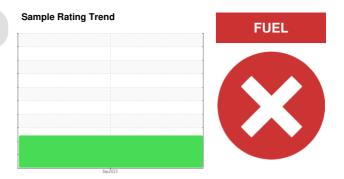


#### **PROBLEM SUMMARY**

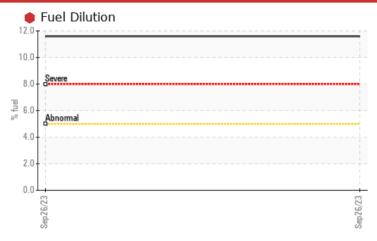
## Action Newark Machine Id KENWORTH 1204

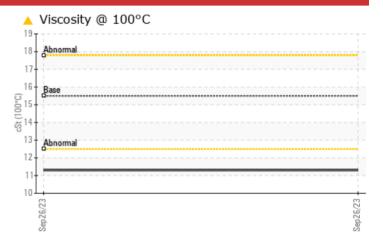
Component **Diesel Engine** 

GIBRALTAR 15W/40 SUPER S-3 LX (11)









#### RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC <sup>1</sup>	TEST RI	ESULTS				
Sample Status				SEVERE	 	
Fuel	%	ASTM D3524	>5	<b>11.6</b>	 	
Visc @ 100°C	cSt.	ASTM DAAS	155	A 11 3		

Customer Id: INT110NEW Sample No.: WC0831029 Lab Number: 05964443 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

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

RECOMMENDED ACTIONS					
Action	Status	Date	Done By	Description	
Change Fluid			?	We recommend that you drain the oil from the component if this has not already been done.	
Resample			?	We recommend an early resample to monitor this condition.	
Check Fuel/injector System			?	We advise that you check the fuel injection system.	

#### HISTORICAL DIAGNOSIS



#### **OIL ANALYSIS REPORT**

### Action Newark **KENWORTH 1204**

Component

**Diesel Engine** 

GIBRALTAR 15W/40 SUPER S-3 LX (11)

# Sample Rating Trend

#### DIAGNOSIS

#### Recommendation

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

#### Wear

All component wear rates are normal.

#### Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

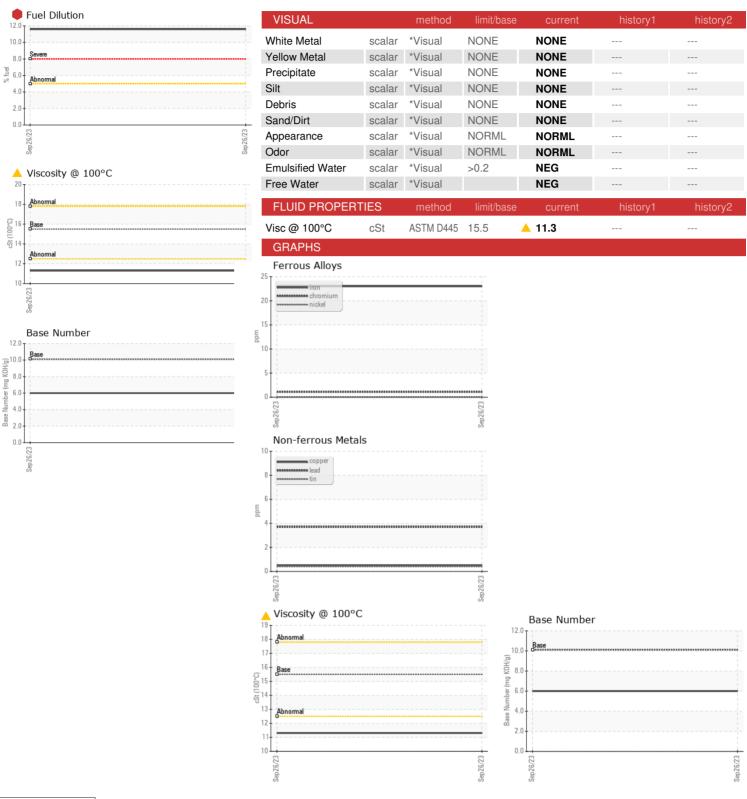
#### ▲ Fluid Condition

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 oil is no longer serviceable due to the presence of contaminants.

				Sep2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0831029		
Sample Date		Client Info		26 Sep 2023		
Machine Age	mls	Client Info		156487		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				SEVERE		
CONTAMINATIO	V	method	limit/base	current	history1	history2
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	23		
Chromium	ppm	ASTM D5185m	>20	1		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	6		
Lead	ppm	ASTM D5185m	>40	4		
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
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current	history1	history2
	ppm		limit/base		•	,
Boron Barium		ASTM D5185m	limit/base	11		
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m		11 0		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		11 0 63		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	66	11 0 63 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	66	11 0 63 <1 550 1212 863		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	66 1000 1050	11 0 63 <1 550 1212 863 1074		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	66 1000 1050 1150	11 0 63 <1 550 1212 863		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	66 1000 1050 1150	11 0 63 <1 550 1212 863 1074		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	66 1000 1050 1150 1270	11 0 63 <1 550 1212 863 1074 3217		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	66 1000 1050 1150 1270	11 0 63 <1 550 1212 863 1074 3217 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	66 1000 1050 1150 1270	11 0 63 <1 550 1212 863 1074 3217 current 4 0 12	    history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	66 1000 1050 1150 1270 limit/base >25	11 0 63 <1 550 1212 863 1074 3217 current 4		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	66  1000 1050 1150 1270  limit/base >25 >20	11 0 63 <1 550 1212 863 1074 3217 current 4 0 12		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	666 1000 1050 1150 1270 limit/base >25 >20 >5	11 0 63 <1 550 1212 863 1074 3217 current 4 0 12	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	66  1000 1050 1150 1270  limit/base >25  >20 >5	11 0 63 <1 550 1212 863 1074 3217 current 4 0 12 11.6 current		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	66  1000 1050 1150 1270  limit/base >25 >20 >5  limit/base >3	11 0 63 <1 550 1212 863 1074 3217 current 4 0 12 11.6 current 0.5	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	66  1000 1050 1150 1270  limit/base >25 >20 >5  limit/base >3 >20	11 0 63 <1 550 1212 863 1074 3217 current 4 0 12 11.6 current 0.5 11.4	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	66  1000 1050 1150 1270  limit/base >25  >20 >5  limit/base >3 >20 >30	11 0 63 <1 550 1212 863 1074 3217 current 4 0 12 11.6 current 0.5 11.4 21.9	history1 history1	history2 history2



#### **OIL ANALYSIS REPORT**







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** 

: WC0831029 : 05964443 : 10670994

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 Sep 2023 Diagnosed

: 03 Oct 2023 Diagnostician : Wes Davis Test Package : FLEET ( Additional Tests: FuelDilution, PercentFuel )

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.

**INTERSTATE WASTE-NEWARK** 

110 EVERGREEN AVE, BAY 3 NEWARK, NJ US 07114

Contact: Robert Witynski RWitynski@interstatewaste.com

T:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: