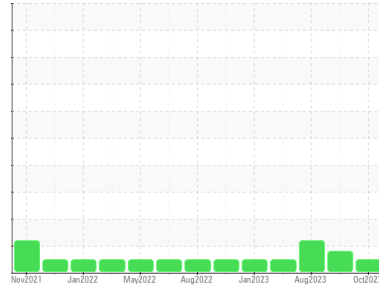




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
040-R006

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 INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0868272	WC0815199	WC0815218
Sample Date	Client Info			24 Oct 2023	19 Sep 2023	04 Aug 2023
Machine Age	hrs	Client Info		5972	5621	5185
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	MARGINAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	▲ 3.3	▲ 5.1
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	6	10	15
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	<1	4
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	1	6	13
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		54	39	36
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m	50	70	67	47
Manganese	ppm	ASTM D5185m		<1	0	2
Magnesium	ppm	ASTM D5185m	1000	17	46	453
Calcium	ppm	ASTM D5185m	1400	2184	2297	2002
Phosphorus	ppm	ASTM D5185m	985	1067	1058	961
Zinc	ppm	ASTM D5185m	1060	1339	1332	1171
Sulfur	ppm	ASTM D5185m	4000	5244	6025	3848

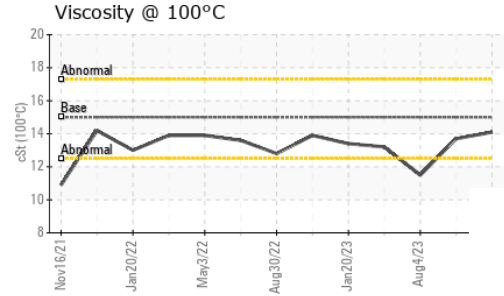
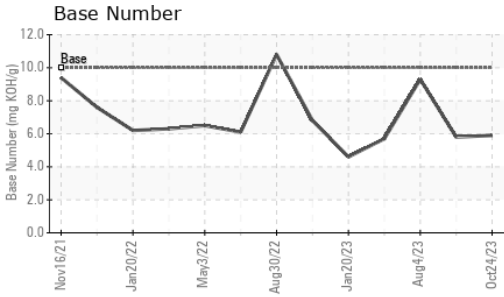
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	6	19
Sodium	ppm	ASTM D5185m		1	4	2
Potassium	ppm	ASTM D5185m	>20	<1	2	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.7	10.1	7.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	20.1	21.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	18.3	19.9
Base Number (BN)	mg KOH/g	ASTM D2896	10	5.9	5.8	9.3



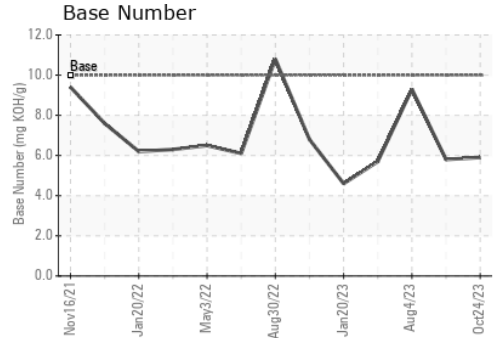
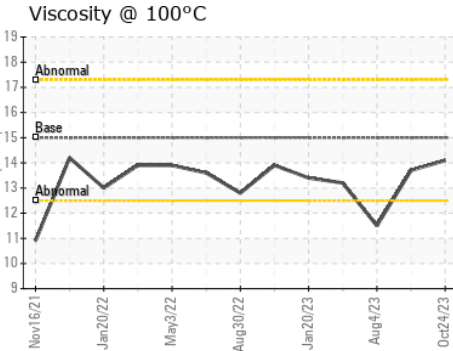
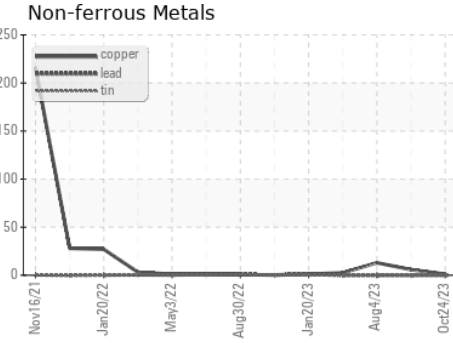
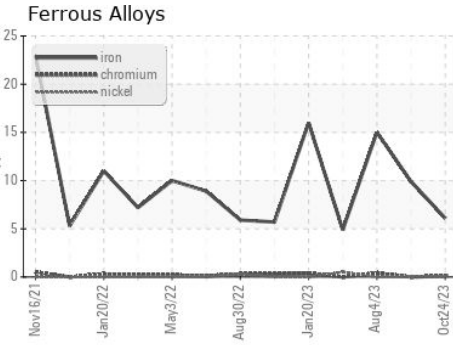
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15	14.1	13.7 ▲ 11.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0868272 **Received** : 06 Nov 2023
Lab Number : 05999624 **Diagnosed** : 07 Nov 2023
Unique Number : 10727984 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

SHIMMICK CONSTRUCTION
 5535 TRAILHEAD DRIVE
 CHATTANOOGA, TN
 US 37415
 Contact: DANIEL LISELLA
 daniel.lisella@shimmick.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)