



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
015-R011
 Component
Diesel Engine
 Fluid
SCHAEFFER SUPREME 7000 (--- GAL)

RECOMMENDATION

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0868358	WC0815232	WC0815034
Sample Date		Client Info		06 Nov 2023	03 Oct 2023	29 Aug 2023
Machine Age	hrs	Client Info		11487	11148	10865
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Iron	ppm	ASTM D5185m	>100	16	6	9
Chromium	ppm	ASTM D5185m	>20	3	1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 22	10	10
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	1	0	<1
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

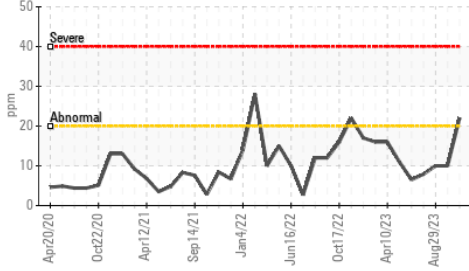
CONTAMINATION

Silicon	ppm	ASTM D5185m	>25	5	4	5
Potassium	ppm	ASTM D5185m	>20	1	2	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.1	8.7	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	18.3	18.4
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

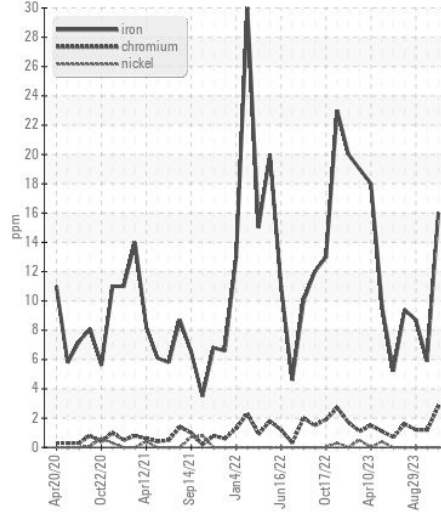
FLUID CONDITION

Sodium	ppm	ASTM D5185m		2	0	2
Boron	ppm	ASTM D5185m		72	71	69
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	50	70	72	69
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	1000	17	18	12
Calcium	ppm	ASTM D5185m	1400	2108	2097	2130
Phosphorus	ppm	ASTM D5185m	985	934	1022	979
Zinc	ppm	ASTM D5185m	1060	1228	1242	1214
Sulfur	ppm	ASTM D5185m	4000	4938	5046	5690
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	14.8	14.8
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.0	6.0	5.9
Visc @ 100°C	cSt	ASTM D445	15	14.2	14.6	14.5

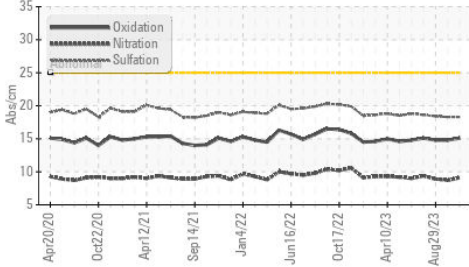
▲ Aluminum (ppm)



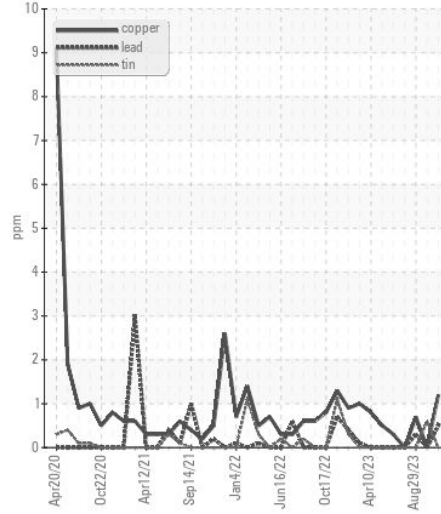
Ferrous Alloys



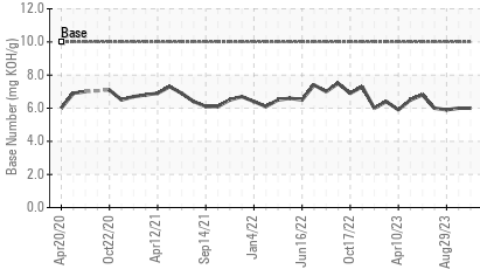
FT-IR (Direct Trend)



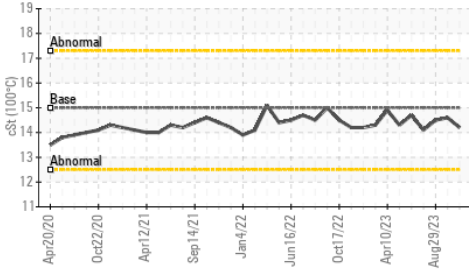
Non-ferrous Metals



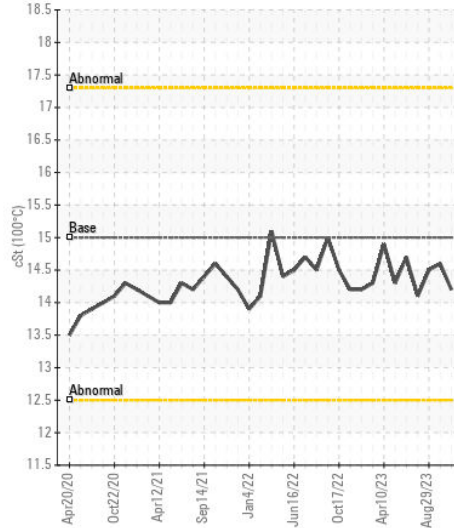
Base Number



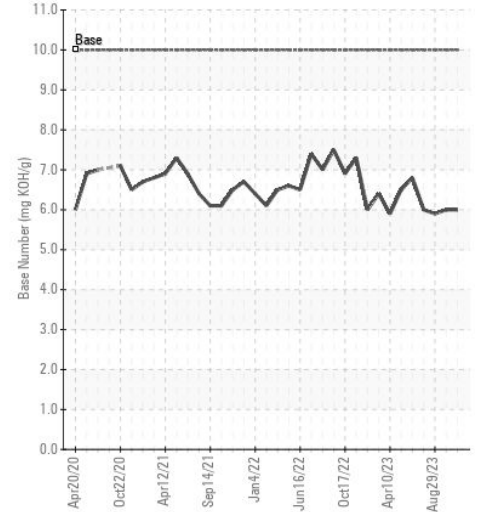
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0868358 **Received** : 21 Nov 2023
Lab Number : 06014459 **Tested** : 22 Nov 2023
Unique Number : 10753603 **Diagnosed** : 24 Nov 2023 - Don Baldrige
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)

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