



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**SOUTH HOLLAND**  
Machine Id  
**KENWORTH T370 MT0434**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL 10W40 (18 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>HPL0004569</b>	HPL0002504	HPL0001711
Sample Date		Client Info		<b>12 Feb 2024</b>	07 Aug 2023	21 Oct 2022
Machine Age	hrs	Client Info		<b>10250</b>	9720	187116
Oil Age	hrs	Client Info		<b>0</b>	692	7400
Filter Age	hrs	Client Info		<b>0</b>	692	7400
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>29</b>	43	52
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	4	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

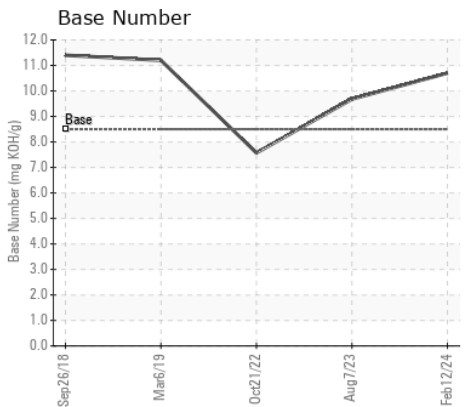
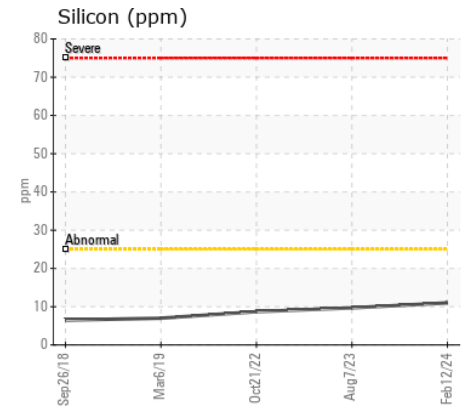
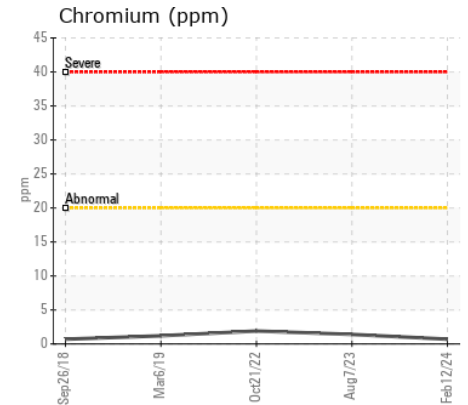
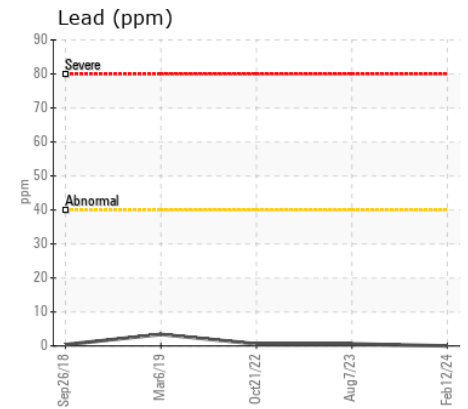
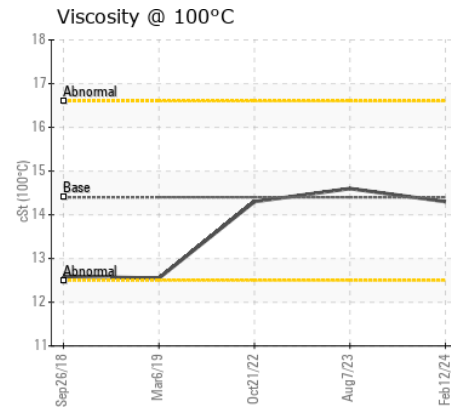
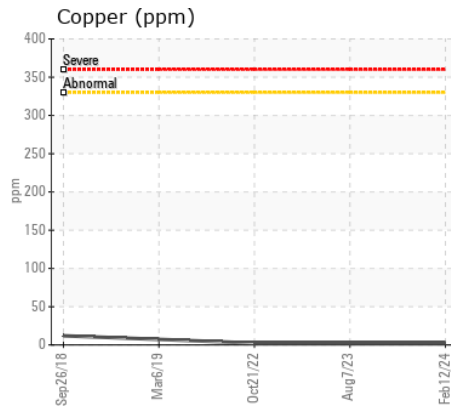
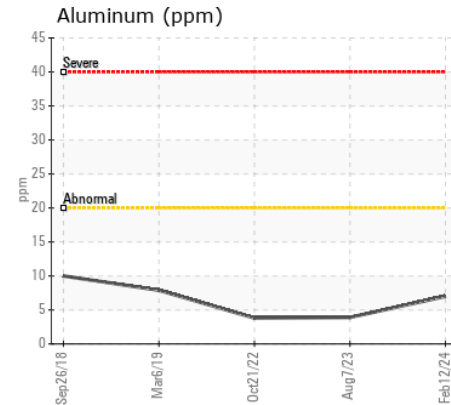
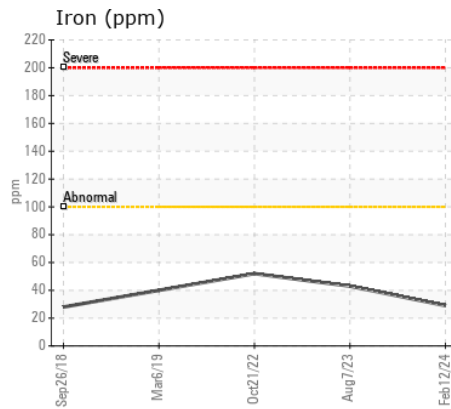
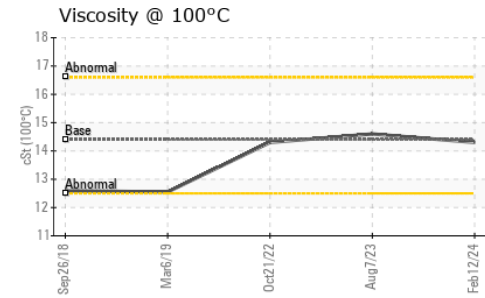
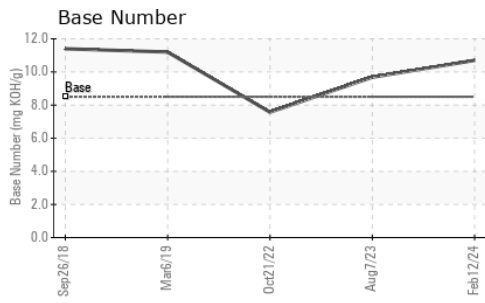
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>11</b>	10	9
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	3	5
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.9</b>	1.1	1.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>16.7</b>	18.9	21.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>43.7</b>	47.9	53.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>1</b>	2	3
Boron	ppm	ASTM D5185m	250	<b>0</b>	0	14
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>634</b>	564	535
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185m	450	<b>974</b>	1016	868
Calcium	ppm	ASTM D5185m	3000	<b>2456</b>	2706	2748
Phosphorus	ppm	ASTM D5185m	1150	<b>928</b>	1007	893
Zinc	ppm	ASTM D5185m	1350	<b>1231</b>	1309	1206
Sulfur	ppm	ASTM D5185m	4250	<b>6919</b>	8626	9869
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>50.1</b>	53.4	53.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>10.70</b>	9.68	7.57
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.3</b>	14.6	14.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HPL0004569  
**Lab Number** : 06087606  
**Unique Number** : 10875051  
**Test Package** : MOB 2  
**Received** : 13 Feb 2024  
**Tested** : 14 Feb 2024  
**Diagnosed** : 14 Feb 2024 - Sean Felton

**STEVENS ON CRANE**  
 410 STEVENSON DR  
 BOLINGBROOK, IL  
 US 60440

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 T: (630)972-9199

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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