



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
CATHERINE PREE [6738]
 Machine Id
YANMAR 4BY2-150 1015106
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA060825	---	---
Sample Date		Client Info		20 Jun 2024	---	---
Machine Age	hrs	Client Info		229	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	23	---	---
Chromium	ppm	ASTM D5185m	>6	<1	---	---
Nickel	ppm	ASTM D5185m	>2	<1	---	---
Titanium	ppm	ASTM D5185m	>2	2	---	---
Silver	ppm	ASTM D5185m	>2	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	3	---	---
Lead	ppm	ASTM D5185m	>95	2	---	---
Copper	ppm	ASTM D5185m	>85	5	---	---
Tin	ppm	ASTM D5185m	>9	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

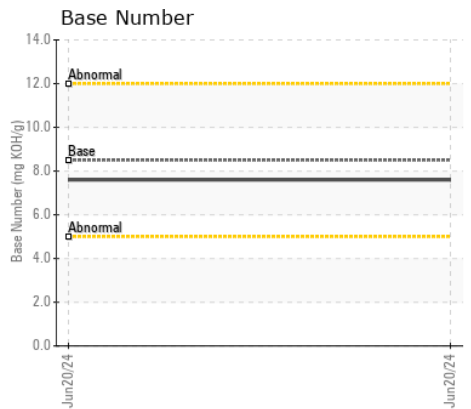
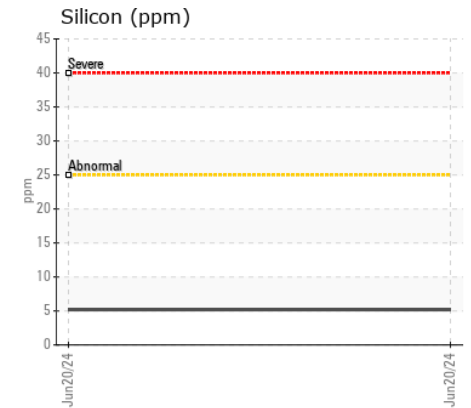
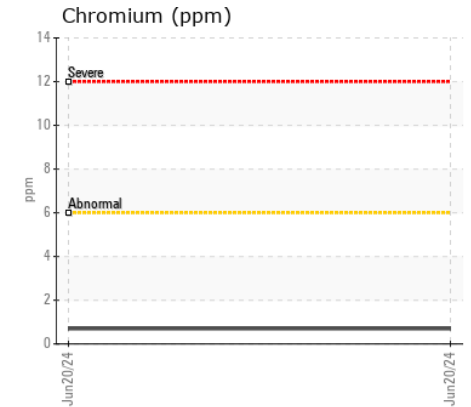
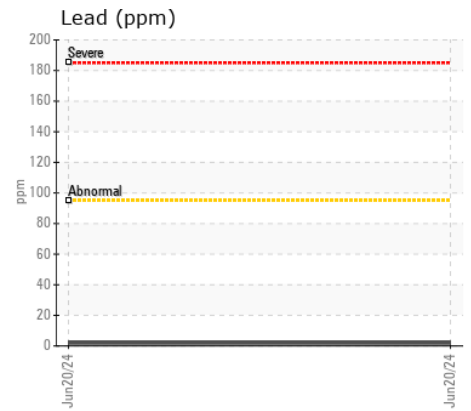
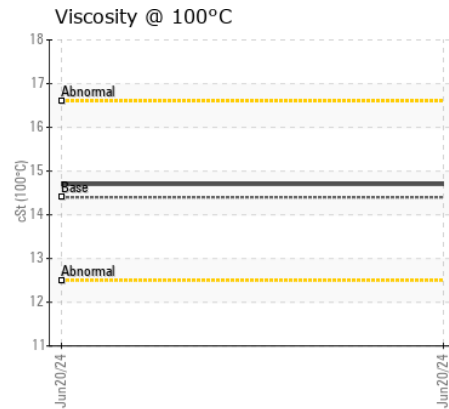
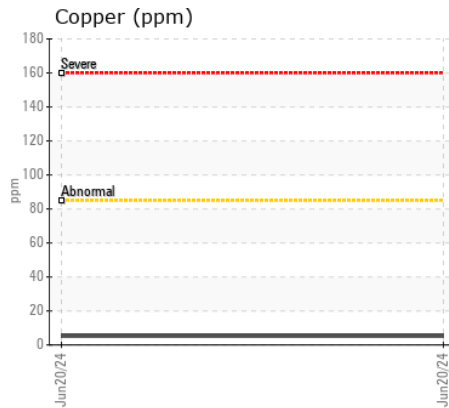
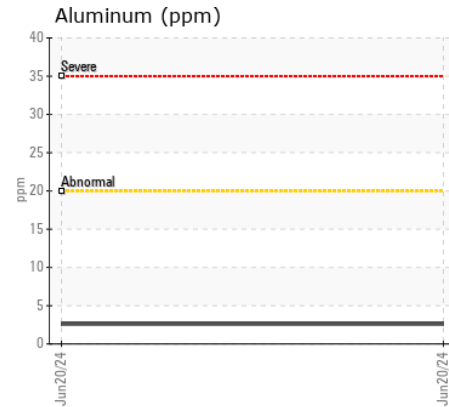
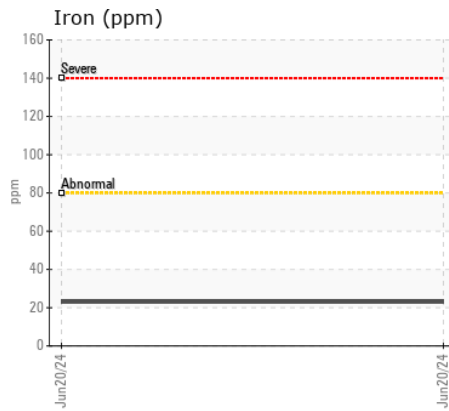
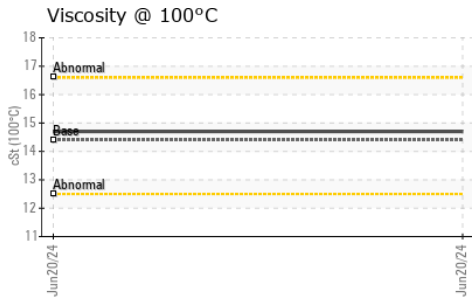
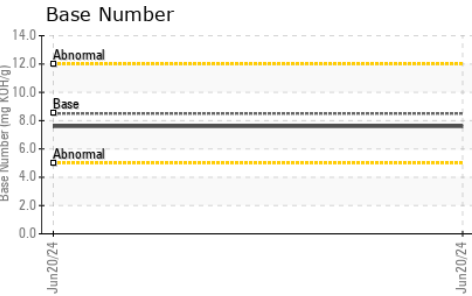
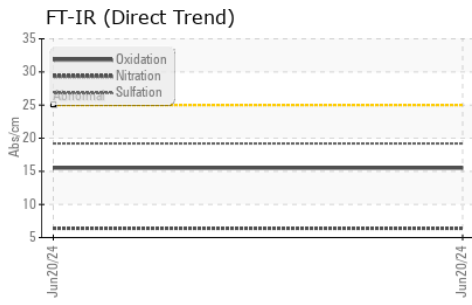
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	---	---
Potassium	ppm	ASTM D5185m	>20	5	---	---
Fuel		WC Method	>4.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844		0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.4	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	---	---
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	>0.1	NEG	---	---

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.

Sodium	ppm	ASTM D5185m	>216	2	---	---
Boron	ppm	ASTM D5185m	250	189	---	---
Barium	ppm	ASTM D5185m	10	<1	---	---
Molybdenum	ppm	ASTM D5185m	100	4	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	450	177	---	---
Calcium	ppm	ASTM D5185m	3000	1865	---	---
Phosphorus	ppm	ASTM D5185m	1150	856	---	---
Zinc	ppm	ASTM D5185m	1350	1080	---	---
Sulfur	ppm	ASTM D5185m	4250	3322	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.6	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	14.7	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA060825 **Received** : 25 Jun 2024
Lab Number : 06219557 **Tested** : 26 Jun 2024
Unique Number : 11097754 **Diagnosed** : 26 Jun 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: TBN)

Northwest Diesel Power
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 BELLINGHAM, WA
 US 98225
 Contact: BRANDON ROBERTSON
 parts@nwdieselpower.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)

T:
F: