



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
050-0035
 Component
Diesel Engine
 Fluid
SCHAEFFER SUPREME 7000 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0868317	WC0903852	WC0814978
Sample Date		Client Info		26 Jun 2024	29 Feb 2024	03 Aug 2023
Machine Age	hrs	Client Info		682	605	339
Oil Age	hrs	Client Info		682	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	24	50	54
Chromium	ppm	ASTM D5185m	>20	2	4	4
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	7	8	11
Lead	ppm	ASTM D5185m	>40	0	3	<1
Copper	ppm	ASTM D5185m	>330	<1	4	4
Tin	ppm	ASTM D5185m	>15	<1	2	2
Vanadium	ppm	ASTM D5185m		<1	<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.

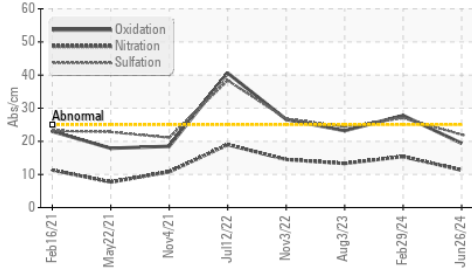
Silicon	ppm	ASTM D5185m	>25	11	13	18
Potassium	ppm	ASTM D5185m	>20	1	2	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	11.3	15.4	13.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	27.0	24.4
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

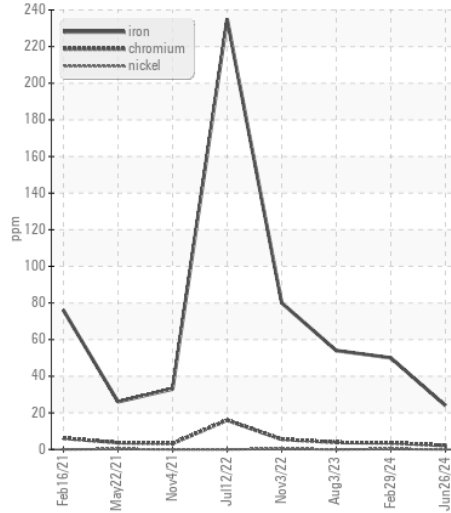
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	3	2
Boron	ppm	ASTM D5185m		68	53	71
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	50	74	74	81
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m	1000	16	37	25
Calcium	ppm	ASTM D5185m	1400	2290	2352	2592
Phosphorus	ppm	ASTM D5185m	985	1002	1028	1124
Zinc	ppm	ASTM D5185m	1060	1243	1351	1440
Sulfur	ppm	ASTM D5185m	4000	5518	5442	5928
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.4	27.8	23.2
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.7	5.9	6.2
Visc @ 100°C	cSt	ASTM D445	15	15.8	16.0	16.2

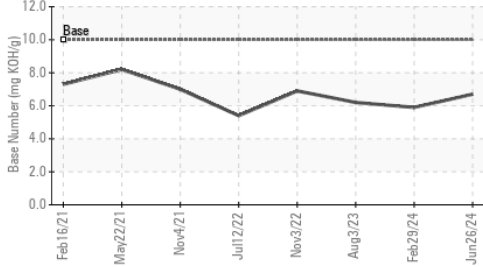
FT-IR (Direct Trend)



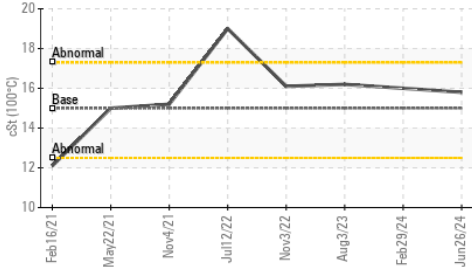
Ferrous Alloys



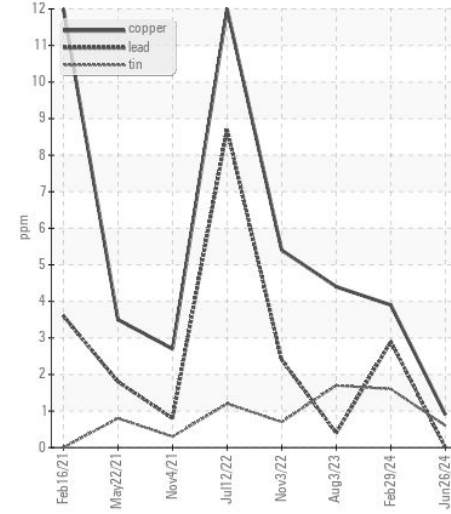
Base Number



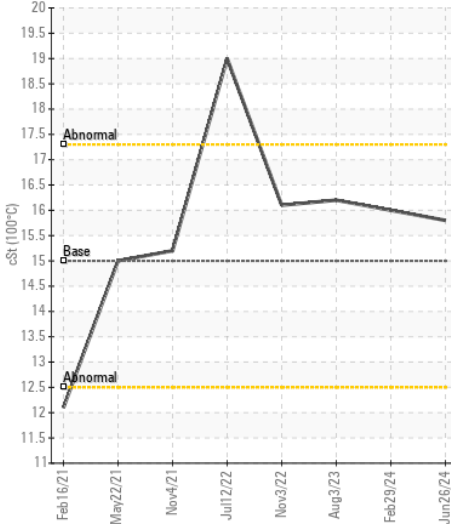
Viscosity @ 100°C



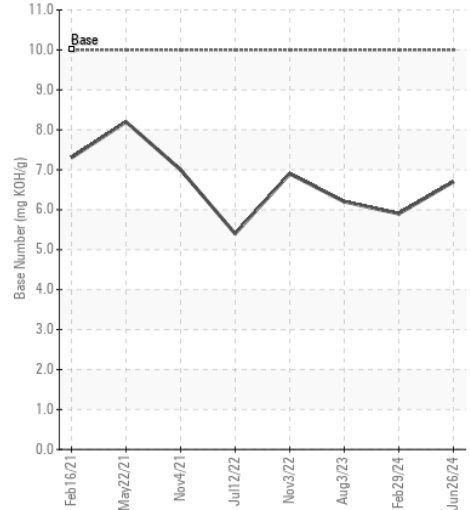
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0868317 **Received** : 03 Jul 2024
Lab Number : 06227206 **Tested** : 05 Jul 2024
Unique Number : 11110699 **Diagnosed** : 05 Jul 2024 - Angela Borella
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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