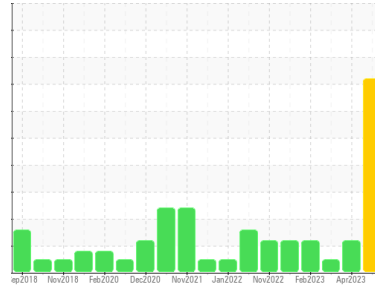




# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area  
**GUAY SON [CONHER]**  
 Machine Id  
**IBACO COZAR VII**  
 Component  
**Main Diesel Engine**  
 Fluid  
**XTRA REV 15W40 (160 LTR)**

## DIAGNOSIS

### Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Sodium and/or potassium levels are high. There is a high amount of particulates present in the oil. There is a high amount of fuel present in the oil.

### Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KL0012869</b>	KL0011402	KL0010261
Sample Date	Client Info		<b>20 Sep 2023</b>	06 Apr 2023	26 Feb 2023
Machine Age	hrs	Client Info	<b>17044</b>	17042	16711
Oil Age	hrs	Client Info	<b>2</b>	326	2
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>SEVERE</b>	ABNORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>14</b>	5	2
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>3</b>	<1	2
Lead	ppm	ASTM D5185m >40	<b>1</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>6</b>	4	<1
Tin	ppm	ASTM D5185m >15	<b>1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>120</b>	74	48
Barium	ppm	ASTM D5185m	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	<b>37</b>	28	15
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>118</b>	130	69
Calcium	ppm	ASTM D5185m	<b>2033</b>	2618	2646
Phosphorus	ppm	ASTM D5185m	<b>1040</b>	1046	1076
Zinc	ppm	ASTM D5185m	<b>1232</b>	1338	1255
Sulfur	ppm	ASTM D5185m	<b>3965</b>	4274	4049

## CONTAMINANTS

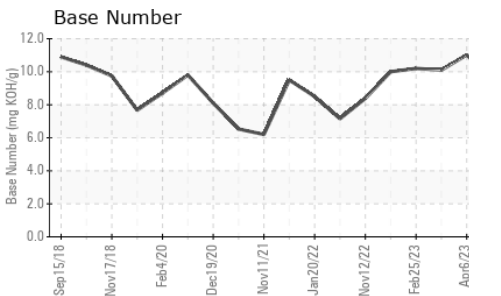
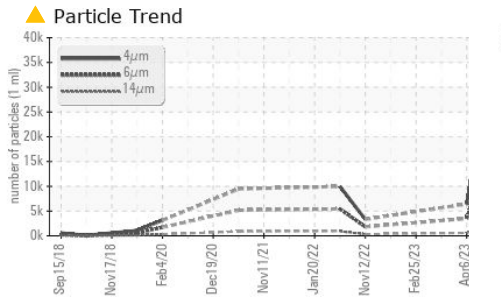
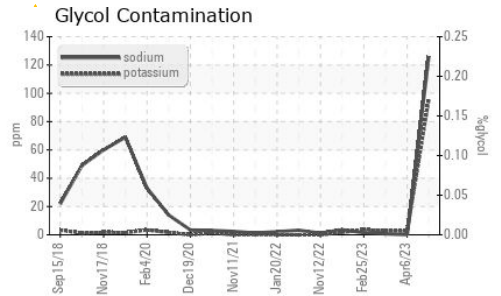
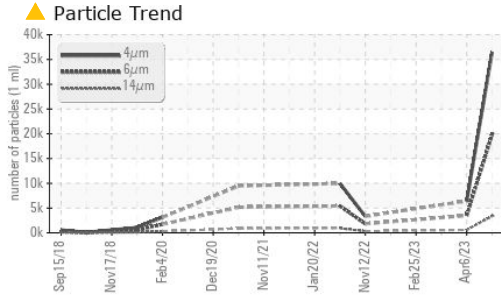
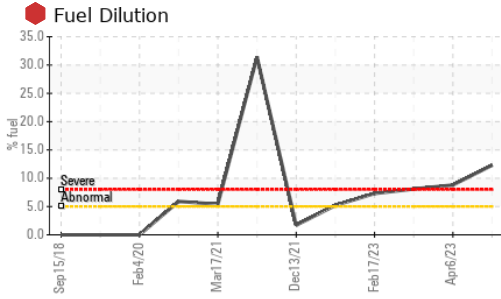
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>10</b>	6	5
Sodium	ppm	ASTM D5185m	<b>▲ 126</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>▲ 96</b>	2	3
Fuel	%	ASTM D3524 >5	<b>● 12.3</b>	<b>▲ 8.8</b>	<1.0
Glycol	%	*ASTM D2982	<b>NEG</b>	NEG	NEG

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.2</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.5</b>	7.6	4.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>10.1</b>	17.3	14.1



# OIL ANALYSIS REPORT



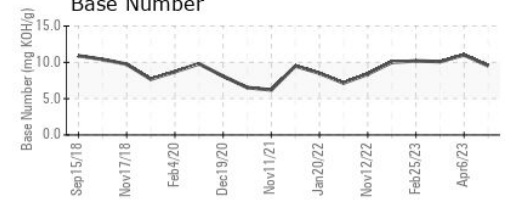
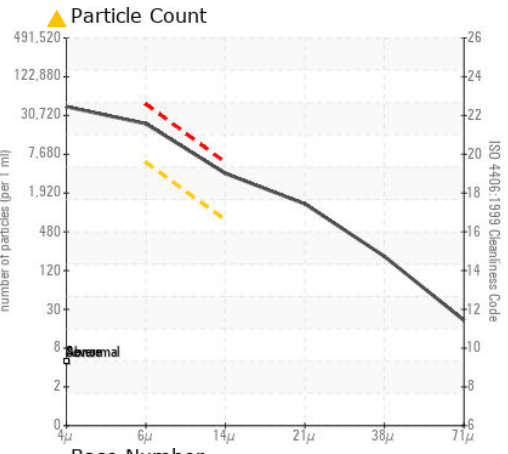
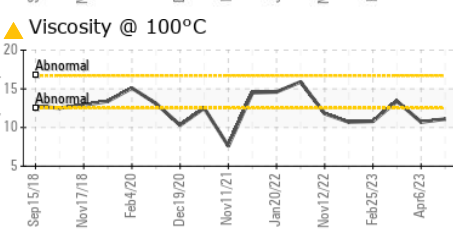
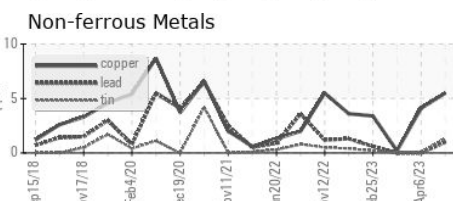
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>36432</b>	6429	---
Particles >6µm	ASTM D7647	>5000	<b>▲ 19846</b>	3502	---
Particles >14µm	ASTM D7647	>640	<b>▲ 3378</b>	596	---
Particles >21µm	ASTM D7647	>160	<b>▲ 1138</b>	201	---
Particles >38µm	ASTM D7647	>40	<b>▲ 176</b>	31	---
Particles >71µm	ASTM D7647	>10	<b>▲ 18</b>	3	---
Oil Cleanliness	ISO 4406 (c)	>19/16	<b>▲ 21/19</b>	19/16	---

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>10.4</b>	11.5	6.8
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.52</b>	11.02	10.1

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	<b>▲ 11.1</b>	▲ 10.7	13.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0012869 **Received** : 29 Sep 2023  
**Lab Number** : 05964780 **Diagnosed** : 03 Oct 2023  
**Unique Number** : 10671331 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: Glycol, PercentFuel, PrtCount )

**CONOR**  
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 HERMOSILLO,  
 MX 83140  
 Contact: EDUARDO GARCIA  
 egarcia.comsa@gmail.com  
 T: (526)622-1581 x:81  
 F: x:

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)