



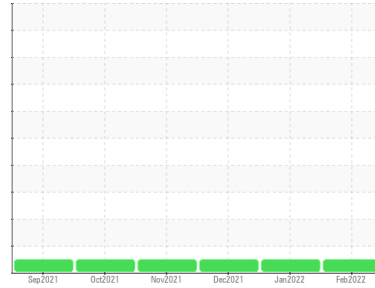
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**GUAY SON/Yavaros [CONHER]**  
 Machine Id  
**CATERPILLAR Pacifico Ind Azteca MP**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 MULTIGRADE 15W40 (160 LTR)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KL0009052</b>	KL0009029	KL0009018
Sample Date	Client Info		<b>07 Feb 2022</b>	08 Jan 2022	11 Dec 2021
Machine Age	hrs	Client Info	<b>1618</b>	998	728
Oil Age	hrs	Client Info	<b>1618</b>	1008	728
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>52</b>	35	29
Chromium	ppm	ASTM D5185m >20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	3	3
Lead	ppm	ASTM D5185m >40	<b>11</b>	6	5
Copper	ppm	ASTM D5185m >330	<b>27</b>	25	30
Tin	ppm	ASTM D5185m >15	<b>2</b>	2	2
Antimony	ppm	ASTM D5185m	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>154</b>	188	223
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>125</b>	120	116
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>713</b>	666	657
Calcium	ppm	ASTM D5185m	<b>1650</b>	1529	1501
Phosphorus	ppm	ASTM D5185m 1360	<b>718</b>	638	621
Zinc	ppm	ASTM D5185m 1480	<b>831</b>	767	737
Sulfur	ppm	ASTM D5185m	<b>2362</b>	1959	1786

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>10</b>	10	10
Sodium	ppm	ASTM D5185m	<b>16</b>	13	13
Potassium	ppm	ASTM D5185m >20	<b>1</b>	1	<1

## INFRA-RED

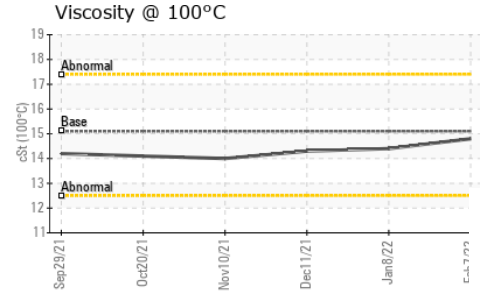
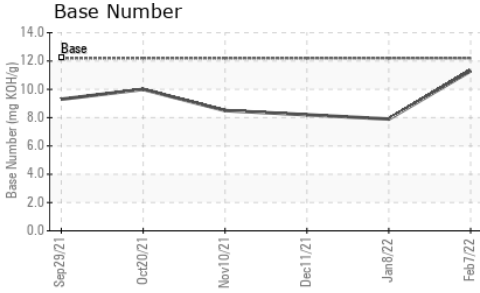
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0.6	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.6</b>	11.5	11
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>16.4</b>	26.9	26

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>9.7</b>	24.1	22.7
Base Number (BN)	mg KOH/g	ASTM D2896 12.2	<b>11.3</b>	7.9	8.2



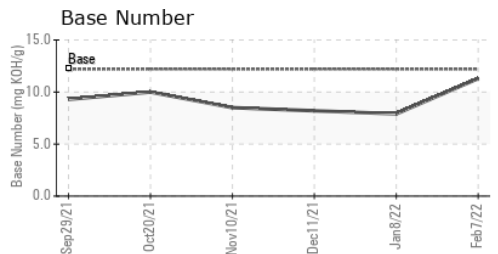
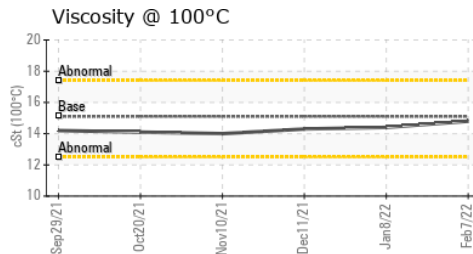
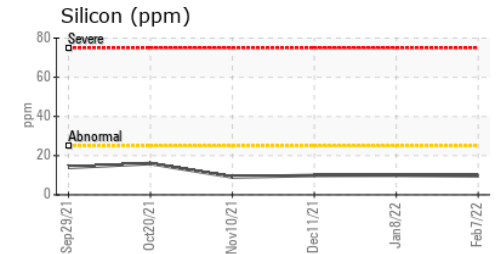
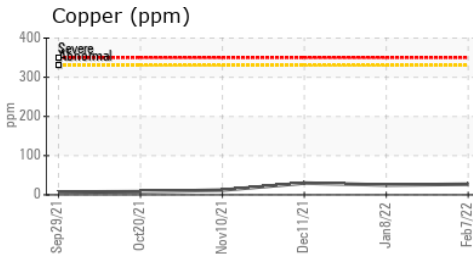
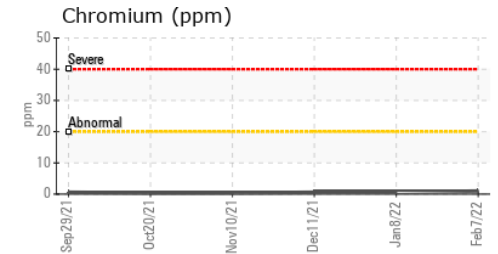
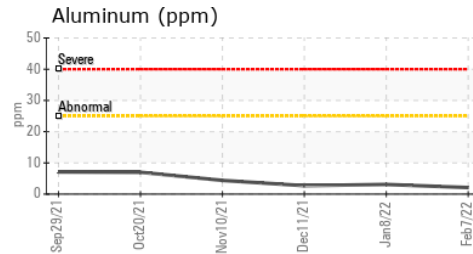
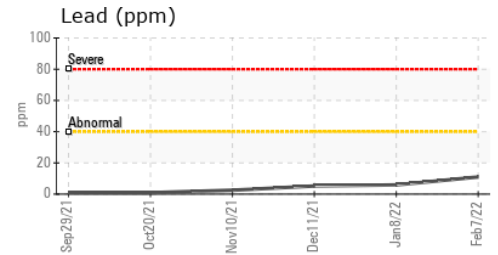
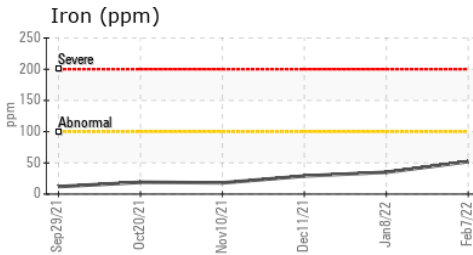
# OIL ANALYSIS REPORT



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	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.8	14.4

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : KL0009052  
 Lab Number : 05467377  
 Unique Number : 9851590  
 Test Package : MOB1+  
 Received : 14 Feb 2022  
 Tested : 15 Feb 2022  
 Diagnosed : 15 Feb 2022 - Angela Borella

**CONOR**  
 JUAREZ 348  
 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)