

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 015-R0014

Component **Diesel Engine** Elui SCHAEFFER SUPREME 7000 (--- GAL)

Recommendation

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

Wear

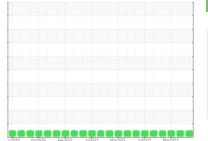
All component wear rates are normal.

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.

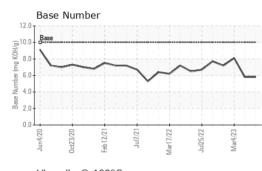


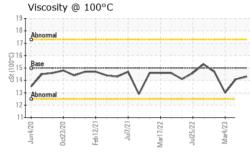


SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0815247	WC0815220	WC0750654
Sample Date		Client Info		14 Nov 2023	19 Jul 2023	04 Mar 2023
Machine Age	hrs	Client Info		6706	5953	5240
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	١	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	6	7	10
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	2
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	3
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	<1	<1	1
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
				-		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 48	history1 65	history2 282
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	48	65	282
Boron Barium	ppm	ASTM D5185m ASTM D5185m		48 0	65 1	282 2
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		48 0 71	65 1 74	282 2 121
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50	48 0 71 0	65 1 74 0	282 2 121 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 1000	48 0 71 0 26	65 1 74 0 84	282 2 121 <1 616
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	48 0 71 0 26 2102	65 1 74 0 84 2043	282 2 121 <1 616 1554
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 1000 1400 985	48 0 71 0 26 2102 919	65 1 74 0 84 2043 913	282 2 121 <1 616 1554 679
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm 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	48 0 71 0 26 2102 919 1245 4628 current	65 1 74 0 84 2043 913 1149 4496 history1	282 2 121 <1 616 1554 679 829 2220 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	48 0 71 0 26 2102 919 1245 4628 <i>current</i> 3	65 1 74 0 84 2043 913 1149 4496 history1 3	282 2 121 <1 616 1554 679 829 2220 history2 3
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 ASTM D5185m	50 1000 1400 985 1060 4000 limit/base >25	48 0 71 0 26 2102 919 1245 4628 <u>current</u> 3 2	65 1 74 0 84 2043 913 1149 4496 history1 3 2	282 2 121 <1 616 1554 679 829 2220 history2 3 0
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	48 0 71 0 26 2102 919 1245 4628 <i>current</i> 3	65 1 74 0 84 2043 913 1149 4496 history1 3	282 2 121 <1 616 1554 679 829 2220 history2 3
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 ASTM D5185m	50 1000 1400 985 1060 4000 limit/base >25	48 0 71 0 26 2102 919 1245 4628 <u>current</u> 3 2 <1 <i>current</i>	65 1 74 0 84 2043 913 1149 4496 history1 3 2 1 history1	282 2 121 <1 616 1554 679 829 2220 history2 3 0 3 %
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	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 >3	48 0 71 0 26 2102 919 1245 4628 <i>current</i> 3 2 <1 <i>current</i> 0.1	65 1 74 0 84 2043 913 1149 4496 history1 3 2 1 history1 0.1	282 2 121 <1 616 1554 679 829 2220 history2 3 0 3 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 50 1000 1400 985 1060 4000 limit/base >25 >20 limit/base >3	48 0 71 0 26 2102 919 1245 4628 <i>current</i> 3 2 <1 2 <1 <i>current</i> 0.1 10.0	65 1 74 0 84 2043 913 1149 4496 history1 3 2 1 history1 0.1 10.0	282 2 121 <1 616 1554 679 829 2220 history2 3 0 3 history2 0.1 8.6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	50 50 1000 1400 985 1060 4000 limit/base >25 >20 limit/base >3	48 0 71 0 26 2102 919 1245 4628 <i>current</i> 3 2 <1 <i>current</i> 0.1	65 1 74 0 84 2043 913 1149 4496 history1 3 2 1 history1 0.1	282 2 121 <1 616 1554 679 829 2220 history2 3 0 3 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 imit/base >25 >20 imit/base >20	48 0 71 0 26 2102 919 1245 4628 <i>current</i> 3 2 <1 2 <1 <i>current</i> 0.1 10.0	65 1 74 0 84 2043 913 1149 4496 history1 3 2 1 history1 0.1 10.0	282 2 121 <1 616 1554 679 829 2220 history2 3 0 3 history2 0.1 8.6
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 50 1000 1400 985 1060 4000 imit/base >25 20 imit/base >3 >20 >30	48 0 71 0 26 2102 919 1245 4628 <u>current</u> 3 2 <1 <u>current</u> 0.1 10.0 20.3	65 1 74 0 84 2043 913 1149 4496 history1 3 2 1 history1 0.1 10.0 20.1	282 2 121 <1 616 1554 679 829 2220 history2 3 0 3 0 3 history2 0.1 8.6 22.5



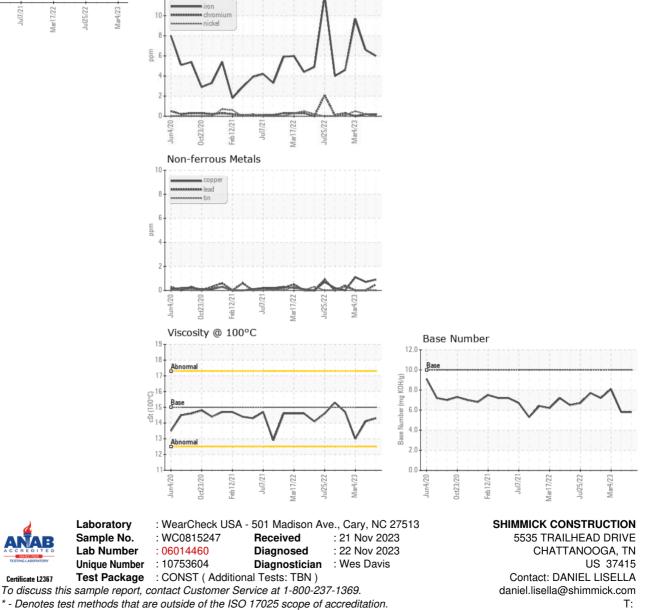
OIL ANALYSIS REPORT

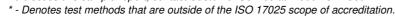




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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	14.3	14.1	13.0
GRAPHS						

Ferrous Alloys





Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

F: