



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
[12623]

Machine Id
KENWORTH T270 SHM3 Will Hales Kenworth (S/N 2NKHHM6X5JM188363)

Component
Diesel Engine

Fluid
MOBIL DELVAC 1300 SUPER15W40 (4 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: Time on oil is about 20,000 miles. Went over on service interval)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SHM0000041	---	---
Sample Date		Client Info		25 Jun 2024	---	---
Machine Age	mls	Client Info		150088	---	---
Oil Age	mls	Client Info		20000	---	---
Filter Age	mls	Client Info		20000	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

Piston and cylinder wear is indicated.

Iron	ppm	ASTM D5185m	>100	▲ 166	---	---
Chromium	ppm	ASTM D5185m	>20	5	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	▲ 22	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	6	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

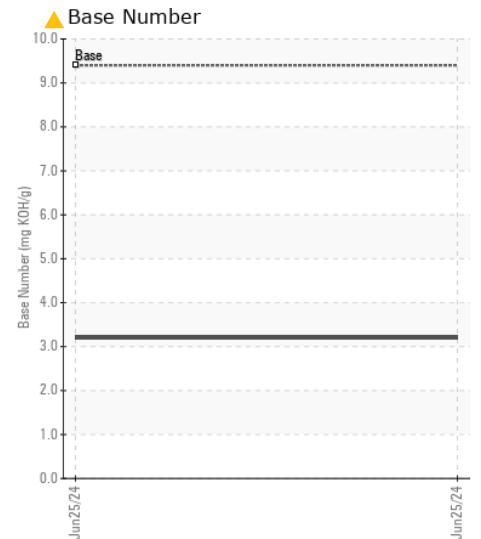
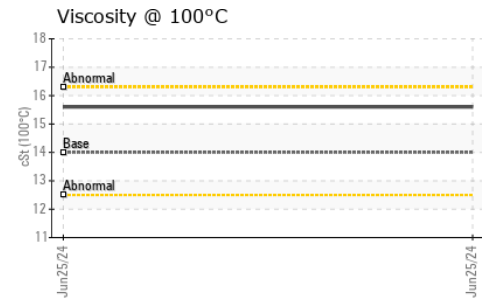
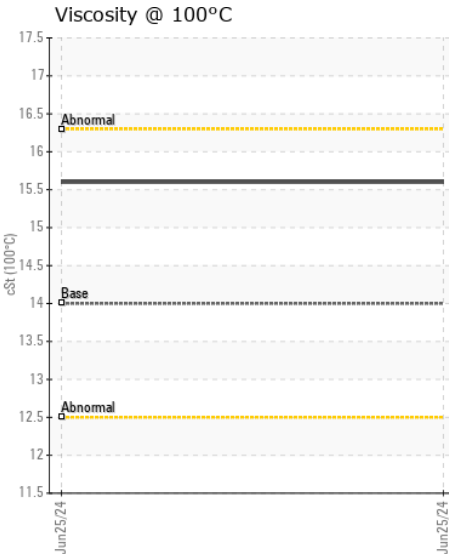
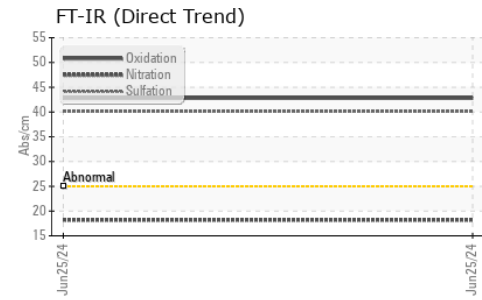
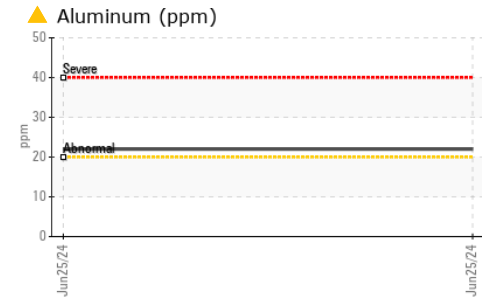
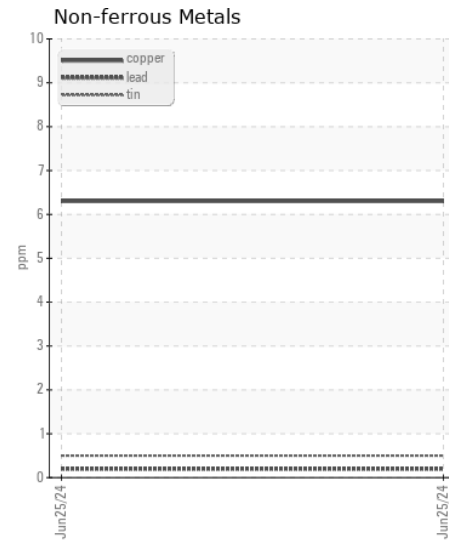
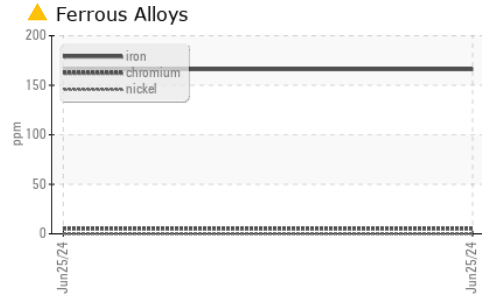
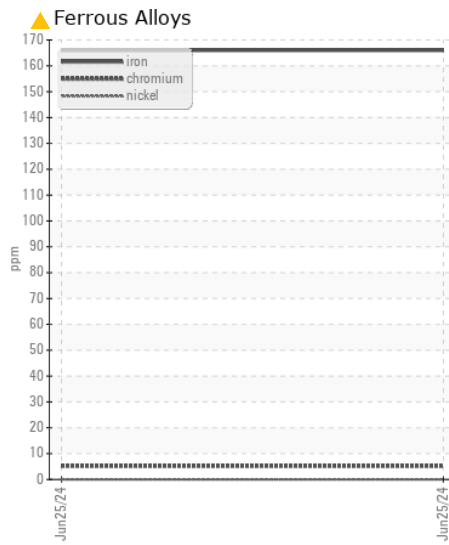
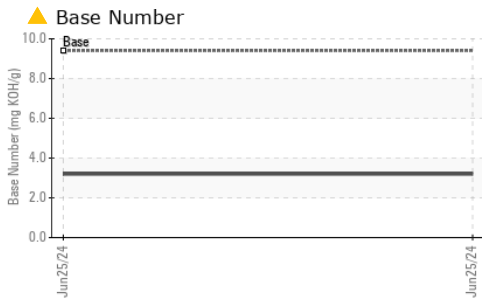
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	16	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 49	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	*ASTM D2982		NEG	---	---
Soot %	%	*ASTM D7844	>3	1.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	18.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	40.1	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

The BN level is low. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		▲ 61	---	---
Boron	ppm	ASTM D5185m	0	13	---	---
Barium	ppm	ASTM D5185m	0	0	---	---
Molybdenum	ppm	ASTM D5185m	0	23	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m	0	232	---	---
Calcium	ppm	ASTM D5185m		2535	---	---
Phosphorus	ppm	ASTM D5185m		980	---	---
Zinc	ppm	ASTM D5185m		1319	---	---
Sulfur	ppm	ASTM D5185m		3864	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	42.8	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	▲ 3.2	---	---
Visc @ 100°C	cSt	ASTM D445	14	15.6	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SHM0000041 **Received** : 02 Jul 2024
Lab Number : 06225939 **Tested** : 05 Jul 2024
Unique Number : 11109432 **Diagnosed** : 05 Jul 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: Glycol, TBN)

SOUND HEAVY MACHINERY
 1809 BLUE CLAY RD
 WILMINGTON, NC
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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)