



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH 21520
 Component
Diesel Engine
 Fluid
SHELL ROTELLA T 10W30 (56 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0955678	WC0831993	WC0642432
Sample Date		Client Info		24 Jun 2024	19 Jul 2023	18 May 2022
Machine Age	mls	Client Info		89070	81514	66367
Oil Age	mls	Client Info		7566	8958	6256
Filter Age	mls	Client Info		7566	8958	6256
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	14	14	12
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	4	3
Lead	ppm	ASTM D5185m	>150	1	0	<1
Copper	ppm	ASTM D5185m	>90	<1	0	1
Tin	ppm	ASTM D5185m	>5	0	0	<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

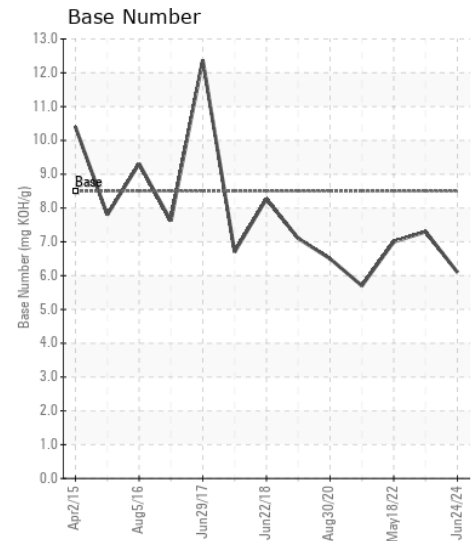
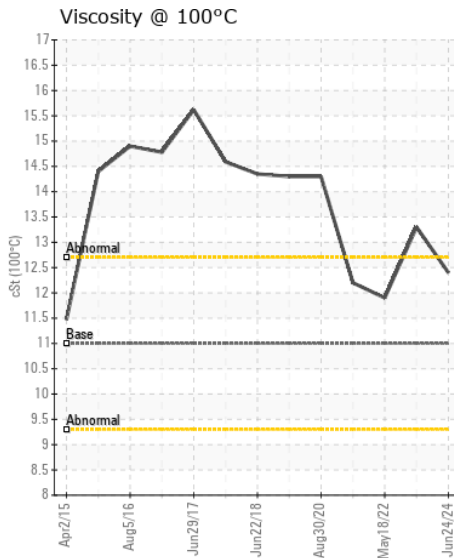
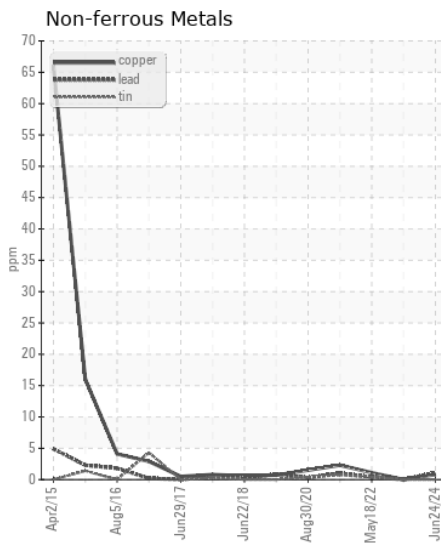
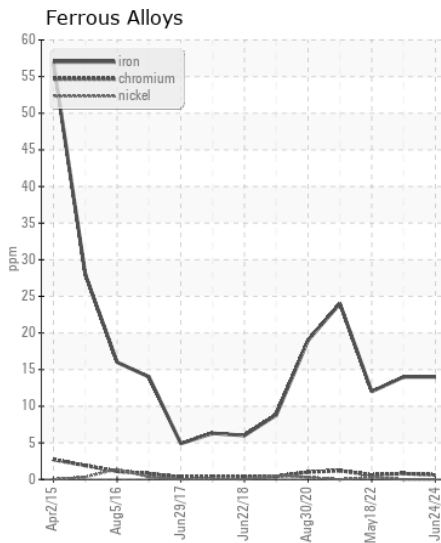
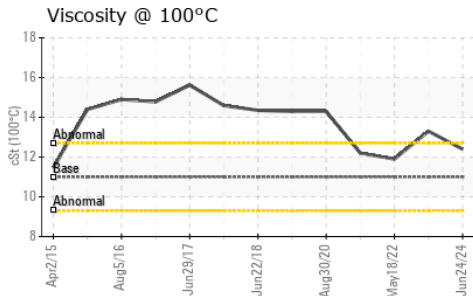
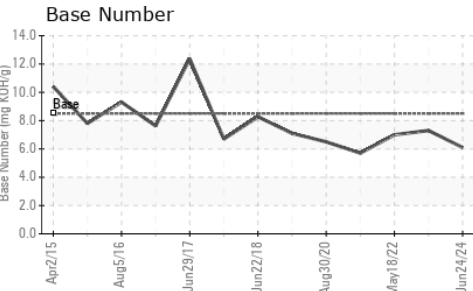
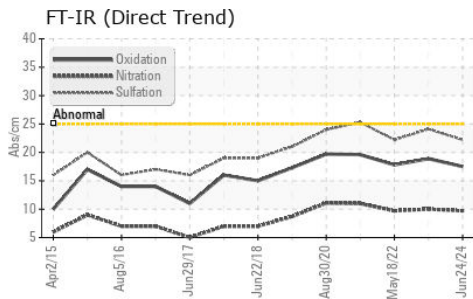
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	5	6	3
Potassium	ppm	ASTM D5185m	>20	6	4	7
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	0.4	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.7	10.0	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	24.1	22.2
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		4	<1	2
Boron	ppm	ASTM D5185m	269	94	150	134
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	0	23	97	4
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	20	150	546	38
Calcium	ppm	ASTM D5185m	1521	2241	1852	2271
Phosphorus	ppm	ASTM D5185m	948	986	850	1047
Zinc	ppm	ASTM D5185m	893	1149	1078	1272
Sulfur	ppm	ASTM D5185m		3749	3516	3479
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	18.9	17.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.1	7.3	7
Visc @ 100°C	cSt	ASTM D445	11.0	12.4	13.3	11.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0955678
Lab Number : 06221953
Unique Number : 11100150
Test Package : FLEET

Received : 26 Jun 2024
Tested : 28 Jun 2024
Diagnosed : 28 Jun 2024 - Don Baldrige

GUY M TURNER & TURNER TRANSFER
 4505 SOUTH HOLDEN ROAD
 GREENSBORO, NC
 US 27406

Contact: ROGER HIXSON
 rhixson@guyturner.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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