FLEET WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	MARGINAL

Area
BOWERS [Z20005]
Machine Id
HINO GDR330-REGO
Component
Diesel Engine
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (16 LTR)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

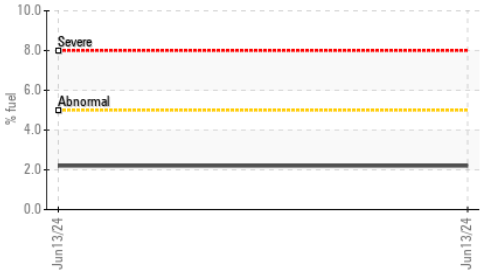
Light fuel dilution occurring.

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

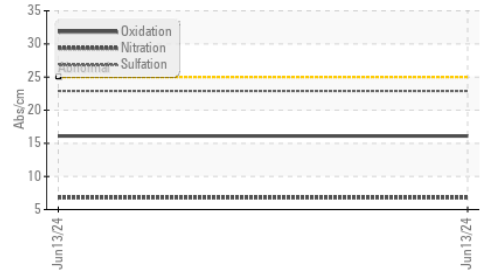
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC06224137	---	---
Sample Date		Client Info		13 Jun 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				MARGINAL	---	---
Iron	ppm	ASTM D5185m	>100	22	---	---
Chromium	ppm	ASTM D5185m	>20	1	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	5	---	---
Lead	ppm	ASTM D5185m	>40	2	---	---
Copper	ppm	ASTM D5185m	>330	3	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	13	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---
Fuel	%	ASTM D3524	>5	▲ 2.2	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.9	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.8	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	---	---
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	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m	151	343	---	---
Barium	ppm	ASTM D5185m	0.4	<1	---	---
Molybdenum	ppm	ASTM D5185m	250	84	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	0	371	---	---
Calcium	ppm	ASTM D5185m	2046	1340	---	---
Phosphorus	ppm	ASTM D5185m	1043	1047	---	---
Zinc	ppm	ASTM D5185m	943	1214	---	---
Sulfur	ppm	ASTM D5185m	5012	3099	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	6.8	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 12.3	---	---

Fuel Dilution

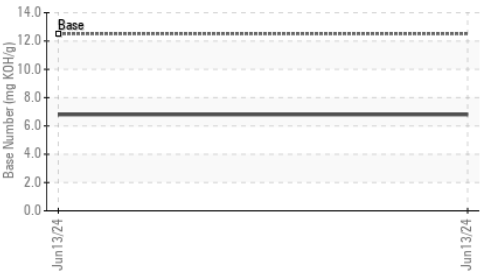


Viscosity @ 100°C

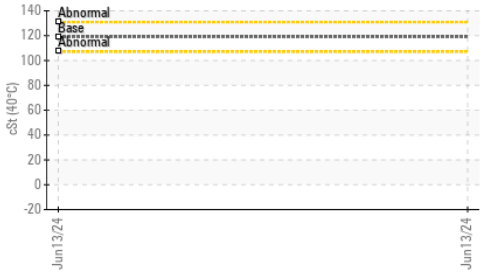
FT-IR (Direct Trend)



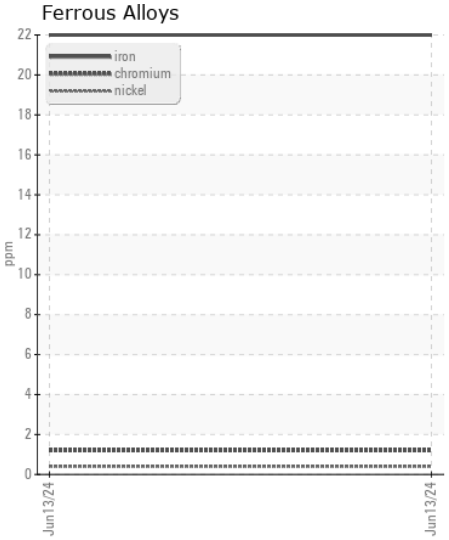
Base Number



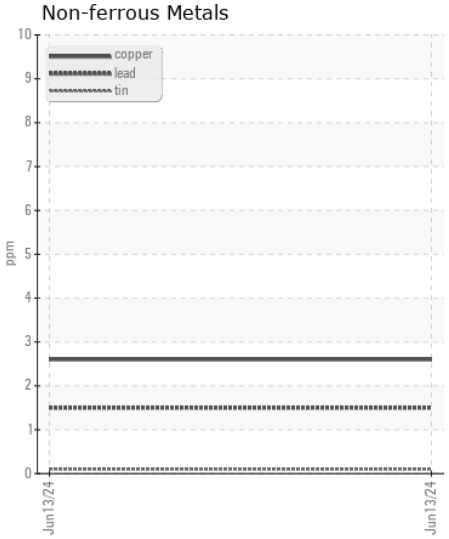
Viscosity @ 40°C



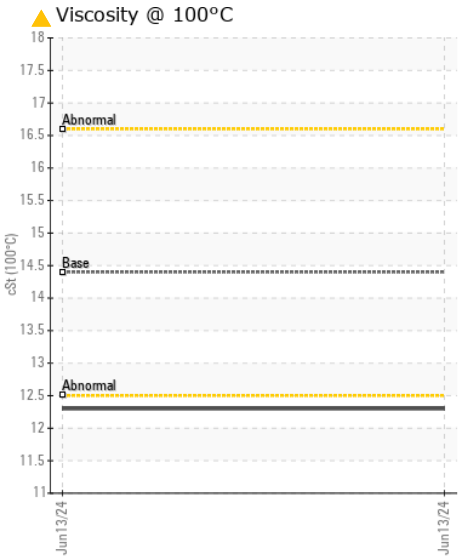
Ferrous Alloys



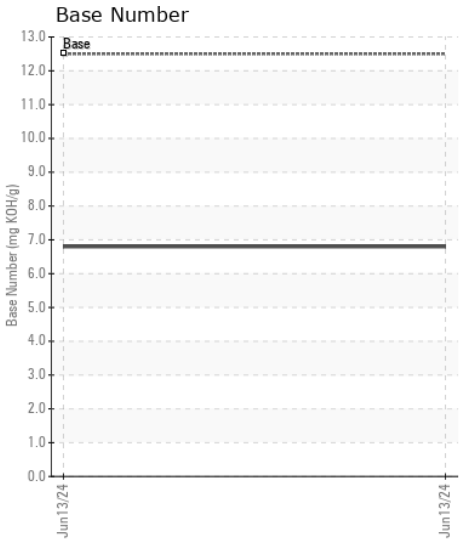
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06224137 **Received** : 28 Jun 2024
Lab Number : 06224137 **Tested** : 03 Jul 2024
Unique Number : 11102334 **Diagnosed** : 03 Jul 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, KV40, PercentFuel)

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)

HTSL DIESEL MECHANICAL
27 PROGRESS DR
OTOROHANGA, ZZ
NZ
Contact: ADELE FOWKES
adele.fowkes@htsl.co.nz
T:
F: