



OIL ANALYSIS REPORT

WEAR CONTAMINATION FLUID CONDITION

NORMAL MARGINAL MARGINAL

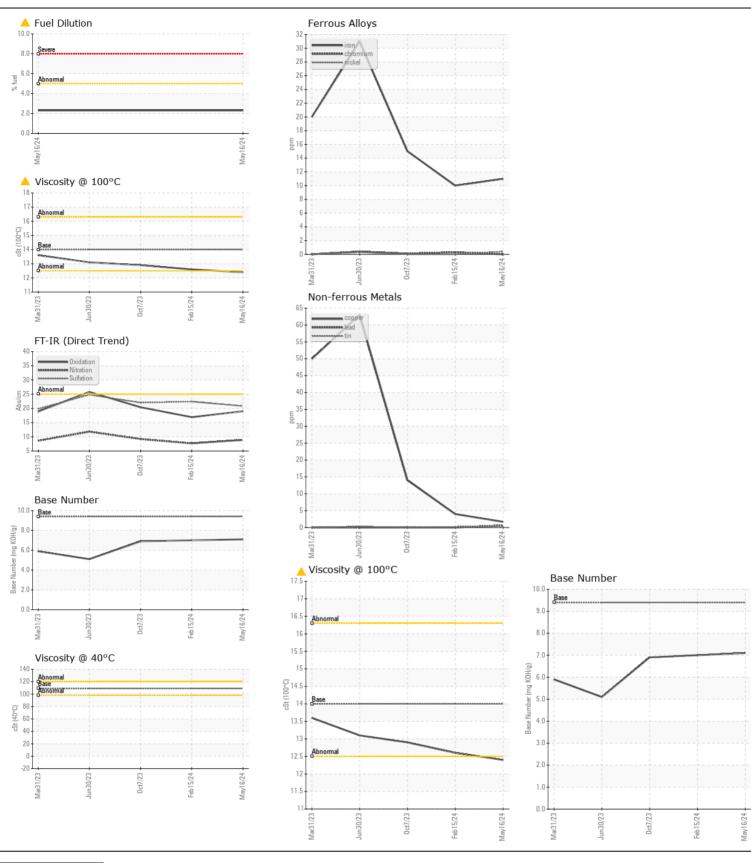
Area

(00000)

## **CUMMINS 8464047**

Diesel Engine

RECOMMENDATION  Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		RPL0020385	RPL0017894	RPL0015505
	Sample Date		Client Info		16 May 2024	15 Feb 2024	07 Oct 2023
	Machine Age	mls	Client Info		212400	204838	197397
	Oil Age	mls	Client Info		212400	13564	6123
	Filter Age	mls	Client Info		0	13564	6123
	Oil Changed		Client Info		Changed	Not Changd	Not Change
	Filter Changed		Client Info		Changed	Not Changd	Not Change
	Sample Status				MARGINAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	11	10	15
	Chromium	ppm	ASTM D5185m		0	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m		0	<1	0
	Silver	ppm	ASTM D5185m	>3	<1	<1	0
	Aluminum	ppm	ASTM D5185m		6	5	2
	Lead	ppm	ASTM D5185m	>40	<1	0	0
	Copper	ppm	ASTM D5185m	>330	2	4	14
	Tin	ppm	ASTM D5185m	>15	<1	<1	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	<b>\25</b>	7	12	7
CONTAININATION	Potassium	ppm	ASTM D5185m		10	30	2
Light fuel dilution occurring.	Fuel	%	ASTM D316311		<u>^</u> 2.3	<1.0	<1.0
	Water	/0	WC Method		NEG	NEG	NEG
	Glycol		WC Method	7 O.L	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.2	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	8.9	7.7	9.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	22.4	22.0
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
LUID CONDITION	Sodium	ppm	ASTM D5185m		1	<1	2
LOID CONDITION	Boron	ppm	ASTM D5185m	0	8	44	<1
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.	Barium	ppm	ASTM D5185m		0	<1	0
	Molybdenum	ppm	ASTM D5185m		63	68	57
	Manganese	ppm	ASTM D5185m	-	<1	<1	<1
	Magnesium	ppm	ASTM D5185m	0	892	253	847
	Calcium	ppm	ASTM D5185m		1191	1571	1002
	Phosphorus	ppm	ASTM D5185m		975	696	860
	Zinc	ppm	ASTM D5185m		1234	757	1094
	Sulfur	ppm	ASTM D5185m		3715	3430	2567
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.0	16.9	20.4
	Base Number (BN)				7.1	7.0	6.9







Certificate L2367

Laboratory Sample No.

Lab Number : 06190189

: RPL0020385

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

Received **Tested** Unique Number : 11046941 Diagnosed

Test Package: FLEET (Additional Tests: FUELDILUTION, KV40, PercentFuel)

: 24 May 2024 : 30 May 2024 : 30 May 2024 - Jonathan Hester

RTL PACLEASE - 7006 - Pico Rivera 7837 Telegraph Rd Pico Rivera, CA

US 90660 Contact: GERARDO CARROLA carrolag@rushenterprises.com

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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