

WEAR CONTAMINATION FLUID CONDITION

NORMAL

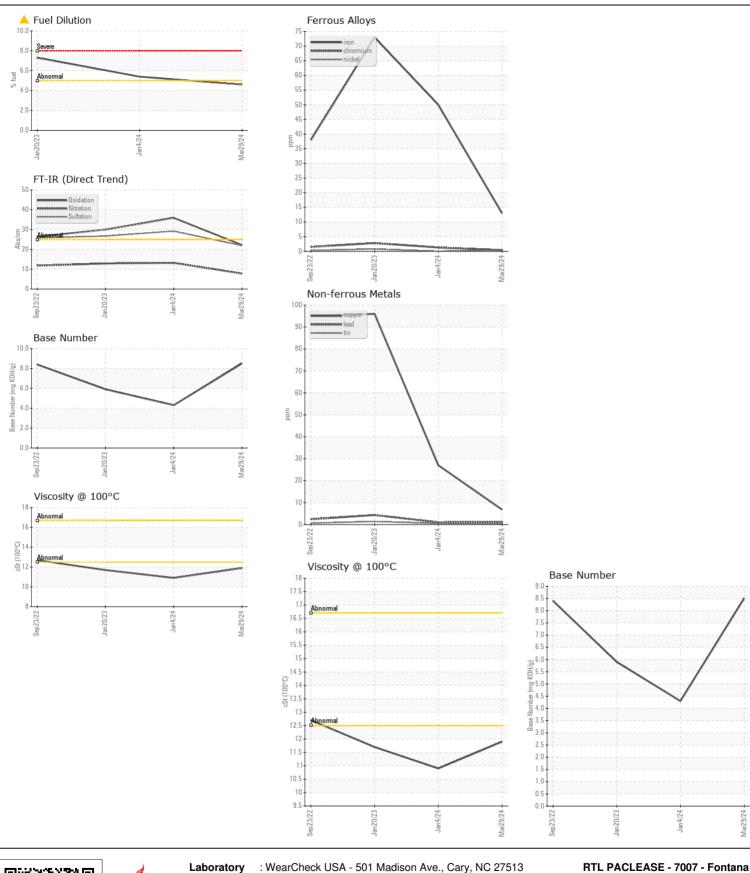
MARGINAL

NORMAL

Machine Id

846-4536

Component							
Diesel Engine							
{not provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number	00111	Client Info	LITTIOTION	RPL0018075	RPL0011478	RPL0009306
	Sample Date		Client Info		29 Mar 2024	04 Jan 2024	20 Jan 2023
	Machine Age	mls	Client Info		0	0	0
	Oil Age	mls	Client Info		860	86711	25924
	Filter Age	mls	Client Info		0	0	0
	Oil Changed	11110	Client Info		Not Changd	Changed	Changed
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				MARGINAL	ABNORMAL	
WEAD	.						
WEAR	Iron	ppm	ASTM D5185m		13	50	73
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	1	3
	Nickel	ppm	ASTM D5185m	>4	<1	0	<1
	Titanium	ppm	ASTM D5185m	_	<1	0	0
	Silver	ppm	ASTM D5185m		0	<1	0
	Aluminum	ppm	ASTM D5185m		9	33	61
	Lead	ppm	ASTM D5185m		1	1	4
	Copper	ppm	ASTM D5185m		7	27	96
	Tin	ppm	ASTM D5185m	>15	<1	<1	1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	7	10
	Potassium	ppm	ASTM D5185m		14	67	148
Light fuel dilution occurring. No other contaminants were detected in the oil.	Fuel	%	ASTM D3524		4.6	△ 5.4	▲ 7.3
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.9	1
	Nitration	Abs/cm	*ASTM D7624	>20	7.8	13.2	12.9
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	29.2	26.7
	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	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1	<1	4
	Boron	ppm	ASTM D5185m		83	20	22
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		69	35	32
	Manganese	ppm	ASTM D5185m		<1	1	1
	Magnesium	ppm	ASTM D5185m		607	439	496
	Calcium	ppm	ASTM D5185m		1615	1404	1682
	Phosphorus	ppm	ASTM D5185m		803	623	648
	Zinc	ppm	ASTM D5185m		970	773	860
	Sulfur	ppm	ASTM D5185m		3422	1878	2446
	Oxidation	Abs/.1mm	*ASTM D7414	>25	22.2	35.9	30.0
	Base Number (BN)	mg KOH/g	ASTM D2896		8.5	4.3	5.9
	Visc @ 100°C	cSt	ASTM D445		11.9	10.9	11.7





Laboratory Sample No.

: RPL0018075 Lab Number : 06145648

Unique Number : 10970456

Received **Tested** Diagnosed Test Package: FLEET (Additional Tests: PercentFuel)

: 15 Apr 2024

: 15 Apr 2024 - Wes Davis

: 11 Apr 2024

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.

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