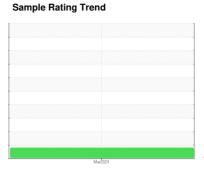


OIL ANALYSIS REPORT

O.D.T







2053
Component
Diesel Engine
Fluid
{not provided} (--- QTS)

DIAGNOSIS

Machine Id

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

The lead level is abnormal.

Contamination

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

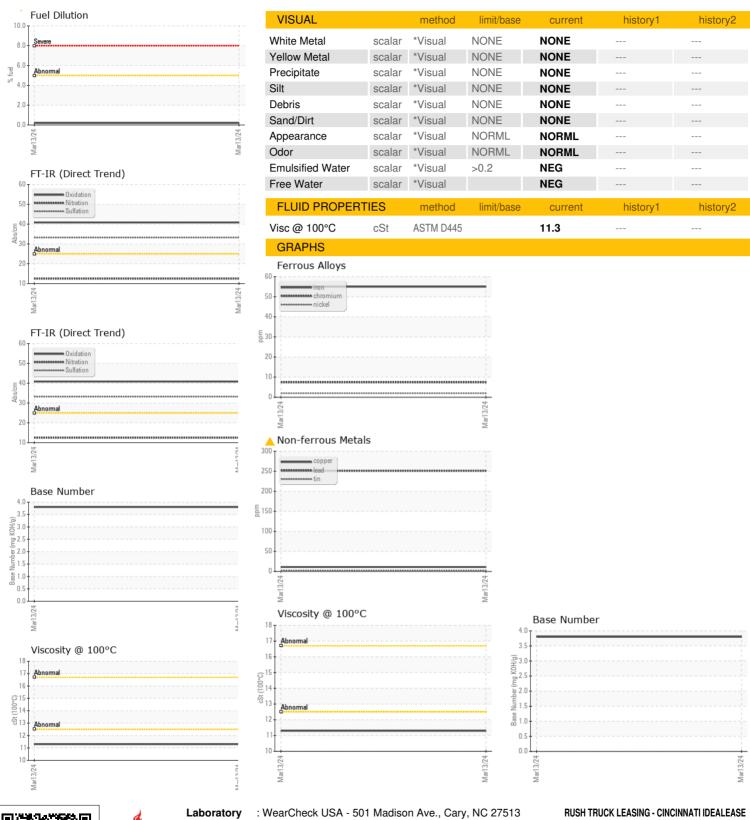
Fluid Condition

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

				Mar2024		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		IL06139617		
Sample Date		Client Info		13 Mar 2024		
Machine Age	hrs	Client Info		9547		
Oil Age	hrs	Client Info		0		
Oil Changed	1110	Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method	70.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
		ASTM D5185m	>100	55		
Iron Chromium	ppm	ASTM D5185m	>100	7		
Nickel	ppm	ASTM D5185m	>4	2		
Titanium	ppm	ASTM D5185m	<i>></i> 4	<1		
Silver		ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	15		
Lead	ppm	ASTM D5185m	>40	△ 251		
Copper	ppm	ASTM D5185m	>330	11		
Tin	ppm	ASTM D5185m	>15	1		
Vanadium	ppm	ASTM D5185m	>10	· <1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	nnm		limit/base		history1	history2
Boron	ppm	ASTM D5185m	limit/base	22		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	22 0		
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	22 0 45		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	22 0 45 5		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	22 0 45 5 649		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	22 0 45 5 649 1746		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	22 0 45 5 649 1746 949		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	22 0 45 5 649 1746		
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	limit/base	22 0 45 5 649 1746 949 1074 2693		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	22 0 45 5 649 1746 949 1074 2693		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	22 0 45 5 649 1746 949 1074 2693 current	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25	22 0 45 5 649 1746 949 1074 2693 current 7	 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	22 0 45 5 649 1746 949 1074 2693 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25 >20 >5	22 0 45 5 649 1746 949 1074 2693 current 7 5 42 0.2	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 ASTM D3524	limit/base >25 >20 >5 limit/base	22 0 45 5 649 1746 949 1074 2693 current 7 5 42 0.2	history1 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	ASTM D5185m	limit/base >25 >20 >5 limit/base >3	22 0 45 5 649 1746 949 1074 2693 current 7 5 42 0.2 current	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm	ASTM D5185m ASTM D7844 *ASTM D7844	limit/base >25 >20 >5 limit/base >3 >20	22 0 45 5 649 1746 949 1074 2693 current 7 5 42 0.2 current 1 12.5	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7624	limit/base >25	22 0 45 5 649 1746 949 1074 2693 current 7 5 42 0.2 current 1 12.5 33.2	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844	limit/base >25 >20 >5 limit/base >3 >20 >30 limit/base	22 0 45 5 649 1746 949 1074 2693 current 7 5 42 0.2 current 1 12.5 33.2 current	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7624	limit/base >25 >20 >5 limit/base >3 >20 >30 limit/base	22 0 45 5 649 1746 949 1074 2693 current 7 5 42 0.2 current 1 12.5 33.2	history1 history1	history2 history2



OIL ANALYSIS REPORT





Certificate 12367

Sample No.

: IL06139617 Lab Number : 06139617

Unique Number : 10964425

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received **Tested** Diagnosed

: 05 Apr 2024 : 09 Apr 2024

: 09 Apr 2024 - Jonathan Hester

Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel)

US 45241 Contact: ROBERT BAIER baierr@rushenterprises.com T: (513)657-7901

11777 HIGHWAY DRIVE

CINCINNATI, OH

 st - 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)

F: (513)733-0537 Contact/Location: ROBERT BAIER - IDECIN