



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
8464236
 Component
Diesel Engine
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0016977	RPL0011473	RPL0015998
Sample Date		Client Info		15 May 2024	21 Feb 2024	14 Nov 2023
Machine Age	mls	Client Info		0	0	0
Oil Age	mls	Client Info		17647	8924	23900
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	25	12	46
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	6	6	5
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	2	<1	1
Tin	ppm	ASTM D5185m	>15	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	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.

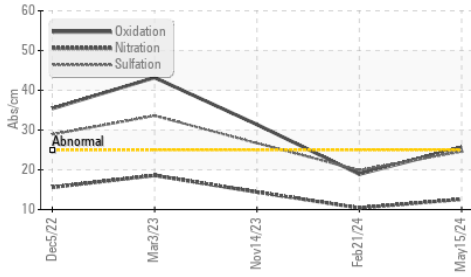
Silicon	ppm	ASTM D5185m	>25	7	6	8
Potassium	ppm	ASTM D5185m	>20	4	3	5
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.3	0.7
Nitration	Abs/cm	*ASTM D7624	>20	12.6	10.4	14.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	19.9	26.7
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

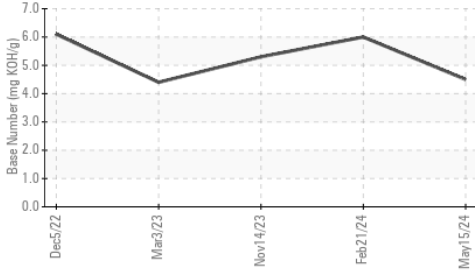
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	2	2
Boron	ppm	ASTM D5185m		46	79	53
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		125	125	73
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		699	661	646
Calcium	ppm	ASTM D5185m		1457	1317	1921
Phosphorus	ppm	ASTM D5185m		702	798	963
Zinc	ppm	ASTM D5185m		959	913	1082
Sulfur	ppm	ASTM D5185m		3102	3021	2772
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.6	18.9	31.4
Base Number (BN)	mg KOH/g	ASTM D2896		4.5	6.0	5.3
Visc @ 100°C	cSt	ASTM D445		13.0	12.8	13.8

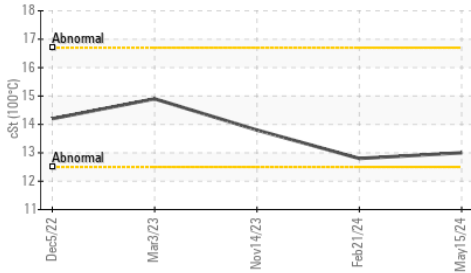
FT-IR (Direct Trend)



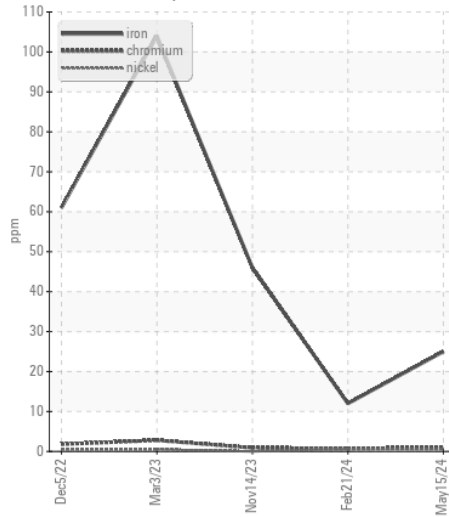
Base Number



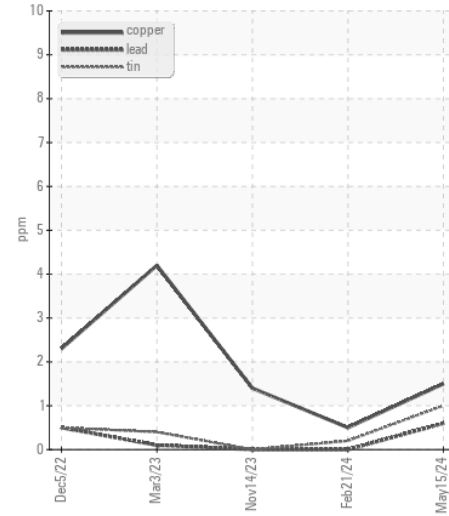
Viscosity @ 100°C



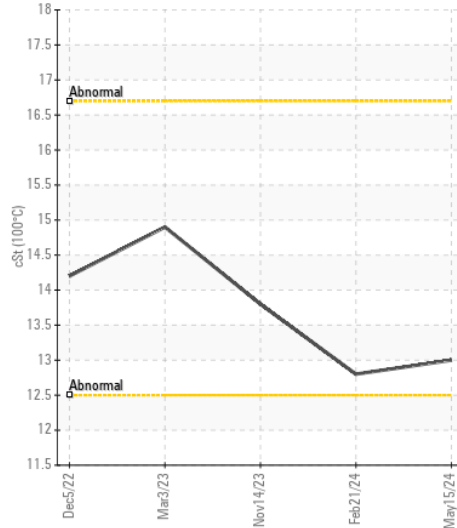
Ferrous Alloys



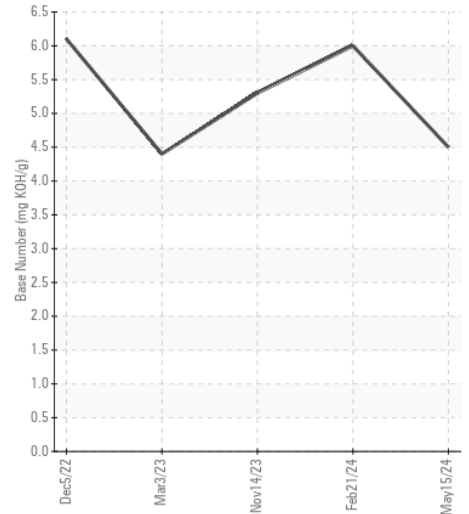
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : RPL0016977

Lab Number : 06190295

Unique Number : 11047047

Test Package : FLEET

Received : 24 May 2024

Tested : 27 May 2024

Diagnosed : 29 May 2024 - Don Baldrige

RTL PACLEASE - 7007 - Fontana

3121 South Riverside

Bloomington, CA

US 92316

Contact: Rudy Trevizo

TrevizoR@RushEnterprises.Com

T: (909)829-1044

F:

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)