



OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
BOWERS [Z20002]
 Machine Id
HINO 21
 Component
Diesel Engine
 Fluid
DELO 400 SLK 15W40 (--- LTR)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

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

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		WC06205967	---	---
Sample Date	Client Info		22 Apr 2024	---	---
Machine Age	hrs	Client Info	20328	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			MARGINAL	---	---

CONTAMINATION	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	18	---	---
Chromium	ppm	ASTM D5185m >20	<1	---	---
Nickel	ppm	ASTM D5185m >4	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m >3	0	---	---
Aluminum	ppm	ASTM D5185m >20	3	---	---
Lead	ppm	ASTM D5185m >40	3	---	---
Copper	ppm	ASTM D5185m >330	2	---	---
Tin	ppm	ASTM D5185m >15	0	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	372	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	90	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m	416	---	---
Calcium	ppm	ASTM D5185m	1552	---	---
Phosphorus	ppm	ASTM D5185m	1087	---	---
Zinc	ppm	ASTM D5185m	1357	---	---
Sulfur	ppm	ASTM D5185m	3946	---	---

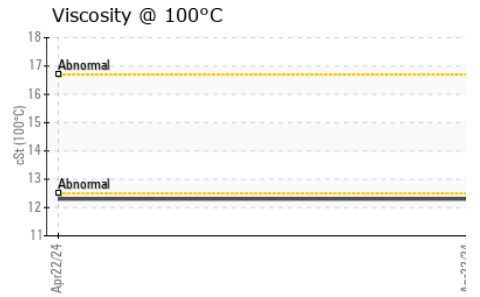
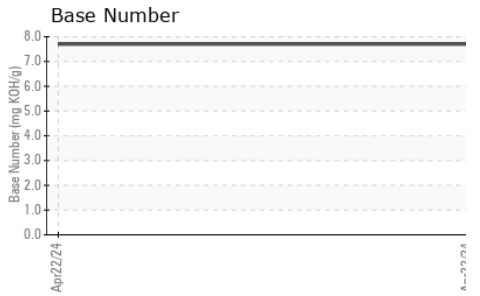
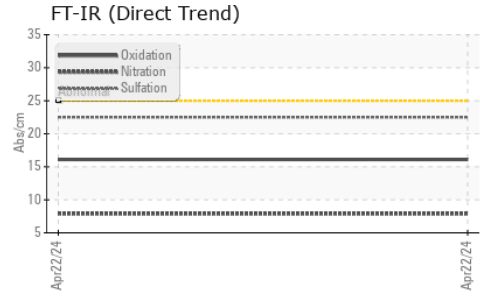
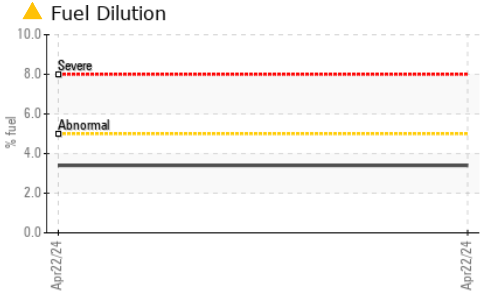
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	---	---
Sodium	ppm	ASTM D5185m	1	---	---
Potassium	ppm	ASTM D5185m >20	1	---	---
Fuel	%	ASTM D3524 >5	▲ 3.4	---	---

INFRA-RED	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.2	---	---
Nitration	Abs/cm	*ASTM D7624 >20	7.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.5	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	7.7	---	---



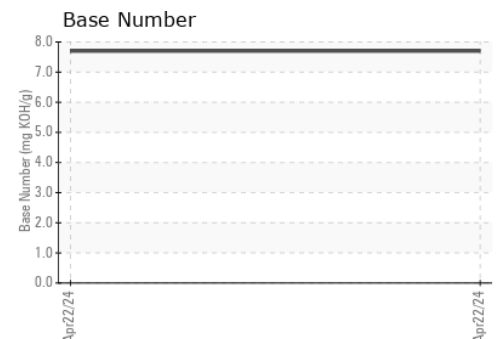
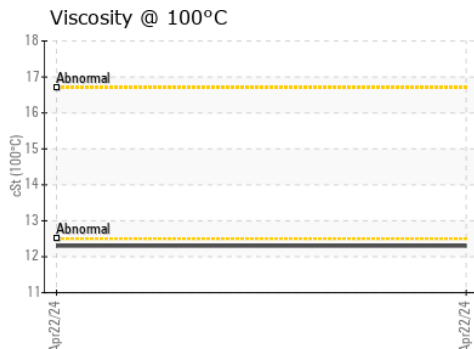
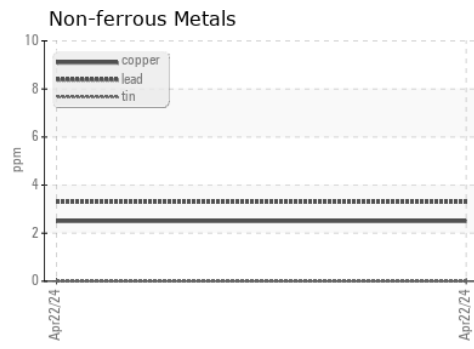
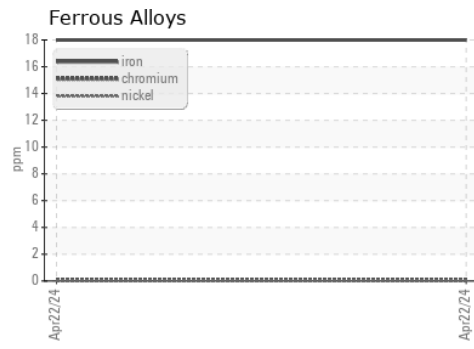
OIL ANALYSIS REPORT



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	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.3	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06205967 **Received** : 10 Jun 2024
Lab Number : 06205967 **Tested** : 13 Jun 2024
Unique Number : 11073428 **Diagnosed** : 13 Jun 2024 - Wes Davis
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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

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)