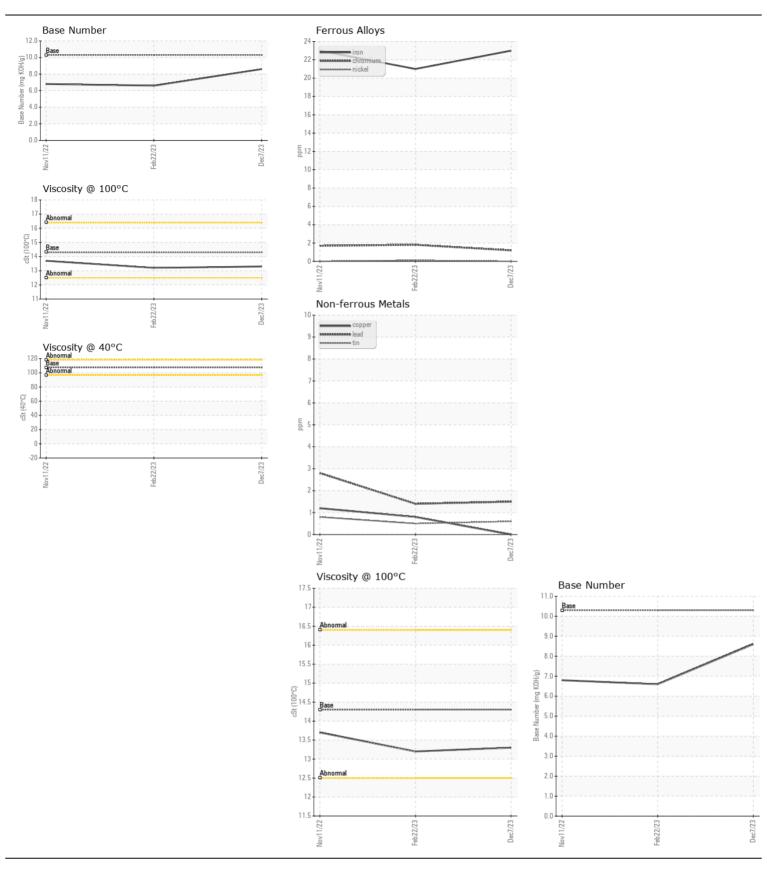
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id **139307**

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		RPL0008096	RPL0008020	RPL000738
	Sample Date		Client Info		07 Dec 2023	22 Feb 2023	11 Nov 202
	Machine Age	hrs	Client Info		13732	327799	11449
	Oil Age	hrs	Client Info		578	19633	1030
	Filter Age	hrs	Client Info		578	19633	1030
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	23	21	23
WEART-	Chromium	ppm	ASTM D5185m		1	2	2
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	- <1	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m	>3	0	<1	<1
	Aluminum	ppm	ASTM D5185m		11	13	10
	Lead	ppm	ASTM D5185m		2	1	3
	Copper	ppm	ASTM D5185m		0	<1	1
	Tin	ppm	ASTM D5185m	>15	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Ciliana		ACTM DE10E	05	44	0.4	
CONTAMINATION	Silicon Potassium	ppm	ASTM D5185m ASTM D5185m		11 4	24 2	5
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	70.L	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.6	0.5	0.6
	Nitration	Abs/cm	*ASTM D7624		10.1	11.2	13.0
	Sulfation	Abs/.1mm	*ASTM D7415		23.6	23.4	26.2
	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	ppm	ASTM D5185m		1	0	<1
LOID CONDITION	Boron	ppm	ASTM D5185m		31	10	9
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		46	55	70
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		624	830	916
	Calcium	ppm	ASTM D5185m		1616	1047	1268
	Phosphorus	ppm	ASTM D5185m		874	875	973
	Zinc	ppm	ASTM D5185m		1030	1110	1275
	Sulfur	ppm	ASTM D5185m		2539	3087	3250
	Oxidation	Abs/.1mm	*ASTM D7414	>25	22.5	20.3	24.5
	Base Number (BN)	mg KOH/g	ASTM D2896	10.3	8.6	6.6	6.8
	Visc @ 100°C	cSt	ASTM D445	110	13.3	13.2	13.7







Report Id: PAC7017 [WUSCAR] 06060909 (Generated: 01/17/2024 22:01:22) Rev: 1

Laboratory Sample No. Lab Number **Unique Number**

: RPL0008096 : 06060909 : 10832291

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

: 16 Jan 2024 : 17 Jan 2024 Diagnostician : Jonathan Hester

Test Package : FLEET (Additional Tests: KV40) 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.

RTL PACLEASE - 7017 - Oklahoma City 8700 West I-40 Oklahoma City, OK US 73128

Contact: TECHNICIAN ACCOUNT catherine.anastasio@wearcheck.com

T: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)