



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



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

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KL0013458</b>	KL0013441	KL0013390
Sample Date		Client Info		<b>04 Jan 2024</b>	21 Dec 2023	17 Nov 2023
Machine Age	hrs	Client Info		<b>0</b>	0	5481
Oil Age	hrs	Client Info		<b>247</b>	255	77
Filter Age	hrs	Client Info		<b>247</b>	255	77
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>13</b>	10	6
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	3	3
Lead	ppm	ASTM D5185m	>40	<b>1</b>	3	1
Copper	ppm	ASTM D5185m	>330	<b>109</b>	86	25
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

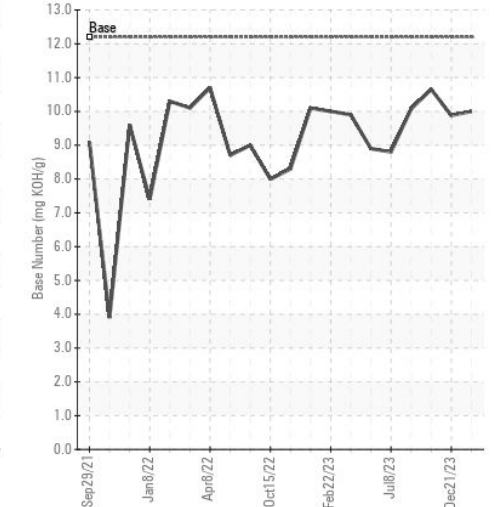
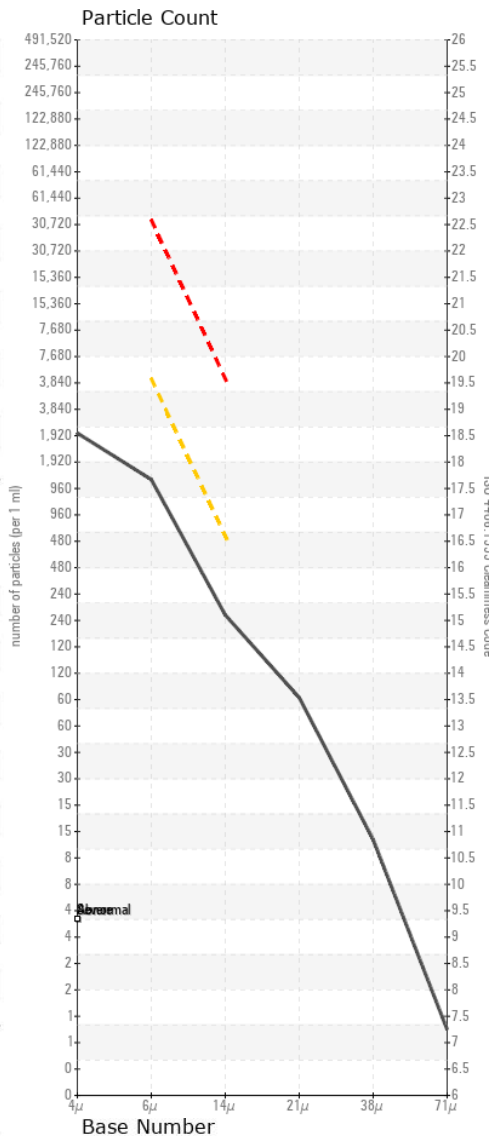
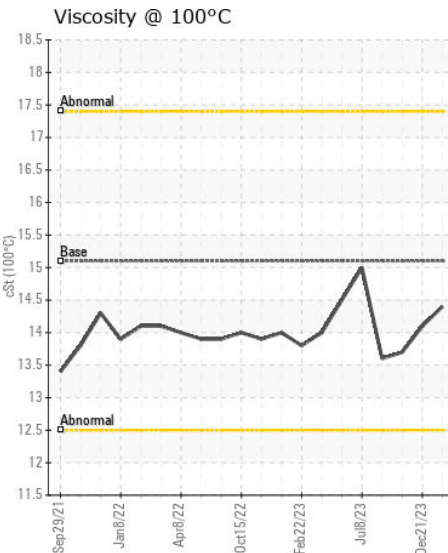
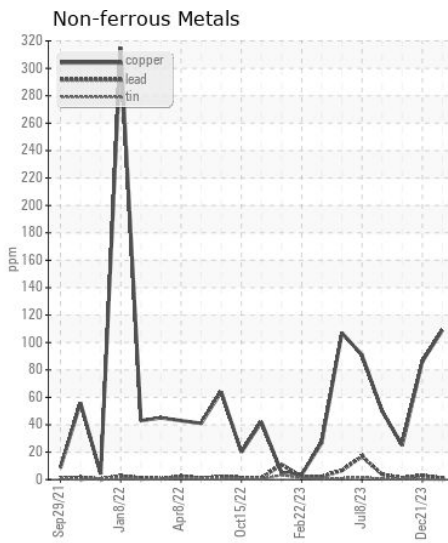
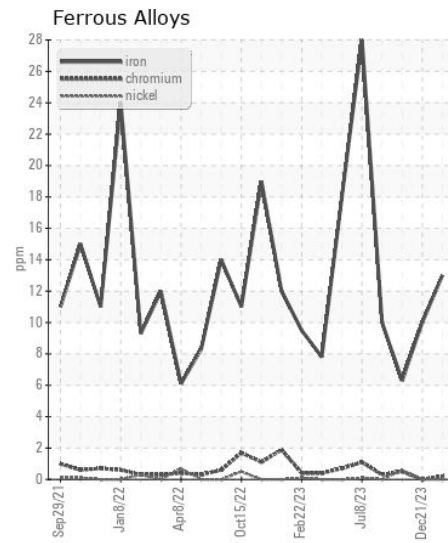
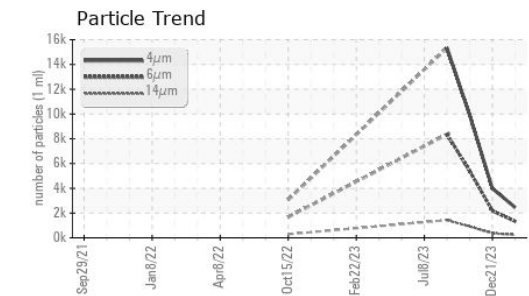
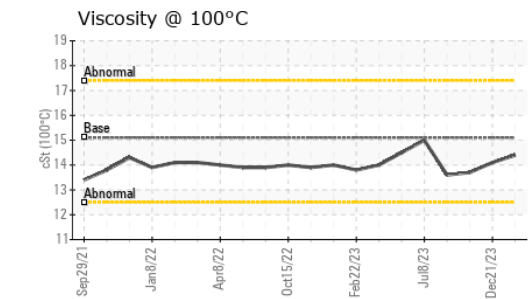
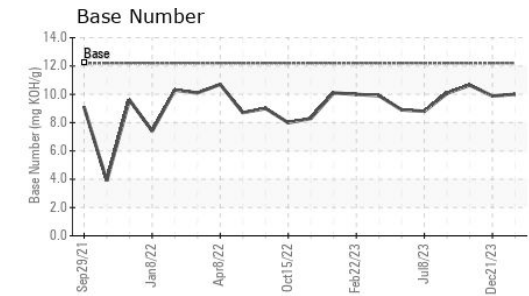
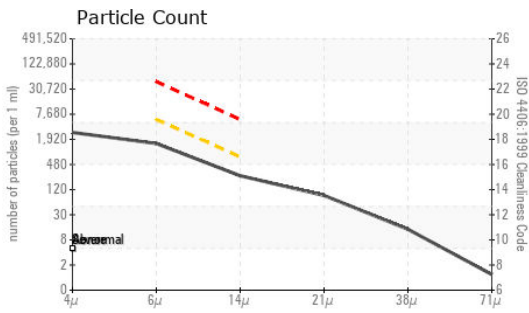
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	8	7
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	2
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
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	10.1	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.9</b>	26.1	23.2
Particles >4µm		ASTM D7647		<b>2453</b>	3993	9900
Particles >6µm		ASTM D7647	>5000	<b>1336</b>	2175	▲ 5393
Particles >14µm		ASTM D7647	>640	<b>227</b>	370	▲ 918
Particles >21µm		ASTM D7647	>160	<b>77</b>	125	▲ 309
Particles >38µm		ASTM D7647	>40	<b>12</b>	19	▲ 48
Particles >71µm		ASTM D7647	>10	<b>1</b>	2	5
Oil Cleanliness		ISO 4406 (c)	>19/16	<b>18/15</b>	18/16	▲ 20/17
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

## 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.

Sodium	ppm	ASTM D5185m		<b>44</b>	65	49
Boron	ppm	ASTM D5185m		<b>247</b>	232	306
Barium	ppm	ASTM D5185m		<b>2</b>	0	1
Molybdenum	ppm	ASTM D5185m		<b>136</b>	141	130
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>653</b>	733	637
Calcium	ppm	ASTM D5185m		<b>1515</b>	1671	1462
Phosphorus	ppm	ASTM D5185m	1360	<b>711</b>	761	661
Zinc	ppm	ASTM D5185m	1480	<b>832</b>	925	808
Sulfur	ppm	ASTM D5185m		<b>2483</b>	2499	2495
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.3</b>	22.4	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	12.2	<b>10.00</b>	9.88	10.65
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.4</b>	14.1	13.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0013458 **Received** : 30 Jan 2024  
**Lab Number** : 06074991 **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10857082 **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

Contact: EDUARDO GARCIA  
 egarcia.comsa@gmail.com

T: (526)622-1581 x:81

F: x: