



OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
FD WRITTEN ON BOTTLE
 Component
Diesel Engine
 Fluid
CAT DIESEL ENGINE OIL 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. 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

There is a moderate amount of fuel present in the oil.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0757429	---	---
Sample Date	Client Info	22 Sep 2023	---	---
Machine Age	hrs	Client Info	348	---
Oil Age	hrs	Client Info	80	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	4	---
Chromium	ppm	ASTM D5185m >20	<1	---
Nickel	ppm	ASTM D5185m >4	<1	---
Titanium	ppm	ASTM D5185m	0	---
Silver	ppm	ASTM D5185m >3	0	---
Aluminum	ppm	ASTM D5185m >20	8	---
Lead	ppm	ASTM D5185m >40	0	---
Copper	ppm	ASTM D5185m >330	<1	---
Tin	ppm	ASTM D5185m >15	<1	---
Vanadium	ppm	ASTM D5185m	0	---
Cadmium	ppm	ASTM D5185m	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	59	---
Barium	ppm	ASTM D5185m	0	---
Molybdenum	ppm	ASTM D5185m	40	---
Manganese	ppm	ASTM D5185m	<1	---
Magnesium	ppm	ASTM D5185m	468	---
Calcium	ppm	ASTM D5185m	1568	---
Phosphorus	ppm	ASTM D5185m	904	---
Zinc	ppm	ASTM D5185m 1460	1117	---
Sulfur	ppm	ASTM D5185m	3378	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	7	---
Sodium	ppm	ASTM D5185m	3	---
Potassium	ppm	ASTM D5185m >20	1	---
Fuel	%	ASTM D3524 >5	▲ 4.6	---

INFRA-RED

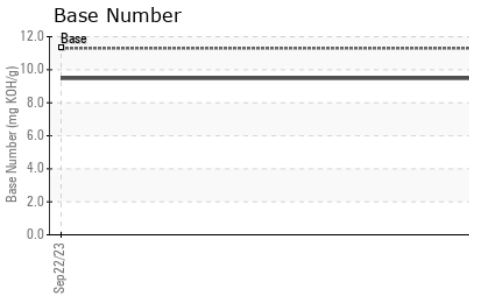
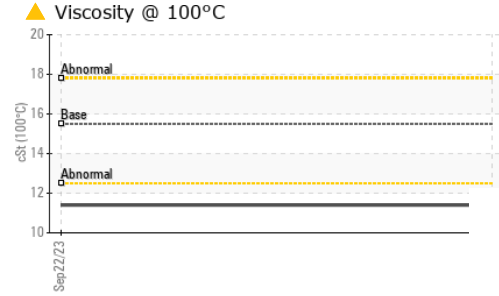
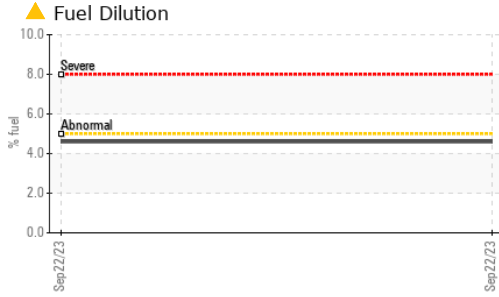
method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	---
Nitration	Abs/cm	*ASTM D7624 >20	5.6	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.3	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	19.2	---
Base Number (BN)	mg KOH/g	ASTM D2896 11.3	9.48	---



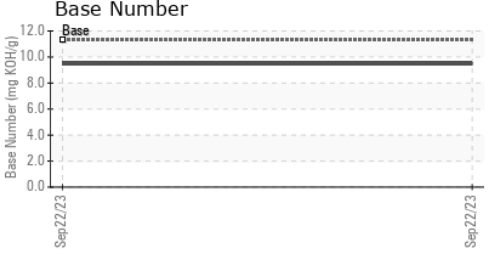
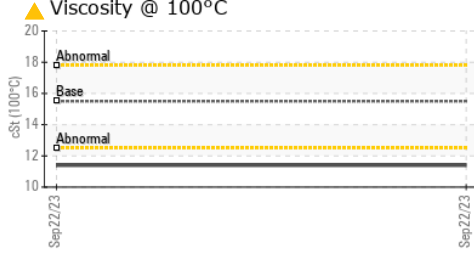
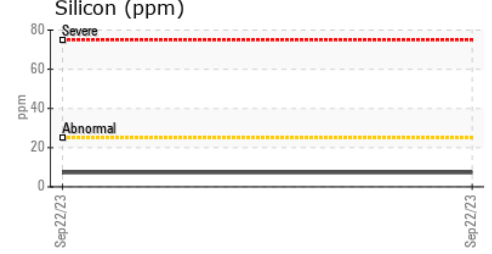
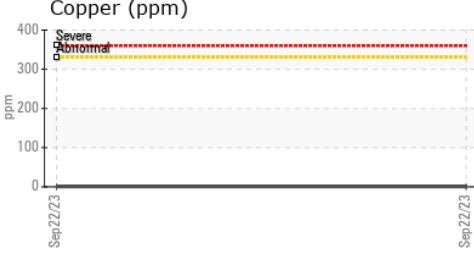
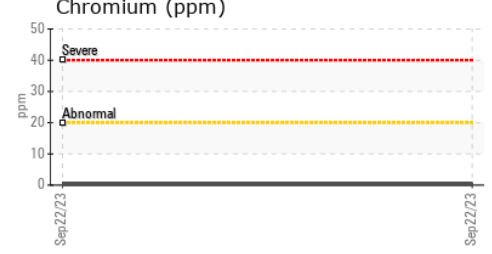
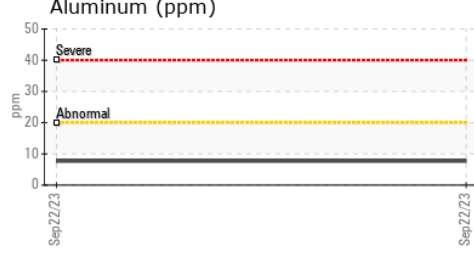
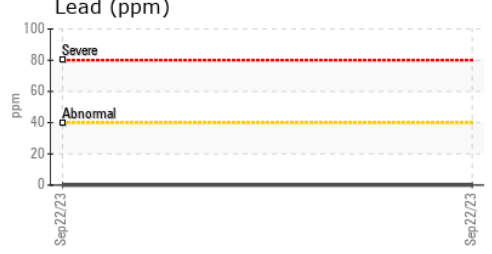
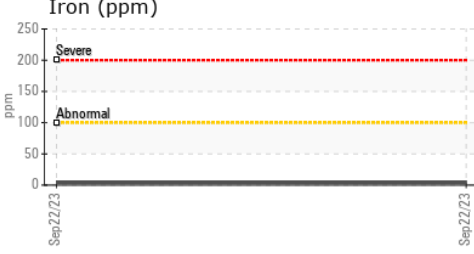
OIL ANALYSIS REPORT



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	▲ 11.4	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0757429 **Received** : 13 Oct 2023
Lab Number : 05979104 **Diagnosed** : 18 Oct 2023
Unique Number : 10696399 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

NEO GENERATOR AND ENGINE, LLC
 10225 PORTLAND AVE SW
 BEACH CITY, OH
 US 44608
 Contact: BILL HOOD
 BHood@neogenservice.com
 T: (330)284-8390
 F:

Certificate L2367
 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)