

OIL ANALYSIS REPORT



Machine Id **7973-EX1** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

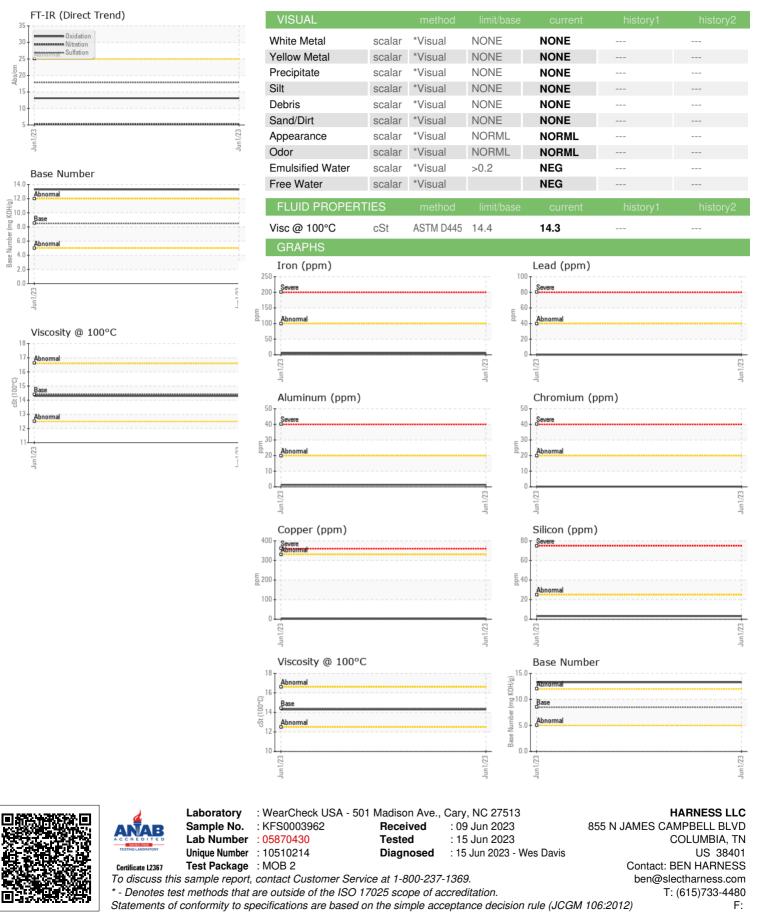
Fluid Condition

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

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KFS0003962		
Sample Date		Client Info		01 Jun 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		400		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
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Iron	ppm	ASTM D5185m	>100	5		
Chromium	ppm	ASTM D5185m		<1		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium Silver	ppm	ASTM D5185m	>3	0		
	ppm	ASTM D5185m ASTM D5185m		0 1		
Aluminum Lead	ppm	ASTM D5185m ASTM D5185m	>20	0		
	ppm	ASTM D5185m		3		
Copper Tin	ppm		>330	0		
Vanadium	ppm	ASTM D5185m	>15	0		
Cadmium	ppm	ASTM D5185m		0		
	ppm	ASTIVI DUTOJIII		0		
ADDITIVES	ppm	method	limit/base	current	history1	history2
	ppm		limit/base 250			
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	250	current 4	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm	method ASTM D5185m ASTM D5185m	250 10 100	current 4 0	history1 	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	current 4 0 61 <1 974	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	current 4 0 61 <1	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150	Current 4 0 61 <1 974 1107 1082	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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 4 0 61 <1 974 1107 1082 1313	history1	history2
ADDITIVES 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	250 10 100 450 3000 1150	Current 4 0 61 <1 974 1107 1082	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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 ASTM D5185m	250 10 100 450 3000 1150 1350 4250	Current 4 0 61 <1 974 1107 1082 1313 4543 Current	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	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 method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <i>limit/base</i>	current 4 0 61 <1 974 1107 1082 1313 4543 current 3	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	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 ASTM D5185m	250 10 100 450 3000 1150 1350 4250	current 4 0 61 <1 974 1107 1082 1313 4543 current 3 <1	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	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 method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158	current 4 0 61 <1 974 1107 1082 1313 4543 current 3 <1 <1	history1 history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158	current 4 0 61 <1 974 1107 1082 1313 4543 current 3 <1 <1 <1 current	history1	history2 history2
ADDITIVES Boron 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	method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20	current 4 0 61 <1 974 1107 1082 1313 4543 current 3 <1 <1 current 0.2	history1 history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 Imit/base >25 >158 >20 Imit/base	current 4 0 61 <1 974 1107 1082 1313 4543 current 3 <1 <1 <1 current	history1 history1 history1 history1 history1	history2 history2 history2 history2
ADDITIVES Boron 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	method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base >3	current 4 0 61 <1 974 1107 1082 1313 4543 current 3 <1 <1 current 0.2	history1 history1 history1	history2 history2 history2 history2 history2
ADDITIVES 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	method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 Iimit/base >25 >158 >20 Iimit/base >3 >20	current 4 0 61 <1 974 1107 1082 1313 4543 current 3 <1 <1 ourrent 0.2 5.2	history1 history1 history1 history1 history1	history2 history2 history2 history2 history2
ADDITIVES 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	method ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 binit/base >25 >158 >20 binit/base >3 >20	current 4 0 61 <1 974 1107 1082 1313 4543 current 3 <1 <1 0.2 5.2 17.9	history1 history1 history1 history1	history2 history2 history2 history2
ADDITIVES 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	method ASTM D5185m ASTM D78144 *ASTM D7624 *ASTM D7415 method	250 10 100 450 3000 1150 1350 4250 binit/base >25 >158 >20 binit/base >3 >20 >30	current 4 0 61 <1 974 1107 1082 1313 4543 current 3 <1 <1 0.2 5.2 17.9 current	history1	history2 history2 history2 history2



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Contact/Location: BEN HARNESS - HARCOLTN

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