

OIL ANALYSIS REPORT

Sample Rating Trend



015-0064 (S/N 236017) Component

Diesel Engine

Flui SCHAEFFER SUPREME 7000 (5 GAL)

Recommendation

Resample at the next service interval to monitor.

Wear

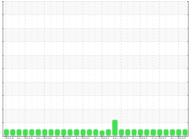
All component wear rates are normal.

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.

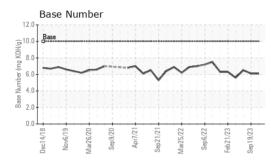


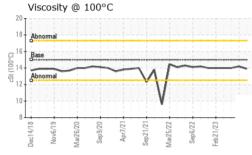


SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0868436	WC0815055	WC0814977
Sample Date		Client Info		18 Dec 2023	19 Sep 2023	18 Jul 2023
Machine Age	hrs	Client Info		9503	9165	8857
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<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	>90	2	3	4
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	<1	5
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	0	0	<1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 89	history1 77	history2 75
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	89	77	75
Boron Barium	ppm	ASTM D5185m ASTM D5185m		89 0	77 0	75 1
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		89 0 69	77 0 73	75 1 72
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50	89 0 69 <1	77 0 73 0	75 1 72 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 1000	89 0 69 <1 22	77 0 73 0 28 2283 1067	75 1 72 0 15 2197 1025
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 1000 1400 985 1060	89 0 69 <1 22 2057	77 0 73 0 28 2283 1067 1313	75 1 72 0 15 2197 1025 1213
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	89 0 69 <1 22 2057 1019	77 0 73 0 28 2283 1067	75 1 72 0 15 2197 1025 1213 4855
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 ASTM D5185m	50 1000 1400 985 1060 4000	89 0 69 <1 22 2057 1019 1174 4864 current	77 0 73 0 28 2283 1067 1313 6349 history1	75 1 72 0 15 2197 1025 1213 4855 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 method	50 1000 1400 985 1060 4000	89 0 69 <1 22 2057 1019 1174 4864 <u>current</u> 3	77 0 73 0 28 2283 1067 1313 6349 history1 3	75 1 72 0 15 2197 1025 1213 4855 history2 4
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	50 1000 1400 985 1060 4000 limit/base >25	89 0 69 <1 22 2057 1019 1174 4864 <u>current</u> 3 <	77 0 73 0 28 2283 1067 1313 6349 history1 3 4	75 1 72 0 15 2197 1025 1213 4855 history2 4 1
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 method	50 1000 1400 985 1060 4000	89 0 69 <1 22 2057 1019 1174 4864 <u>current</u> 3	77 0 73 0 28 2283 1067 1313 6349 history1 3	75 1 72 0 15 2197 1025 1213 4855 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	50 1000 1400 985 1060 4000 limit/base >25	89 0 69 <1 22 2057 1019 1174 4864 <u>current</u> 3 <1 <1 <1	77 0 73 0 28 2283 1067 1313 6349 history1 3 4 2 2 history1	75 1 72 0 15 2197 1025 1213 4855 history2 4 1 1 history2
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	ASTM D5185m ASTM D5185m	50 1000 1400 985 1060 4000 limit/base >25 >20	89 0 69 <1 22 2057 1019 1174 4864 <i>current</i> 3 <1 <1 <1 <i>current</i>	77 0 73 0 28 2283 1067 1313 6349 history1 3 4 2 history1 0.1	75 1 72 0 15 2197 1025 1213 4855 history2 4 1 1 history2 0.1
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	ASTM D5185m ASTM D5185m	50 1000 1400 985 1060 4000 limit/base >25 -20 limit/base	89 0 69 <1 22 2057 1019 1174 4864 <i>current</i> 3 <1 <1 <1 <i>current</i> 0.1 8.7	77 0 73 0 28 2283 1067 1313 6349 history1 3 4 2 2 history1 0.1 8.1	75 1 72 0 15 2197 1025 1213 4855 history2 4 1 1 history2 0.1 9.0
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	ASTM D5185m ASTM D5185m	50 50 1000 1400 985 1060 4000 limit/base >25 >20 limit/base >20	89 0 69 <1 22 2057 1019 1174 4864 <i>current</i> 3 <1 <1 <1 <i>current</i>	77 0 73 0 28 2283 1067 1313 6349 history1 3 4 2 history1 0.1	75 1 72 0 15 2197 1025 1213 4855 history2 4 1 1 history2 0.1
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 Iimit/base >25 >20 Iimit/base >6 >20	89 0 69 <1 22 2057 1019 1174 4864 <i>current</i> 3 <1 <1 <1 <i>current</i> 0.1 8.7	77 0 73 0 28 2283 1067 1313 6349 history1 3 4 2 2 history1 0.1 8.1	75 1 72 0 15 2197 1025 1213 4855 history2 4 1 1 history2 0.1 9.0
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 limit/base >25 limit/base >20 limit/base >6 >20	89 0 69 <1 22 2057 1019 1174 4864 <u>current</u> 3 <1 <1 <1 <1 0.1 8.7 18.0	77 0 73 0 28 2283 1067 1313 6349 history1 3 4 2 2 history1 0.1 8.1 17.6	75 1 72 0 15 2197 1025 1213 4855 history2 4 1 1 history2 0.1 9.0 18.5

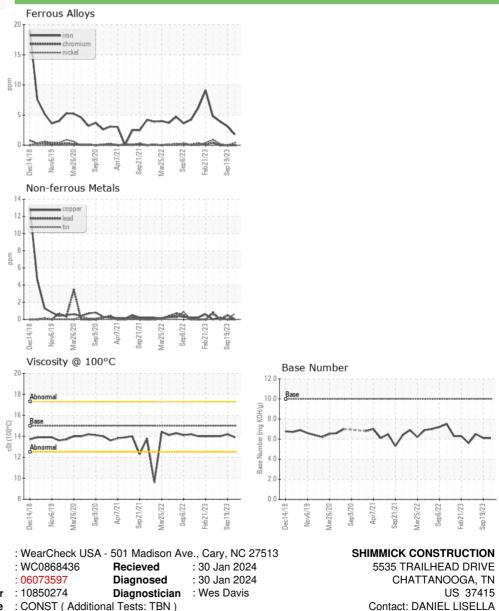


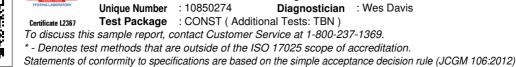
OIL ANALYSIS REPORT





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	TIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15	13.9	14.2	14.0
СРАРИС						





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Laboratory

Sample No.

Lab Number

Т:

F:

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