



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
PETERBILT T00723
Component
Diesel Engine
Fluid
CASTROL VECTON 15W40 CK4 (--- GAL)

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		WC0856132	WC0757894	WC0497660
Sample Date		Client Info		10 Apr 2024	22 Feb 2023	22 Feb 2021
Machine Age	mls	Client Info		126009	108823	76838
Oil Age	mls	Client Info		17186	31985	12000
Filter Age	mls	Client Info		17186	31985	12000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	100	147	107
Chromium	ppm	ASTM D5185m	>20	4	5	3
Nickel	ppm	ASTM D5185m	>4	2	1	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	1	<1
Aluminum	ppm	ASTM D5185m	>20	8	7	6
Lead	ppm	ASTM D5185m	>40	3	2	0
Copper	ppm	ASTM D5185m	>330	8	8	6
Tin	ppm	ASTM D5185m	>15	2	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

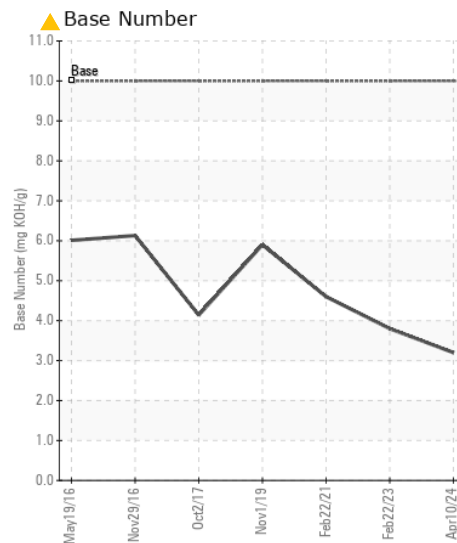
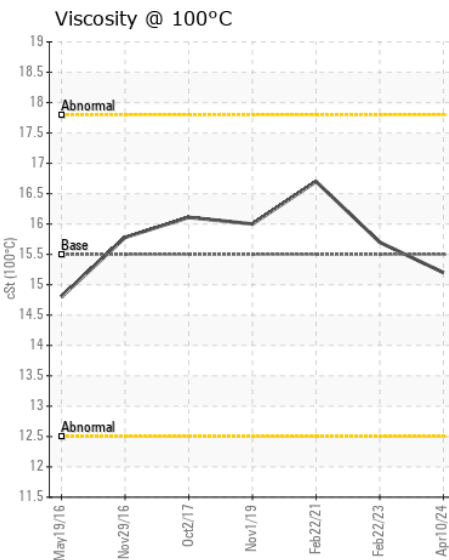
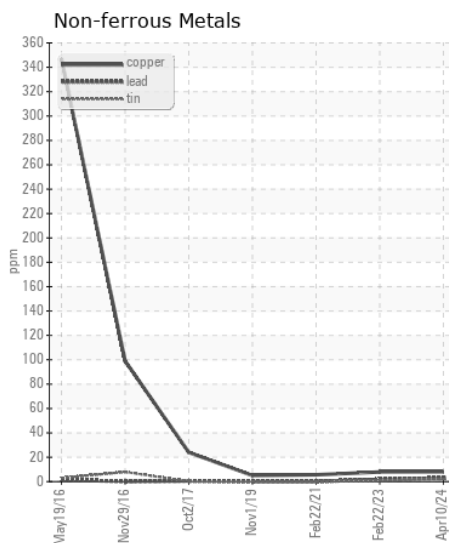
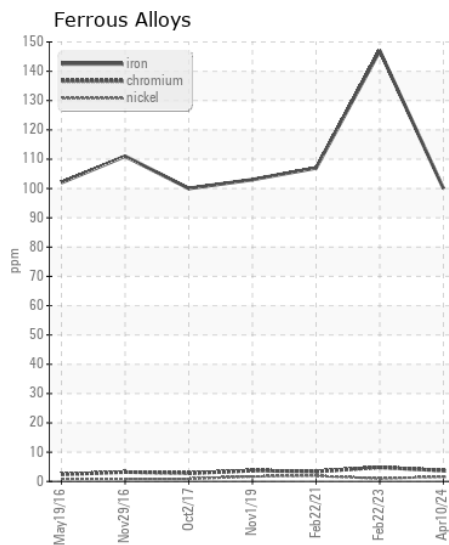
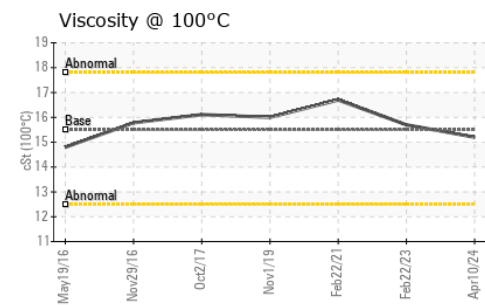
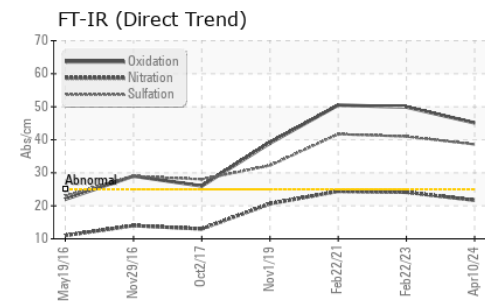
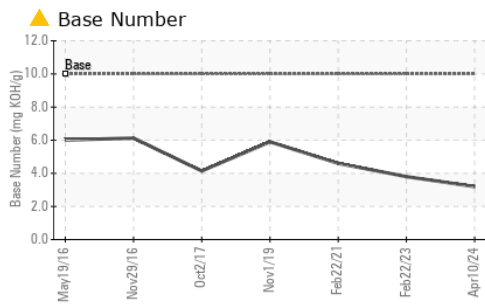
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	20	21	9
Potassium	ppm	ASTM D5185m	>20	10	9	20
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	1.9	2.1	1.8
Nitration	Abs/cm	*ASTM D7624	>20	21.7	24.1	24.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	38.6	41.0	41.7
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 level is low. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		11	8	9
Boron	ppm	ASTM D5185m		16	16	34
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		85	80	44
Manganese	ppm	ASTM D5185m		1	3	1
Magnesium	ppm	ASTM D5185m		163	275	375
Calcium	ppm	ASTM D5185m		2060	1898	1954
Phosphorus	ppm	ASTM D5185m		1035	956	1002
Zinc	ppm	ASTM D5185m		1132	1254	1159
Sulfur	ppm	ASTM D5185m		3272	3391	2385
Oxidation	Abs/.1mm	*ASTM D7414	>25	45.1	49.9	50.5
Base Number (BN)	mg KOH/g	ASTM D2896	10	3.2	3.8	4.6
Visc @ 100°C	cSt	ASTM D445	15.5	15.2	15.7	16.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0856132 **Received** : 12 Apr 2024
Lab Number : 06147955 **Tested** : 15 Apr 2024
Unique Number : 10978033 **Diagnosed** : 16 Apr 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

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)

CJ MILLER LLC
 2903 DEDE RD
 FINKSBURG, MD
 US 21048
 Contact: JOE ROSS
 jross@cjmillerllc.com
 T: (410)239-8006
 F: (410)239-1051