



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
M09-0912 M09-0912
 Component
Diesel Engine
 Fluid
CASTROL 15W40 (46 QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

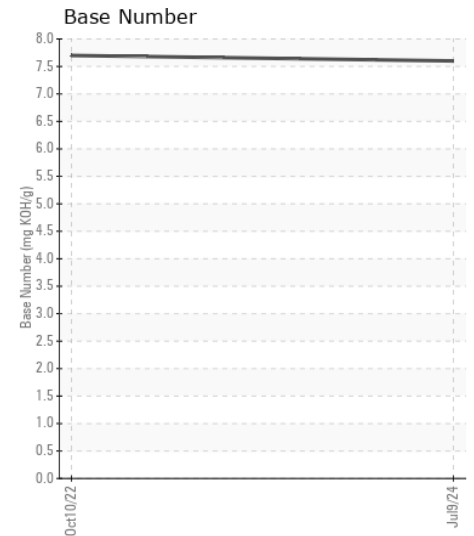
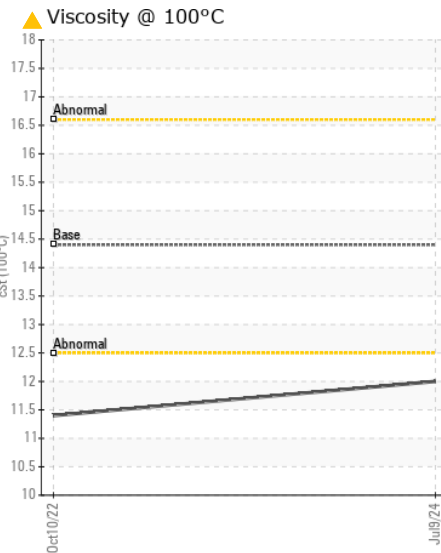
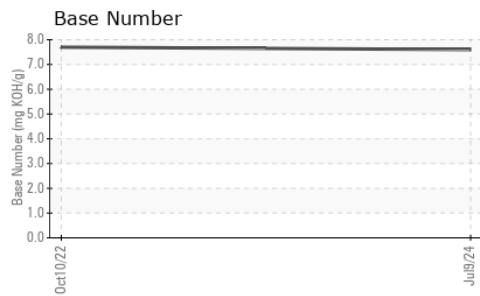
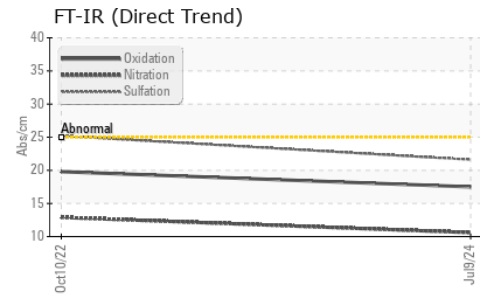
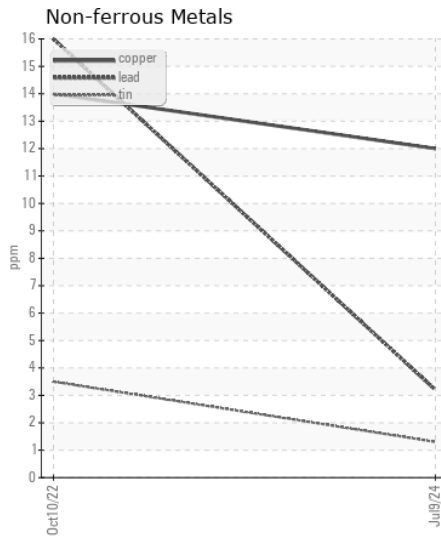
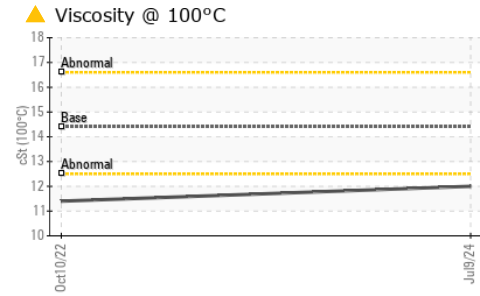
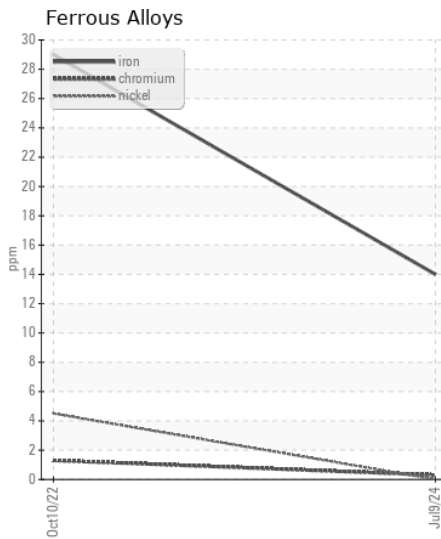
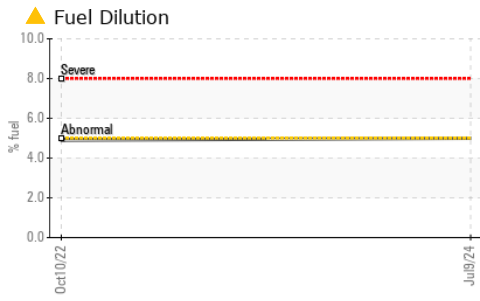
CONTAMINATION

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0211442	JR0124650	---
Sample Date		Client Info		09 Jul 2024	10 Oct 2022	---
Machine Age	hrs	Client Info		5041	1566	---
Oil Age	hrs	Client Info		500	566	---
Filter Age	hrs	Client Info		500	566	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185m	>100	14	29	---
Chromium	ppm	ASTM D5185m	>20	<1	1	---
Nickel	ppm	ASTM D5185m	>4	0	4	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	3	4	---
Lead	ppm	ASTM D5185m	>40	3	16	---
Copper	ppm	ASTM D5185m	>330	12	14	---
Tin	ppm	ASTM D5185m	>15	1	4	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	9	3	---
Potassium	ppm	ASTM D5185m	>20	3	12	---
Fuel	%	ASTM D3524	>5	▲ 5.0	▲ 4.9	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.8	---
Nitration	Abs/cm	*ASTM D7624	>20	10.6	12.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	25.2	---
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	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m	>406	1	4	---
Boron	ppm	ASTM D5185m		33	14	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		72	59	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		1059	916	---
Calcium	ppm	ASTM D5185m		1052	1091	---
Phosphorus	ppm	ASTM D5185m		960	876	---
Zinc	ppm	ASTM D5185m		1269	1197	---
Sulfur	ppm	ASTM D5185m		3114	3207	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	19.8	---
Base Number (BN)	mg KOH/g	ASTM D2896		7.6	7.7	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 12.0	▲ 11.4	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0211442 **Received** : 15 Jul 2024
Lab Number : 06235584 **Tested** : 16 Jul 2024
Unique Number : 11124418 **Diagnosed** : 16 Jul 2024 - Wes Davis
Test Package : CONST (Additional Tests: PercentFuel, TBN)
 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)

LUCK STONE - MILFORD
 19380 RICHMOND TURNPIKE
 MILFORD, VA
 US 22514
 Contact: BRYAN MORRIS
 bmorris@luckstone.com
 T: (804)400-3630
 F: