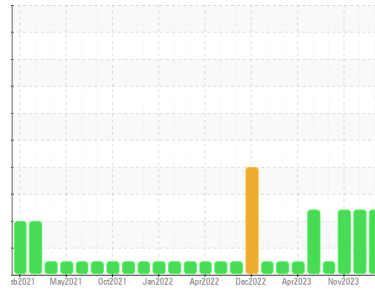




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
[CONHER]

Machine Id
Flota Barda - Barda1

Component
Diesel Engine

Fluid
TOTAL FINA RUBIA TIR 7900 15W40 (160 LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. 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.

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	KL0014574	KL0014117	KL0013393	
Sample Date	Client Info	19 Apr 2024	02 Feb 2024	17 Nov 2023	
Machine Age	hrs	Client Info	6111	0	4022
Oil Age	hrs	Client Info	0	1	0
Oil Changed	Client Info	N/A	Not Changd	N/A	
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL	

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	<1.0
Water	WC Method >0.2	NEG	NEG	NEG
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	8	19	44
Chromium	ppm ASTM D5185m >20	<1	0	<1
Nickel	ppm ASTM D5185m >2	<1	0	<1
Titanium	ppm ASTM D5185m >2	<1	0	0
Silver	ppm ASTM D5185m >2	0	0	0
Aluminum	ppm ASTM D5185m >25	2	3	2
Lead	ppm ASTM D5185m >40	2	1	2
Copper	ppm ASTM D5185m >330	1	<1	3
Tin	ppm ASTM D5185m >15	1	<1	<1
Vanadium	ppm ASTM D5185m	<1	0	<1
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	75	39	35
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	94	91	96
Manganese	ppm ASTM D5185m	<1	<1	<1
Magnesium	ppm ASTM D5185m	30	65	34
Calcium	ppm ASTM D5185m 3290	2195	2078	2311
Phosphorus	ppm ASTM D5185m 1200	1116	967	1161
Zinc	ppm ASTM D5185m 1400	1200	1158	1325
Sulfur	ppm ASTM D5185m 4000	4459	3332	3851

CONTAMINANTS

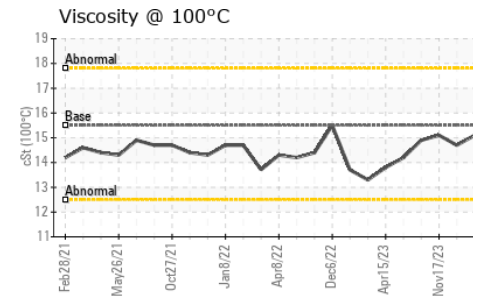
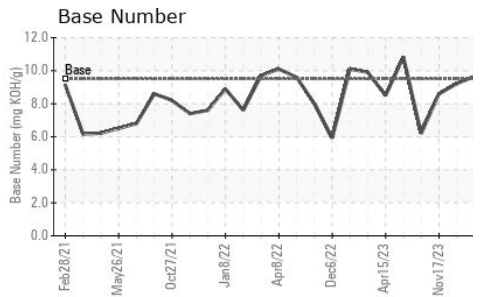
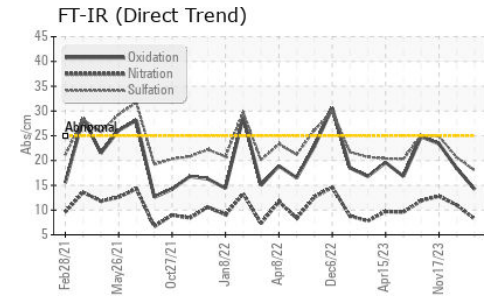
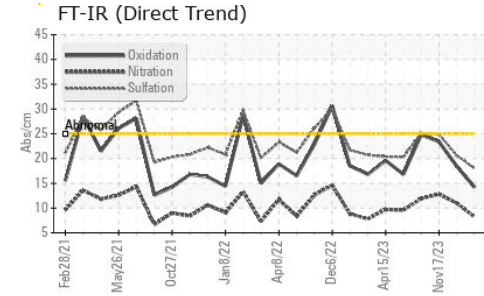
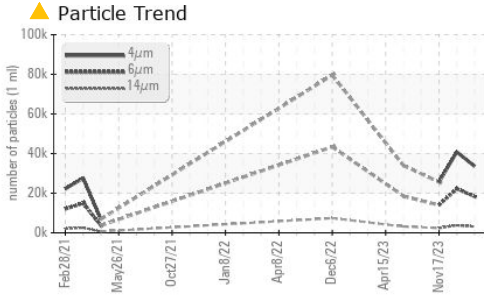
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	5	5	5
Sodium	ppm ASTM D5185m	<1	2	4
Potassium	ppm ASTM D5185m >20	3	<1	0

