OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
050-0049
Component
Diesel Engine
Fluid
SCHAEFFER SUPREME 7000 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

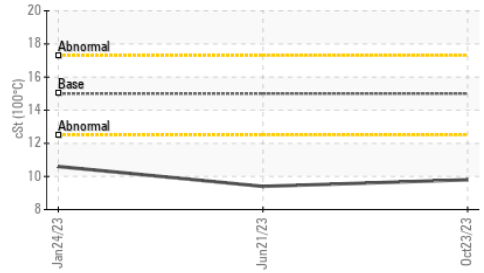
Light fuel dilution occurring.

FLUID CONDITION

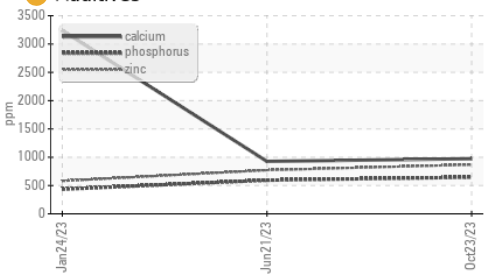
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0868399	WC0815222	WC0750756
Sample Date		Client Info		23 Oct 2023	21 Jun 2023	24 Jan 2023
Machine Age	hrs	Client Info		332	210	51
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	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	21	63	23
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	8	5
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	6	5	6
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	14	10	12
Potassium	ppm	ASTM D5185m	>20	2	1	4
Fuel	%	ASTM D3524	>5	▲ 4.8	▲ 3.6	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.3	8.9	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	20.1	15.0
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
Sodium	ppm	ASTM D5185m		6	7	42
Boron	ppm	ASTM D5185m		● 13	68	0
Barium	ppm	ASTM D5185m		0	0	5
Molybdenum	ppm	ASTM D5185m	50	● 238	74	30
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	1000	774	● 738	151
Calcium	ppm	ASTM D5185m	1400	● 974	● 926	3239
Phosphorus	ppm	ASTM D5185m	985	● 646	● 594	434
Zinc	ppm	ASTM D5185m	1060	869	● 771	581
Sulfur	ppm	ASTM D5185m	4000	● 2197	● 2587	1758
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.9	13.6	8.2
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.3	6.4	10.7
Visc @ 100°C	cSt	ASTM D445	15	▲ 9.8	▲ 9.4	10.6

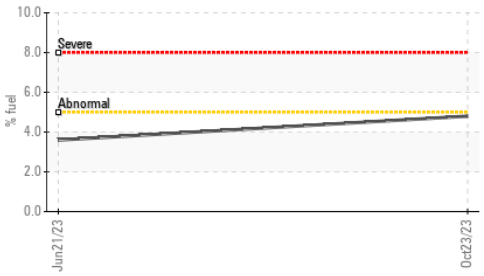
Viscosity @ 100°C



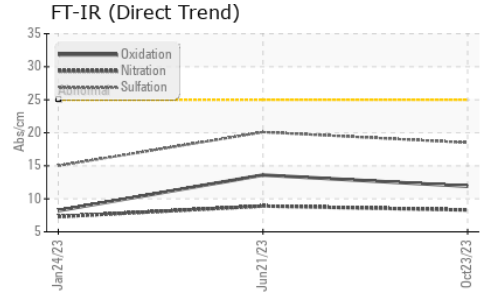
Additives



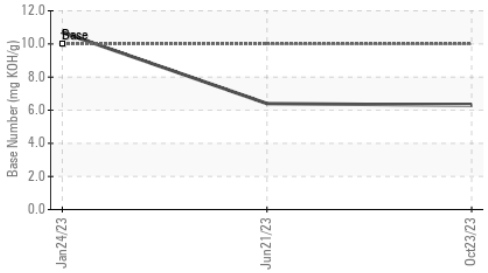
Fuel Dilution



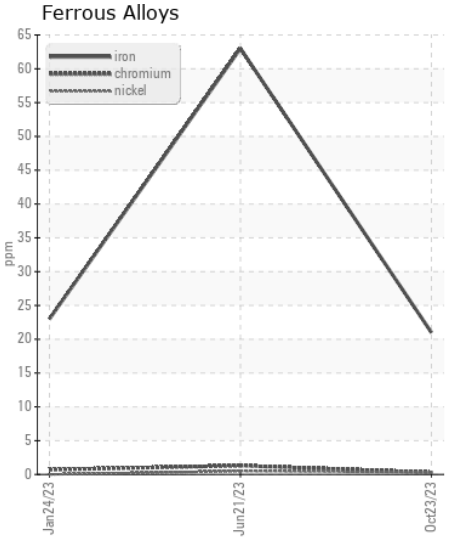
FT-IR (Direct Trend)



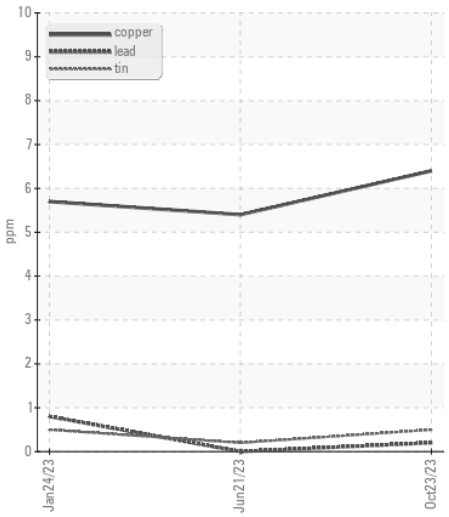
Base Number



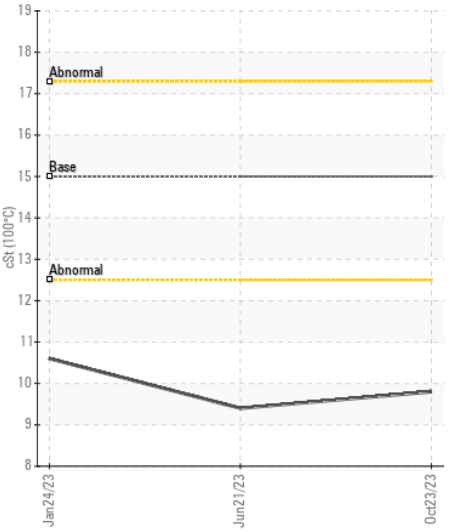
Ferrous Alloys



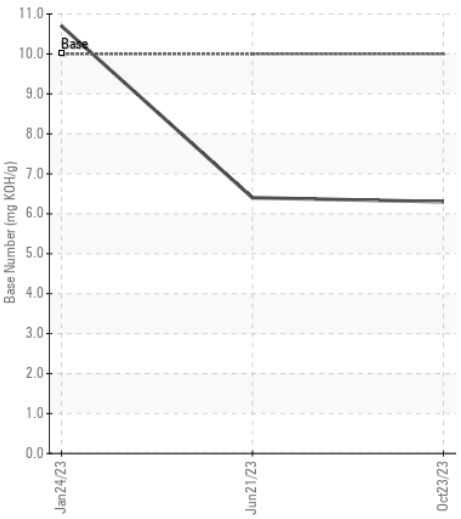
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0868399 **Received** : 27 Oct 2023
Lab Number : 05991981 **Tested** : 31 Oct 2023
Unique Number : 10714643 **Diagnosed** : 31 Oct 2023 - Wes Davis
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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)

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