

OIL ANALYSIS REPORT



Machine Id

MCI 1890

Component Diesel Engine

Fluid PURUS SYNTHETIC BLEND 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

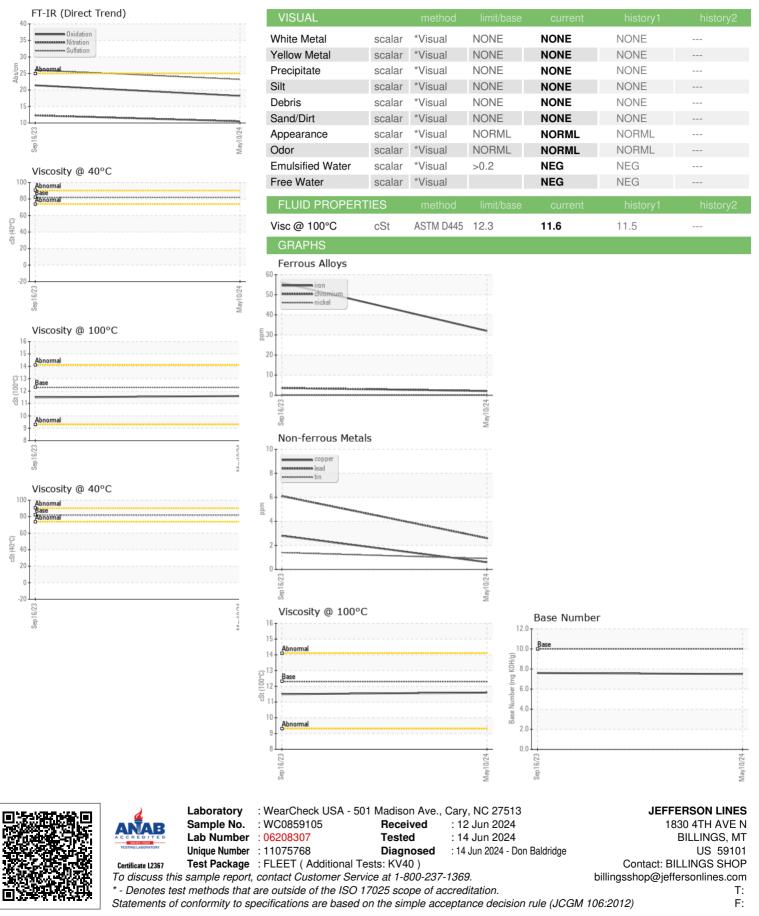
Fluid Condition

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

	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0859105	WC0859045	
Sample Date		Client Info		10 May 2024	16 Sep 2023	
Machine Age	mls	Client Info		1247752	1174509	
Oil Age	mls	Client Info		20000	25000	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	1	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	32	56	
Chromium	ppm	ASTM D5185m	>20	2	4	
Nickel	ppm	ASTM D5185m	>4	0	0	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	2	3	
Lead	ppm	ASTM D5185m	>40	3	6	
Copper	ppm	ASTM D5185m	>330	<1	3	
Tin	ppm	ASTM D5185m	>15	<1	1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 10	history1 30	history2
	ppm ppm		limit/base			history2
Boron		ASTM D5185m	limit/base	10	30	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	10 0	30 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	10 0 63	30 0 89	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	10 0 63 <1	30 0 89 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	10 0 63 <1 1034	30 0 89 <1 1114	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	10 0 63 <1 1034 1225	30 0 89 <1 1114 1312	
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	limit/base	10 0 63 <1 1034 1225 1097	30 0 89 <1 1114 1312 1232	
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	limit/base	10 0 63 <1 1034 1225 1097 1353	30 0 89 <1 1114 1312 1232 1419	
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		10 0 63 <1 1034 1225 1097 1353 3659	30 0 89 <1 1114 1312 1232 1419 3356	
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	limit/base	10 0 63 <1 1034 1225 1097 1353 3659 current	30 0 89 <1 1114 1312 1232 1419 3356 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Chosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base	10 0 63 <1 1034 1225 1097 1353 3659 current 11	30 0 89 <1 1114 1312 1232 1419 3356 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	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	limit/base	10 0 63 <1 1034 1225 1097 1353 3659 current 11 10	30 0 89 <1 1114 1312 1232 1419 3356 history1 12 1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20	10 0 63 <1 1034 1225 1097 1353 3659 <u>current</u> 11 10 1	30 0 89 <1 1114 1312 1232 1419 3356 history1 12 1 2	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base	10 0 63 <1 1034 1225 1097 1353 3659 current 11 10 1 1 current	30 0 89 <1 1114 1312 1232 1419 3356 history1 12 1 2 1 2 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	10 0 63 <1 1034 1225 1097 1353 3659 current 11 10 1 1 10 1 1 .6	30 0 89 <1 1114 1312 1232 1419 3356 history1 12 1 2 1 2 history1 1.6	 history2 history2
Boron 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 ASTM D5185m	limit/base >25 >20 limit/base >3 >20	10 0 63 <1 1034 1225 1097 1353 3659 current 11 10 1 1 10 1 1.6 1.6 10.5	30 0 89 <1 1114 1312 1232 1419 3356 history1 12 1 2 1 2 history1 1.6 12.3	 history2 history2
Boron 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 ASTM D5185m	limit/base >25 >20 limit/base >3 >20 >3 >20 >30	10 0 63 <1 1034 1225 1097 1353 3659 <i>current</i> 11 10 1 <i>current</i> 1.6 10.5 23.2	30 0 89 <1 1114 1312 1232 1419 3356 history1 12 1 2 history1 1.6 12.3 26.0	 history2 history2 history2



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Contact/Location: BILLINGS SHOP ? - JEFBIL