

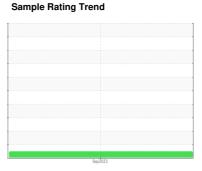
OIL ANALYSIS REPORT



Brooklyn Hauling **MACK 2257**

Component **Diesel Engine**

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





Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a components first oil change.

Contamination

There is no indication of any contamination in the

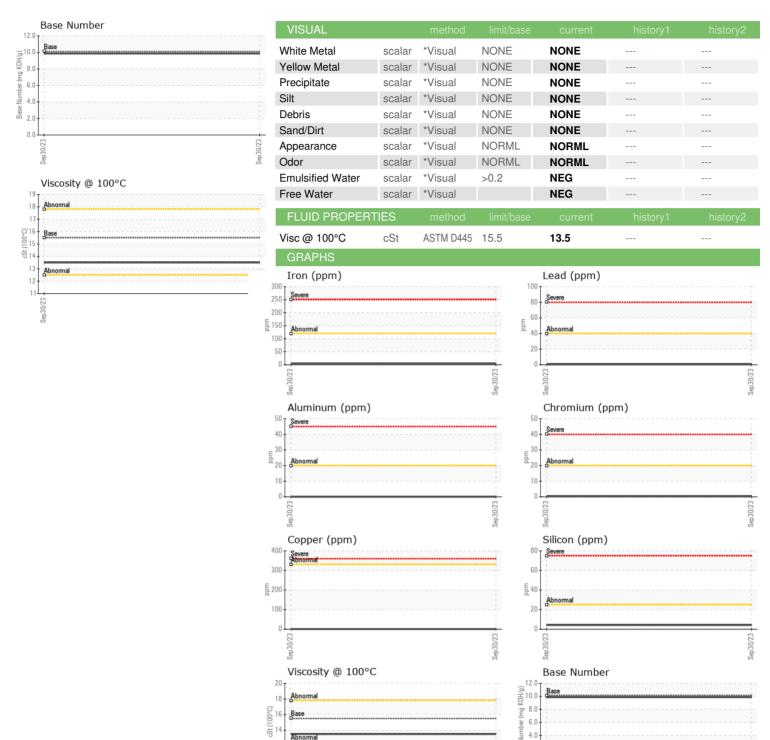
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

	1)	1		Sep2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0850545		
Sample Date		Client Info		30 Sep 2023		
Machine Age	hrs	Client Info		450		
Oil Age	hrs	Client Info		450		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATIO	Ν	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	4		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>5	0		
Titanium	ppm	ASTM D5185m	>2	<1		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>20	0		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m	>330	<1		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Б	10.10.100	ASTM D5185m		9		
Boron	ppm	AOTIVI DOTOSIII				
	ppm	ASTM D5185m		0		
Barium			66	0 63		
Barium Molybdenum	ppm	ASTM D5185m	66	-		
Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	66	63		
Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		63 <1		
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1000	63 <1 772		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1000 1050	63 <1 772 1243		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1000 1050 1150	63 <1 772 1243 973		
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	1000 1050 1150	63 <1 772 1243 973 1188		
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	1000 1050 1150 1270	63 <1 772 1243 973 1188 3239		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm 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	1000 1050 1150 1270	63 <1 772 1243 973 1188 3239	 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	1000 1050 1150 1270	63 <1 772 1243 973 1188 3239 current	 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	1000 1050 1150 1270 limit/base	63 <1 772 1243 973 1188 3239 current 4	 history1	history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	1000 1050 1150 1270 limit/base >25 >20	63 <1 772 1243 973 1188 3239 current 4 2 3	 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m MEthod ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1000 1050 1150 1270 limit/base >25 >20 limit/base	63 <1 772 1243 973 1188 3239 current 4 2 3 current	history1 history1	history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1000 1050 1150 1270 limit/base >25 >20 limit/base	63 <1 772 1243 973 1188 3239 current 4 2 3 current 0.1	history1 history1	history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1000 1050 1150 1270 limit/base >25 >20 limit/base >4 >20	63 <1 772 1243 973 1188 3239 current 4 2 3 current 0.1 8.5	history1 history1	history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m MEthod ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	1000 1050 1150 1270 limit/base >25 >20 limit/base >4 >20 >30	63 <1 772 1243 973 1188 3239 current 4 2 3 current 0.1 8.5 19.8	history1 history1	history2 history2



OIL ANALYSIS REPORT







Certificate L2367

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

10

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0850545 : 05969108 : 10675659

Test Package : MOB 1 (Additional Tests: TBN)

Received Diagnosed

: 04 Oct 2023 : 05 Oct 2023

2.0

0.0

Diagnostician : Wes Davis

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)

INTERSTATE WASTE-BROOKLYN

505 COZINE AVENUE BROOKLYN, NY US 10474

Contact: Steve Andreuk SAndreuk@actioncarting.com

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