



WEAR **NORMAL**

CONTAMINATION **NORMAL**

FLUID CONDITION **NORMAL**

OIL ANALYSIS REPORT

Area
{UNASSIGNED}

Machine Id
PETERBILT 453698

Component
Diesel Engine

Fluid
CITGO CITGUARD 600 15W40 (24 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0012805	RPL0012768	RPL0004569
Sample Date		Client Info		12 Jun 2024	19 Oct 2023	12 Jun 2023
Machine Age	hrs	Client Info		14507	12820	11626
Oil Age	hrs	Client Info		1066	1194	2398
Filter Age	hrs	Client Info		1066	1194	2398
Oil Changed		Client Info		Not Changd	Not Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	45	80	▲ 154
Chromium	ppm	ASTM D5185m	>20	1	3	5
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	15	11
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	2	5	9
Tin	ppm	ASTM D5185m	>15	0	<1	1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

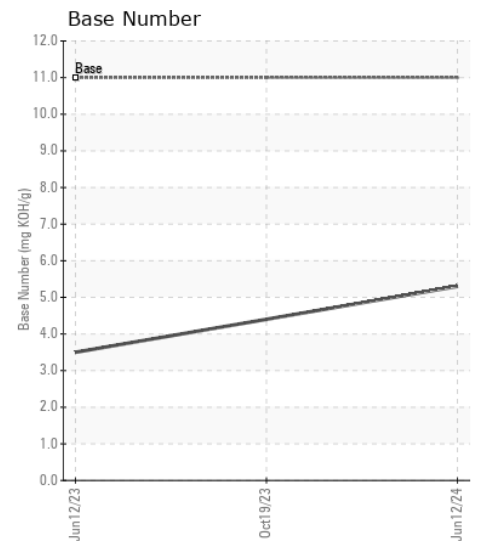
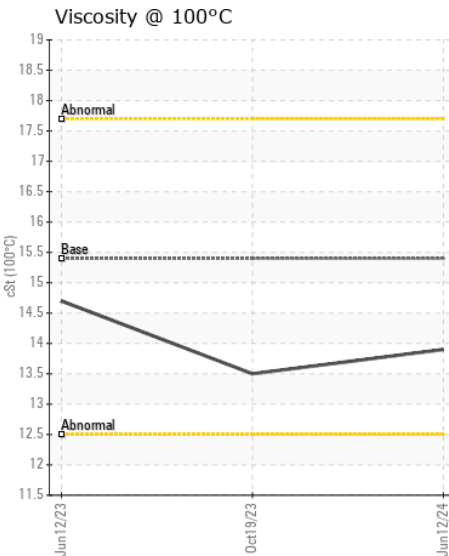
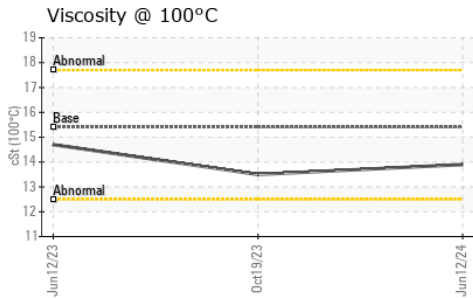
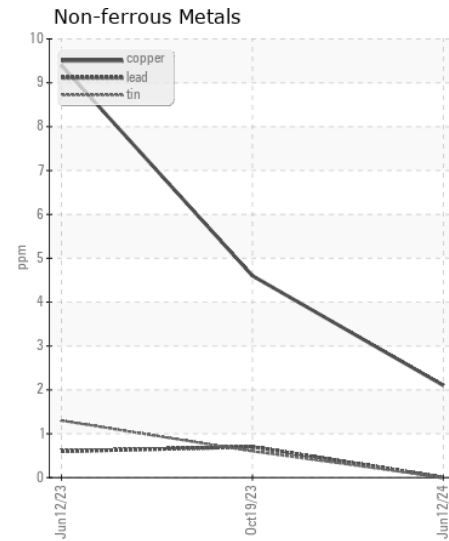
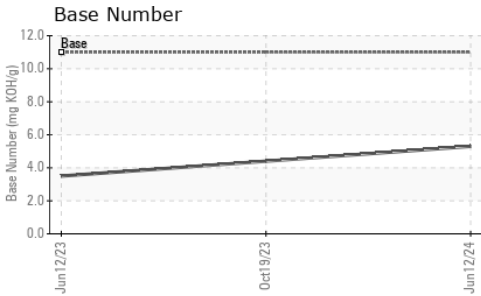
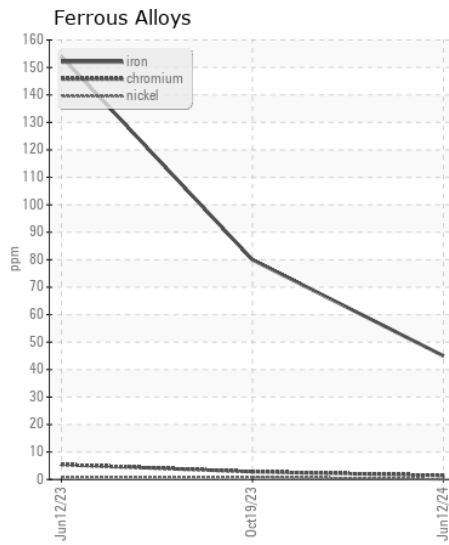
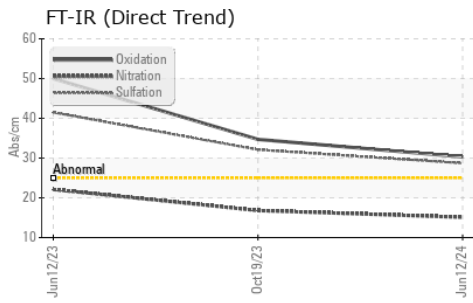
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	9	14
Potassium	ppm	ASTM D5185m	>20	9	34	21
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	1.3	1.9
Nitration	Abs/cm	*ASTM D7624	>20	15.1	16.8	22.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.7	32.1	41.5
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

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		5	2	7
Boron	ppm	ASTM D5185m	13	0	3	33
Barium	ppm	ASTM D5185m	0	0	9	0
Molybdenum	ppm	ASTM D5185m	57	62	68	71
Manganese	ppm	ASTM D5185m		<1	1	2
Magnesium	ppm	ASTM D5185m	825	402	398	494
Calcium	ppm	ASTM D5185m	1100	1993	1742	1971
Phosphorus	ppm	ASTM D5185m	933	1051	995	1082
Zinc	ppm	ASTM D5185m	1089	1265	1228	1406
Sulfur	ppm	ASTM D5185m	2769	3578	3086	3506
Oxidation	Abs/.1mm	*ASTM D7414	>25	30.3	34.7	50.0
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	5.3	4.4	▲ 3.5
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	13.5	14.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0012805 **Received** : 11 Jul 2024
Lab Number : 06234251 **Tested** : 12 Jul 2024
Unique Number : 11123085 **Diagnosed** : 14 Jul 2024 - Don Baldrige
Test Package : FLEET

RTL PACLEASE - 7010 - Florida
 9407 Bachman Road
 Orlando, FL
 US 32824

Contact: John Churchwell
 ChurchwellJ@rushenterprises.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)

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F: