



PROBLEM SUMMARY

Sample Rating Trend



DIRT

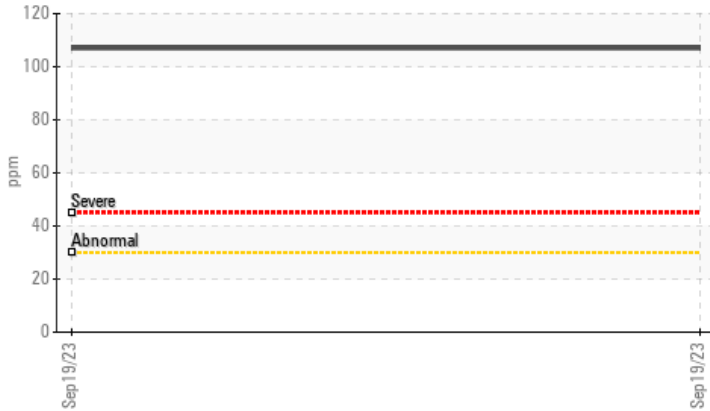


Area
Bernardsville
 Machine Id
MACK 6769

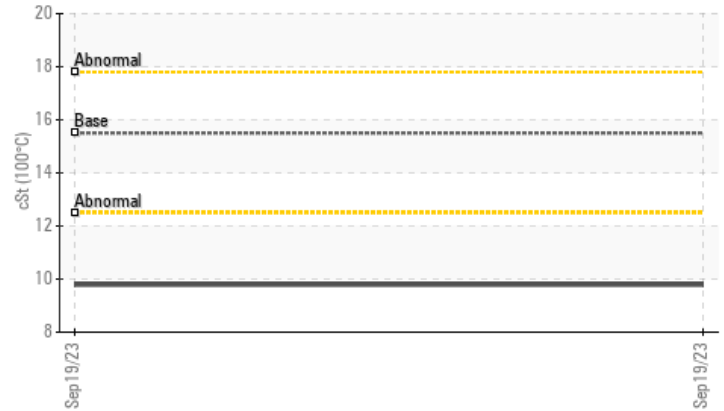
Component
Diesel Engine
 Fluid
GIBRALTAR 15W/40 SUPER S-3 LX (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Viscosity @ 100°C



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status	ABNORMAL			---	---	
Silicon	ppm	ASTM D5185m	>30	▲ 107	---	---
Visc @ 100°C	cSt	ASTM D445	15.5	▲ 9.79	---	---

Customer Id: INTBER
 Sample No.: WC0830893
 Lab Number: 05965042
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

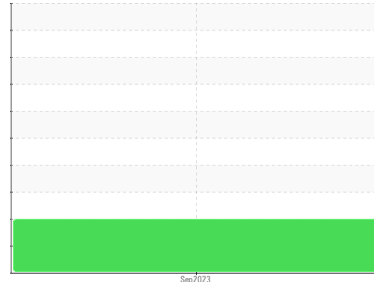
There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area
Bernardsville
 Machine Id
MACK 6769

Component
Diesel Engine
 Fluid
GIBRALTAR 15W/40 SUPER S-3 LX (--- GAL)

DIAGNOSIS

▲ Recommendation

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

Wear

Metal levels are typical for a new component breaking in.

▲ Contamination

Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material.

▲ Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0830893	---	---
Sample Date	Client Info		19 Sep 2023	---	---
Machine Age	hrs	Client Info	286	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Not Chngd	---	---
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 >110	40	---	---
Chromium	ppm	ASTM D5185m >4	<1	---	---
Nickel	ppm	ASTM D5185m >2	5	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m >2	1	---	---
Aluminum	ppm	ASTM D5185m >25	6	---	---
Lead	ppm	ASTM D5185m >45	<1	---	---
Copper	ppm	ASTM D5185m >85	90	---	---
Tin	ppm	ASTM D5185m >4	3	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
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 66	133	---	---
Manganese	ppm	ASTM D5185m	5	---	---
Magnesium	ppm	ASTM D5185m 1000	628	---	---
Calcium	ppm	ASTM D5185m 1050	1482	---	---
Phosphorus	ppm	ASTM D5185m 1150	682	---	---
Zinc	ppm	ASTM D5185m 1270	850	---	---
Sulfur	ppm	ASTM D5185m	2778	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	▲ 107	---	---
Sodium	ppm	ASTM D5185m	2	---	---
Potassium	ppm	ASTM D5185m >20	11	---	---
Fuel	%	ASTM D3524 >5	0.2	---	---

INFRA-RED

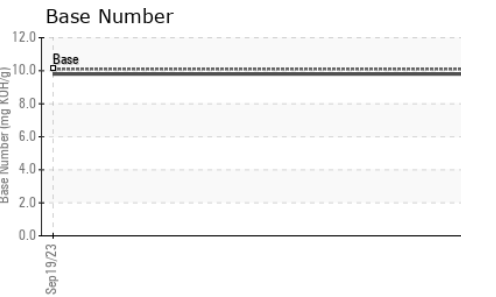
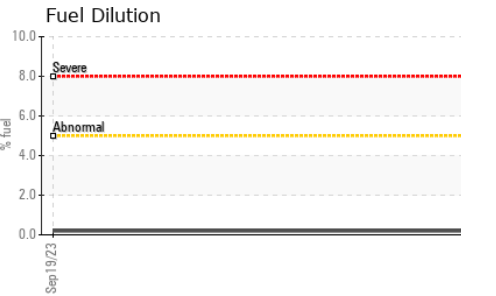
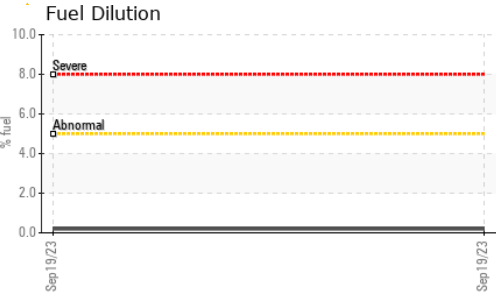
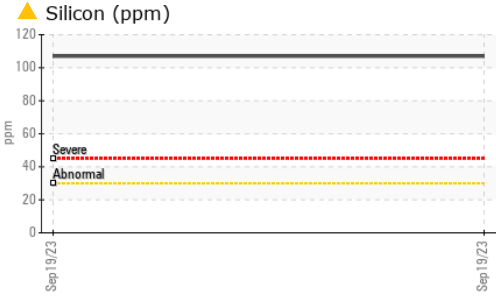
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624 >20	9.0	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.7	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	20.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.1	9.8	---	---



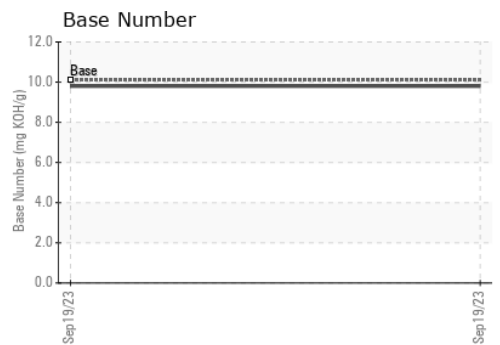
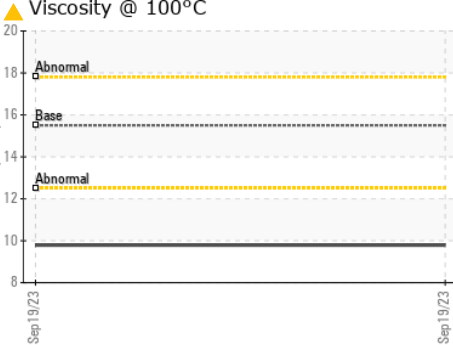
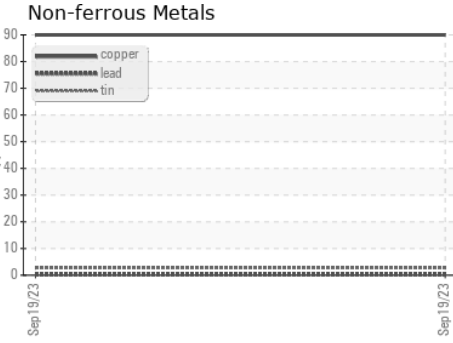
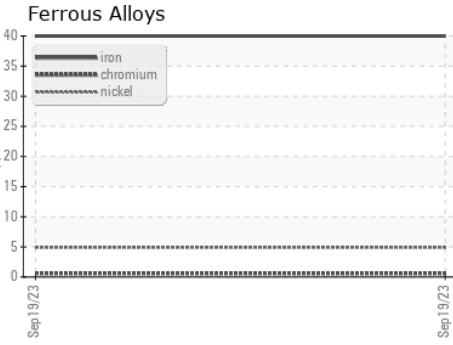
OIL ANALYSIS REPORT



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	15.5	▲ 9.79	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0830893 **Received** : 29 Sep 2023
Lab Number : 05965042 **Diagnosed** : 06 Oct 2023
Unique Number : 10671593 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

INTERSTATE WASTE-BERNARDSVILLE
 33 OLD QUARRY ROAD
 BERNARDSVILLE, NJ
 US 07924
 Contact: Pablo Chardon
 PChardon@interstatewaste.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: