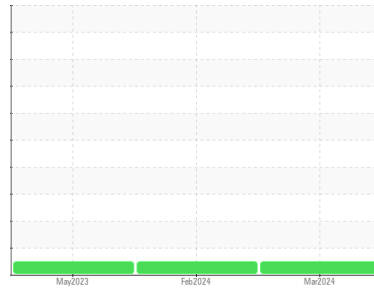


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
PETERBILT 450
 Component
Diesel Engine
 Fluid
 DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0115576	PCA0082953	PCA0069354
Sample Date	Client Info			18 Mar 2024	25 Feb 2024	19 May 2023
Machine Age	mls	Client Info		0	0	4378
Oil Age	mls	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	0.5
Water	WC Method	>0.2		NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	26	15	22
Chromium	ppm	ASTM D5185m	>20	1	2	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	19	15
Lead	ppm	ASTM D5185m	>40	10	2	2
Copper	ppm	ASTM D5185m	>330	1	2	12
Tin	ppm	ASTM D5185m	>15	1	<1	2
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	24	12	69
Barium	ppm	ASTM D5185m	10	1	0	0
Molybdenum	ppm	ASTM D5185m	100	66	62	16
Manganese	ppm	ASTM D5185m		<1	<1	4
Magnesium	ppm	ASTM D5185m	450	921	1016	695
Calcium	ppm	ASTM D5185m	3000	1547	1167	1265
Phosphorus	ppm	ASTM D5185m	1150	1219	1104	699
Zinc	ppm	ASTM D5185m	1350	1465	1346	830
Sulfur	ppm	ASTM D5185m	4250	3783	3112	3096

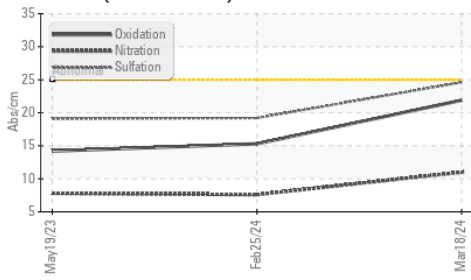
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	10	6	35
Sodium	ppm	ASTM D5185m	>158	6	7	4
Potassium	ppm	ASTM D5185m	>20	20	50	57
Glycol	%	*ASTM D2982		NEG	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.0	7.6	7.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	19.2	19.1

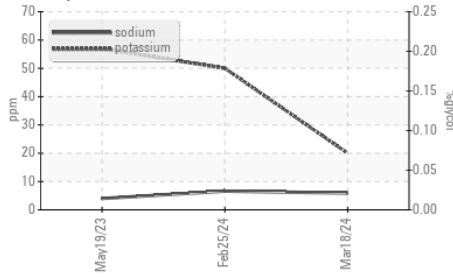
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.9	15.3	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.9	7.8	8.6

OIL ANALYSIS REPORT

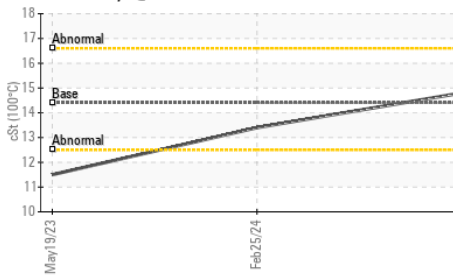
FT-IR (Direct Trend)



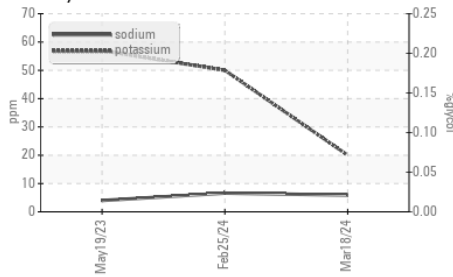
Glycol Contamination



Viscosity @ 100°C



Glycol Contamination

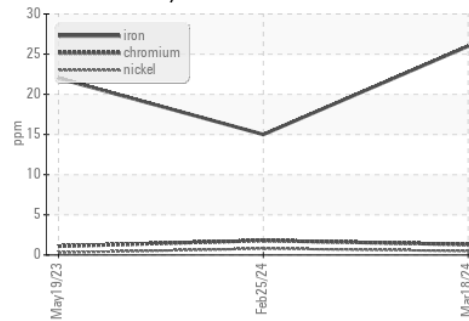


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

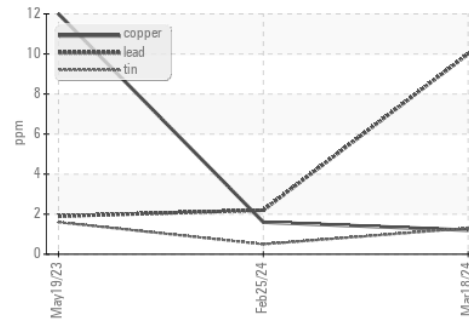
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	14.8	13.4	11.5

GRAPHS

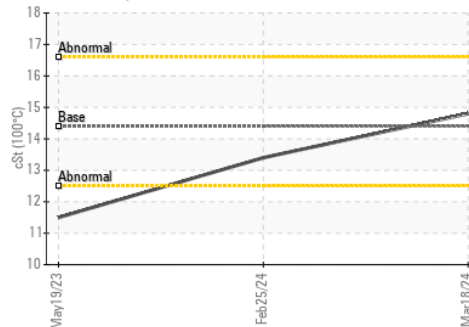
Ferrous Alloys



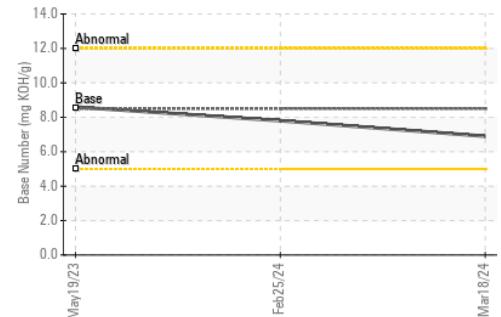
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0115576 **Received** : 25 Mar 2024
Lab Number : **06128542** **Tested** : 28 Mar 2024
Unique Number : 10942693 **Diagnosed** : 28 Mar 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: Glycol)

LEFEBVRE AND SONS
 10895 171ST AVE NW
 ELK RIVER, MN
 US 55330
 Contact: JAY LEFEBVRE
 jay.lefebvre@letruck.com

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)