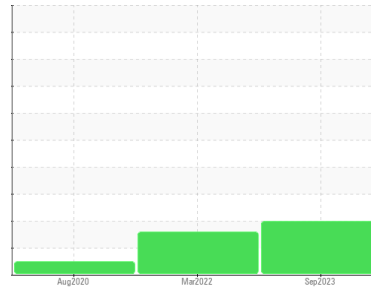




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**IBACO [CONHER]**  
Machine Id  
**IBACO BM COZAR IX**  
Component  
**Bottom Diesel Engine**  
Fluid  
**XTRA REV 15W40 (8 LTR)**

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a high amount of particulates present 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 INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	<b>KL0012873</b>	KL0009204	KL0004307	
Sample Date	Client Info	<b>22 Sep 2023</b>	23 Mar 2022	18 Aug 2020	
Machine Age	hrs	Client Info	<b>11359</b>	0	5996
Oil Age	hrs	Client Info	<b>5</b>	240	250
Oil Changed	Client Info	<b>Changed</b>	N/A	Changed	
Sample Status		<b>ABNORMAL</b>	ABNORMAL	NORMAL	

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >250	<b>7</b>	13	14
Chromium	ppm ASTM D5185m >10	<b>0</b>	<1	<1
Nickel	ppm ASTM D5185m >5	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185m >35	<b>3</b>	3	2
Lead	ppm ASTM D5185m >100	<b>&lt;1</b>	<1	0
Copper	ppm ASTM D5185m >60	<b>&lt;1</b>	<1	<1
Tin	ppm ASTM D5185m >5	<b>&lt;1</b>	<1	0
Antimony	ppm ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>0</b>	279	2
Barium	ppm ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>&lt;1</b>	117	58
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m	<b>4</b>	591	849
Calcium	ppm ASTM D5185m	<b>2721</b>	1589	1820
Phosphorus	ppm ASTM D5185m	<b>1151</b>	904	1029
Zinc	ppm ASTM D5185m	<b>1394</b>	1060	1245
Sulfur	ppm ASTM D5185m	<b>3812</b>	2681	2583

## CONTAMINANTS

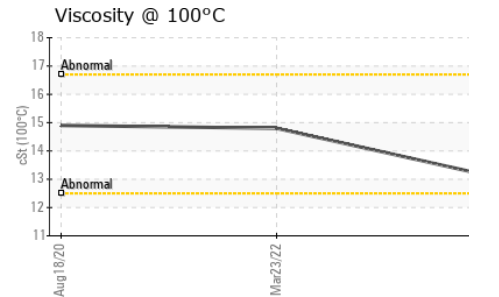
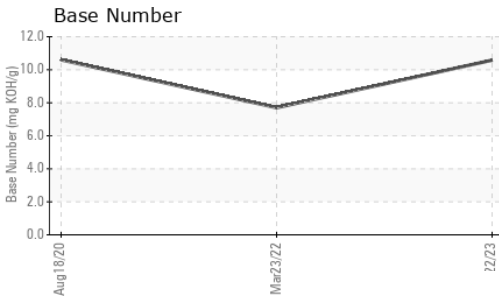
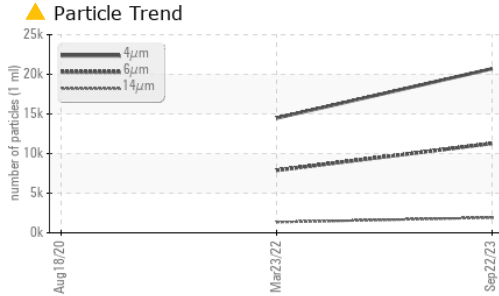
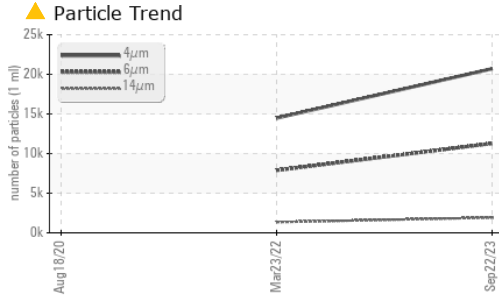
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >35	<b>10</b>	7	7
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	3	3
Potassium	ppm ASTM D5185m >20	<b>2</b>	0	10

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.2</b>	0.4	0.2
Nitration	Abs/cm *ASTM D7624 >20	<b>5.3</b>	10.9	11.4
Sulfation	Abs/1mm *ASTM D7415 >30	<b>13.6</b>	25.2	22.7



# OIL ANALYSIS REPORT



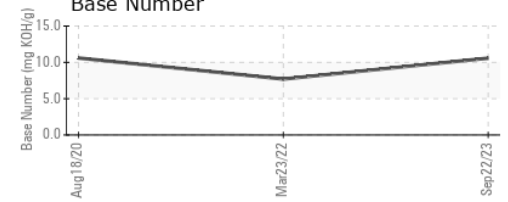
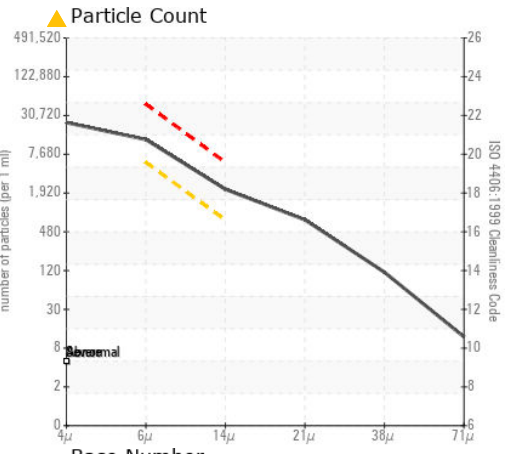
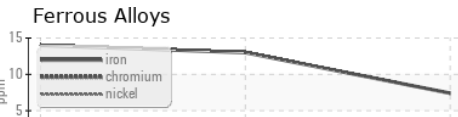
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>20705</b>	14476	---
Particles >6µm	ASTM D7647	>5000	<b>▲ 11279</b>	▲ 7886	---
Particles >14µm	ASTM D7647	>640	<b>▲ 1920</b>	▲ 1342	---
Particles >21µm	ASTM D7647	>160	<b>▲ 647</b>	▲ 452	---
Particles >38µm	ASTM D7647	>40	<b>▲ 100</b>	▲ 70	---
Particles >71µm	ASTM D7647	>10	<b>10</b>	7	---
Oil Cleanliness	ISO 4406 (c)	>19/16	<b>▲ 21/18</b>	▲ 20/18	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	<b>7.4</b>	23.9	22.5
Base Number (BN)	mg KOH/g ASTM D2896		<b>10.58</b>	7.70	10.6

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D445		<b>13.1</b>	14.8	14.9

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0012873 **Received** : 29 Sep 2023  
**Lab Number** : **05964779** **Diagnosed** : 03 Oct 2023  
**Unique Number** : 10671330 **Diagnostician** : Angela Borella  
**Test Package** : MOB 2 ( Additional Tests: PrtCount )

**CONOR**  
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 HERMOSILLO,  
 MX 83140  
 Contact: EDUARDO GARCIA  
 egarcia.comsa@gmail.com  
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 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)