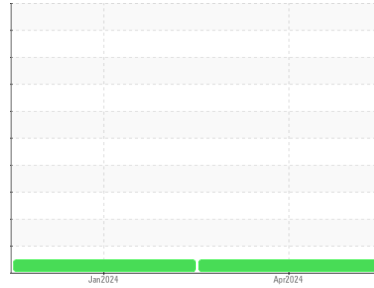




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Bridgewater
 Machine ID
SHUTTLEWAGON 5258
 Component
Diesel Engine
 Fluid
GIBRALTAR 15W/40 SUPER S-3 LX (--- QTS)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0864832	WC0875297	---
Sample Date	Client Info			05 Apr 2024	13 Jan 2024	---
Machine Age	hrs	Client Info		24850	500	---
Oil Age	hrs	Client Info		500	0	---
Oil Changed	Client Info			N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	---
Water	WC Method	>0.2		NEG	NEG	---
Glycol	WC Method			NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	9	11	---
Chromium	ppm	ASTM D5185m	>20	0	<1	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	0	2	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	0	1	---
Tin	ppm	ASTM D5185m	>15	0	0	---
Vanadium	ppm	ASTM D5185m		0	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		4	6	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m	66	61	58	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m	1000	985	931	---
Calcium	ppm	ASTM D5185m	1050	1250	1124	---
Phosphorus	ppm	ASTM D5185m	1150	1139	1084	---
Zinc	ppm	ASTM D5185m	1270	1272	1259	---
Sulfur	ppm	ASTM D5185m		3941	3337	---

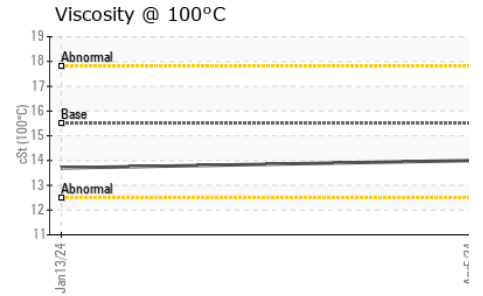
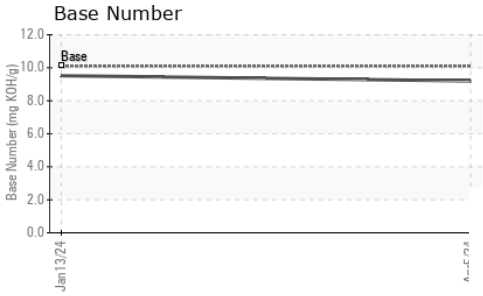
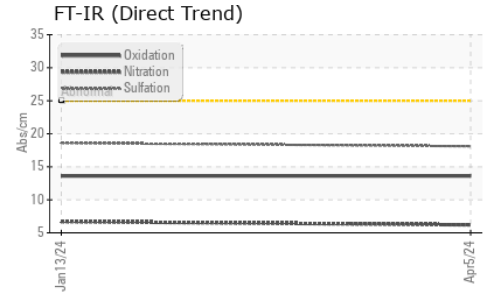
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	3	---
Sodium	ppm	ASTM D5185m		2	3	---
Potassium	ppm	ASTM D5185m	>20	<1	2	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	6.2	6.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.1	18.6	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	13.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	9.2	9.52	---



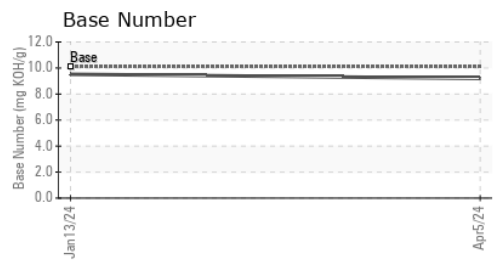
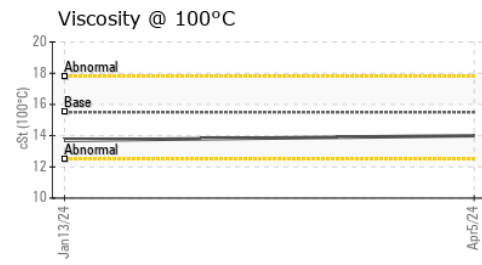
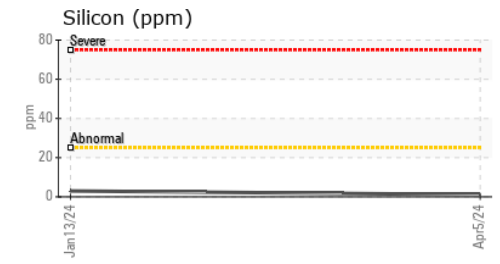
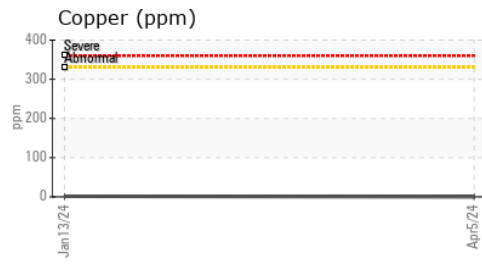
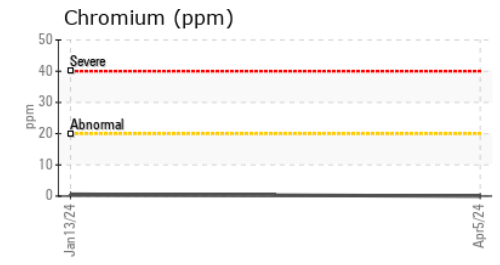
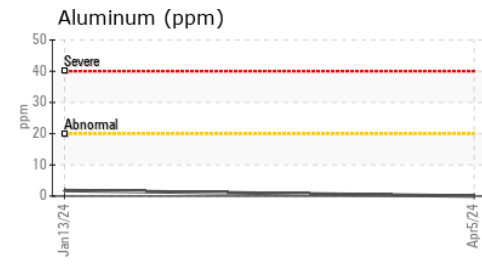
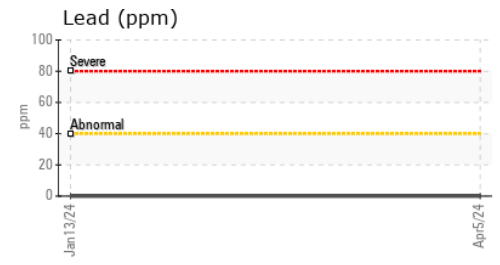
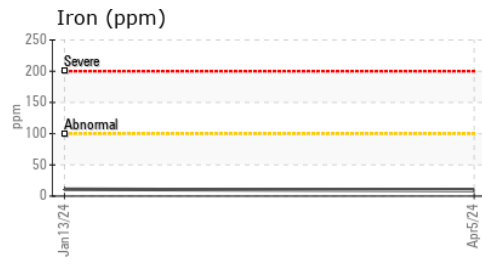
OIL ANALYSIS REPORT



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	14.0	13.7	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0864832 **Received** : 12 Apr 2024
Lab Number : **06146983** **Tested** : 15 Apr 2024
Unique Number : 10977061 **Diagnosed** : 15 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

INTERSTATE WASTE-BRIDGEWATER
 15 POLHEMUS LANE
 BRIDGEWATER, NJ
 US 08807
 Contact: PABLO CHARDON
 PChardon@interstatewaste.com
 T: (609)366-7431
 F:

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)