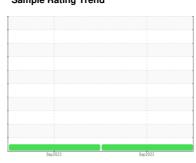


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



MCCLOSKEY 5588

Component

Diesel Engine

DIESEL ENGINE OIL SAE 40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

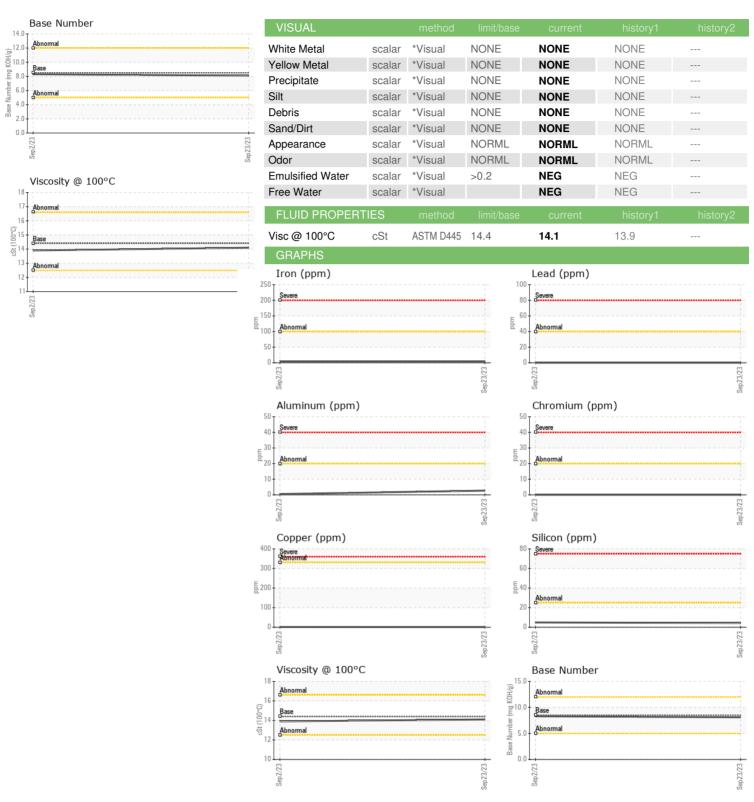
Fluid Condition

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

			Sep2023	Sep2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0850715	WC0850664	
Sample Date		Client Info		23 Sep 2023	02 Sep 2023	
Machine Age	hrs	Client Info		2060	1834	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINATIO	V	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	5	4	
Chromium	ppm	ASTM D5185m	>20	0	0	
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	3	<1	
Lead	ppm	ASTM D5185m	>40	0	0	
Copper	ppm	ASTM D5185m	>330	<1	1	
Tin	ppm	ASTM D5185m	>15	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	6	13	
	le le					
Barium	ppm	ASTM D5185m	10	0	0	
Barium Molybdenum		ASTM D5185m ASTM D5185m	100	0 64	0 68	
	ppm			-		
Molybdenum	ppm ppm	ASTM D5185m		64	68	
Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m	100	64 0	68	
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	100	64 0 849	68 0 928	
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000	64 0 849 1154	68 0 928 1487	
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000 1150	64 0 849 1154 1018	68 0 928 1487 1088	
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	100 450 3000 1150 1350	64 0 849 1154 1018	68 0 928 1487 1088 1390	
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	100 450 3000 1150 1350 4250 limit/base	64 0 849 1154 1018 1241 3550	68 0 928 1487 1088 1390 4222	
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	100 450 3000 1150 1350 4250 limit/base >25	64 0 849 1154 1018 1241 3550	68 0 928 1487 1088 1390 4222 history1	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	100 450 3000 1150 1350 4250 limit/base >25 >216	64 0 849 1154 1018 1241 3550 current	68 0 928 1487 1088 1390 4222 history1	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	100 450 3000 1150 1350 4250 limit/base >25 >216	64 0 849 1154 1018 1241 3550 current 4	68 0 928 1487 1088 1390 4222 history1 5	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	100 450 3000 1150 1350 4250 limit/base >25 >216 >20	64 0 849 1154 1018 1241 3550 current 4 0 3	68 0 928 1487 1088 1390 4222 history1 5 2 2	history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	100 450 3000 1150 1350 4250 limit/base >25 >216 >20 limit/base	64 0 849 1154 1018 1241 3550 current 4 0 3	68 0 928 1487 1088 1390 4222 history1 5 2 2	history2 history2
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	100 450 3000 1150 1350 4250 limit/base >25 >216 >20 limit/base >3	64 0 849 1154 1018 1241 3550 current 4 0 3 current 0.2	68 0 928 1487 1088 1390 4222 history1 5 2 2 history1 0.2	history2 history2
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	100 450 3000 1150 1350 4250 limit/base >25 >216 >20 limit/base >3 >20	64 0 849 1154 1018 1241 3550 current 4 0 3 current 0.2 6.0	68 0 928 1487 1088 1390 4222 history1 5 2 2 history1 0.2 6.5	history2 history2
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 D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	100 450 3000 1150 1350 4250 limit/base >25 >216 >20 limit/base >3 >20 >30	64 0 849 1154 1018 1241 3550 current 4 0 3 current 0.2 6.0 17.7	68 0 928 1487 1088 1390 4222 history1 5 2 2 history1 0.2 6.5 17.1	history2 history2



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number

Unique Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0850715 : 05967349

: 10673900

Received : 03 Oct 2023 Diagnosed : 04 Oct 2023

Diagnostician : Wes Davis Test Package : MOB 1 (Additional Tests: TBN)

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: F:

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