OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
PETERBILT 8464532
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (22 QTS)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

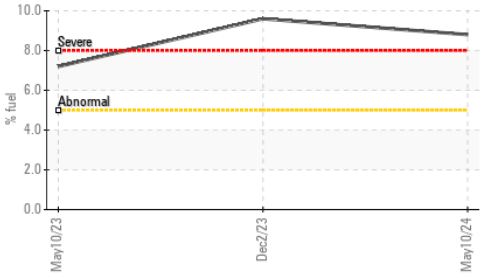
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

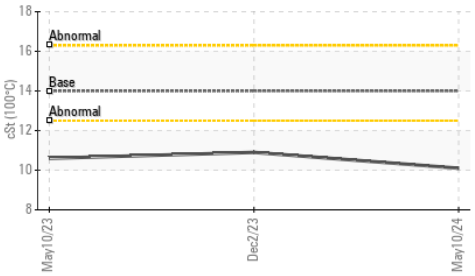
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0020416	RPL0016362	RPL0012575
Sample Date		Client Info		10 May 2024	02 Dec 2023	10 May 2023
Machine Age	mls	Client Info		47144	42423	35987
Oil Age	mls	Client Info		40708	6436	9430
Filter Age	mls	Client Info		0	6436	9430
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				SEVERE	SEVERE	ABNORMAL
Iron	ppm	ASTM D5185m	>110	29	17	30
Chromium	ppm	ASTM D5185m	>4	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	2	<1	<1
Aluminum	ppm	ASTM D5185m	>25	29	20	26
Lead	ppm	ASTM D5185m	>45	1	0	<1
Copper	ppm	ASTM D5185m	>85	19	17	54
Tin	ppm	ASTM D5185m	>4	2	<1	<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	>30	8	5	8
Potassium	ppm	ASTM D5185m	>20	69	50	78
Fuel	%	ASTM D3524	>5	▲ 8.8	▲ 9.6	▲ 7.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.9	8.3	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.0	23.3	24.0
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
Sodium	ppm	ASTM D5185m		2	0	0
Boron	ppm	ASTM D5185m	0	2	2	9
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	52	53	43
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	0	760	821	664
Calcium	ppm	ASTM D5185m		1005	987	1231
Phosphorus	ppm	ASTM D5185m		737	823	715
Zinc	ppm	ASTM D5185m		1003	1066	986
Sulfur	ppm	ASTM D5185m		2607	3227	2998
Oxidation	Abs/.1mm	*ASTM D7414	>25	32.0	23.4	22.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	3.4	5.8	6.2
Visc @ 100°C	cSt	ASTM D445	14	▲ 10.1	▲ 10.9	▲ 10.6

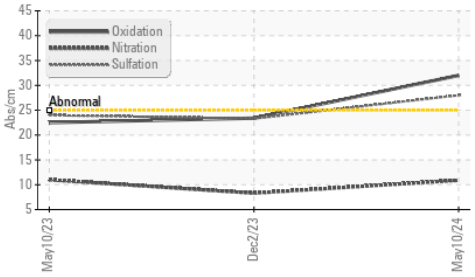
Fuel Dilution



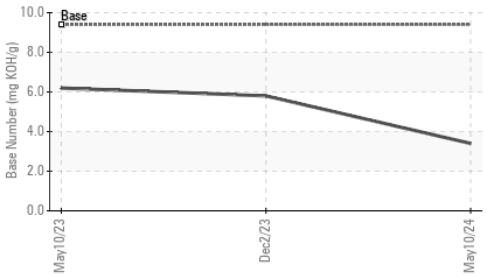
Viscosity @ 100°C



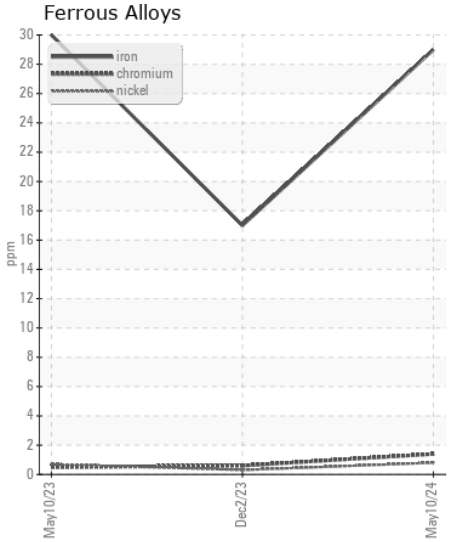
FT-IR (Direct Trend)



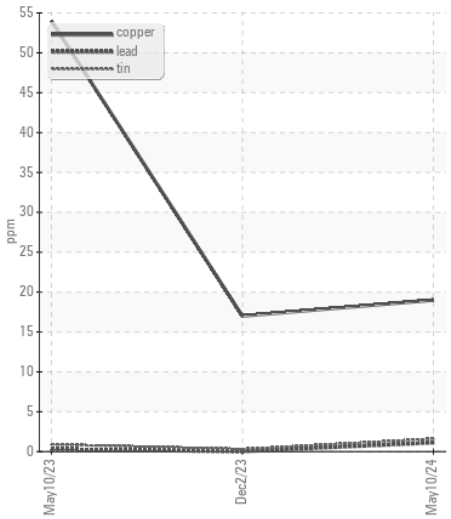
Base Number



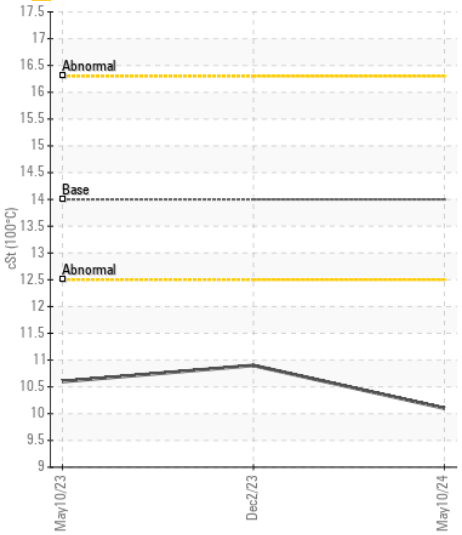
Ferrous Alloys



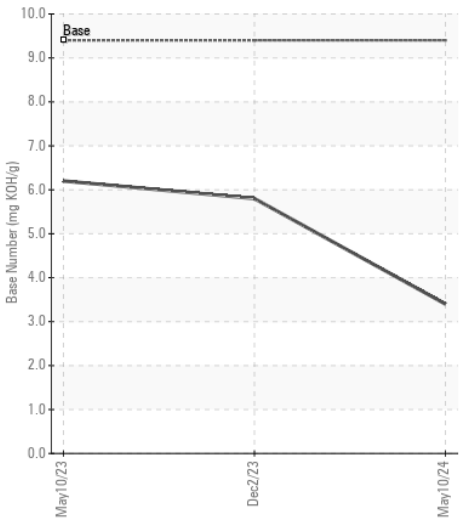
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0020416
Lab Number : 06191903
Unique Number : 11048655
Test Package : FLEET (Additional Tests: PercentFuel)

Received : 28 May 2024
Tested : 29 May 2024
Diagnosed : 30 May 2024 - Sean Felton

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 - 7006 - Pico Rivera
7837 Telegraph Rd
Pico Rivera, CA
US 90660
Contact: GERARDO CARROLA
carrolag@rushenterprises.com
T:
F: