



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 459615
Component
Diesel Engine
Fluid
MOBIL 15W40 (46 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0011800	RPL0011772	RPL0011678
Sample Date		Client Info		21 Jun 2024	20 Mar 2024	02 Oct 2023
Machine Age	mls	Client Info		75713	51825	34496
Oil Age	mls	Client Info		15165	17329	18487
Filter Age	mls	Client Info		15165	0	18487
Oil Changed		Client Info		Changed	Not Changed	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	12	27	32
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	12	35	42
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	2	3	6
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	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.

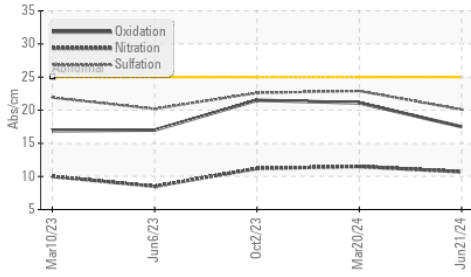
Silicon	ppm	ASTM D5185m	>25	8	10	9
Potassium	ppm	ASTM D5185m	>20	19	75	98
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.7	11.5	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	22.9	22.6
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

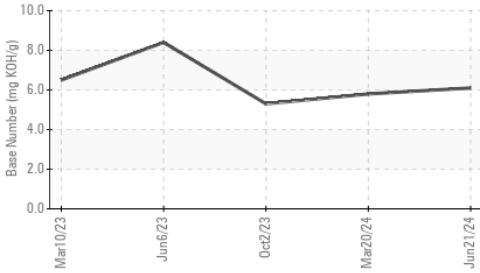
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	2	2	3
Boron	ppm	ASTM D5185m		54	24	25
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		124	110	109
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		723	779	737
Calcium	ppm	ASTM D5185m		1277	1389	1370
Phosphorus	ppm	ASTM D5185m		759	846	823
Zinc	ppm	ASTM D5185m		899	974	1044
Sulfur	ppm	ASTM D5185m		3561	3585	3120
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	21.1	21.5
Base Number (BN)	mg KOH/g	ASTM D2896		6.1	5.8	5.3
Visc @ 100°C	cSt	ASTM D445		13.3	13.9	13.7

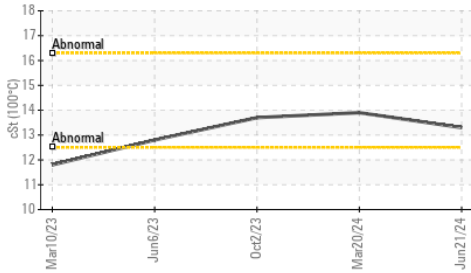
FT-IR (Direct Trend)



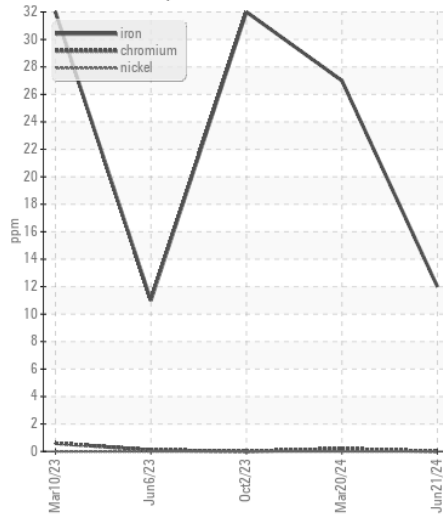
Base Number



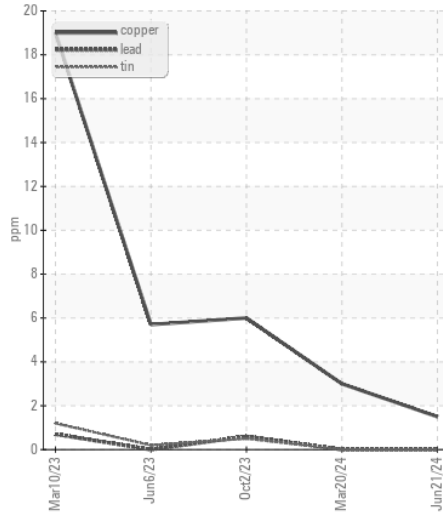
Viscosity @ 100°C



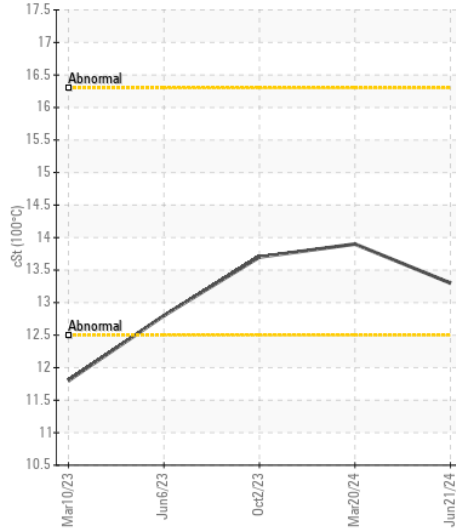
Ferrous Alloys



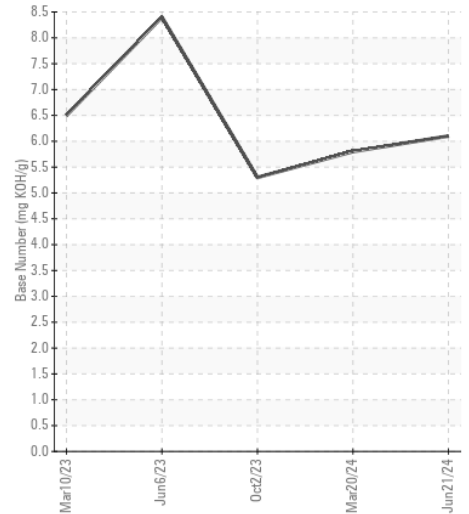
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : RPL0011800

Lab Number : 06220631

Unique Number : 11098828

Test Package : FLEET

Received : 26 Jun 2024

Tested : 27 Jun 2024

Diagnosed : 27 Jun 2024 - Angela Borella

RTL PACLEASE - 7018 - West Texas

1230 South Grandview

Odessa, TX

US 79761

Contact: David Johnson

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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)