

OIL ANALYSIS REPORT



Machine Id

25 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

A Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

A Wear

Cylinder, crank, or cam shaft wear is indicated.

Contamination

There is no indication of any contamination in the oil.

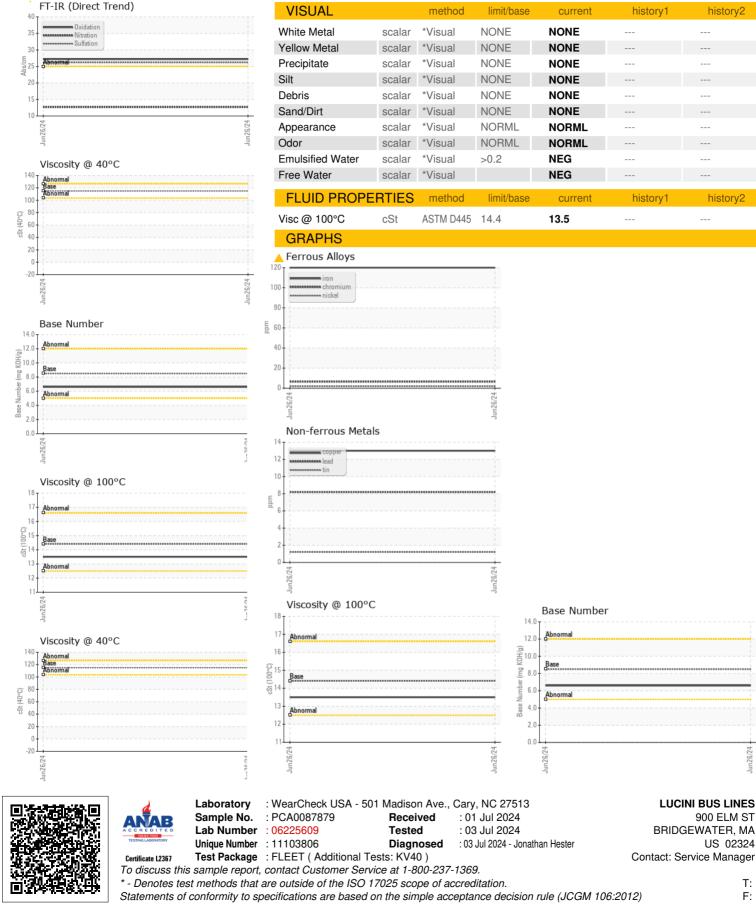
Fluid Condition

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

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0087879		
Sample Date		Client Info		26 Jun 2024		
Machine Age	mls	Client Info		959536		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	120		
Chromium	ppm	ASTM D5185m	>20	7		
Nickel	ppm	ASTM D5185m	>4	2		
Titanium	ppm	ASTM D5185m	- 1	<u>د</u> <1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	5		
Lead	ppm	ASTM D5185m	>40	8		
Copper	ppm	ASTM D5185m	>330	13		
Tin	ppm	ASTM D5185m	>15	1		
Vanadium	ppm	ASTM D5185m	210	0		
Cadmium	ppm	ASTM D5185m		0		
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ADDITIVES	= = · · · ·	method	limit/base	current	history1	history2
ADDITIVES Boron	ppm		limit/base 250			
		method		current	history1	history2
Boron	ppm	method ASTM D5185m	250	current 16	history1	history2
Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	250 10	current 16 0	history1 	history2
Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	250 10	current 16 0 63	history1 	history2
Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	current 16 0 63 <1	history1	history2
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	current 16 0 63 <1 953	history1 	history2
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185m	250 10 100 450 3000	current 16 0 63 <1	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150	current 16 0 63 <1 953 1140 1002	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350	current 16 0 63 <1	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base	16 0 63 <1	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25	current 16 0 63 <1	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158	current 16 0 63 <1	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158	current 16 0 63 <1	history1 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	method ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20	current 16 0 63 <1	history1 history1 <td>history2 history2</td>	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	method ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base	current 16 0 63 <1	history1 history1 history1 history1 history1	history2 history2 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 Imit/base >25 >158 >20 Imit/base >3	current 16 0 63 <1	history1 history1 history1 history1 history1 history1	history2 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base >3 >20	current 16 0 63 <1	history1 history1 history1	history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 Iimit/base >25 >158 >20 Iimit/base >3 >20 >3 >20	current 16 0 63 <1	history1 history1 history1 history1 history1	history2 history2 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7185 method *ASTM D7624 *ASTM D7415 method	250 10 100 450 3000 1150 1350 4250 Iimit/base >25 >158 >20 Iimit/base >3 >20 >30 Iimit/base	current 16 0 63 <1	history1 history1 history1 history1 history1 history1 history1	history2 history2 history2 history2 history2 history2 history2 history2 history2



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