



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 459581
Component
Diesel Engine
Fluid
MOBIL 15W40 (44 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0011809	RPL0011746	RPL0003965
Sample Date		Client Info		21 Jun 2024	10 Feb 2024	08 May 2023
Machine Age	mls	Client Info		124913	98378	63169
Oil Age	mls	Client Info		26535	15999	16487
Filter Age	mls	Client Info		26535	15999	16487
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	15	11	16
Chromium	ppm	ASTM D5185m	>5	<1	1	2
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	9	10	12
Lead	ppm	ASTM D5185m	>150	4	1	1
Copper	ppm	ASTM D5185m	>90	2	1	2
Tin	ppm	ASTM D5185m	>5	<1	1	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

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. There is no indication of any contamination in the oil.

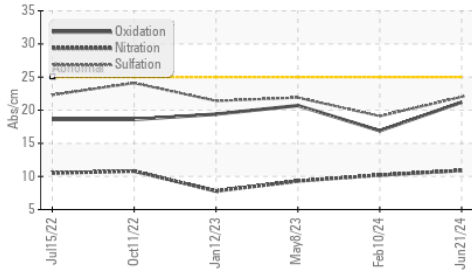
Silicon	ppm	ASTM D5185m	>35	6	6	7
Potassium	ppm	ASTM D5185m	>20	17	20	31
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	0.4	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	10.9	10.2	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	19.1	21.9
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

FLUID CONDITION

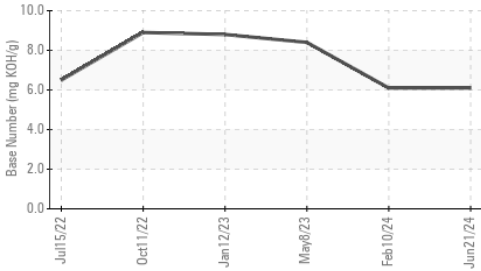
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	3	2	2
Boron	ppm	ASTM D5185m		34	65	55
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		93	117	73
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		639	681	549
Calcium	ppm	ASTM D5185m		1437	1242	1541
Phosphorus	ppm	ASTM D5185m		751	725	745
Zinc	ppm	ASTM D5185m		907	869	906
Sulfur	ppm	ASTM D5185m		3185	3150	2734
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.2	16.9	20.7
Base Number (BN)	mg KOH/g	ASTM D2896		6.1	6.1	8.4
Visc @ 100°C	cSt	ASTM D445		12.6	12.9	12.7

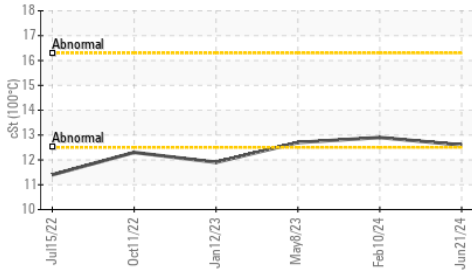
FT-IR (Direct Trend)



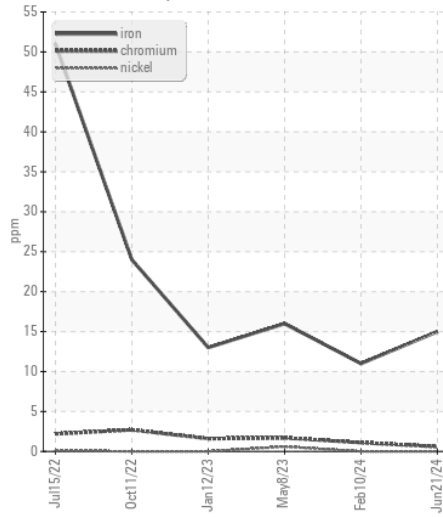
Base Number



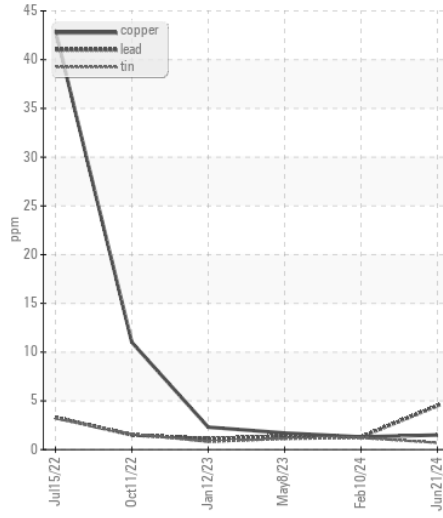
Viscosity @ 100°C



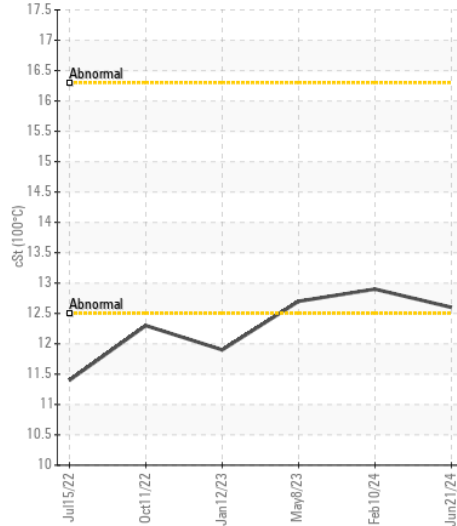
Ferrous Alloys



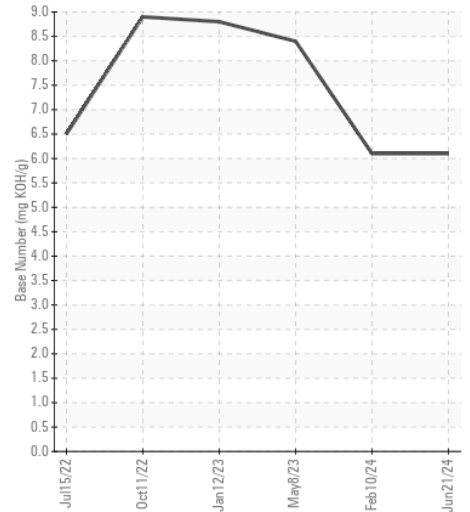
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0011809
Lab Number : 06220638
Unique Number : 11098835
Test Package : FLEET

Received : 26 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 Jun 2024 - Wes Davis

RTL PACLEASE - 7018 - West Texas
 1230 South Grandview
 Odessa, TX
 US 79761

Contact: David Johnson
 JohnsonD@RushEnterprises.com

T: (512)401-7063

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)

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