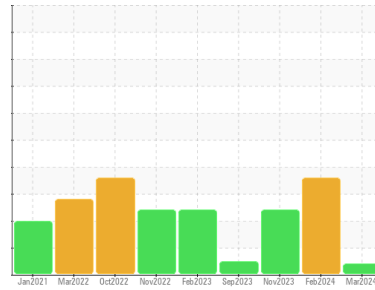




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
[CONHER]
 Machine Id
IBACO BM JLV II AUX
 Component
Auxiliary Engine
 Fluid
RALOY 15W40 (9 LTR)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: Fluid: Raloy 15W40)

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			KL0014213	KL0014133	KL0013367
Sample Date	Client Info			20 Mar 2024	06 Feb 2024	02 Nov 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		600	200	41
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	16	12	30
Chromium	ppm	ASTM D5185m	>20	1	<1	2
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	1	<1	3
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

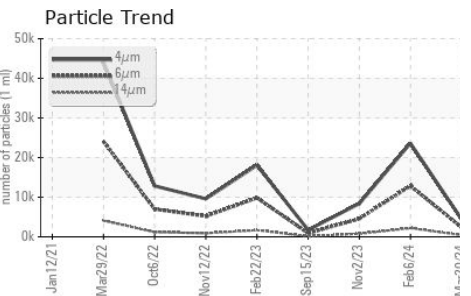
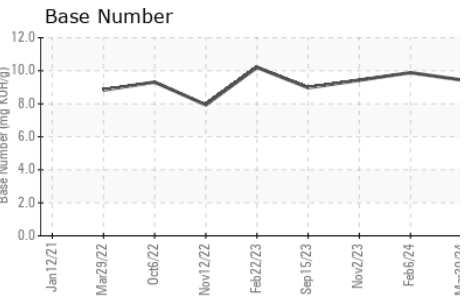
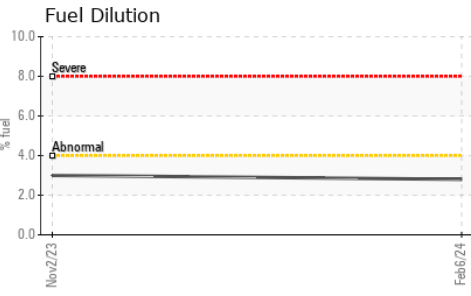
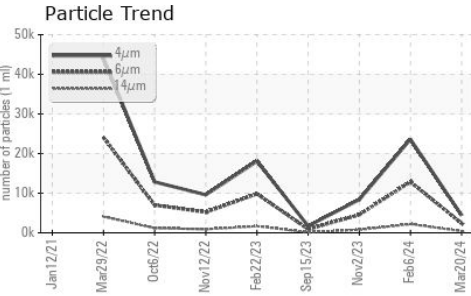
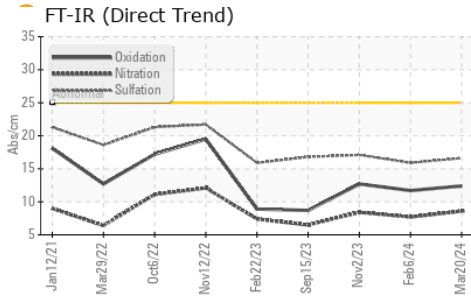
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		5	6	0
Calcium	ppm	ASTM D5185m		2737	2629	2690
Phosphorus	ppm	ASTM D5185m		1131	1014	1103
Zinc	ppm	ASTM D5185m		1308	1215	1307
Sulfur	ppm	ASTM D5185m		3781	3145	3068

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	10	10	13
Sodium	ppm	ASTM D5185m		2	<1	5
Potassium	ppm	ASTM D5185m	>20	1	1	7
Fuel	%	ASTM D3524	>4.0	<1.0	▲ 2.8	▲ 3.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.6	7.7	8.4
Sulfation	Abs./1mm	*ASTM D7415	>30	16.6	15.9	17.1



OIL ANALYSIS REPORT



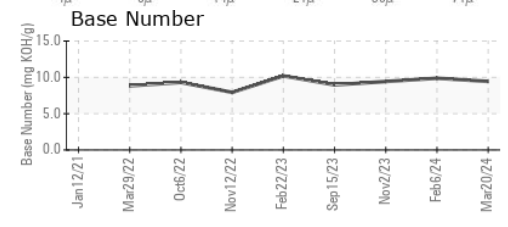
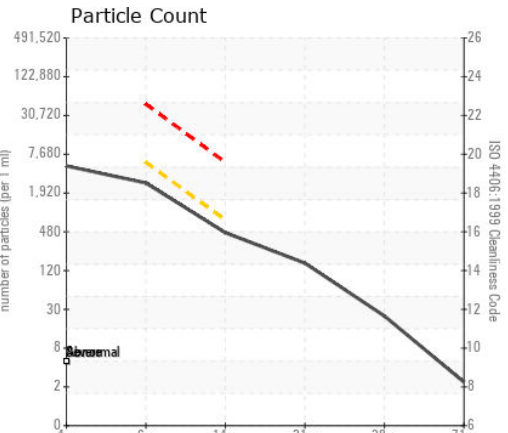
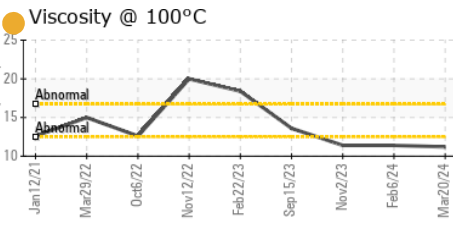
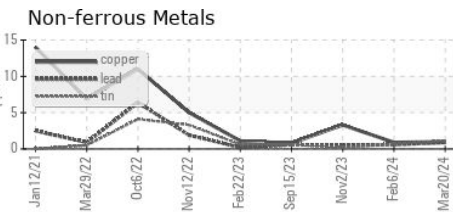
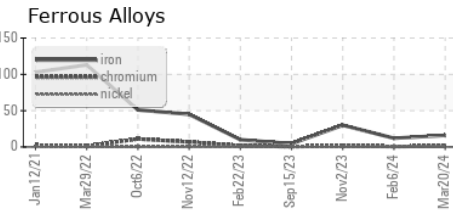
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		4411	23611	8378
Particles >6µm	ASTM D7647	>5000	2403	▲ 12862	4564
Particles >14µm	ASTM D7647	>640	409	▲ 2189	● 777
Particles >21µm	ASTM D7647	>160	138	▲ 737	● 262
Particles >38µm	ASTM D7647	>40	21	▲ 114	40
Particles >71µm	ASTM D7647	>10	2	▲ 12	4
Oil Cleanliness	ISO 4406 (c)	>19/16	18/16	▲ 21/18	● 19/17

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	*ASTM D7414	>25	12.4	11.7	12.7
Base Number (BN)	mg KOH/g	ASTM D2896		9.44	9.88	9.43

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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	● 11.2	● 11.4	▲ 11.4

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : KL0014213
 Lab Number : 06153298
 Unique Number : 10983376
 Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel, PrtCount)

Received : 18 Apr 2024
 Tested : 23 Apr 2024
 Diagnosed : 23 Apr 2024 - Don Baldrige

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: