



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
781142
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 40 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL06220788	RPL06151636	RPL06063998
Sample Date		Client Info		17 Jun 2024	02 Apr 2024	09 Jan 2024
Machine Age	mls	Client Info		288146	269889	250752
Oil Age	mls	Client Info		18000	55261	9637
Filter Age	mls	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	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	12	43	26
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		10	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	8	5
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	2	2	3
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	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.

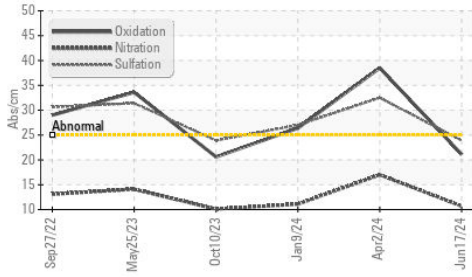
Silicon	ppm	ASTM D5185m	>25	7	10	10
Potassium	ppm	ASTM D5185m	>20	8	9	7
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.8	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.7	17.0	11.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	32.5	27.0
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

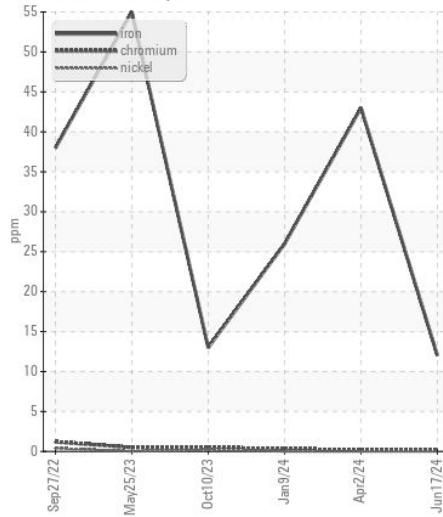
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	2	<1	0
Boron	ppm	ASTM D5185m	250	33	32	59
Barium	ppm	ASTM D5185m	10	0	0	3
Molybdenum	ppm	ASTM D5185m	100	61	132	138
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	450	693	691	731
Calcium	ppm	ASTM D5185m	3000	1506	1664	1547
Phosphorus	ppm	ASTM D5185m	1150	694	716	708
Zinc	ppm	ASTM D5185m	1350	899	874	910
Sulfur	ppm	ASTM D5185m	4250	2797	2550	2448
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.1	38.5	26.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.2	▲ 1.4	4.1
Visc @ 100°C	cSt	ASTM D445	14.4	14.3	15.2	14.3

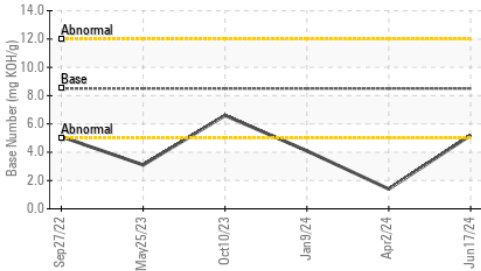
FT-IR (Direct Trend)



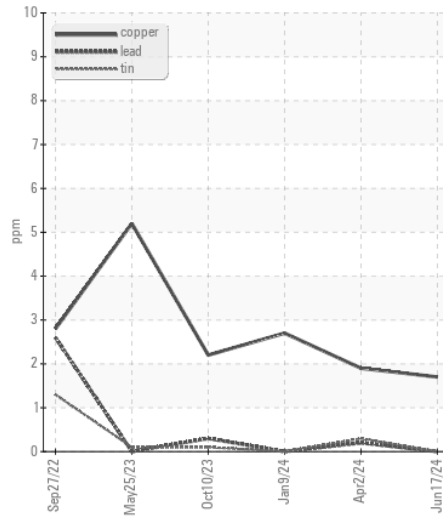
Ferrous Alloys



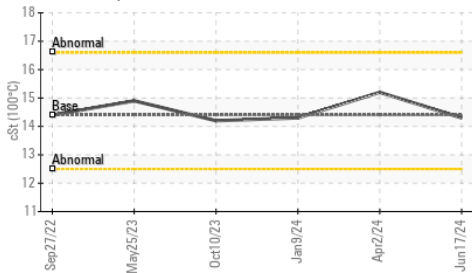
Base Number



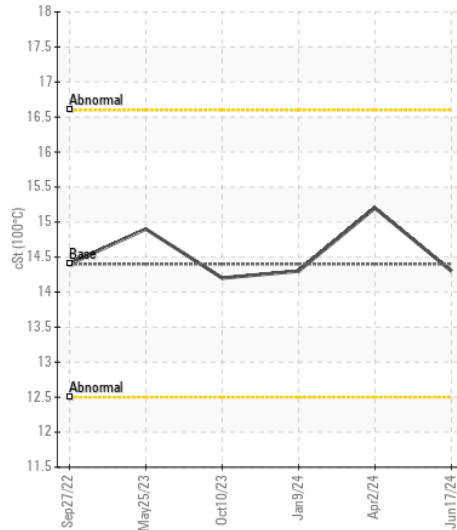
Non-ferrous Metals



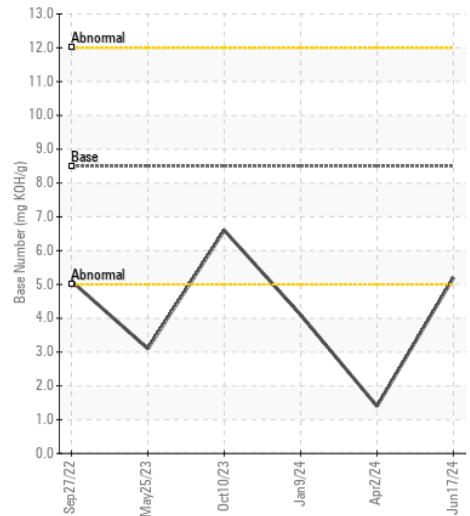
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL06220788
Lab Number : 06220788
Unique Number : 11098985
Test Package : FLEET

RTL PACLEASE - 7050 -Leasing Tyler
 10791 Hwy 69 North
 Tyler, TX
 US 75706
 Contact: Justin Cooper
 CooperJ1@RushEnterprises.Com
 T: (903)405-3000
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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)