



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
1FFDDP70CKF840647
 Component
Diesel Engine
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0215667	JR0188395	---
Sample Date		Client Info		20 May 2024	18 Sep 2023	---
Machine Age	hrs	Client Info		4058	2947	---
Oil Age	hrs	Client Info		1111	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Not Changed	---
Sample Status				ATTENTION	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	4	12	---
Chromium	ppm	ASTM D5185m	>20	0	<1	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	2	6	---
Lead	ppm	ASTM D5185m	>40	0	3	---
Copper	ppm	ASTM D5185m	>330	2	165	---
Tin	ppm	ASTM D5185m	>15	0	2	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

Sodium and/or potassium levels are high. Test for glycol is negative.

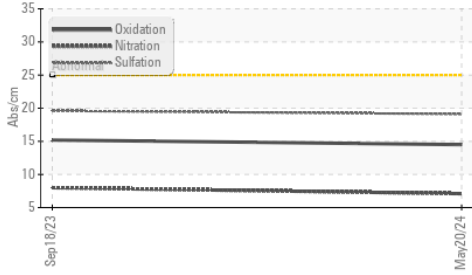
Silicon	ppm	ASTM D5185m	>25	6	8	---
Potassium	ppm	ASTM D5185m	>20	9	0	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol	%	*ASTM D2982		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	7.1	8.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	19.6	---
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	---

FLUID CONDITION

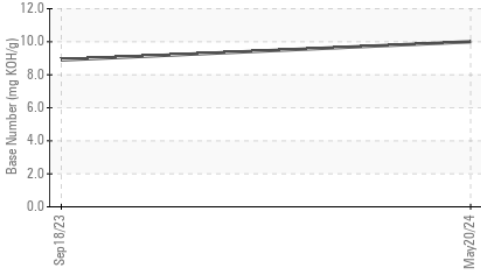
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		101	2	---
Boron	ppm	ASTM D5185m		25	12	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		84	63	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		1002	977	---
Calcium	ppm	ASTM D5185m		1174	1332	---
Phosphorus	ppm	ASTM D5185m		1048	1076	---
Zinc	ppm	ASTM D5185m		1286	1326	---
Sulfur	ppm	ASTM D5185m		3492	4047	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	15.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		10.0	8.9	---
Visc @ 100°C	cSt	ASTM D445		13.1	14.07	---

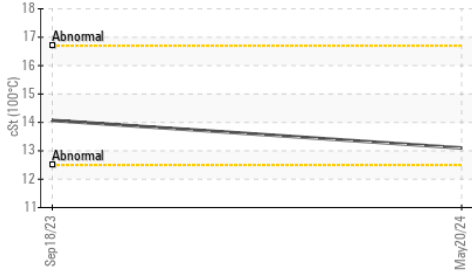
FT-IR (Direct Trend)



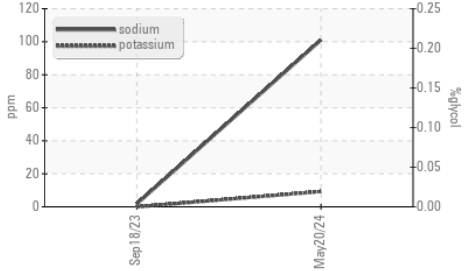
Base Number



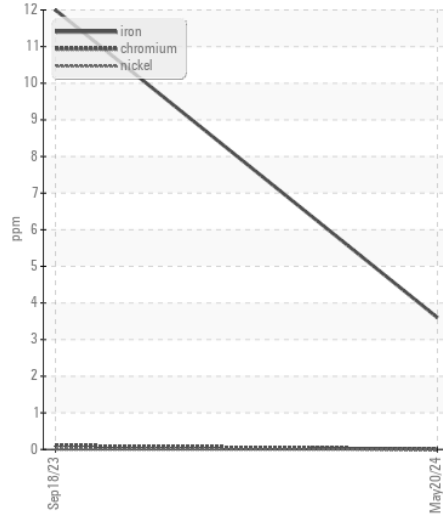
Viscosity @ 100°C



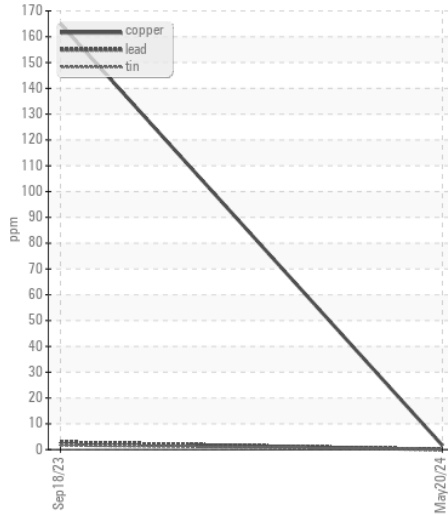
Glycol Contamination



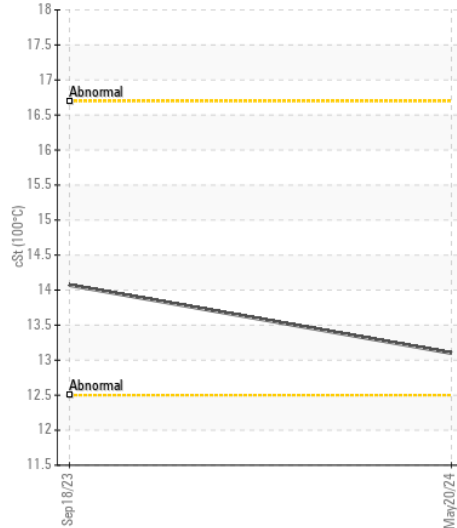
Ferrous Alloys



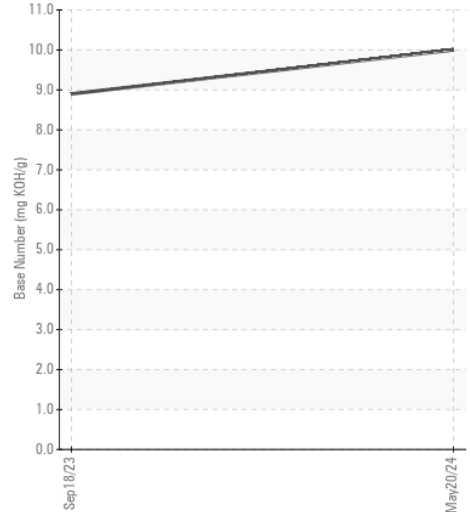
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0215667 **Received** : 22 May 2024
Lab Number : 06187446 **Tested** : 28 May 2024
Unique Number : 11044198 **Diagnosed** : 28 May 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: Glycol, TBN)

JRE - CHARLOTTE
 9550 STATESVILLE ROAD
 CHARLOTTE, NC
 US 28269

Contact: CHARLOTTE SHOP
 myoung@jamesriverequipment.com

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)

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