



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
021-0136
 Component
Diesel Engine
 Fluid
SCHAEFFER SUPREME 7000 (2 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample
 Comment: Engine oil sample 2243 hours)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0868372	WC0815204	WC0750686
Sample Date		Client Info		16 May 2024	18 Sep 2023	18 Apr 2023
Machine Age	hrs	Client Info		2243	1897	1558
Oil Age	hrs	Client Info		1897	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				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

There is no indication of any contamination in the oil.

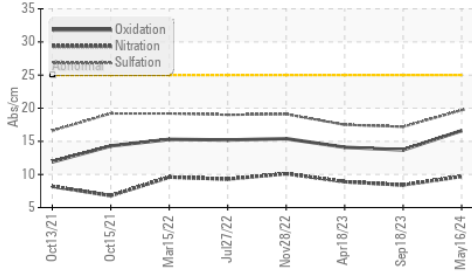
Silicon	ppm	ASTM D5185m	>25	8	10	8
Potassium	ppm	ASTM D5185m	>20	2	1	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.7	8.4	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	17.2	17.5
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

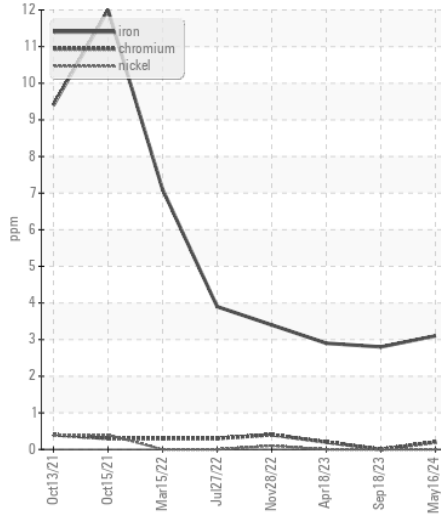
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	2	2
Boron	ppm	ASTM D5185m		92	83	87
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m	50	71	74	72
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	1000	16	36	19
Calcium	ppm	ASTM D5185m	1400	2087	2131	2143
Phosphorus	ppm	ASTM D5185m	985	1105	1006	1001
Zinc	ppm	ASTM D5185m	1060	1222	1218	1174
Sulfur	ppm	ASTM D5185m	4000	5550	5791	5903
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	13.7	14.1
Base Number (BN)	mg KOH/g	ASTM D2896	10	5.9	6.0	5.7
Visc @ 100°C	cSt	ASTM D445	15	13.6	13.7	13.3

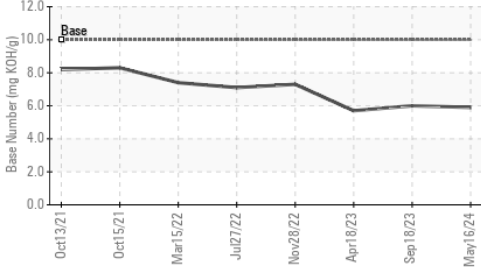
FT-IR (Direct Trend)



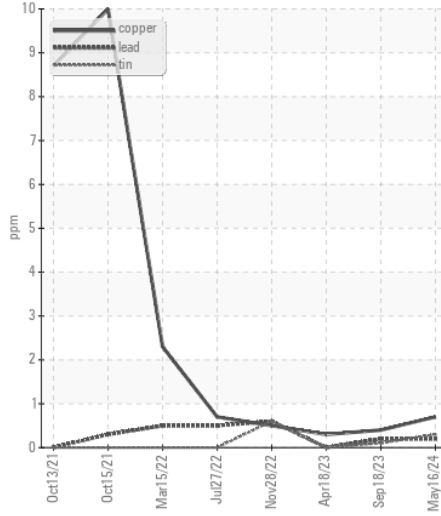
Ferrous Alloys



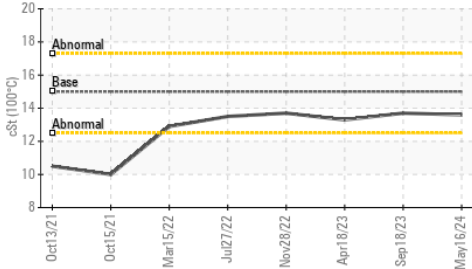
Base Number



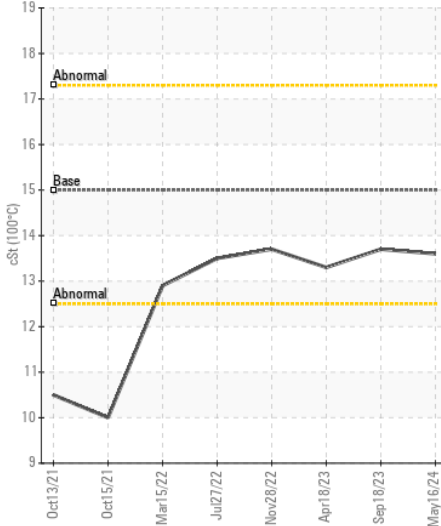
Non-ferrous Metals



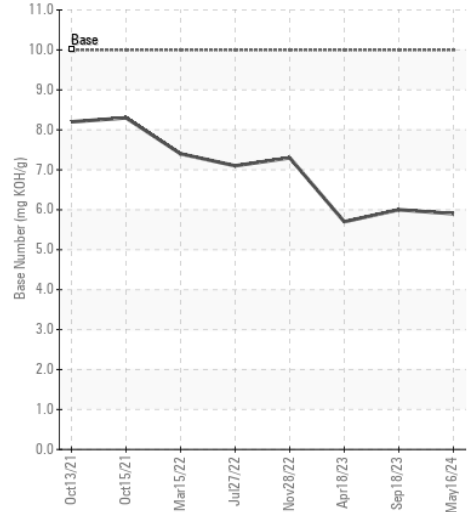
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0868372 **Received** : 22 May 2024
Lab Number : 06187405 **Tested** : 31 May 2024
Unique Number : 11044157 **Diagnosed** : 31 May 2024 - Jonathan Hester
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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