WEAR CONTAMINATION FLUID CONDITION

NORMAL

MARGINAL

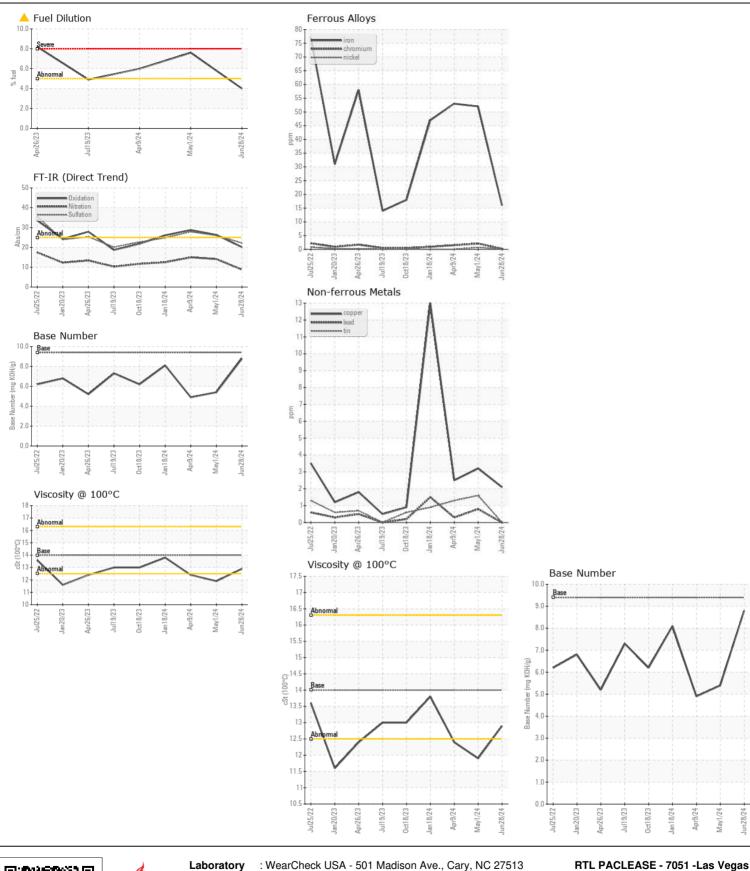
NORMAL

Machine Id

8591876

Component Diesel Engine

RECOMMENDATION No corrective action is recommended at this time. Decemble at the	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		RPL0021318	RPL0019799	RPL0019747
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.	Sample Date		Client Info		28 Jun 2024	01 May 2024	09 Apr 2024
	Machine Age	mls	Client Info		419430	417347	416525
	Oil Age	mls	Client Info		0	0	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Not Changd	Changed	Not Change
	Filter Changed		Client Info		Changed	Changed	Not Chang
	Sample Status				MARGINAL	ABNORMAL	ABNORMA
VEAR	Iron	ppm	ASTM D5185m	>100	16	52	53
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	2	2
	Nickel	ppm	ASTM D5185m	>4	0	<1	0
	Titanium	ppm	ASTM D5185m		<1	2	0
	Silver	ppm	ASTM D5185m	>3	0	1	0
	Aluminum	ppm	ASTM D5185m	>20	3	10	10
	Lead	ppm	ASTM D5185m	>40	0	<1	<1
	Copper	ppm	ASTM D5185m	>330	2	3	2
	Tin	ppm	ASTM D5185m	>15	0	2	1
	Vanadium	ppm	ASTM D5185m		0	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5	13	13
ONTAMINATION	Potassium	ppm	ASTM D5185m		<1	3	<1
Light fuel dilution occurring. No other contaminants were detected in the oil.	Fuel	%	ASTM D3524		▲ 4.0	<u> </u>	<u>▲</u> 6.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.6	1.8	1.9
	Nitration	Abs/cm	*ASTM D7624	>20	8.8	14.1	15.0
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	26.0	27.9
	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
					_	3	4
I UID CONDITION	Sodium	mag	ASTM D5185m		3		
FLUID CONDITION	Sodium Boron	ppm	ASTM D5185m ASTM D5185m	0	3 65		3/
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m ASTM D5185m ASTM D5185m		3 65 0	51 0	0
The BN result indicates that there is suitable alkalinity remaining in the			ASTM D5185m	0	65	51	
The BN result indicates that there is suitable alkalinity remaining in the	Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	0	65 0	51 0	0
The BN result indicates that there is suitable alkalinity remaining in the	Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	65 0 64	51 0 89	0 94
The BN result indicates that there is suitable alkalinity remaining in the	Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	65 0 64 <1	51 0 89 <1	0 94 <1
The BN result indicates that there is suitable alkalinity remaining in the	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	65 0 64 <1 557	51 0 89 <1 623	0 94 <1 624
he BN result indicates that there is suitable alkalinity remaining in the	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	65 0 64 <1 557 1527	51 0 89 <1 623 1277	0 94 <1 624 1370
he BN result indicates that there is suitable alkalinity remaining in the	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	65 0 64 <1 557 1527 755	51 0 89 <1 623 1277 649	0 94 <1 624 1370 713
The BN result indicates that there is suitable alkalinity remaining in the	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0	65 0 64 <1 557 1527 755 856	51 0 89 <1 623 1277 649 871	0 94 <1 624 1370 713 807
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7414	0 0 0 >25	65 0 64 <1 557 1527 755 856 3024	51 0 89 <1 623 1277 649 871 2711	0 94 <1 624 1370 713 807 2933







Certificate L2367

Sample No. : RPL0021318 Lab Number : 06235485

Unique Number : 11124319

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

: 16 Jul 2024

: 16 Jul 2024 - Wes Davis

: 15 Jul 2024

4150 Arctic Spring Ave North Las Vegas, NV

US 89115 Contact: Rudy Trevizo TrevizoR@RushEnterprises.Com

T: (702)208-7164

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)

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