



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
IRIG [6341011]
 Machine Id
IRIG-RF-DW-2302 IRIG-RF-DW-2302 DRAW WORKS
 Component
Gearbox
 Fluid
GEAR OIL LS 80W90 (40 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL LS 80W90. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		HLC0002794	---	---
Sample Date		Client Info		04 Dec 2023	---	---
Machine Age	mths	Client Info		0	---	---
Oil Age	mths	Client Info		0	---	---
Filter Age	mths	Client Info		2	---	---
Oil Changed		Client Info		Not Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	2	---	---
Chromium	ppm	ASTM D5185m	>15	<1	---	---
Nickel	ppm	ASTM D5185m	>15	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	2	---	---
Lead	ppm	ASTM D5185m	>100	0	---	---
Copper	ppm	ASTM D5185m	>200	<1	---	---
Tin	ppm	ASTM D5185m	>25	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

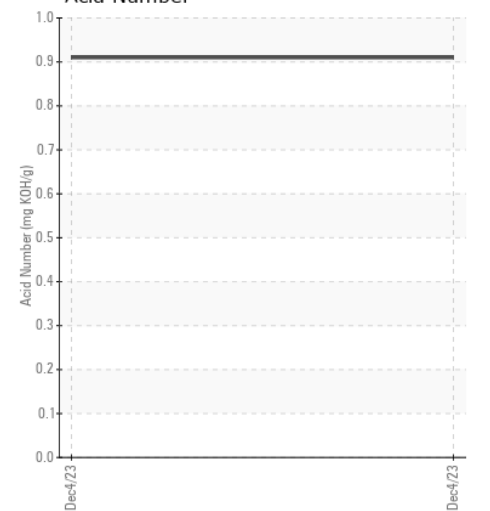
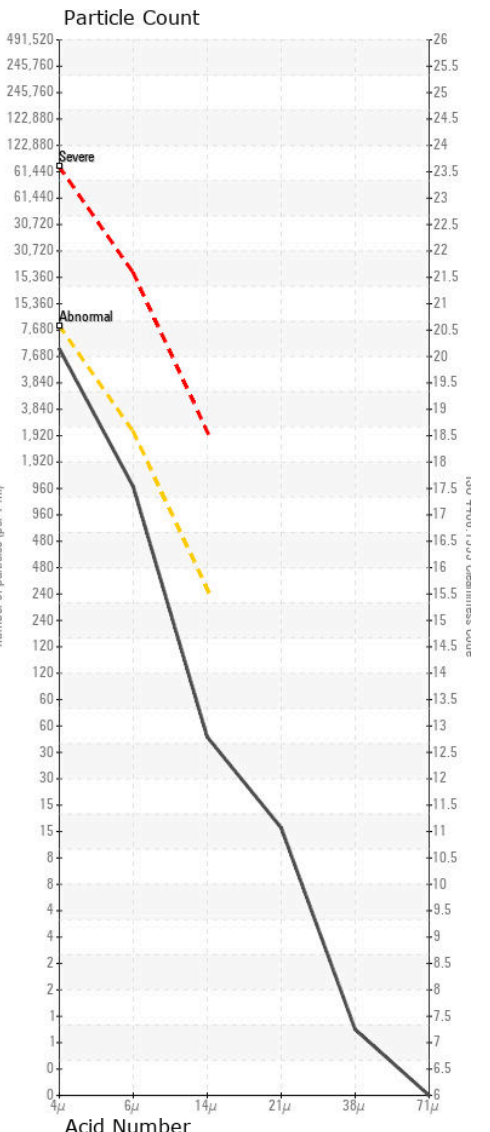
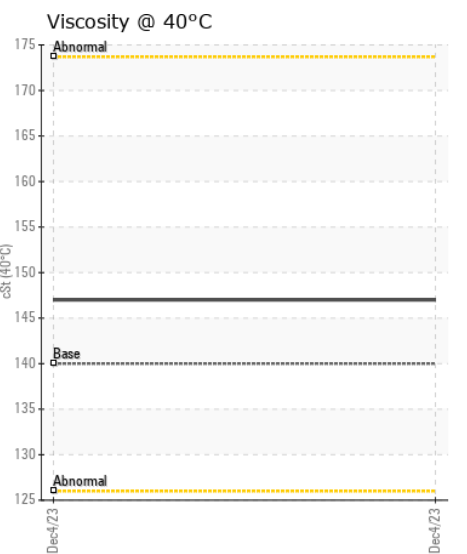
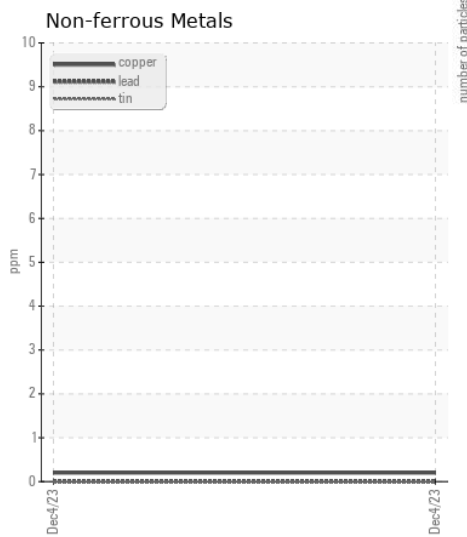
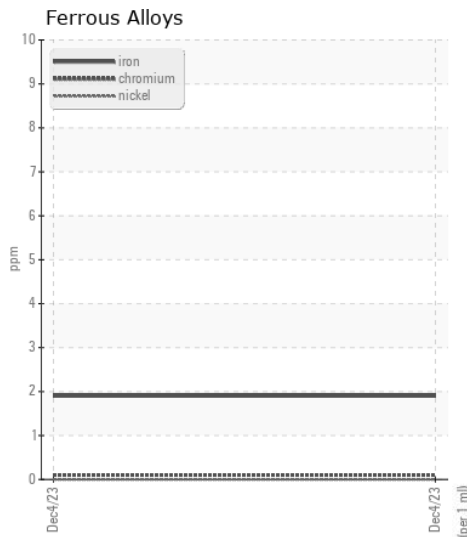
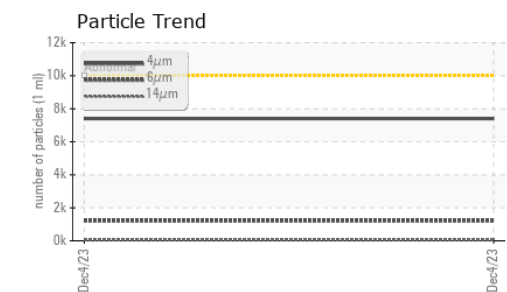
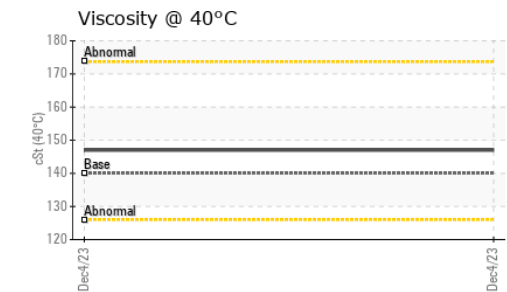
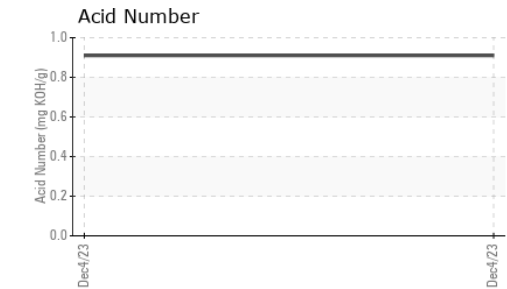
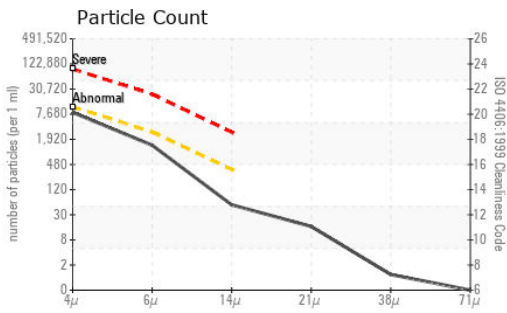
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	2	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Water		WC Method	>0.2	NEG	---	---
Particles >4µm		ASTM D7647	>10000	7401	---	---
Particles >6µm		ASTM D7647	>2500	1215	---	---
Particles >14µm		ASTM D7647	>320	46	---	---
Particles >21µm		ASTM D7647	>80	14	---	---
Particles >38µm		ASTM D7647	>20	1	---	---
Particles >71µm		ASTM D7647	>4	0	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	20/17/13	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	LIGHT	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	---	---
Boron	ppm	ASTM D5185m	150	133	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		0	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m	10	<1	---	---
Calcium	ppm	ASTM D5185m	70	3	---	---
Phosphorus	ppm	ASTM D5185m	2000	520	---	---
Zinc	ppm	ASTM D5185m	50	0	---	---
Sulfur	ppm	ASTM D5185m	20000	10909	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.91	---	---
Visc @ 40°C	cSt	ASTM D445	140	147	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HLC0002794 **Received** : 22 Dec 2023
Lab Number : 06044056 **Diagnosed** : 27 Dec 2023
Unique Number : 10804664 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: PrtCount)

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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)