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.1	0.3	0.4
Nitration	Abs/cm *ASTM D7624 >20	8.2	11.0	12.8
Sulfation	Abs/.1mm *ASTM D7415 >30	18.0	20.6	24.9



OIL ANALYSIS REPORT



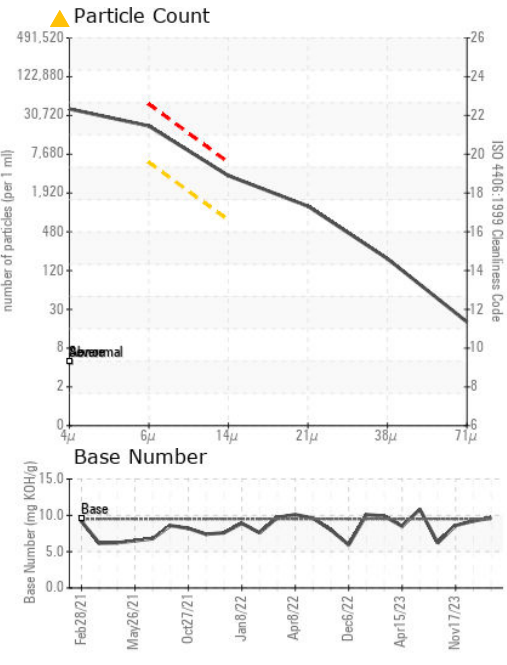
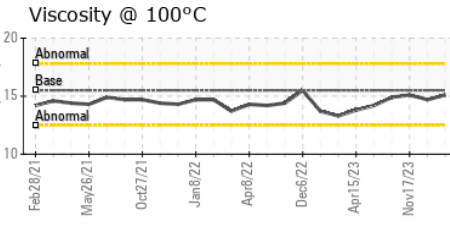
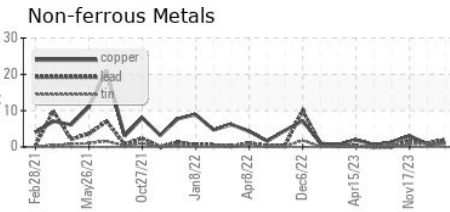
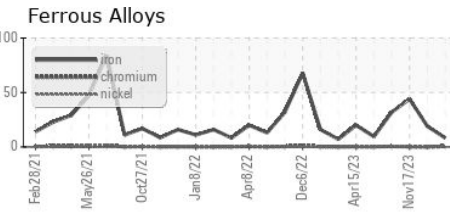
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		33589	40819	25612
Particles >6µm	ASTM D7647	>5000	▲ 18298	▲ 22236	▲ 13952
Particles >14µm	ASTM D7647	>640	▲ 3114	▲ 3784	▲ 2375
Particles >21µm	ASTM D7647	>160	▲ 1049	▲ 1275	▲ 800
Particles >38µm	ASTM D7647	>40	▲ 162	▲ 197	▲ 123
Particles >71µm	ASTM D7647	>10	▲ 17	▲ 20	▲ 13
Oil Cleanliness	ISO 4406 (c)	>19/16	▲ 21/19	▲ 22/19	▲ 21/18

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	*ASTM D7414 >25	14.2	18.4	23.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.5	9.66	9.22	8.60

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 15.5	15.1	14.7	15.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : KL0014574
 Lab Number : **06174062**
 Unique Number : 11020115
 Test Package : MOB 2 (Additional Tests: PrtCount)

Received : 09 May 2024
 Tested : 10 May 2024
 Diagnosed : 12 May 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
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