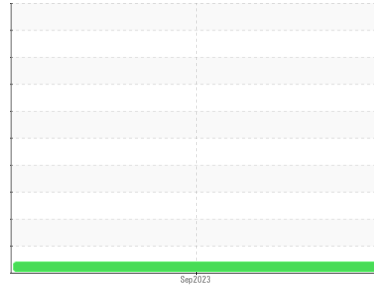




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
Cluster
 Machine Id
CRANE CARRIER 2677
 Component
Diesel Engine
 Fluid
GIBRALTAR 15W/40 SUPER S-3 LX (11 GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter 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

Fuel content negligible. There is no indication of any contamination in the oil.

▲ 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	WC0850731	---	---
Sample Date	Client Info	15 Sep 2023	---	---
Machine Age	hrs	Client Info	0	---
Oil Age	hrs	Client Info	0	---
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	33	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	8	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	17	---	---
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		26	---	---
Barium	ppm	ASTM D5185m		4	---	---
Molybdenum	ppm	ASTM D5185m	66	50	---	---
Manganese	ppm	ASTM D5185m		6	---	---
Magnesium	ppm	ASTM D5185m	1000	776	---	---
Calcium	ppm	ASTM D5185m	1050	1188	---	---
Phosphorus	ppm	ASTM D5185m	1150	663	---	---
Zinc	ppm	ASTM D5185m	1270	895	---	---
Sulfur	ppm	ASTM D5185m		2722	---	---

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	18	---	---
Sodium	ppm	ASTM D5185m		6	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Fuel	%	ASTM D3524	>5	1.1	---	---

INFRA-RED

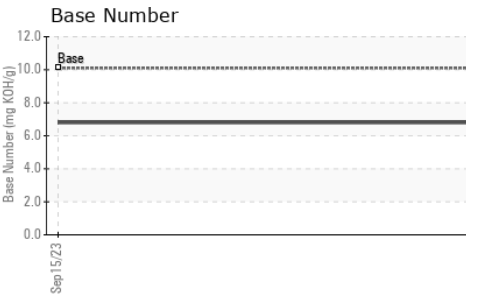
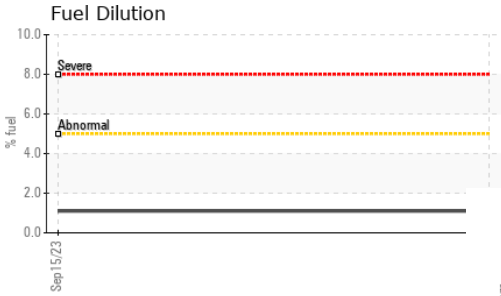
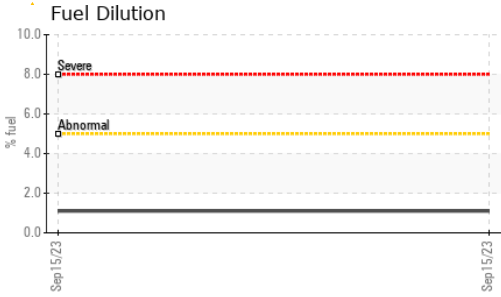
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	0.4	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	6.8	---	---



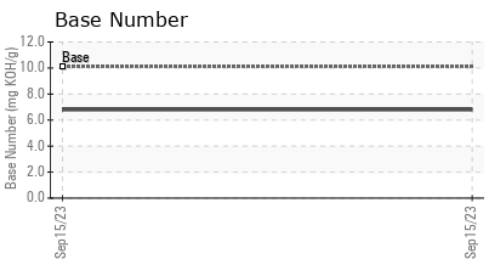
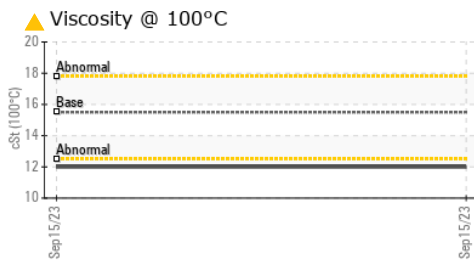
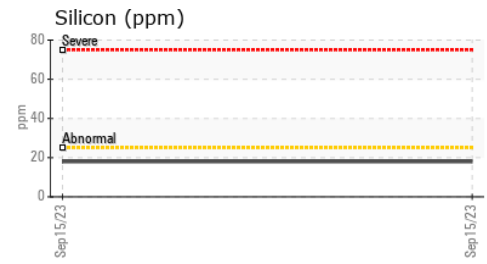
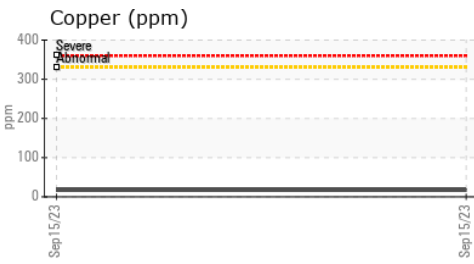
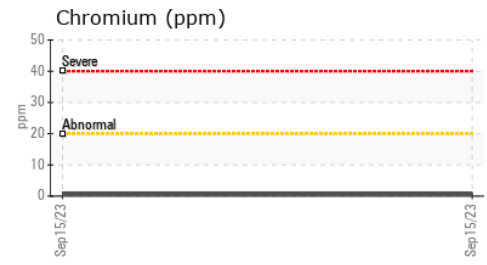
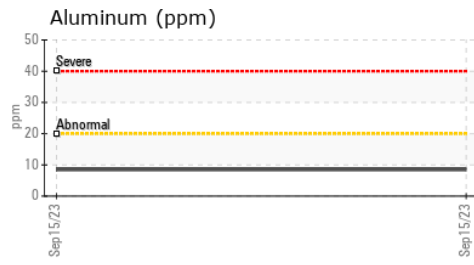
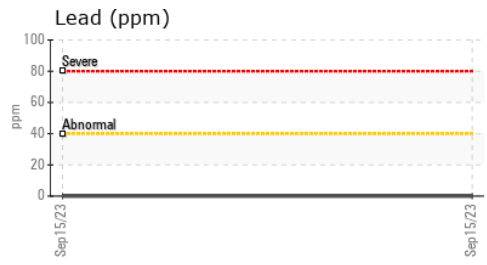
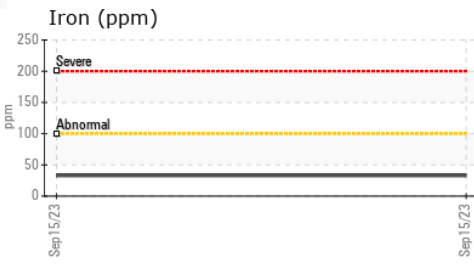
OIL ANALYSIS REPORT



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	▲ 12.0	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0850731 **Received** : 29 Sep 2023
Lab Number : 05964395 **Diagnosed** : 03 Oct 2023
Unique Number : 10670946 **Diagnostician** : Angela Borella
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

INTERSTATE WASTE-CLOSTER
 77 RAILROAD AVENUE
 CLOSTER, NJ
 US 07624
 Contact: Tony Gagliano
 tgagliano@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: