-	<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	6	19
Lead	ppm	ASTM D5185m	>40	1	0	4
Copper	ppm	ASTM D5185m	>330	2	1	6
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m	NONE	<1 NONE		
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	7	5	5
Potassium	ppm	ASTM D5185m	>20	9	7	43
Fuel	lelerri	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	2.5	1.1	<b>3</b> .9
Nitration	Abs/cm	*ASTM D7624	>20	10.5	7.4	15.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	20.3	33.5
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
Codium				4	0	0
Sodium	ppm	ASTM D5185m		1	3	2
Boron	ppm	ASTM D5185m		7	0	4
Barium	ppm	ASTM D5185m ASTM D5185m		1	0 63	2 63
Molybdenum Manganese	ppm	ASTM D5185m		68 <1	<1	<1
Magnesium	ppm	ASTM D5185m		<1 786	945	943
Calcium	ppm ppm	ASTM D5185m		962	945 1169	1273
Phosphorus	ppm	ASTM D5185m		889	1034	986
Zinc		ASTM D5185m		1059	1247	1290
Sulfur	ppm ppm	ASTM D5185m		2903	3729	3470
Oxidation	Abs/.1mm	*ASTM D5185111	>25	2903 16.1	14.1	23.5
Base Number (BN)	mg KOH/g	ASTM D7414 ASTM D2896	220	7.2	14.1	6.6
Visc @ 100°C	cSt	ASTM D2090 ASTM D445		13.9	13.8	15.4
	631	70 HVI D440		13.9	10.0	10.4



Test Package : FLEET Contact: ROBERT BAIER Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. baierr@rushenterprises.com * - 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)

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