

WEAR CONTAMINATION **FLUID CONDITION**

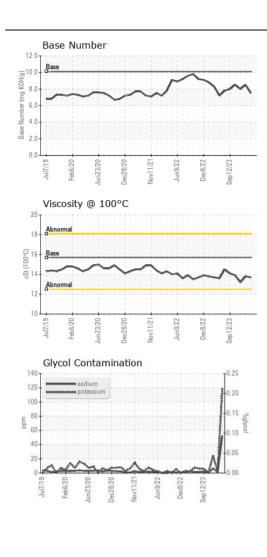
NORMAL ABNORMAL ABNORMAL

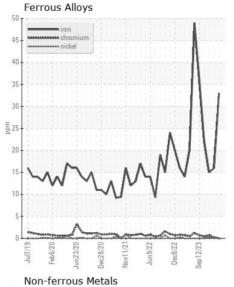
Store 9 - Marietta

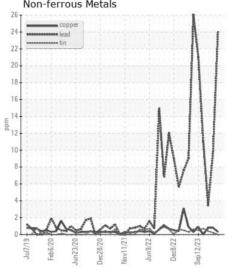
KENWORTH 1032

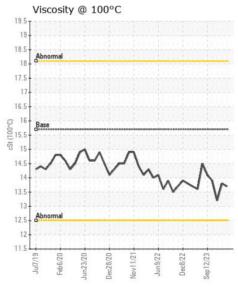
Component Diesel Engine

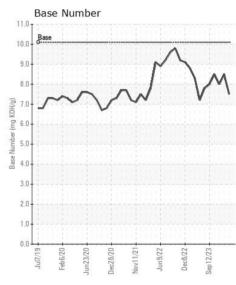
Test Sample Number Sample Date Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status Iron Chromium Nickel Titanium Silver	hrs hrs hrs ppm ppm ppm ppm	Method Client Info ASTM D5185m ASTM D5185m ASTM D5185m	>20	Current LEC0048281 11 Mar 2024 45374 400 400 Changed Changed ABNORMAL	History1 LEC0046173 06 Dec 2023 44100 400 400 Changed Changed NORMAL	History2 LEC0044052 29 Nov 2023 1016045 10000 10000 Changed Changed NORMAL
Sample Date Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status Iron Chromium Nickel Titanium Silver	hrs hrs ppm ppm ppm	Client Info ASTM D5185m ASTM D5185m	>20	11 Mar 2024 45374 400 400 Changed Changed ABNORMAL	06 Dec 2023 44100 400 400 Changed Changed NORMAL	29 Nov 2023 1016045 10000 10000 Changed Changed NORMAL
Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status Iron Chromium Nickel Titanium Silver	hrs hrs ppm ppm ppm	Client Info Client Info Client Info Client Info Client Info ASTM D5185m ASTM D5185m	>20	45374 400 400 Changed Changed ABNORMAL	44100 400 400 Changed Changed NORMAL	1016045 10000 10000 Changed Changed NORMAL
Oil Age Filter Age Oil Changed Filter Changed Sample Status Iron Chromium Nickel Titanium Silver	hrs hrs ppm ppm ppm	Client Info Client Info Client Info Client Info ASTM D5185m ASTM D5185m	>20	400 400 Changed Changed ABNORMAL	400 400 Changed Changed NORMAL	10000 10000 Changed Changed NORMAL
Filter Age Oil Changed Filter Changed Sample Status Iron Chromium Nickel Titanium Silver	ppm ppm ppm	Client Info Client Info Client Info ASTM D5185m ASTM D5185m	>20	400 Changed Changed ABNORMAL	400 Changed Changed NORMAL	10000 Changed Changed NORMAL
Oil Changed Filter Changed Sample Status Iron Chromium Nickel Titanium Silver	ppm ppm	Client Info Client Info ASTM D5185m ASTM D5185m	>20	Changed Changed ABNORMAL	Changed Changed NORMAL	Changed Changed NORMAL
Filter Changed Sample Status Iron Chromium Nickel Titanium Silver	ppm	ASTM D5185m ASTM D5185m	>20	Changed ABNORMAL	Changed NORMAL	Changed NORMAL
Sample Status Iron Chromium Nickel Titanium Silver	ppm	ASTM D5185m ASTM D5185m	>20	ABNORMAL 33	NORMAL	NORMAL
Chromium Nickel Titanium Silver	ppm	ASTM D5185m	>20		16	15
Chromium Nickel Titanium Silver	ppm	ASTM D5185m	>20			
Nickel Titanium Silver	ppm			0	<1	<1
Titanium Silver			>4	0	<1	<1
		ASTM D5185m		0	<1	<1
	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m		3	4	10
Lead	ppm	ASTM D5185m		24	10	4
Copper	ppm	ASTM D5185m	>330	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>!20	7	6	6
Potassium	ppm	ASTM D5185m	>20	120	2	24
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.1	0.9	0.3
Nitration	Abs/cm	*ASTM D7624	>20	12.0	10.4	9.0
Sulfation	Abs/.1mm		>30	27.4	25.8	24.4
						NONE
					1	NONE
						NONE
					1	NORML
					_	NORML
Emuisitied water	scalar	"VISUAI	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		▲ 52	<1	6
Boron	ppm	ASTM D5185m	316	148	214	233
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm		1.2	155	140	135
Manganese	ppm	ASTM D5185m		0	<1	<1
9	ppm					651
	ppm					1523
	ppm					717
	ppm					869
					1	2653
						18.6
						8.0 13.2
	Copper Tin Vanadium White Metal Yellow Metal Silicon Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Oxidation	Copper ppm Tin ppm Vanadium ppm White Metal scalar Yellow Metal scalar Silicon ppm Potassium ppm Fuel Water Glycol % Soot % % Nitration Abs/cm Sulfation Abs/.mm Silt scalar Debris scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Sodium ppm Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Calcium ppm Phosphorus ppm Sulfur ppm Sulfur ppm Sulfur ppm Oxidation Abs/.1mm Base Number (BN) mg KOH/g	Copper ppm ASTM D5185m Tin ppm ASTM D5185m Vanadium ppm ASTM D5185m White Metal scalar *Visual Yellow Metal scalar *Visual Silicon ppm ASTM D5185m Potassium ppm ASTM D5185m Fuel WC Method Water WC Method Glycol % *ASTM D2982 Soot % % *ASTM D7844 Nitration Abs/cm *ASTM D7624 Sulfation Abs/.1mm *ASTM D7415 Silt scalar *Visual Debris scalar *Visual Sand/Dirt scalar *Visual Appearance scalar *Visual Appearance scalar *Visual Emulsified Water scalar *Visual Sodium ppm ASTM D5185m Boron ppm ASTM D5185m Barium ppm ASTM D5185m Molybdenum ppm ASTM D5185m Manganese ppm ASTM D5185m Magnesium ppm ASTM D5185m Magnesium ppm ASTM D5185m Calcium ppm ASTM D5185m	Copper ppm ASTM D5185m >330 Tin ppm ASTM D5185m >15 Vanadium ppm ASTM D5185m >15 White Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE Silicon ppm ASTM D5185m >120 Potassium ppm ASTM D5185m >20 Fuel WC Method >5 Water WC Method >0.2 Glycol *ASTM D5185m >20 Water WC Method >0.2 Soot % *ASTM D7844 >3 Nitration Abs/cm *ASTM D7844 >3 Notrical *Visual NONE Sald *Visual NONE	Copper ppm ASTM D5185m >330 <1 Tin ppm ASTM D5185m >15 0 Vanadium ppm ASTM D5185m 0 NONE White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Silicon ppm ASTM D5185m >120 7 Potassium ppm ASTM D5185m >20 4 120 Fuel WC Method >5 <1.0	Copper ppm ASTM D5185m >330 <1 <1 Tin ppm ASTM D5185m >15 0 <1













Certificate L2367

Laboratory Sample No. Unique Number: 10937488

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06123337

: LEC0048281

Received **Tested** Diagnosed

: 20 Mar 2024 : 22 Mar 2024

: 22 Mar 2024 - Jonathan Hester Test Package: CONST (Additional Tests: Glycol, TBN)

ELLENBORO, WV

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US 26346

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)