OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
PETERBILT TDI 1411
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (42 QTS)

RECOMMENDATION

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

WEAR

All component wear rates are normal.

CONTAMINATION

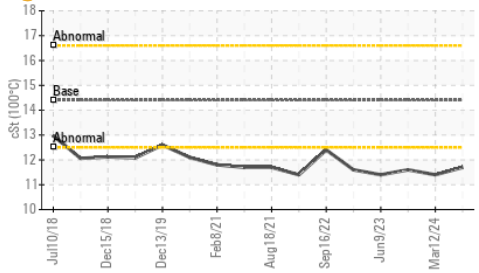
There is no indication of any contamination in the oil.

FLUID CONDITION

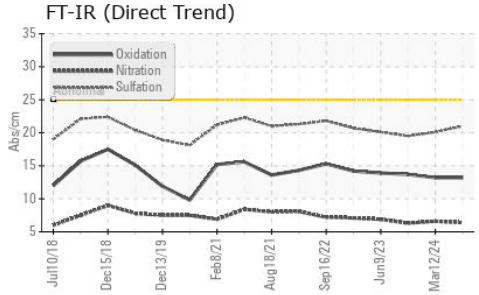
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0936325	WC0903454	WC0828035
Sample Date		Client Info		23 May 2024	12 Mar 2024	15 Sep 2023
Machine Age	mls	Client Info		260432	254149	237517
Oil Age	mls	Client Info		25000	0	25000
Filter Age	mls	Client Info		25000	0	25000
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ATTENTION	ATTENTION	ATTENTION
Iron	ppm	ASTM D5185m	>110	15	13	14
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	3	1
Lead	ppm	ASTM D5185m	>45	1	2	2
Copper	ppm	ASTM D5185m	>85	<1	2	<1
Tin	ppm	ASTM D5185m	>4	0	1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>30	5	5	3
Potassium	ppm	ASTM D5185m	>20	2	3	3
Fuel	%	ASTM D3524	>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	0.9	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	6.4	6.6	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	20.1	19.5
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	>158	0	0	0
Boron	ppm	ASTM D5185m	250	320	331	6
Barium	ppm	ASTM D5185m	10	0	2	<1
Molybdenum	ppm	ASTM D5185m	100	104	107	58
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	450	405	484	824
Calcium	ppm	ASTM D5185m	3000	1399	1385	1063
Phosphorus	ppm	ASTM D5185m	1150	1000	963	892
Zinc	ppm	ASTM D5185m	1350	1211	1146	1097
Sulfur	ppm	ASTM D5185m	4250	3119	3321	3290
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.2	13.2	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.0	7.1	9.4
Visc @ 100°C	cSt	ASTM D445	14.4	11.7	11.4	11.6

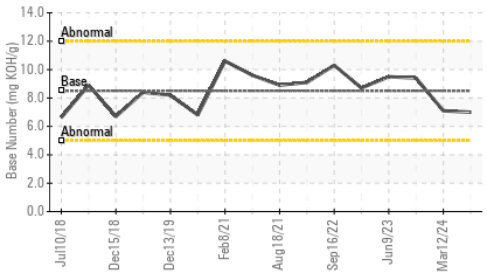
Viscosity @ 100°C



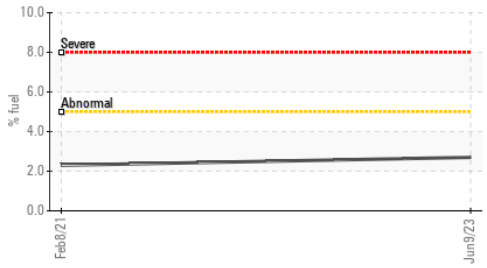
FT-IR (Direct Trend)



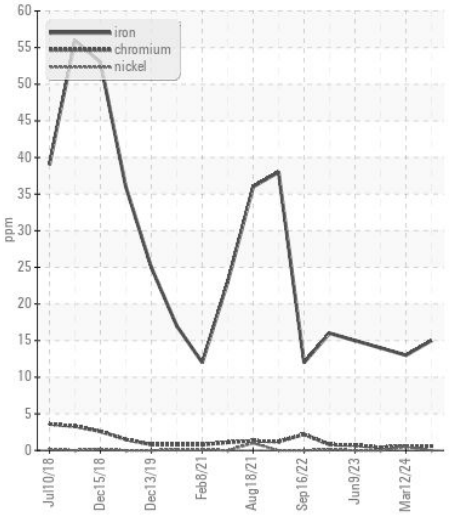
Base Number



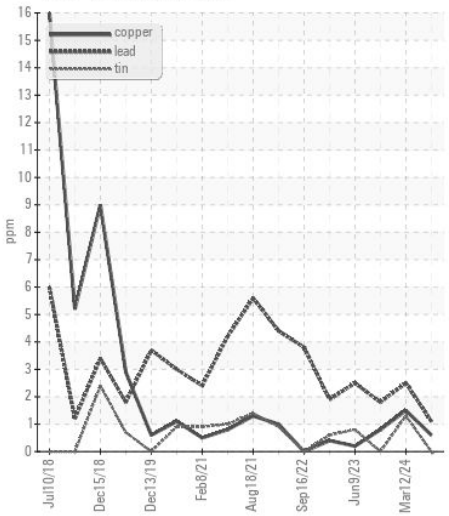
Fuel Dilution



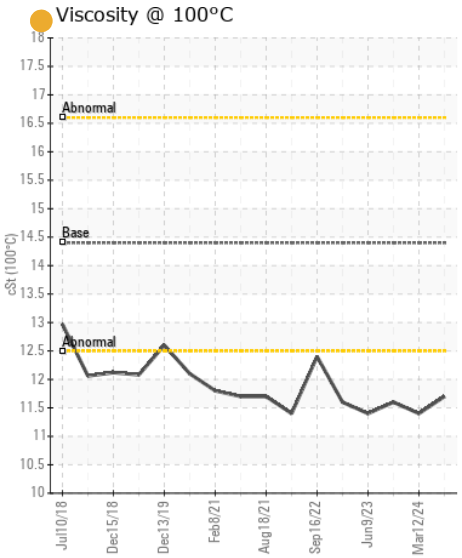
Ferrous Alloys



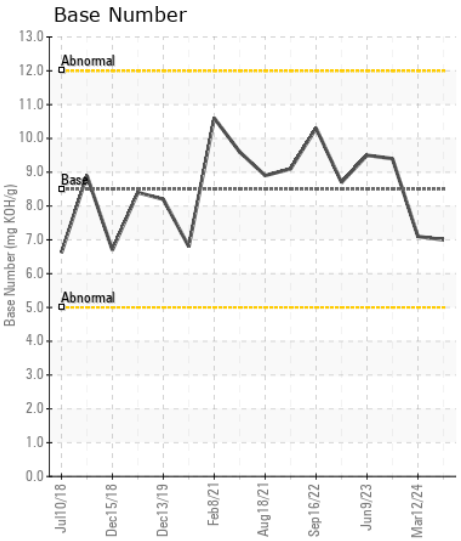
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0936325
Lab Number : 06216476
Unique Number : 11089340
Test Package : FLEET (Additional Tests: FuelDilution)

Received : 20 Jun 2024
Tested : 23 Jun 2024
Diagnosed : 23 Jun 2024 - Don Baldridge

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)

SALEM NATIONALEASE CORPORATION
198 PARK PLAZA DRIVE
WINSTON SALEM, NC
US 27105
Contact: Audrey Hopkins
Audrey.Hopkins@salemcorp.com
T: (336)767-9642
F: x: