

### **OIL ANALYSIS REPORT**

#### Sample Rating Trend

#### NORMAL

# Machine Id 023-0202

#### Component Diesel Engine Fluid SCHAEFFER SUPREME 7000 (--- GAL)

#### DIAGNOSIS

#### Recommendation

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

#### Wear

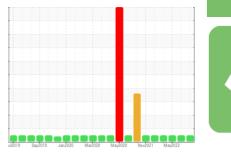
All component wear rates are normal.

#### 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.

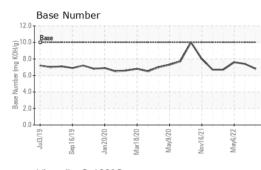


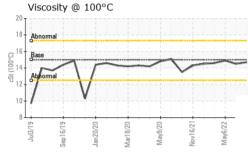


SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0868421	WC0750866	WC0698224
Sample Date		Client Info		18 Jan 2024	07 Nov 2022	06 May 2022
Machine Age	hrs	Client Info		7262	7179	6962
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<1	3	4
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	1
Aluminum	ppm	ASTM D5185m	>20	3	3	3
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	0	0	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 97	history1 88	history2 93
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	97	88	93
Boron Barium	ppm	ASTM D5185m ASTM D5185m		97 0	88 0	93 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		97 0 70	88 0 69	93 0 74
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50	97 0 70 <1	88 0 69 0	93 0 74 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 1000	97 0 70 <1 15	88 0 69 0 18	93 0 74 <1 19
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 1000 1400	97 0 70 <1 15 2048	88 0 69 0 18 2134	93 0 74 <1 19 2374
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	50 1000 1400 985	97 0 70 <1 15 2048 981	88 0 69 0 18 2134 956	93 0 74 <1 19 2374 1111
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	50 1000 1400 985 1060	97 0 70 <1 15 2048 981 1158	88 0 69 0 18 2134 956 1190	93 0 74 <1 19 2374 1111 1373
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	50 1000 1400 985 1060 4000	97 0 70 <1 15 2048 981 1158 4765	88 0 69 0 18 2134 956 1190 5701	93 0 74 <1 19 2374 1111 1373 4723
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	50 1000 1400 985 1060 4000	97 0 70 <1 15 2048 981 1158 4765 current	88 0 69 0 18 2134 956 1190 5701 history1	93 0 74 <1 19 2374 1111 1373 4723 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm 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	50 1000 1400 985 1060 4000 limit/base >25	97 0 70 <1 15 2048 981 1158 4765 current 8	88 0 69 0 18 2134 956 1190 5701 history1 7	93 0 74 <1 19 2374 1111 1373 4723 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm 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	50 1000 1400 985 1060 4000 limit/base >25	97 0 70 <1 15 2048 981 1158 4765 <b>current</b> 8 1	88 0 69 0 18 2134 956 1190 5701 <b>history1</b> 7 2	93 0 74 <1 19 2374 1111 1373 4723 history2 4 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 1000 1400 985 1060 4000 <b>limit/base</b> >25 >20	97 0 70 <1 15 2048 981 1158 4765 current 8 1 1 <1	88 0 69 0 18 2134 956 1190 5701 history1 7 2 2 <1	93 0 74 <1 19 2374 1111 1373 4723 history2 4 4 4 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 1000 1400 985 1060 4000 <b>Iimit/base</b> >25 >20 <b>Iimit/base</b>	97 0 70 <1 15 2048 981 1158 4765 current 8 1 <1 <1	88 0 69 0 18 2134 956 1190 5701 <b>history1</b> 7 2 <1 <b>history1</b>	93 0 74 <1 19 2374 1111 1373 4723 history2 4 4 1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	50 1000 1400 985 1060 4000 limit/base >25 >20 limit/base >3	97 0 70 <1 15 2048 981 1158 4765 <u>current</u> 8 1 <1 <1 current	88 0 69 0 18 2134 956 1190 5701 history1 7 2 <1 7 2 <1 history1 0.1	93 0 74 <1 19 2374 1111 1373 4723 history2 4 4 4 1 history2 0.2
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	50 50 1400 985 1060 4000 imit/base >25 >20 imit/base >20	97 0 70 <1 15 2048 981 1158 4765 <i>current</i> 8 1 1 <1 <i>current</i> 0.1 7.8	88 0 69 0 18 2134 956 1190 5701 history1 7 2 2 <1 history1 0.1 9	93 0 74 <1 19 2374 1111 1373 4723 history2 4 4 1 history2 0.2 9.4
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	50 1000 1400 985 1060 4000 <b>imit/base</b> >25 <b>imit/base</b> >20 <b>imit/base</b> >3 >20	97 0 70 <1 15 2048 981 1158 4765 <b>current</b> 8 1 <1 <1 <1 <b>current</b> 0.1 7.8 17.5	88 0 69 0 18 2134 956 1190 5701 history1 7 2 <1 7 2 <1 0.1 9 18.8	93 0 74 <1 19 2374 1111 1373 4723 history2 4 4 4 1 history2 0.2 9.4 19.3



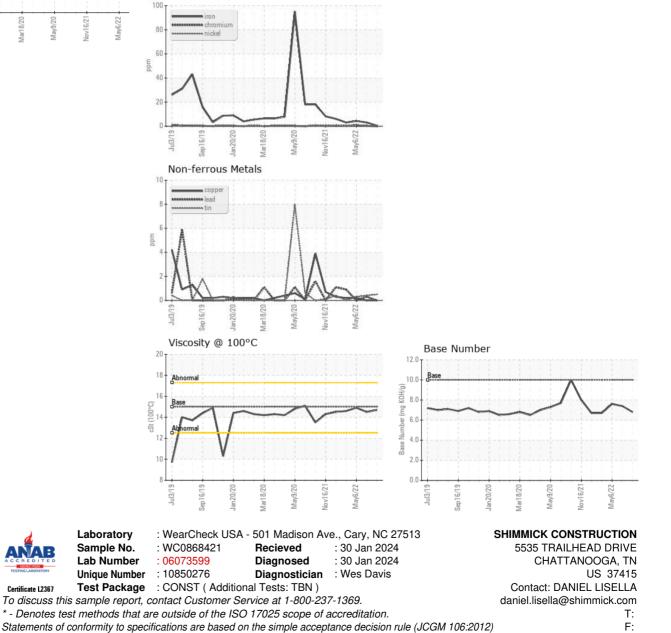
## **OIL ANALYSIS REPORT**





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15	14.7	14.5	14.9
CRAPHS						

Ferrous Alloys





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