



OIL ANALYSIS REPORT

Area
MINING
 Machine Id
ME-022 CATERPILLAR 980 WFX00241
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER 15W40 (--- GAL)

Sample Rating Trend



FUEL



DIAGNOSIS

Recommendation

The oil 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 BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0929517	---	---
Sample Date	Client Info		04 Jun 2024	---	---
Machine Age	hrs	Client Info	6311	---	---
Oil Age	hrs	Client Info	500	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

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	36	---	---
Chromium	ppm	ASTM D5185m >20	<1	---	---
Nickel	ppm	ASTM D5185m >2	0	---	---
Titanium	ppm	ASTM D5185m >2	0	---	---
Silver	ppm	ASTM D5185m >2	0	---	---
Aluminum	ppm	ASTM D5185m >25	2	---	---
Lead	ppm	ASTM D5185m >40	<1	---	---
Copper	ppm	ASTM D5185m >330	4	---	---
Tin	ppm	ASTM D5185m >15	<1	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	12	---	---
Barium	ppm	ASTM D5185m 0	0	---	---
Molybdenum	ppm	ASTM D5185m 0	54	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m 0	501	---	---
Calcium	ppm	ASTM D5185m	1663	---	---
Phosphorus	ppm	ASTM D5185m	879	---	---
Zinc	ppm	ASTM D5185m	1074	---	---
Sulfur	ppm	ASTM D5185m	3037	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	8	---	---
Sodium	ppm	ASTM D5185m	5	---	---
Potassium	ppm	ASTM D5185m >20	<1	---	---
Fuel	%	ASTM D3524 >5	▲ 3.2	---	---

INFRA-RED

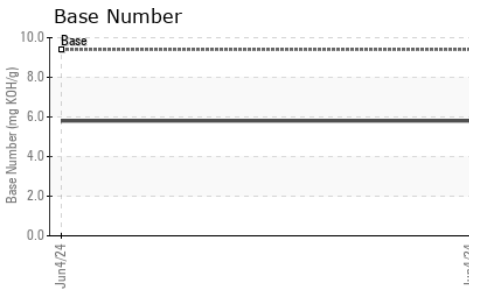
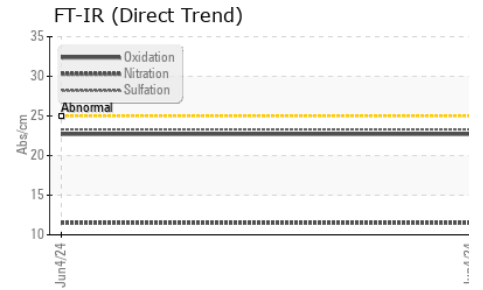
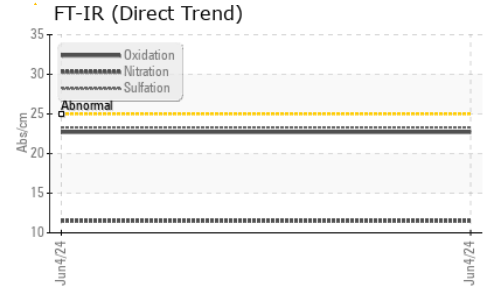
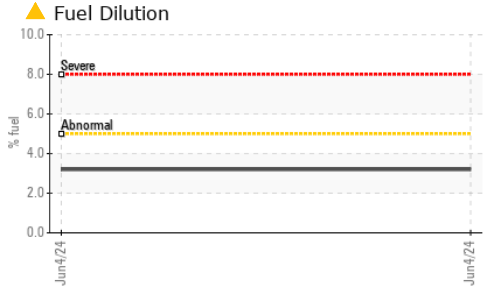
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.8	---	---
Nitration	Abs/cm	*ASTM D7624 >20	11.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.3	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	22.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	5.8	---	---



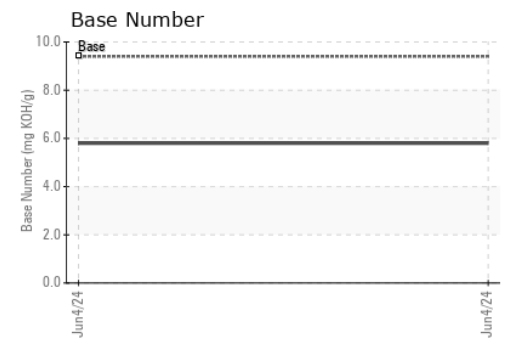
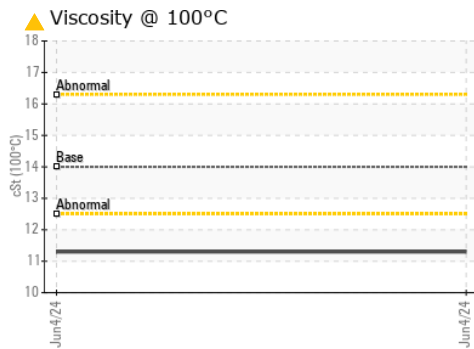
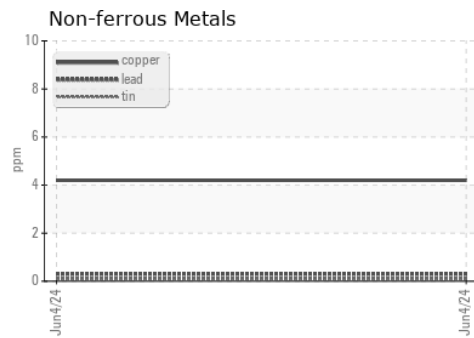
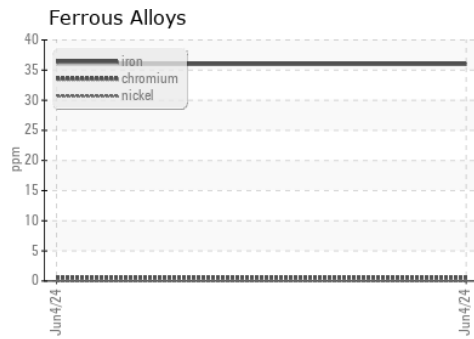
OIL ANALYSIS REPORT



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 14	▲ 11.3	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0929517 **Received** : 07 Jun 2024
Lab Number : **06202440** **Tested** : 11 Jun 2024
Unique Number : 11069901 **Diagnosed** : 11 Jun 2024 - Wes Davis
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

COVIA - LUGOFF - 023
 1704 GILLIES CREEK ROAD
 LUGOFF, SC
 US 29078
 Contact: Mick Mickelson
 mick.mickelson@coviacorp.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)