

OIL ANALYSIS REPORT

Sample Rating Trend





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

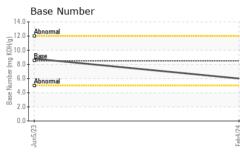
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

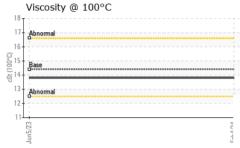
			Jun2023	Feb2024		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0082947	PCA0069335	
Sample Date		Client Info		04 Feb 2024	05 Jun 2023	
Machine Age	mls	Client Info		0	335687	
Oil Age	mls	Client Info		0	1000	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	ABNORMAL	
CONTAMINAT	ION	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 METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	14	29	
Chromium	ppm	ASTM D5185m	>20	<1	2	
Nickel	ppm	ASTM D5185m	>4	<1	<1	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	3	▲ 8	
Lead	ppm	ASTM D5185m	>40	2	3	
Copper	ppm	ASTM D5185m	>330	<1	6	
Tin	ppm	ASTM D5185m	>15	1	3	
Vanadium	ppm	ASTM D5185m		<1	<1	
Cadmium	ppm	ASTM D5185m		0	0	
				-		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 250		history1 5	history2
	ppm ppm			current		
Boron		ASTM D5185m	250	current 1	5	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	250 10	current 1 0	5 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	250 10	current 1 0 56	5 0 86	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	current 1 0 56 <1	5 0 86 3	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	current 1 0 56 <1 989	5 0 86 3 1271	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000	current 1 0 56 <1 989 1047	5 0 86 3 1271 1524	
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	250 10 100 450 3000 1150	current 1 0 56 <1 989 1047 1063	5 0 86 3 1271 1524 1357 1804 4511	
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	250 10 100 450 3000 1150 1350	current 1 0 56 <1 989 1047 1063 1231	5 0 86 3 1271 1524 1357 1804	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm	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 1 0 56 <1 989 1047 1063 1231 2693 current 5	5 0 86 3 1271 1524 1357 1804 4511 history1 ▲ 43	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	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	current 1 0 56 <1 989 1047 1063 1231 2693 current	5 0 86 3 1271 1524 1357 1804 4511 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	250 10 100 450 3000 1150 1350 4250 limit/base >25	current 1 0 56 <1 989 1047 1063 1231 2693 current 5	5 0 86 3 1271 1524 1357 1804 4511 history1 ▲ 43	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	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 >158	current 1 0 56 <1 989 1047 1063 1231 2693 current 5 6	5 0 86 3 1271 1524 1357 1804 4511 history1 ▲ 43 6	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20	current 1 0 56 <1 989 1047 1063 1231 2693 current 5 6 4	5 0 86 3 1271 1524 1357 1804 4511 ▲ 43 6 4	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >158 >20 limit/base	current 1 0 56 <1 989 1047 1063 1231 2693 current 5 6 4 current	5 0 86 3 1271 1524 1357 1804 4511 history1 ▲ 43 6 4 4 history1	 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 TS ppm ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >158 >20 limit/base	current 1 0 56 <1 989 1047 1063 1231 2693 current 5 6 4 current 0.4	5 0 86 3 1271 1524 1357 1804 4511 history1 ▲ 43 6 4 4 history1 0.2	 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	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base >3 >20	current 1 0 56 <1 989 1047 1063 1231 2693 current 5 6 4 current 0.4 10.5	5 0 86 3 1271 1524 1357 1804 4511 ▲ 43 6 4 3 6 4 4 0.2 7.2	 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	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 imit/base >25 >158 >20 imit/base >3 >20	current 1 0 56 <1 989 1047 1063 1231 2693 current 5 6 4 current 0.4 10.5 22.2	5 0 86 3 1271 1524 1357 1804 4511 ▲ 43 6 4 4 3 6 4 4 0.2 7.2 19.7	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAC	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	250 10 100 450 3000 1150 1350 4250 iimit/base >25 >158 >20 iimit/base >3 >20 >30	current 1 0 56 <1 989 1047 1063 1231 2693 current 5 6 4 current 0.4 10.5 22.2 current	5 0 86 3 1271 1524 1357 1804 4511 ▲ 43 6 4 4 • history1 0.2 7.2 19.7 history1	 history2 history2 history2 history2

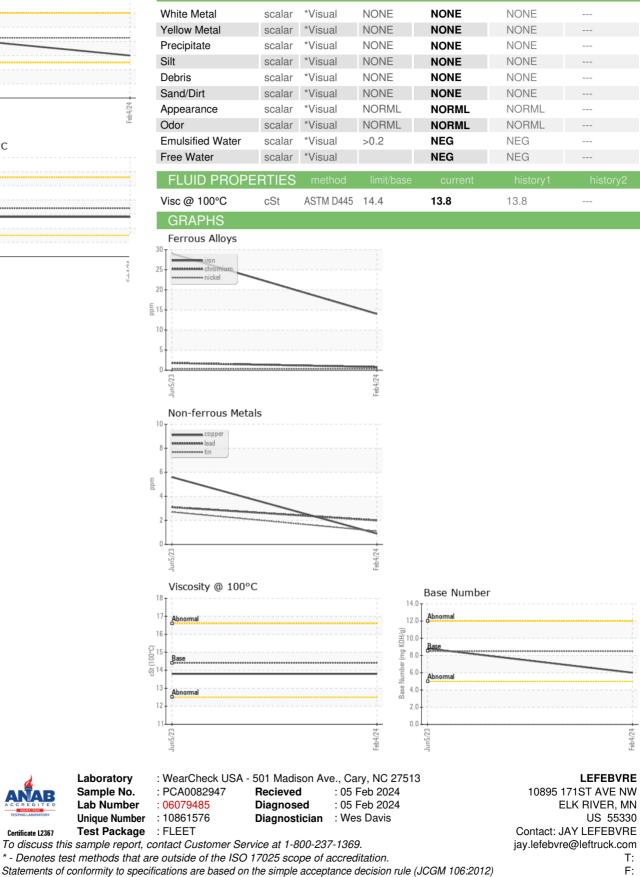


OIL ANALYSIS REPORT

VISUAL







Certificate L2367

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