

WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

Machine Id

857-5116

Component Diesel Engine

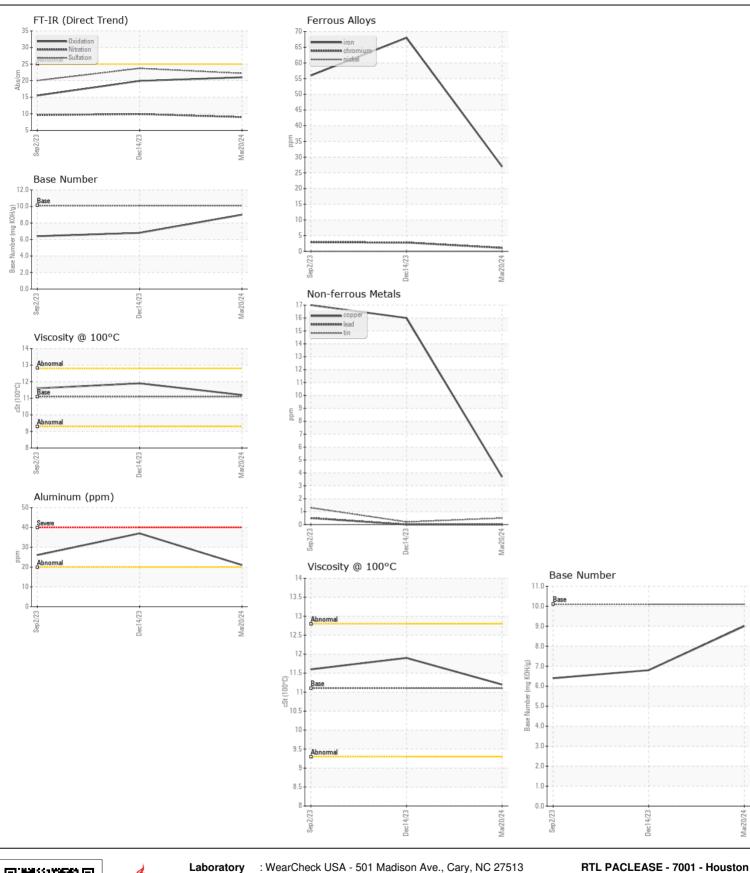
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		RPL0014239	RPL0014023	RPL0010760
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Date		Client Info		20 Mar 2024	14 Dec 2023	02 Sep 2023
	Machine Age	hrs	Client Info		1387	973	9758
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Not Changd	N/A	N/A
	Filter Changed		Client Info		Not Changd	N/A	N/A
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	27	68	56
WEATT	Chromium	ppm	ASTM D5185m		1	3	3
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m	>3	<1	0	<1
	Aluminum	ppm	ASTM D5185m	>20	21	37	26
	Lead	ppm	ASTM D5185m	>40	0	0	<1
	Copper	ppm	ASTM D5185m	>330	4	16	17
	Tin	ppm	ASTM D5185m	>15	<1	<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
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	11	19	20
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		57	118	88
	Fuel	PP	WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.2	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	9.0	9.9	9.6
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	23.7	20.0
	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	NORMI
	Odor	scalar	*Visual	NORML	NORML	NORML	NORMI
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	3	4
	Boron	ppm	ASTM D5185m		43	48	54
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		44	13	<1
	Manganese	ppm	ASTM D5185m		1	<1	2
	Magnesium	ppm	ASTM D5185m		609	698	794
	Calcium	ppm	ASTM D5185m		1775	1442	1477
	Phosphorus	ppm	ASTM D5185m	1260	869	744	738
	Zinc	ppm	ASTM D5185m	1400	1001	863	884
	Sulfur	ppm	ASTM D5185m		3163	3140	3739
	Oxidation	Abs/.1mm	*ASTM D7414		21.0	19.9	15.5
	Base Number (BN)	ma KOUla	ACTM DOOG	10.1	9.0	6.8	6.4

Visc @ 100°C cSt

ASTM D445 11.1

11.9

11.6







Certificate L2367

Report Id: PAC7001 [WUSCAR] 06149984 (Generated: 04/17/2024 19:31:38) Rev: 1

Laboratory Sample No.

Lab Number : 06149984 Unique Number : 10980062 Test Package : FLEET

: RPL0014239

Received **Tested** Diagnosed

: 16 Apr 2024 : 17 Apr 2024 : 17 Apr 2024 - Wes Davis

Houston, TX US 77026 Contact: RODNEY BRIGGS briggsr@rushenterprises.com

6300 N. Loop East

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)

Contact/Location: RODNEY BRIGGS - PAC7001

T:

F: