

OIL ANALYSIS REPORT

Sample Rating Trend



Area Area Material Machine Id Fuchs 360F 360410/5546

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

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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.

			Aug2022	Mar2024		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0015494	LW0005319	
Sample Date		Client Info		07 Mar 2024	18 Aug 2022	
Machine Age	hrs	Client Info		5846	2827	
Oil Age	hrs	Client Info		5846	275	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
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	16	17	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>4	<1	0	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>20	12	8	
Lead	ppm	ASTM D5185m	>40	<1	2	
Copper	ppm	ASTM D5185m	>330	4	3	
Tin	ppm	ASTM D5185m	>15	<1	2	
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 250	current 345	history1 211	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base 250 10	current 345 0	history1 211 0	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100	current 345 0 91	history1 211 0 82	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100	current 345 0 91 0	history1 211 0 82 <1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100 450	current 345 0 91 0 388	history1 211 0 82 <1 370	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100 450 3000	current 345 0 91 0 388 1412	history1 211 0 82 <1 370 1620	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100 450 3000 1150	current 345 0 91 0 388 1412 1063	history1 211 0 82 <1 370 1620 1086	history2
ADDITIVES 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	limit/base 250 10 100 450 3000 1150 1350	current 345 0 91 0 388 1412 1063 1275	history1 211 0 82 <1 370 1620 1086 1313	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 ASTM D5185m ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250	current 345 0 91 0 388 1412 1063 1275 3496	history1 211 0 82 <1 370 1620 1086 1313 3434	history2
ADDITIVES 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	limit/base 250 10 100 450 450 3000 1150 1350 4250 limit/base	current 345 0 91 0 388 1412 1063 1275 3496 current	history1 211 0 82 <1 370 1620 1086 1313 3434 history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	method ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25	current 345 0 91 0 388 1412 1063 1275 3496 current 6	history1 211 0 82 <1 370 1620 1086 1313 3434 history1 5	history2
ADDITIVES 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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158	current 345 0 91 0 388 1412 1063 1275 3496 current 6 <1	history1 211 0 82 <1 370 1620 1086 1313 3434 history1 5 <1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 25 >25 >158 >20	current 345 0 91 0 388 1412 1063 1275 3496 current 6 <1 15	history1 211 0 82 <1 370 1620 1086 1313 3434 history1 5 <1 9	history2 history2 -
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	method ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20	current 345 0 91 0 388 1412 1063 1275 3496 current 6 <1 15 current	history1 211 0 82 <1 370 1620 1086 1313 3434 history1 5 <1 9 history1	history2
ADDITIVES 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	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base >3	current 345 0 91 0 388 1412 1063 1275 3496 current 6 <1 15 current 0.5	history1 211 0 82 <1 370 1620 1086 1313 3434 history1 5 <1 9 history1 0.4	history2
ADDITIVES 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 TS ppm ppm	method ASTM D5185m	limit/base 250 10 100 450 3000 1150 1350 4250 20 limit/base >25 >158 >20 limit/base >3 >20	current 345 0 91 0 388 1412 1063 1275 3496 current 6 <1 15 current 0.5 8.2	history1 211 0 82 <1 370 1620 1086 1313 3434 history1 5 <1 9 history1 0.4 9.6	history2
ADDITIVES 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 TS ppm ppm ppm	method ASTM D5185m ASTM D7844 *ASTM D7624	limit/base 250 10 100 450 3000 1150 1350 4250 20 limit/base >25 >158 >20 limit/base >3 >20 >30	current 345 0 91 0 388 1412 1063 1275 3496 current 6 <1 15 current 0.5 8.2 21.8	history1 211 0 82 <1 370 1620 1086 1313 3434 history1 5 <1 9 history1 0.4 9.6 23.8	history2 history2 history2
ADDITIVES 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	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base >3 >20 >30 >30	current 345 0 91 0 388 1412 1063 1275 3496 current 6 <1 15 current 0.5 8.2 21.8 current	history1 211 0 82 <1 370 1620 1086 1313 3434 history1 5 <1 9 history1 0.4 9.6 23.8 history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE Oxidation	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm % Abs/cm Abs/1mm	method ASTM D5185m ASTM D78444 *ASTM D78444 *ASTM D7415 method	limit/base 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 limit/base >3 >20 >30 ≥25	current 345 0 91 0 388 1412 1063 1275 3496 current 6 <1 15 current 0.5 8.2 21.8 current 16.9	history1 211 0 82 <1 370 1620 1086 1313 3434 history1 5 <1 9 history1 0.4 9.6 23.8 history1 20.1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD Oxidation Base Number (BN)	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	method ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7414 ASTM D7414 ASTM D78496	limit/base 250 10 100 450 3000 1150 1350 4250 20 limit/base >20 limit/base >3 >20 30 limit/base >25 >30	current 345 0 91 0 388 1412 1063 1275 3496 current 6 <1 15 current 0.5 8.2 21.8 current 16.9 7.3	history1 211 0 82 <1 370 1620 1086 1313 3434 history1 5 <1 9 history1 0.4 9.6 23.8 history1 20.1 7.9	history2



16 cSt (100°C)

13 Ab

12

Ba

Aug18/22

OIL ANALYSIS REPORT





Certificate L2367

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