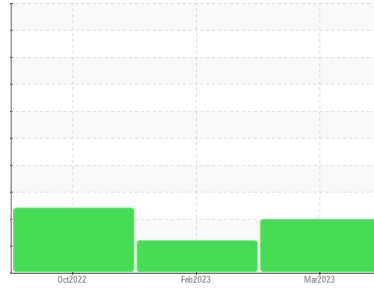




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
GUAY SON [CONHER]
 Machine Id
PERKINS Cozar IX AUX IBACO
 Component
Diesel Engine
 Fluid
Diesel Engine Oil (9 LTR)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	KL0011406	KL0010229	KL0010150	
Sample Date	Client Info	30 Mar 2023	17 Feb 2023	10 Oct 2022	
Machine Age	hrs	Client Info	11354	0	8120
Oil Age	hrs	Client Info	80	0	120
Oil Changed	Client Info	Not Chngd	N/A	Not Chngd	
Sample Status		ATTENTION	ABNORMAL	ABNORMAL	

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	▲ 4.9	<1.0
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >250	26	40	74
Chromium	ppm ASTM D5185m >10	0	<1	<1
Nickel	ppm ASTM D5185m >5	0	<1	0
Titanium	ppm ASTM D5185m	0	0	<1
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >35	<1	<1	3
Lead	ppm ASTM D5185m >100	2	4	1
Copper	ppm ASTM D5185m >60	3	<1	7
Tin	ppm ASTM D5185m >5	0	<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	0	0	74
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	2	3	62
Manganese	ppm ASTM D5185m	<1	<1	1
Magnesium	ppm ASTM D5185m	9	7	216
Calcium	ppm ASTM D5185m	3441	3109	2685
Phosphorus	ppm ASTM D5185m	1154	1209	881
Zinc	ppm ASTM D5185m	1408	1414	1046
Sulfur	ppm ASTM D5185m	4259	4084	5850

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >35	9	9	10
Sodium	ppm ASTM D5185m	0	2	25
Potassium	ppm ASTM D5185m >20	2	<1	4

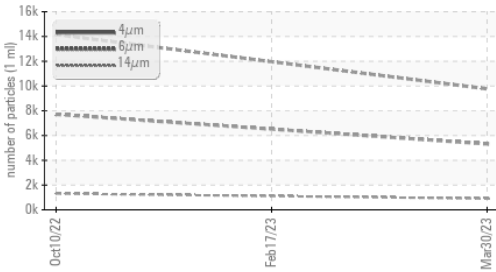
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.8	0.3	2.8
Nitration	Abs/cm *ASTM D7624 >20	9.8	11.8	13.9
Sulfation	Abs/.1mm *ASTM D7415 >30	18.8	21.3	30.4

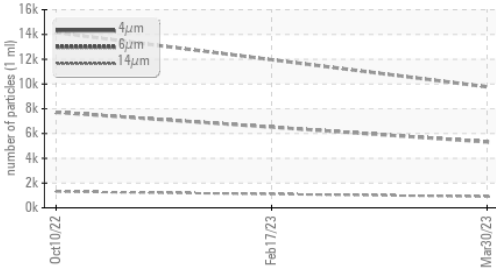


OIL ANALYSIS REPORT

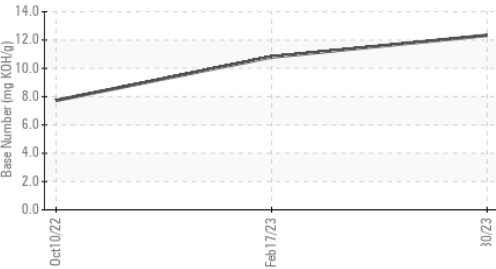
Particle Trend



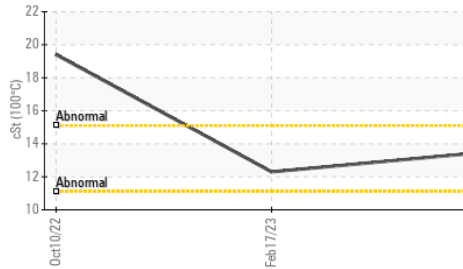
Particle Trend



Base Number



Viscosity @ 100°C



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		9770	---	14154
Particles >6µm	ASTM D7647	>5000	▲ 5322	---	▲ 7711
Particles >14µm	ASTM D7647	>640	▲ 906	---	▲ 1312
Particles >21µm	ASTM D7647	>160	▲ 305	---	▲ 442
Particles >38µm	ASTM D7647	>40	▲ 47	---	▲ 68
Particles >71µm	ASTM D7647	>10	5	---	7
Oil Cleanliness	ISO 4406 (c)	>19/16	▲ 20/17	---	▲ 20/18

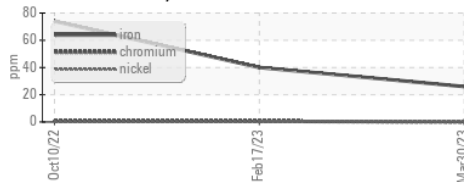
FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	11.8	20.2	24.5
Base Number (BN)	mg KOH/g ASTM D2896		12.33	10.8	7.73

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

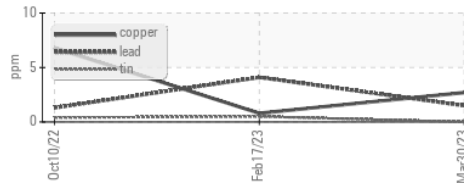
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D445		13.5	▲ 12.3	▲ 19.4

GRAPHS

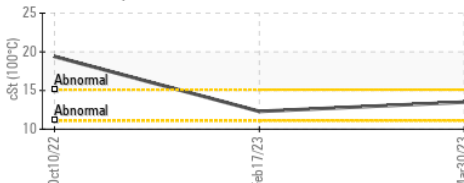
Ferrous Alloys



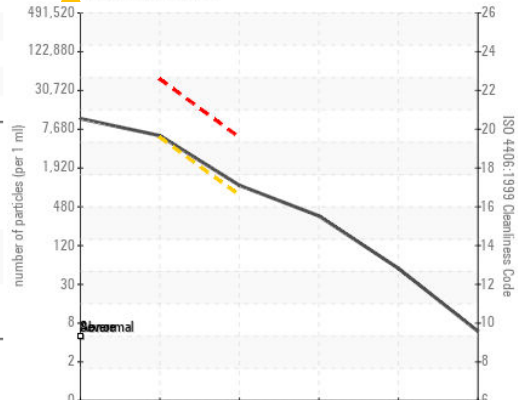
Non-ferrous Metals



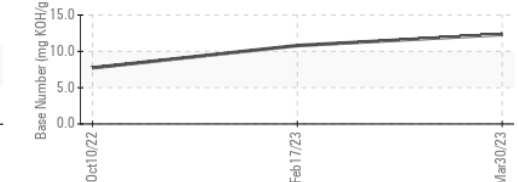
Viscosity @ 100°C



Particle Count



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : KL0011406 Received : 14 Apr 2023
 Lab Number : 05821120 Diagnosed : 19 Apr 2023
 Unique Number : 10429203 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: