



Machine Id
BELLEVUE
Component
Port Reduction Gear
Fluid
DIESEL ENGINE OIL SAE 15W40 (10 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

The copper level is abnormal. All other component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

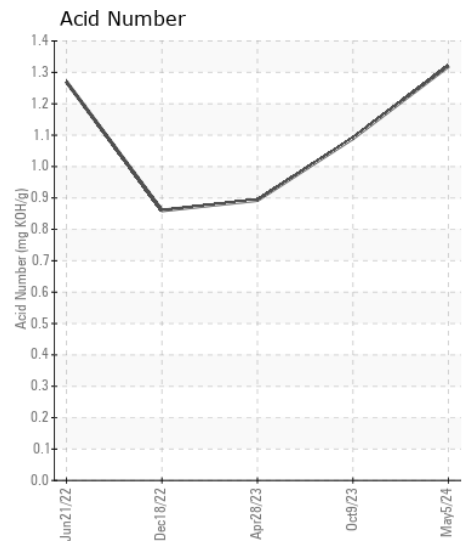
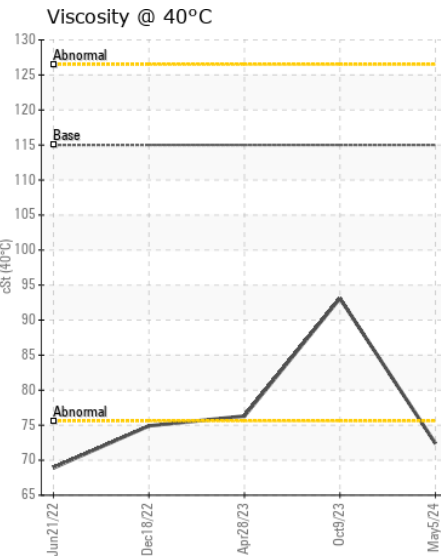
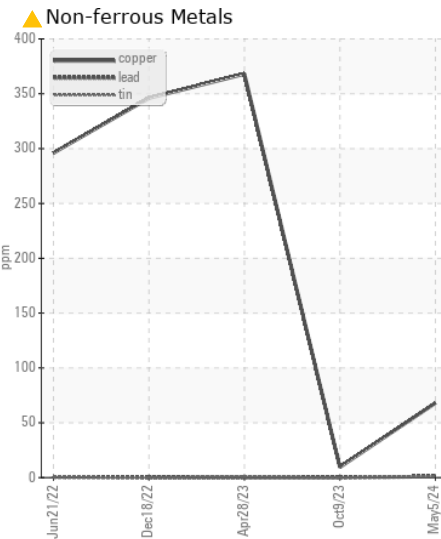
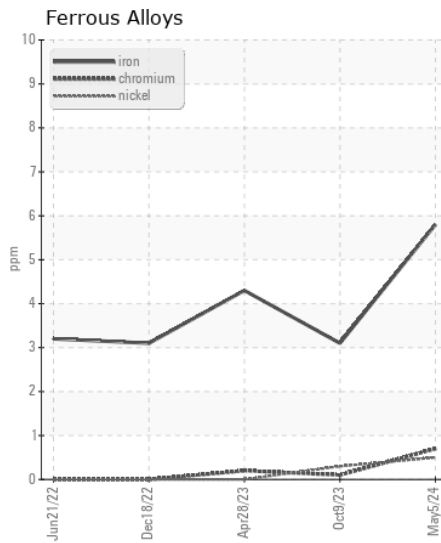
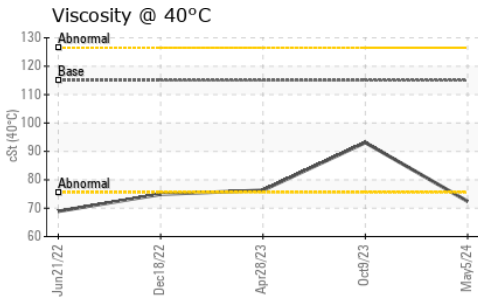
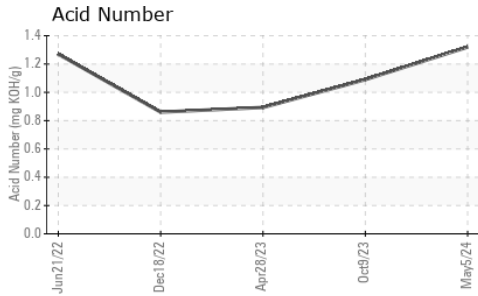
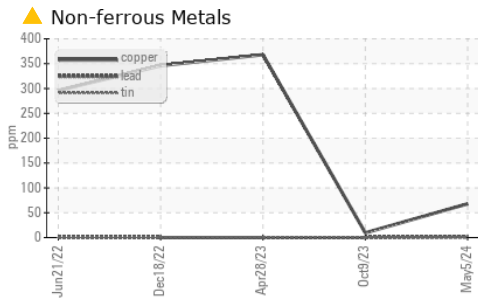
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0048409	MW0048414	MW0045757
Sample Date		Client Info		05 May 2024	09 Oct 2023	28 Apr 2023
Machine Age	hrs	Client Info		32914	30101	0
Oil Age	hrs	Client Info		0	1500	0
Filter Age	hrs	Client Info		1500	1500	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

Iron	ppm	ASTM D5185m	>150	6	3	4
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	2	8	1
Lead	ppm	ASTM D5185m	>100	1	0	0
Copper	ppm	ASTM D5185m	>50	▲ 68	10	▲ 368
Tin	ppm	ASTM D5185m	>10	1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>50	4	5	6
Potassium	ppm	ASTM D5185m	>20	2	2	1
Water		WC Method	>0.1	NEG	NEG	NEG
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	>0.1	NEG	NEG	NEG

Sodium	ppm	ASTM D5185m	>158	<1	1	3
Boron	ppm	ASTM D5185m	250	66	316	380
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	42	122	118
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	457	605	645
Calcium	ppm	ASTM D5185m	3000	1641	1361	1663
Phosphorus	ppm	ASTM D5185m	1150	903	672	757
Zinc	ppm	ASTM D5185m	1350	1049	816	873
Sulfur	ppm	ASTM D5185m	4250	3648	2796	3180
Acid Number (AN)	mg KOH/g	ASTM D8045		1.32	1.09	0.893
Visc @ 40°C	cSt	ASTM D445	115	72.4	93.1	76.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0048409
Lab Number : 06186875
Unique Number : 11043627
Test Package : MAR 2

Received : 21 May 2024
Tested : 23 May 2024
Diagnosed : 23 May 2024 - Don Baldrige

C & B MARINE
 50 E RIVERCENTER BLVD, SUITE 1180
 COVINGTON, KY
 US 41011

Contact: DAVID WESTRICH
 dwestrich@carlislebray.com

T: (812)290-4063
 F: (859)655-7504

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)