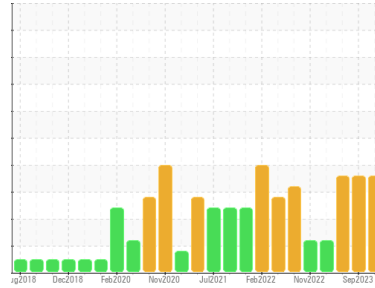




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
GUAY SON [CONHER]
 Machine Id
IBACO BM ISMAR 6
 Component
Diesel Engine
 Fluid
XTRA REV 15W40 (--- LTR)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil. There is a moderate amount of fuel present in the oil.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KL0013345	KL0012819	KL0011411
Sample Date	Client Info	21 Oct 2023	16 Sep 2023	30 Mar 2023
Machine Age	hrs	14208	13737	13732
Oil Age	hrs	476	376	1595
Oil Changed	Client Info	Changed	Not Changd	Not Changd
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >100	24	23	17
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >2	0	<1	0
Titanium	ppm	ASTM D5185m >2	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >25	1	<1	<1
Lead	ppm	ASTM D5185m >40	2	2	1
Copper	ppm	ASTM D5185m >330	153	193	171
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	2	4	2
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	2	4	4
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	16	21	18
Calcium	ppm	ASTM D5185m	2575	2931	2934
Phosphorus	ppm	ASTM D5185m	800	896	860
Zinc	ppm	ASTM D5185m	932	1069	1081
Sulfur	ppm	ASTM D5185m	2899	3851	3596

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	9	9	7
Sodium	ppm	ASTM D5185m	4	3	1
Potassium	ppm	ASTM D5185m >20	2	2	2
Fuel	%	ASTM D3524 >5	▲ 6.9	▲ 6.7	▲ 6.7

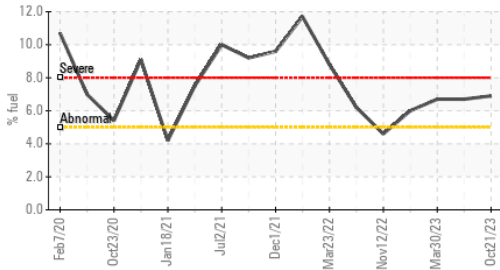
INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >3	0.3	0.4	0.3
Nitration	Abs/cm	*ASTM D7624 >20	7.3	9.1	8.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	15.5	18.4	18.0

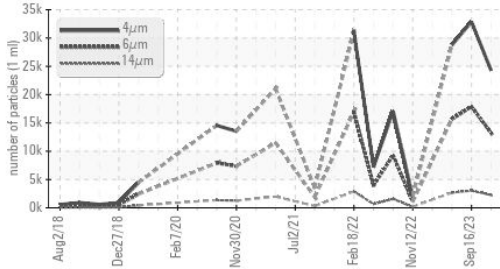


OIL ANALYSIS REPORT

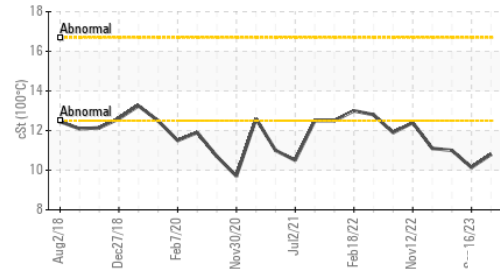
▲ Fuel Dilution



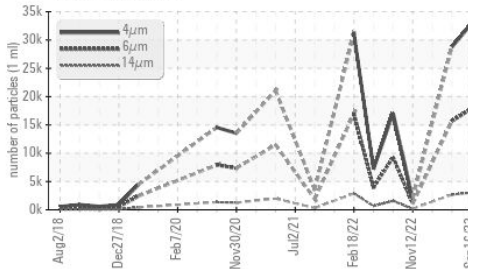
▲ Particle Trend



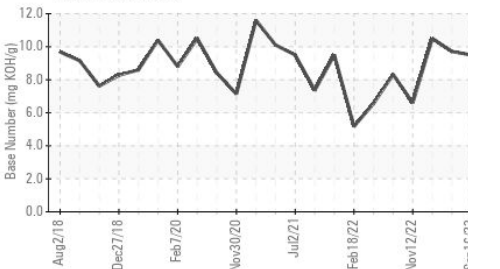
▲ Viscosity @ 100°C



▲ Particle Trend



Base Number



FLUID CLEANLINESS method limit/base current history1 history2

Particles >4µm	ASTM D7647		24281	32850	28770
Particles >6µm	ASTM D7647	>5000	▲ 13227	▲ 17895	▲ 15673
Particles >14µm	ASTM D7647	>640	▲ 2251	▲ 3046	▲ 2667
Particles >21µm	ASTM D7647	>160	▲ 758	▲ 1026	▲ 898
Particles >38µm	ASTM D7647	>40	▲ 117	▲ 158	▲ 139
Particles >71µm	ASTM D7647	>10	▲ 12	▲ 16	▲ 14
Oil Cleanliness	ISO 4406 (c)	>19/16	▲ 21/18	▲ 21/19	▲ 21/19

FLUID DEGRADATION method limit/base current history1 history2

Oxidation	Abs/.1mm	*ASTM D7414	>25	8.9	10.4	10.5
Base Number (BN)	mg KOH/g	ASTM D2896		7.57	9.5	9.71

VISUAL method limit/base current history1 history2

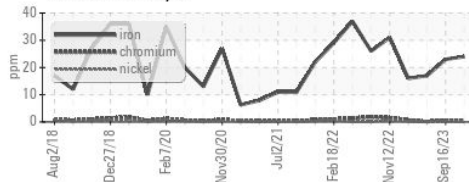
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES method limit/base current history1 history2

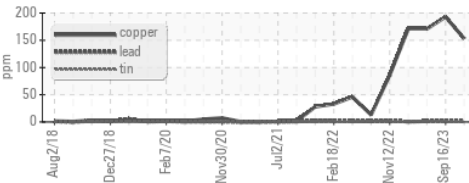
Visc @ 100°C	cSt	ASTM D445		▲ 10.8	▲ 10.14	▲ 11.0
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GRAPHS

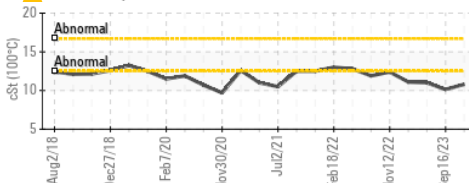
▲ Ferrous Alloys



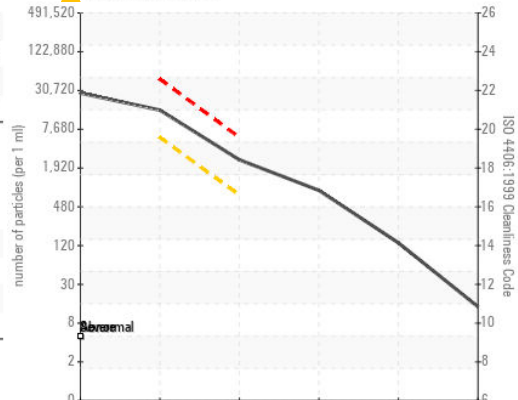
▲ Non-ferrous Metals



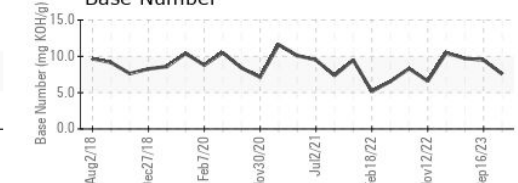
▲ Viscosity @ 100°C



▲ Particle Count



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013345 **Received** : 01 Nov 2023
Lab Number : 05996363 **Diagnosed** : 03 Nov 2023
Unique Number : 10724723 **Diagnostician** : Don Baldrige
Test Package : MOB 2 (Additional Tests: PercentFuel, 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
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 MX 83140
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F: x: