OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id
139499
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. 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

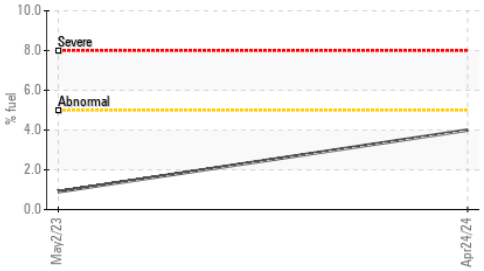
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

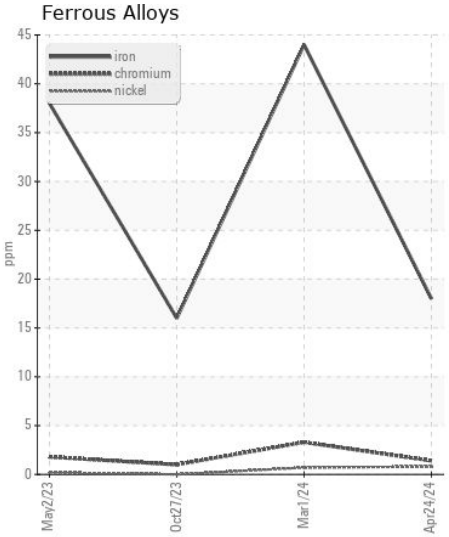
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0019624	RPL0016647	RPL0015312
Sample Date		Client Info		24 Apr 2024	01 Mar 2024	27 Oct 2023
Machine Age	hrs	Client Info		0	93932	81839
Oil Age	hrs	Client Info		0	12093	50000
Filter Age	hrs	Client Info		0	0	50000
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				MARGINAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	18	44	16
Chromium	ppm	ASTM D5185m	>20	1	3	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		2	0	0
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	19	66	22
Lead	ppm	ASTM D5185m	>40	7	8	5
Copper	ppm	ASTM D5185m	>330	2	7	4
Tin	ppm	ASTM D5185m	>15	2	2	1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	8	14	9
Potassium	ppm	ASTM D5185m	>20	51	210	71
Fuel	%	ASTM D3524	>5	▲ 4.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.1	12.1	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	25.7	23.9
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
Sodium	ppm	ASTM D5185m		1	6	1
Boron	ppm	ASTM D5185m		151	75	99
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		106	116	84
Manganese	ppm	ASTM D5185m		1	2	<1
Magnesium	ppm	ASTM D5185m		624	662	565
Calcium	ppm	ASTM D5185m		1411	1578	1083
Phosphorus	ppm	ASTM D5185m		657	657	458
Zinc	ppm	ASTM D5185m		819	785	588
Sulfur	ppm	ASTM D5185m		2403	2318	1709
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.8	22.6	20.9
Base Number (BN)	mg KOH/g	ASTM D2896		6.7	5.6	6.7
Visc @ 100°C	cSt	ASTM D445		11.9	12.9	13.2

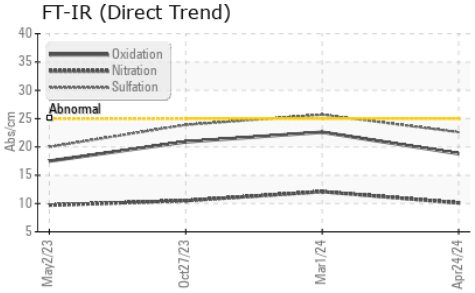
Fuel Dilution



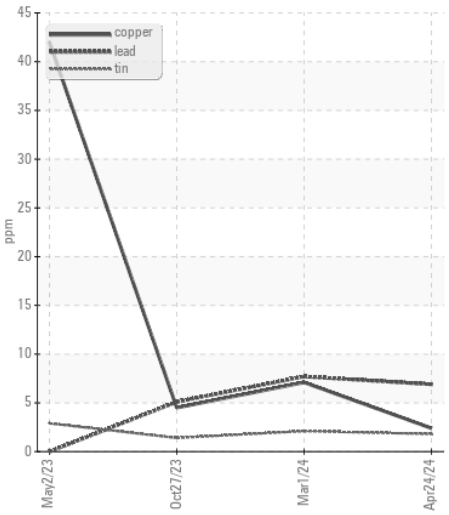
Ferrous Alloys



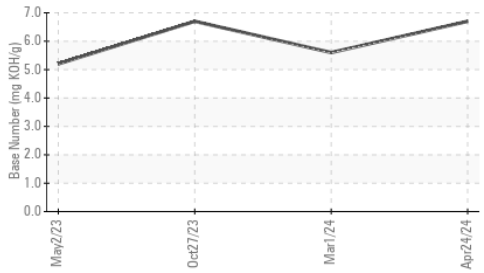
FT-IR (Direct Trend)



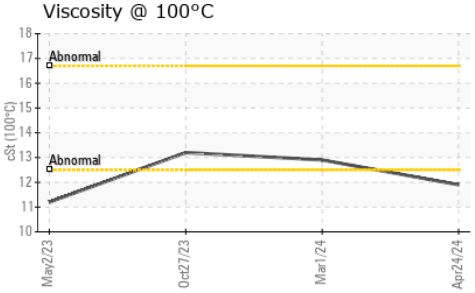
Non-ferrous Metals



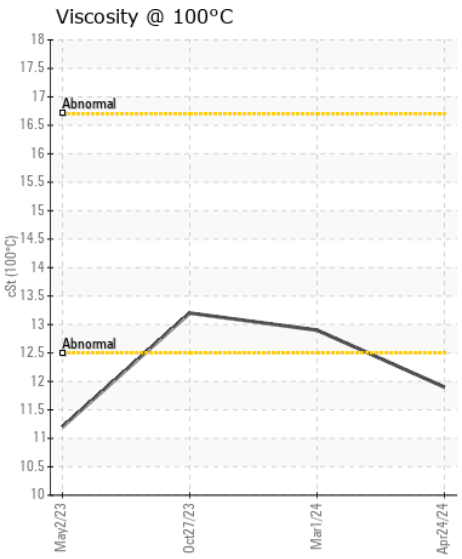
Base Number



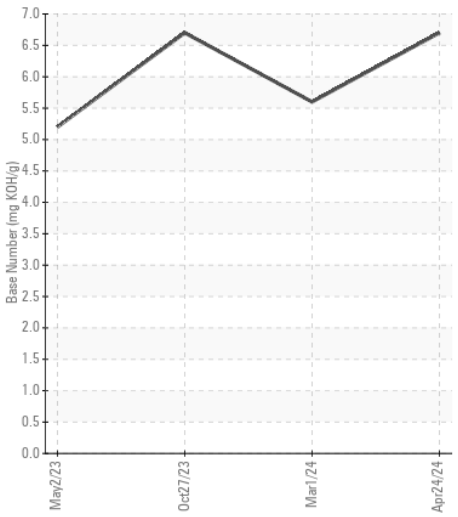
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0019624
Lab Number : 06217892
Unique Number : 11096089
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 24 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 26 Jun 2024 - Wes Davis

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)

RTL PACLEASE - 7005 - Arlington
1900 E Division
Arlington, TX
US 76011
Contact: Ricardo Ronquillo
ronquillor@rushenterprises.com
T: (469)203-8172
F: