WEAR CONTAMINATION **FLUID CONDITION**

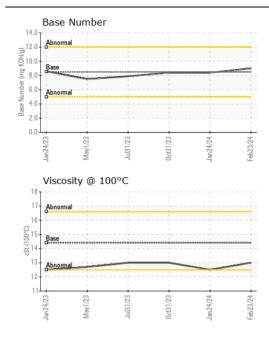
NORMAL NORMAL NORMAL

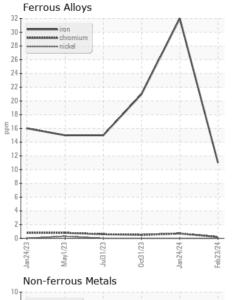
Machine Id

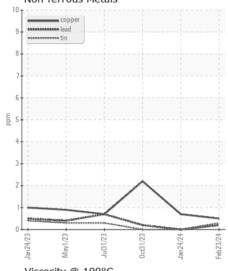
1640

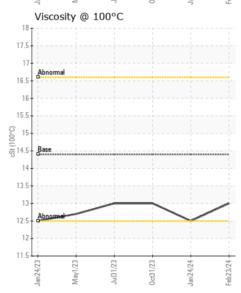
Component Diesel Engine Fluid

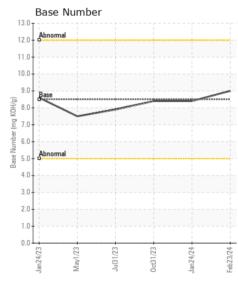
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0858131	WC0858134	WC085812
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Date		Client Info		23 Feb 2024	24 Jan 2024	31 Oct 202
	Machine Age	hrs	Client Info		12219	12064	11577
	Oil Age	hrs	Client Info		520	520	520
	Filter Age	hrs	Client Info		520	520	520
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
VEAR	Iron	ppm	ASTM D5185m	>110	11	32	21
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
	Nickel	ppm	ASTM D5185m	>2	0	0	0
	Titanium	ppm	ASTM D5185m		0	<1	0
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m	>25	5	13	12
	Lead	ppm	ASTM D5185m	>45	<1	0	<1
	Copper	ppm	ASTM D5185m	>85	<1	<1	2
	Tin	ppm	ASTM D5185m	>4	<1	0	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>30	4	4	6
	Potassium	ppm	ASTM D5185m		8	21	28
There is no indication of any contamination in the oil.	Fuel	1-1-	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.3	0.6	0.5
	Nitration	Abs/cm	*ASTM D7624	>20	6.4	8.7	8.8
	Sulfation	Abs/.1mm	*ASTM D7415		17.7	19.6	20.3
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	nnm	ASTM D5185m	<158	1	4	1
LOID CONDITION	Boron	ppm	ASTM D5185m		10	9	2
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		59	60	64
	Manganese	ppm	ASTM D5185m	100	<1	<1	0
	Magnesium	ppm	ASTM D5185m	450	906	902	925
	Calcium	ppm	ASTM D5185m		1030	1119	1097
	Phosphorus	ppm	ASTM D5185m		1057	993	929
	Zinc	ppm	ASTM D5185m		1240	1170	1234
	Sulfur	ppm	ASTM D5185m		3269	3021	3319
	Oxidation	Abs/.1mm	*ASTM D7414		13.6	15.2	16.1
	Base Number (BN)		ASTM D2896		9.0	8.4	8.4
	Visc @ 100°C	cSt	ASTM D2030		13.0	12.5	13.0













Certificate L2367

Laboratory Sample No.

Lab Number : 06104988 Unique Number : 10903218

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0858131

Received

Tested Diagnosed

: 01 Mar 2024 : 01 Mar 2024 - Wes Davis

: 29 Feb 2024

155 Airport Road

Apple Valley Waste - Hometown Location

Selinsgrove, PA US 17870 Contact: Service Manager

Test Package : CONST (Additional Tests: TBN) 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)

T:

F: