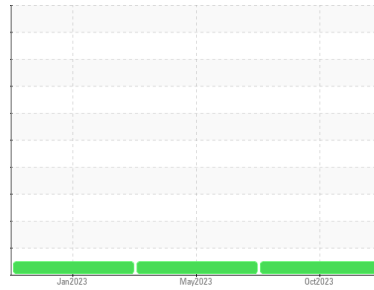




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
KENWORTH T800 3905 (S/N KCB50515)

Component
Diesel Engine

Fluid
SHELL ROTELLA T 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0822359	WC0613666	WC0613712
Sample Date	Client Info		02 Oct 2023	18 May 2023	24 Jan 2023
Machine Age	mls	Client Info	690457	674495	661888
Oil Age	mls	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	37	26	28
Chromium	ppm	ASTM D5185m >20	1	1	<1
Nickel	ppm	ASTM D5185m >4	0	<1	0
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	<1	1	1
Lead	ppm	ASTM D5185m >40	13	16	4
Copper	ppm	ASTM D5185m >330	13	36	178
Tin	ppm	ASTM D5185m >15	1	1	1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 316	15	27	6
Barium	ppm	ASTM D5185m 0.0	0	0	1
Molybdenum	ppm	ASTM D5185m 1.2	67	80	60
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 24	864	794	849
Calcium	ppm	ASTM D5185m 2292	1577	1617	1264
Phosphorus	ppm	ASTM D5185m 1064	1109	1130	995
Zinc	ppm	ASTM D5185m 1160	1408	1433	1234
Sulfur	ppm	ASTM D5185m 4996	3229	3410	2615

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	6	6
Sodium	ppm	ASTM D5185m	6	5	2
Potassium	ppm	ASTM D5185m >20	2	3	2

INFRA-RED

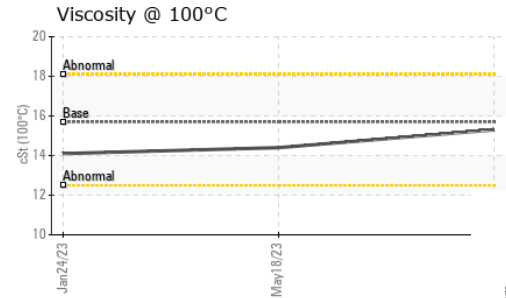
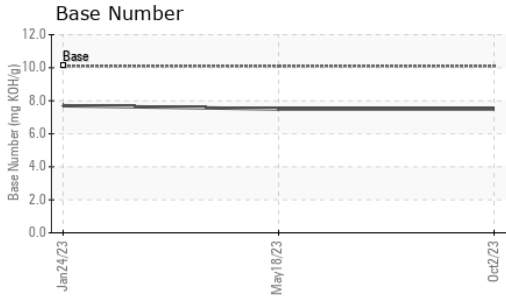
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.6	0.4	0.4
Nitration	Abs/cm	*ASTM D7624 >20	10.6	10.2	9.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.6	23.8	20.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	21.3	21.2	17.6
Base Number (BN)	mg KOH/g	ASTM D2896 10.1	7.5	7.5	7.7



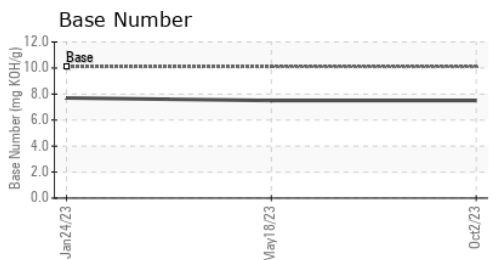
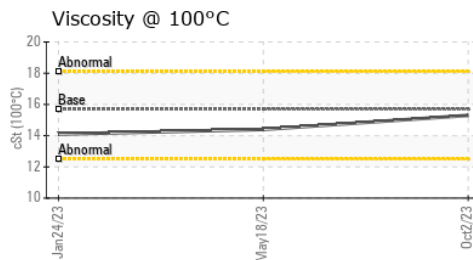
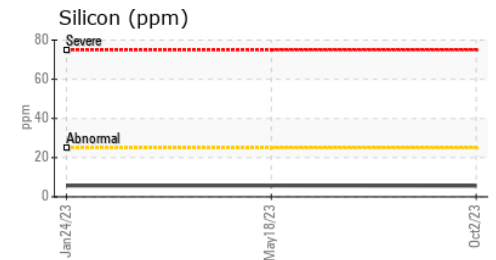
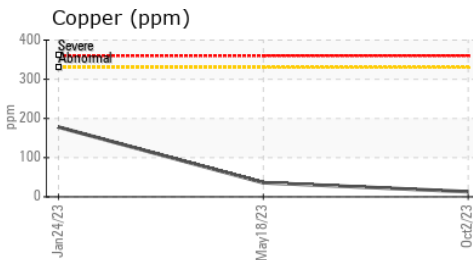
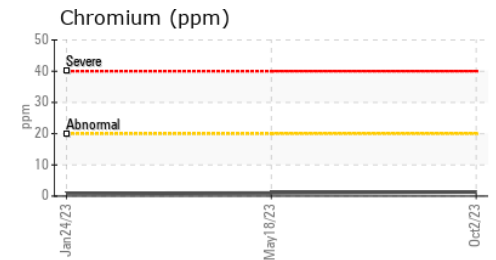
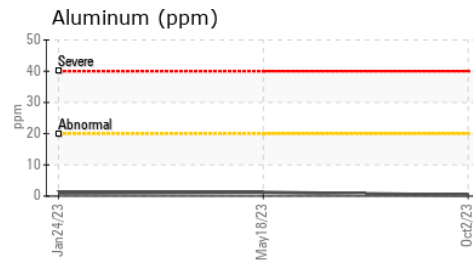
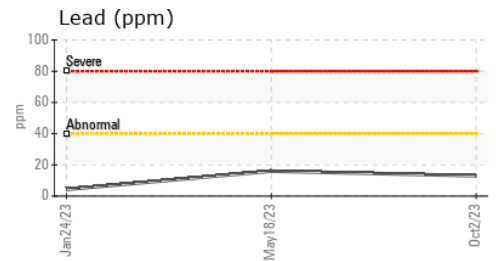
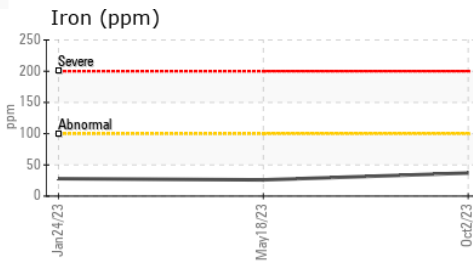
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	15.3	14.4

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0822359 **Received** : 04 Oct 2023
Lab Number : 05969490 **Diagnosed** : 05 Oct 2023
Unique Number : 10676041 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

JOHNSON BREEDERS
 3425 HWY 117N
 ROSE HILL, NC
 US 28458
 Contact: GREG JONES
 gregory.jones@houseofraeford.com
 T: (910)289-6884
 F:

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)