OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION

Area
DICK LAVY
Machine Id
DICK LAVY 4956
Component
Rear Differential
Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation
The oil is near the end of it`s useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition
The AN level is at the top-end of the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0843213**	---	---
Sample Date		Client Info		**28 Jul 2023**	---	---
Machine Age	mls	Client Info		**456**	---	---
Oil Age	mls	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**ABNORMAL**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	**37**	---	---
Chromium	ppm	ASTM D5185m	>10	**<1**	---	---
Nickel	ppm	ASTM D5185m	>10	**0**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m		**0**	---	---
Aluminum	ppm	ASTM D5185m	>25	**3**	---	---
Lead	ppm	ASTM D5185m	>25	**0**	---	---
Copper	ppm	ASTM D5185m	>100	**0**	---	---
Tin	ppm	ASTM D5185m	>10	**0**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**194**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**0**	---	---
Manganese	ppm	ASTM D5185m		**2**	---	---
Magnesium	ppm	ASTM D5185m		**<1**	---	---
Calcium	ppm	ASTM D5185m		**14**	---	---
Phosphorus	ppm	ASTM D5185m		**1104**	---	---
Zinc	ppm	ASTM D5185m		**0**	---	---
Sulfur	ppm	ASTM D5185m		**29741**	---	---

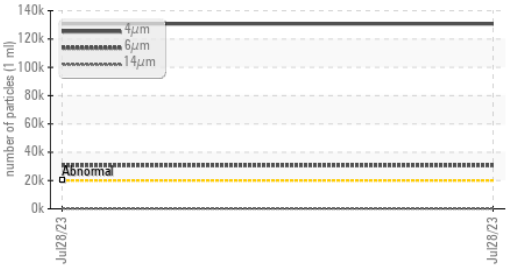
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	**17**	---	---
Sodium	ppm	ASTM D5185m		**4**	---	---
Potassium	ppm	ASTM D5185m	>20	**2**	---	---
Water	%	ASTM D6304	>.2	**0.066**	---	---
ppm Water	ppm	ASTM D6304	>2000	**666.8**	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **130728**	---	---
Particles >6µm		ASTM D7647	>5000	▲ **30661**	---	---
Particles >14µm		ASTM D7647	>640	**253**	---	---
Particles >21µm		ASTM D7647	>160	**30**	---	---
Particles >38µm		ASTM D7647	>40	**0**	---	---
Particles >71µm		ASTM D7647	>10	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/22/15**	---	---

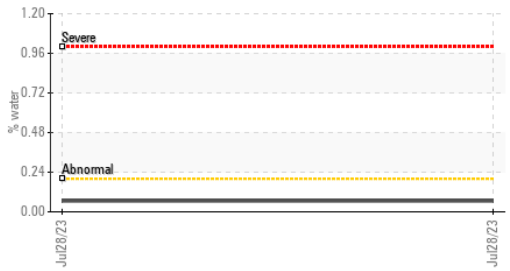
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ **3.47**	---	---

OIL ANALYSIS REPORT

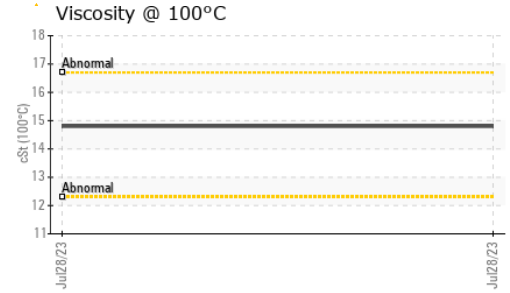
Particle Trend



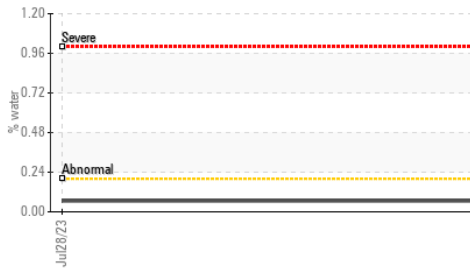
Water



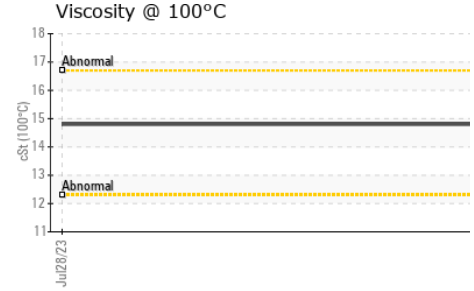
Viscosity @ 100°C



Water



Viscosity @ 100°C



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	**NORML**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>.2	**NEG**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**98.7**	---	---
Visc @ 100°C	cSt	ASTM D445		**14.8**	---	---
Viscosity Index (VI)	Scale	ASTM D2270		**156**	---	---

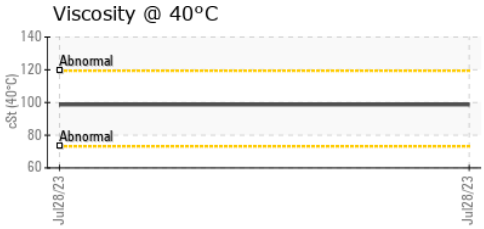
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

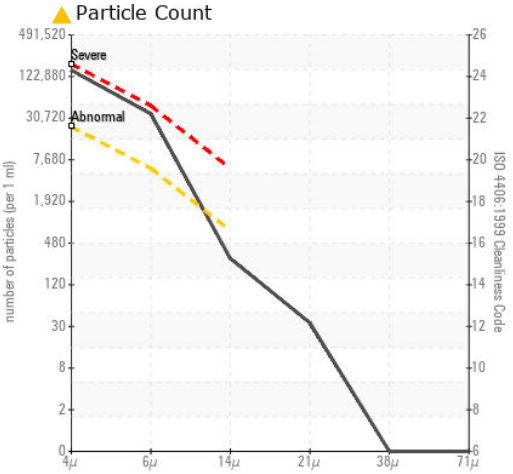
Ferrous Alloys

Non-ferrous Metals

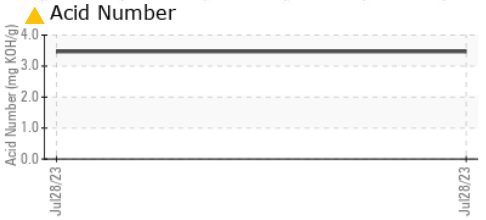
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0843213 **Received** : 29 Aug 2023
Lab Number : 05937872 **Diagnosed** : 14 Sep 2023
Unique Number : 10628484 **Diagnostician** : Doug Bogart
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

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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