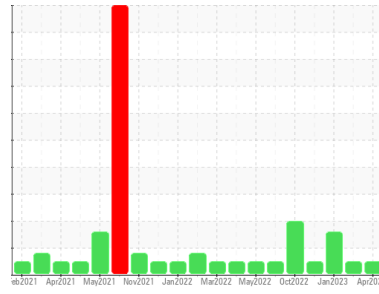




OIL ANALYSIS REPORT

Area
GUAY SON/Yavaros [CONHER]
 Machine Id
CATERPILLAR Pacifico industrial PISA2 MP
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 SDE SAE 15W40 (100 LTR)

Sample Rating Trend



NORMAL



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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KL0012222	KL0010256	KL0010216
Sample Date	Client Info		04 Apr 2023	01 Mar 2023	16 Jan 2023
Machine Age	hrs	Client Info	0	37251	36860
Oil Age	hrs	Client Info	0	391	1200
Oil Changed	Client Info		N/A	Not Changd	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	80	44	▲ 118
Chromium	ppm	ASTM D5185m >20	2	<1	2
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m >2	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	2	3
Lead	ppm	ASTM D5185m >40	<1	<1	2
Copper	ppm	ASTM D5185m >330	7	5	23
Tin	ppm	ASTM D5185m >15	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	128	290	50
Barium	ppm	ASTM D5185m	0	3	0
Molybdenum	ppm	ASTM D5185m	117	103	150
Manganese	ppm	ASTM D5185m	<1	<1	2
Magnesium	ppm	ASTM D5185m	559	460	715
Calcium	ppm	ASTM D5185m	1532	1541	1718
Phosphorus	ppm	ASTM D5185m 760	892	991	749
Zinc	ppm	ASTM D5185m 800	1106	1201	970
Sulfur	ppm	ASTM D5185m 3000	2677	3254	2750

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	6	7
Sodium	ppm	ASTM D5185m	2	0	2
Potassium	ppm	ASTM D5185m >20	1	2	2

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	2.5	2.2	▲ 3.3
Nitration	Abs/cm	*ASTM D7624 >20	9.4	7.9	13.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	25.5	23.9	30.9

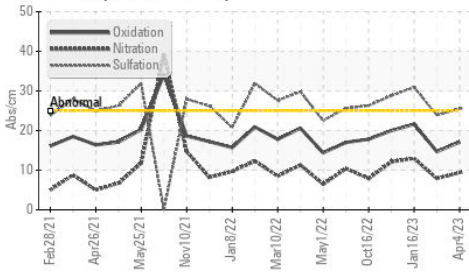
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	17.1	14.7	21.6
Base Number (BN)	mg KOH/g	ASTM D2896 10	5.1	7.3	5.7

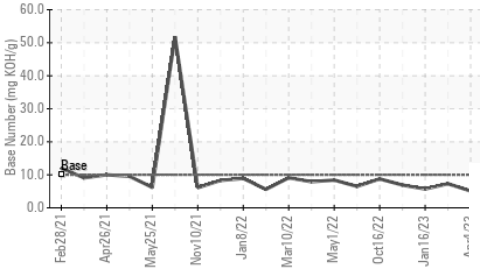


OIL ANALYSIS REPORT

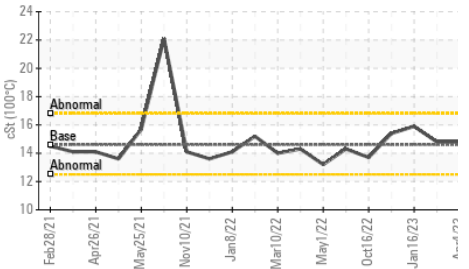
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

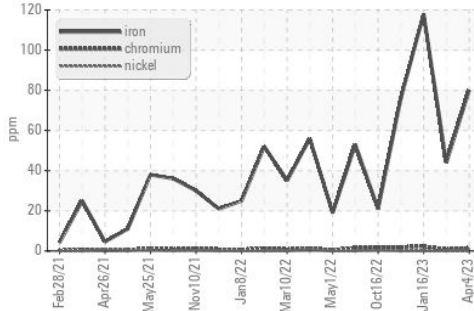


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

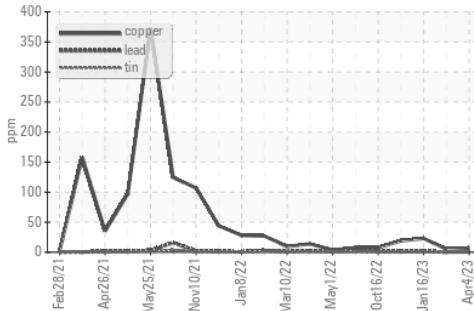
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.6	14.8	15.9

GRAPHS

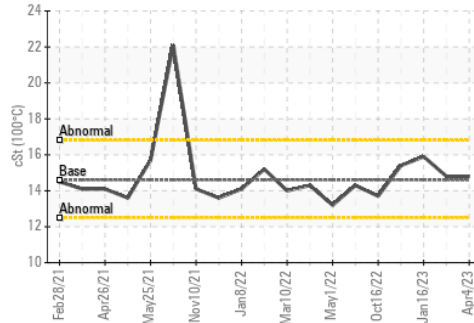
Ferrous Alloys



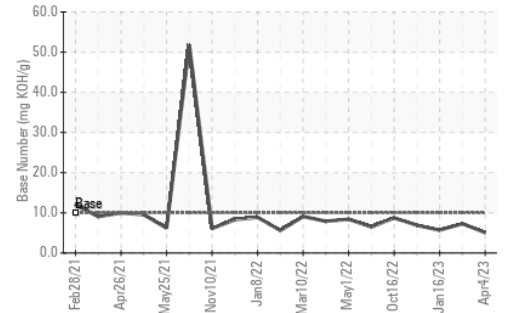
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : KL0012222

Lab Number : 05826103

Unique Number : 10439596

Test Package : FLEET

Received : 21 Apr 2023

Tested : 24 Apr 2023

Diagnosed : 24 Apr 2023 - Don Baldrige

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)