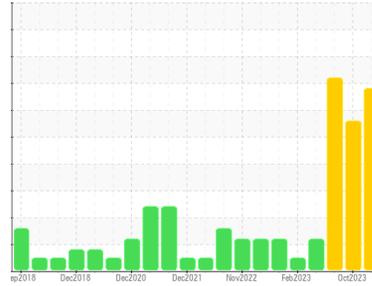




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
GUAY SON [CONHER]
 Machine Id
IBACO COZAR VII
 Component
Main Diesel Engine
 Fluid
XTRA REV 15W40 (160 LTR)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. There is a high amount of particulates present in the oil. There is a high amount of fuel present in the oil. Test for glycol is negative.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KL0013354	KL0013312	KL0012869
Sample Date	Client Info		01 Nov 2023	17 Oct 2023	20 Sep 2023
Machine Age	hrs	Client Info	17869	17522	17044
Oil Age	hrs	Client Info	345	480	2
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			SEVERE	ABNORMAL	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	20	16	14
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >4	<1	0	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	2	1	3
Lead	ppm	ASTM D5185m >40	5	5	1
Copper	ppm	ASTM D5185m >330	120	95	6
Tin	ppm	ASTM D5185m >15	<1	<1	1
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	7	13	120
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	23	26	37
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	51	65	118
Calcium	ppm	ASTM D5185m	2445	2342	2033
Phosphorus	ppm	ASTM D5185m	1072	1007	1040
Zinc	ppm	ASTM D5185m	1300	1358	1232
Sulfur	ppm	ASTM D5185m	3600	3550	3965

CONTAMINANTS

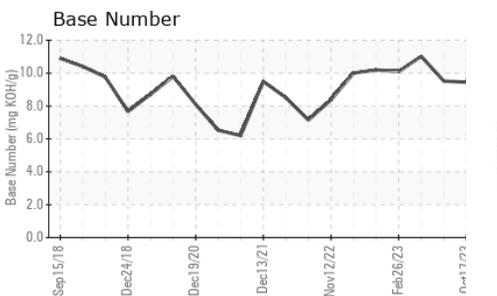
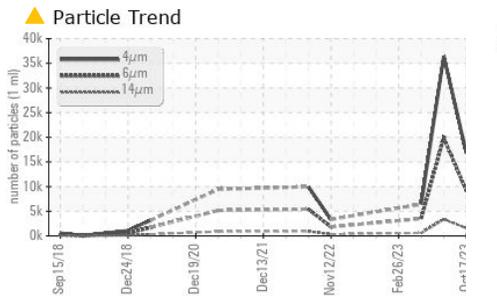
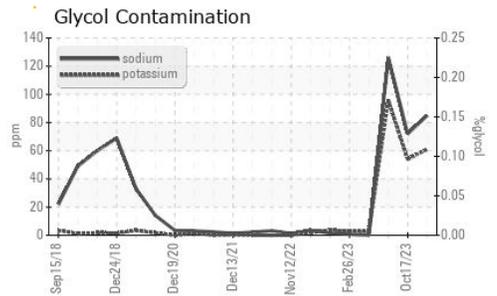
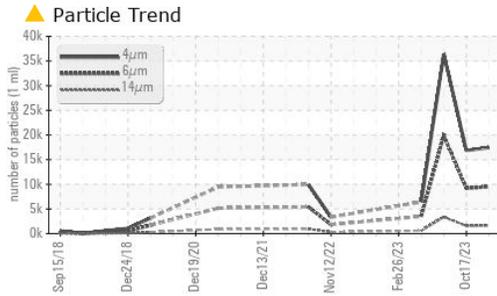
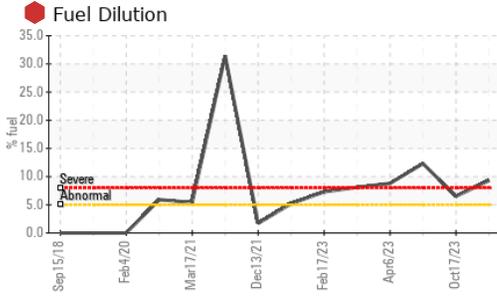
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	8	9	10
Sodium	ppm	ASTM D5185m	▲ 85	▲ 72	▲ 126
Potassium	ppm	ASTM D5185m >20	▲ 61	▲ 54	▲ 96
Fuel	%	ASTM D3524 >5	● 9.3	▲ 6.5	● 12.3
Glycol	%	*ASTM D2982	NEG	NEG	NEG

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.2	0.1	0.2
Nitration	Abs/cm	*ASTM D7624 >20	8.4	7.2	11.5
Sulfation	Abs/1mm	*ASTM D7415 >30	17.3	15.6	10.1



OIL ANALYSIS REPORT



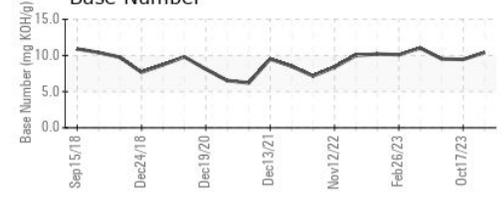
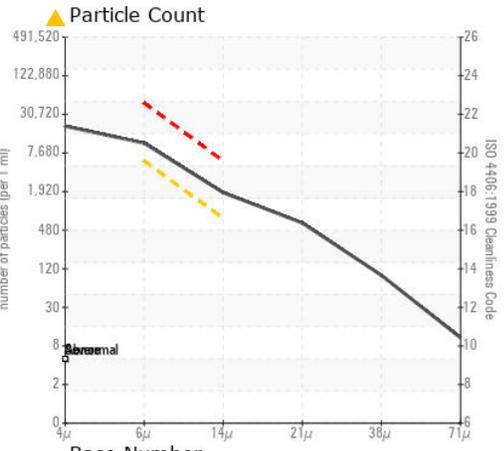
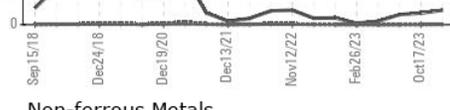
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		17443	16869	36432
Particles >6µm	ASTM D7647	>5000	▲ 9502	▲ 9189	▲ 19846
Particles >14µm	ASTM D7647	>640	▲ 1617	▲ 1564	▲ 3378
Particles >21µm	ASTM D7647	>160	▲ 545	▲ 527	▲ 1138
Particles >38µm	ASTM D7647	>40	▲ 84	▲ 81	▲ 176
Particles >71µm	ASTM D7647	>10	9	8	▲ 18
Oil Cleanliness	ISO 4406 (c)	>19/16	▲ 20/18	▲ 20/18	▲ 21/19

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	*ASTM D7414	>25	10.7	9.0	10.4
Base Number (BN)	mg KOH/g	ASTM D2896		10.41	9.45	9.52

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	▲ 10.4	▲ 11.3	▲ 11.1

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013354
Lab Number : 06001127
Unique Number : 10729487
Test Package : MOB 2 (Additional Tests: Glycol, PercentFuel, PrtCount)
Received : 07 Nov 2023
Diagnosed : 09 Nov 2023
Diagnostician : Jonathan Hester

CONOR
 JUAREZ 348
 HERMOSILLO,
 MX 83140
 Contact: EDUARDO GARCIA
 egarcia.comsa@gmail.com
 T: (526)622-1581 x:81
 F: x:

Certificate L2367
 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)