

OIL ANALYSIS REPORT

Zinc

ppm

ASTM D5185m

GUAY SON [CONHER] Cummins Ibaco Rene Aux Cummins Component

Auxiliary Engine XTRA REV 15W40 (9 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



Sample Rating Trend



SAMPLE INFORMATION method KL0012867 KL0012329 KL0010242 Sample Number **Client Info** Sample Date Client Info 21 Sep 2023 06 Apr 2023 24 Feb 2023 Machine Age hrs **Client Info** 1794 1770 1490 Oil Age hrs Client Info 24 160 150 Oil Changed **Client Info** Changed Not Changd Changed NORMAL Sample Status NORMAL NORMAL Fuel WC Method >4.0 <1.0 <1.0 <1.0 Glycol WC Method NEG NEG NEG WEAR METALS 26 Iron ASTM D5185m >100 12 11 ppm ASTM D5185m >20 Chromium ppm <1 <1 <1 Nickel ASTM D5185m >2 0 0 0 ppm 0 ASTM D5185m >2 Titanium ppm <1 <1 Silver ppm ASTM D5185m >2 0 0 0 Aluminum ASTM D5185m >20 3 2 ppm <1 Lead ASTM D5185m >40 0 0 ppm <1 0 Copper ppm ASTM D5185m >330 <1 <1 0 Tin ppm ASTM D5185m >15 <1 <1 0 0 Vanadium ASTM D5185m ppm <1 Cadmium ppm ASTM D5185m 0 0 0 0 0 ASTM D5185m 0 Boron ppm Barium ppm ASTM D5185m 0 0 <1 Molybdenum ASTM D5185m ppm <1 <1 <1 Manganese ppm ASTM D5185m <1 <1 <1 16 Magnesium ppm ASTM D5185m 13 16 Calcium ppm ASTM D5185m 3552 3832 3892 Phosphorus ppm ASTM D5185m 984 939 967

Sulfur	ppm	ASTM D5185m		4702	5046	5004
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	4	4
Sodium	ppm	ASTM D5185m		2	<1	<1
Potassium	ppm	ASTM D5185m	>20	0	1	0

1206

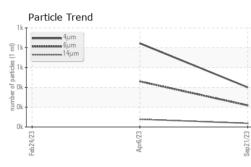
1233

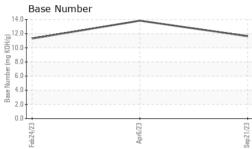
1208

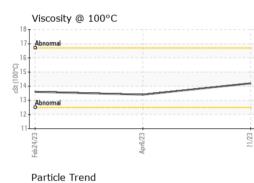
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.0	5.9	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.2	16.2	16.5

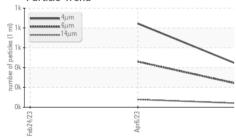


OIL ANALYSIS REPORT









bpm

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18 Abnorma

010-01 14 12 cSt (100-0

10

Unique Number : 10671318

Laboratory Sample No.

Lab Number

Feb24/23

: KL0012867

: 05964767

20120

Viscosity @ 100°C

Apr6/23

Apr6/23 -

FLUID CLEANLIN	NESS	method	limit/base	current	history1	history2
Particles >4µm	1200	ASTM D7647		400	844	
articles >6μm		ASTM D7647	>5000	218	460	
Particles >14µm		ASTM D7647	>640	37	78	
articles >21µm		ASTM D7647	>160	12	26	
articles >38µm		ASTM D7647	>40	2	4	
articles >71µm		ASTM D7647	>10	0	0	
il Cleanliness		ISO 4406 (c)	>19/16	15/12	16/13	
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
xidation	Abs/.1mm	*ASTM D7414	>25	9.8	10.3	10.1
ase Number (BN)	mg KOH/g	ASTM D2896		11.63	13.83	11.3
VISUAL		method	limit/base	current	history1	history2
/hite Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
ellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
recipitate	scalar	*Visual	NONE	NONE	NONE	NONE
ilt	scalar	*Visual	NONE	NONE	NONE	NONE
ebris	scalar	*Visual	NONE	NONE	NONE	NONE
and/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
ppearance	scalar	*Visual	NORML	NORML	NORML	NORML
dor	scalar	*Visual	NORML	NORML	NORML	NORML
mulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
ree Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPER	TIES	method	limit/base	current	history1	history2
isc @ 100°C	cSt	ASTM D445		14.2	13.4	13.6
GRAPHS						
Ferrous Alloys			491,520 T	Particle Count	t	т2
iron						
nickel			122,880			-2
			30,720	1. A.		-2
//23	1/23 -		E 7,680		•	-2
Feb24/23	Apr6/23		Sep21/23 (per 1 ml			-14
Non-ferrous Meta	s		840.7 840.4 84			-2 -11 -11
copper			5 120-			11

30

(^B/H0X

Ê 10.0 5.0 Base 0.0

Feb24/23

Sep21/23

Sep21/23.



: WearCheck USA - 501 Madison Ave., Cary, NC 27513 CONOR Received : 29 Sep 2023 JUAREZ 348 Diagnosed : 02 Oct 2023 HERMOSILLO, Diagnostician : Don Baldridge MX 83140 Test Package : MOB 2 (Additional Tests: PrtCount) Contact: EDUARDO GARCIA To discuss this sample report, contact Customer Service at 1-800-237-1369. egarcia.comsa@gmail.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (526)622-1581 x:81 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: x:

Base Number

14µ

21µ

Apr6/23 -

38µ

Certificate L2367

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Sep21/23