

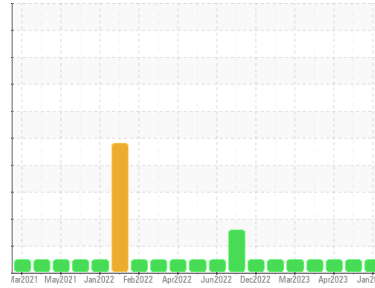


# OIL ANALYSIS REPORT



Area  
**GUAY SON [CONHER]**  
Machine Id  
**CATERPILLAR Nova del Mar - Chuchin Aux**  
Component  
**Diesel Engine**  
Fluid  
**PHILLIPS 66 15W40 (60 LTR)**

Sample Rating Trend



**NORMAL**



## 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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KL0013467</b>	KL0012381	KL0012355
Sample Date	Client Info		<b>26 Jan 2024</b>	21 Jun 2023	23 Apr 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>350</b>	436	0
Oil Changed	Client Info		<b>Changed</b>	Not Changd	N/A
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>23</b>	12	5
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	2	0
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >330	<b>7</b>	3	<1
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	<1
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>39</b>	2	2
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	0	1
Molybdenum	ppm	ASTM D5185m	<b>3</b>	2	2
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>376</b>	32	30
Calcium	ppm	ASTM D5185m	<b>2847</b>	4002	3712
Phosphorus	ppm	ASTM D5185m	<b>1142</b>	1040	1032
Zinc	ppm	ASTM D5185m	<b>1337</b>	1307	1226
Sulfur	ppm	ASTM D5185m	<b>4641</b>	5003	4471

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	4	3
Sodium	ppm	ASTM D5185m	<b>2</b>	4	5
Potassium	ppm	ASTM D5185m >20	<b>8</b>	3	2

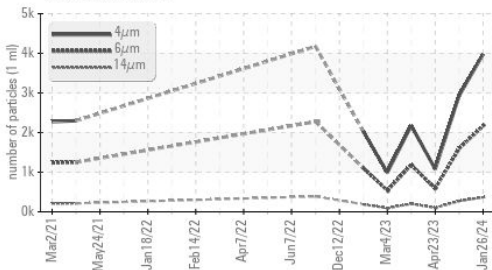
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.2</b>	9.8	7.3
Sulfation	Abs./1mm	*ASTM D7415 >30	<b>24.3</b>	21.5	16.9

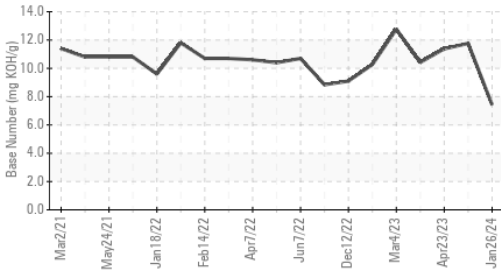


# OIL ANALYSIS REPORT

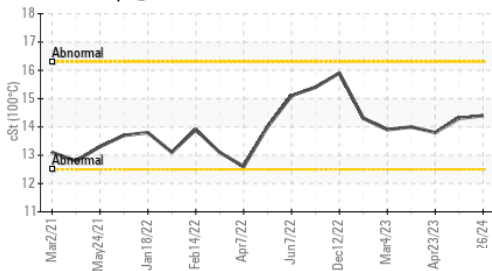
### Particle Trend



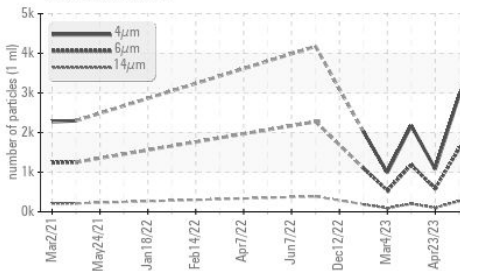
### Base Number



### Viscosity @ 100°C



### Particle Trend



### FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>3976</b>	2932	1079
Particles >6µm	ASTM D7647 >5000	<b>2166</b>	1597	588
Particles >14µm	ASTM D7647 >640	<b>369</b>	272	100
Particles >21µm	ASTM D7647 >160	<b>124</b>	92	34
Particles >38µm	ASTM D7647 >40	<b>19</b>	14	5
Particles >71µm	ASTM D7647 >10	<b>2</b>	1	1
Oil Cleanliness	ISO 4406 (c) >19/16	<b>18/16</b>	18/15	16/14

### FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation Abs/.1mm	*ASTM D7414 >25	<b>19.8</b>	15.1	10.8
Base Number (BN)	mg KOH/g ASTM D2896	<b>7.43</b>	11.76	11.38

### VISUAL

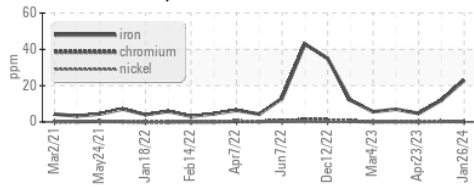
method	limit/base	current	history1	history2
White Metal	scalar *Visual NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar *Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar *Visual NONE	<b>NONE</b>	NONE	NONE
Silt	scalar *Visual NONE	<b>NONE</b>	NONE	NONE
Debris	scalar *Visual NONE	<b>NONE</b>	NONE	NONE
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

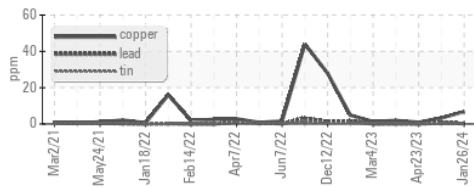
method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D445	<b>14.4</b>	14.3	13.8

### GRAPHS

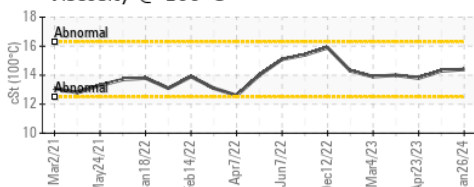
#### Ferrous Alloys



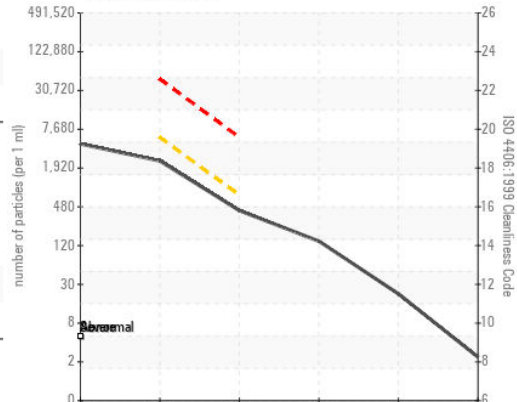
#### Non-ferrous Metals



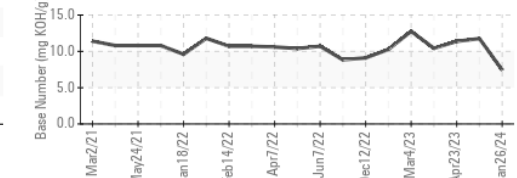
#### Viscosity @ 100°C



#### Particle Count



#### Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0013467 **Received** : 30 Jan 2024  
**Lab Number** : **06075005** **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10857096 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: PrtCount )

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)

**CONOR**  
**JUAREZ 348**  
**HERMOSILLO,**  
**MX 83140**

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