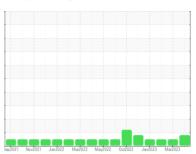


OIL ANALYSIS REPORT

Sample Rating Trend







GUAY SON/Yavaros [CONHER] Machine Id CATERPILLAR Pacifico Ind Azteca MP

Component **Diesel Engine**

CHEVRON DELO 400 MULTIGRADE 15W40 (160 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

📤 Wear

An increase in the iron level is noted. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the

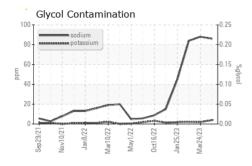
Fluid Condition

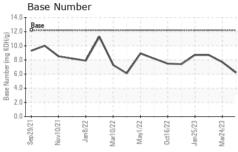
The condition of the oil is acceptable for the time in service.

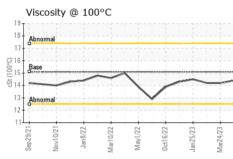
(Japan 1000	2021 Jan 2022 Mar 2022	May2022 Oct2022 Jan2023	Mar2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KL0012234	KL0010265	KL0010249
Sample Date		Client Info		26 Apr 2023	24 Mar 2023	22 Feb 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		358	404	100
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ATTENTION	NORMAL	NORMAL
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	92	27	16
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	2	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	2	2
Lead	ppm	ASTM D5185m	>40	5	1	<1
Copper	ppm	ASTM D5185m	>330	69	62	20
Tin	ppm	ASTM D5185m		1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVE O			12 - 24 /1			histow.O
ADDITIVES		method				history2
Boron	mag		limit/base		history1 224	
Boron	ppm	ASTM D5185m	limit/base	86		239 2
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base		224	239
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	86 0 122	224 0 111	239 2 111
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	86 0 122 <1	224 0 111 <1	239 2 111 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	86 0 122 <1 545	224 0 111 <1 518	239 2 111 <1 473
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		86 0 122 <1 545 1437	224 0 1111 <1 518 1356	239 2 111 <1 473 1371
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1360	86 0 122 <1 545 1437 772	224 0 1111 <1 518 1356 862	239 2 111 <1 473 1371 871
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		86 0 122 <1 545 1437	224 0 1111 <1 518 1356	239 2 111 <1 473 1371
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1360	86 0 122 <1 545 1437 772 990 2630	224 0 111 <1 518 1356 862 1069	239 2 111 <1 473 1371 871 1076
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1360 1480	86 0 122 <1 545 1437 772 990 2630	224 0 111 <1 518 1356 862 1069 2885	239 2 111 <1 473 1371 871 1076 2894
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	1360 1480 limit/base	86 0 122 <1 545 1437 772 990 2630 current	224 0 111 <1 518 1356 862 1069 2885 history1	239 2 111 <1 473 1371 871 1076 2894 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	1360 1480 limit/base	86 0 122 <1 545 1437 772 990 2630 current	224 0 1111 <1 518 1356 862 1069 2885 history1	239 2 111 <1 473 1371 871 1076 2894 history2 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	1360 1480 limit/base >25	86 0 122 <1 545 1437 772 990 2630 current 8 86	224 0 1111 <1 518 1356 862 1069 2885 history1 7 88	239 2 111 <1 473 1371 871 1076 2894 history2 7 84
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	1360 1480 limit/base >25	86 0 122 <1 545 1437 772 990 2630 current 8 86 4 NEG	224 0 1111 <1 518 1356 862 1069 2885 history1 7 88	239 2 111 <1 473 1371 871 1076 2894 history2 7 84 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	1360 1480 limit/base >25 >20	86 0 122 <1 545 1437 772 990 2630 current 8 86 4 NEG	224 0 111 <1 518 1356 862 1069 2885 history1 7 88 2 NEG	239 2 111 <1 473 1371 871 1076 2894 history2 7 84 2 NEG
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D5185m	1360 1480 limit/base >25 >20 limit/base >3	86 0 122 <1 545 1437 772 990 2630 current 8 86 4 NEG current	224 0 111 <1 518 1356 862 1069 2885 history1 7 88 2 NEG history1 0.5	239 2 111 <1 473 1371 871 1076 2894 history2 7 84 2 NEG history2 0.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D2982	1360 1480 limit/base >25 >20 limit/base >3 >20	86 0 122 <1 545 1437 772 990 2630 current 8 86 4 NEG	224 0 111 <1 518 1356 862 1069 2885 history1 7 88 2 NEG history1	239 2 111 <1 473 1371 871 1076 2894 history2 7 84 2 NEG history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D5185m **ASTM D7844 **ASTM D7844	1360 1480 limit/base >25 >20 limit/base >3 >20	86 0 122 <1 545 1437 772 990 2630 current 8 86 4 NEG current 1 12.6 28.1	224 0 111 <1 518 1356 862 1069 2885 history1 7 88 2 NEG history1 0.5 9.4	239 2 111 <1 473 1371 871 1076 2894 history2 7 84 2 NEG history2 0.2 8.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D2982 *ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415 *Method	1360 1480 limit/base >25 >20 limit/base >3 >20 >30 limit/base	86 0 122 <1 545 1437 772 990 2630 current 8 86 4 NEG current 1 12.6 28.1 current	224 0 111 <1 518 1356 862 1069 2885 history1 7 88 2 NEG history1 0.5 9.4 23.0 history1	239 2 111 <1 473 1371 871 1076 2894 history2 7 84 2 NEG history2 0.2 8.3 21.9 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	1360 1480 limit/base >25 >20 limit/base >3 >20 >30	86 0 122 <1 545 1437 772 990 2630 current 8 86 4 NEG current 1 12.6 28.1	224 0 111 <1 518 1356 862 1069 2885 history1 7 88 2 NEG history1 0.5 9.4 23.0	239 2 111 <1 473 1371 871 1076 2894 history2 7 84 2 NEG history2 0.2 8.3 21.9

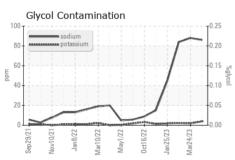


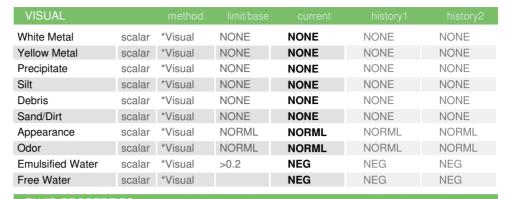
OIL ANALYSIS REPORT







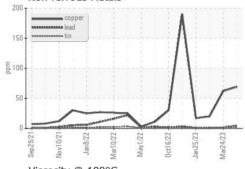


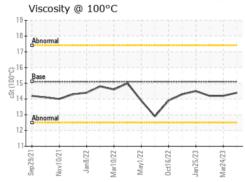


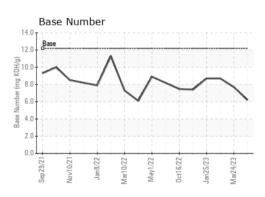
FLUID PROPER	HES	method	ilmit/base		nistory i	nistoryz
Visc @ 100°C	cSt	ASTM D445	15.1	14.4	14.2	14.2

GRAPHS













Laboratory Sample No. Lab Number

: KL0012234 : 05843088

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

Received **Tested Unique Number** : 10467195

: 12 May 2023 Diagnosed Test Package: FLEET (Additional Tests: Glycol)

: 12 May 2023 - Angela Borella

: 10 May 2023

HERMOSILLO. MX 83140 Contact: EDUARDO GARCIA

egarcia.comsa@gmail.com

Submitted By: EDUARDO GARCIA

T: (526)622-1581 x:81

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

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